Portsmouth City Council

LOCAL CYCLING & WALKING INFRASTRUCTURE PLAN

Background Report

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Glossary

AQMA Air Quality Management Areas. Declared by local authorities for locations which are recorded to have levels of nitrogen dioxide which exceed the limits outlined in the National Air Quality Strategy

DfT Department for Transport. The UK ministerial department which inter alia provides policy and guidance to English local authorities for local transport, including on cycling and walking. Published the LCWIP Technical Guidance.

DSTL Defence Science and Technology Laboratory, a major employment destination on Portsdown Hill

LCWIP Local Cycling & Walking Infrastructure Plan, a new, strategic, long-term approach to identify the improvements to cycling and walking networks which are required in each local area.

MSOA Middle Layer Super Output Area. MSOAs were chosen to represent journey origins from existing residential areas in the LCWIP methodology. These are statistical areas created by the Office for National Statistics (ONS) which had populations of between 5,000 and 15,000 at the time of the 2011 census. The ONS choose output area boundaries to ensure each one has a similar population and are as socially homogenous as possible based on tenure of household and dwelling type. 25 MSOAs cover Portsmouth.

ONS Office for National Statistics, the body charged with the collection and publication of statistics related to the economy, population and society of the UK.

PCT Propensity to Cycle Tool. A website analysis tool which forecasts the potential future growth of cycle trips under different scenarios for travel to work and travel to school.

RST Route Selection Tool. An Excel spreadsheet which assesses and compares the suitability of different routes for inclusion in a cycle network.

SPD Supplementary Planning Document. Planning policy which adds further detail to the policies in the Local Plan.

WRAT Walking Route Audit Tool. An Excel spreadsheet for auditing the existing condition of walking routes.

1 Introduction

1.1 Background

1.1.1. The Cycling & Walking Investment Strategy sets out government's ambition to make cycling and walking the natural choice for shorter journeys, or as part of longer journeys, and increase the number of trips made by these modes. The government considers that Local Cycling and Walking Infrastructure Plans (LCWIPs) are a vital part of this strategy. LCWIPs are a new, strategic, long-term approach to identify the improvements to cycling and walking networks which are required in each local area. LCWIPs require an understanding of existing and future travel patterns, plus evidence on the barriers preventing people currently cycling and walking, and factors which would enable more people to make more cycling and walking journeys.

1.1.2. This report sets out the methodology used, and describes the development of the first iteration of the Portsmouth LCWIP.

1.1.3. Throughout the preparation of the Portsmouth LCWIP reference was made the Department for Transport (DfT) document LCWIPs Technical Guidance for Local Authorities. The guidance identifies that there are three key outputs from the LCWIP process:

- Cycling and walking network plans which identify preferred routes and core zones for further development;
- A prioritised schedule of infrastructure improvements for future investment; and
- A report setting out the underlying analysis and the narrative which supports the rationale for the identified network and prioritised improvements (this Background Report).

1.1.4. The Background Report does not seek to provide a comprehensive description of baseline conditions but instead describes the processes by which the cycling and walking network plans and schedule of infrastructure improvements were developed.

1.1.5. The LCWIP aims to create a walking and cycling network which will enable people to get from A to B in the most direct way possible when making utility trips. These are everyday journeys made for a purpose, such as commuting to work, trips to the shops or the doctor, or to school, college and university, for example. Directness and journey times are usually important factors when considering making utility journeys. Cycling and walking trips which are made purely for leisure (i.e., no destination) are not within the scope of the LCWIP, although more of these journeys may be encouraged with the improvements identified.

1.1.6. In the context of LCWIP, walking includes people using wheelchairs or mobility scooters and people with pushchairs. It also considers all types of cycle typically in use, including adapted cycles, tricycles and cycles with trailers. The LCWIP guidance suggests that cycling has the potential to replace trips currently made by other modes, typically up to 10km in length, whilst walking has the potential to replace trips currently made by other modes up to 2km in length. A network of routes which caters for these shorter-distance journeys is also likely to cater for longer-distance or leisure cycle trips.

1.1.7. To inform the LCWIP three DfT-recommended tools were also used, as follows:

- The Propensity to Cycle Tool (PCT): a website analysis tool which forecasts the potential future growth of cycle trips under different scenarios for travel to work and travel to school. The scenarios are based on journey to work data from the 2011 census and 2011 school census data respectively;
- The Route Selection Tool (RST), which assesses and compares the suitability of different routes for inclusion in a cycle network; and
- The Walking Route Audit Tool (WRAT), for auditing existing condition of walking routes.

1.2 LCWIP Scope

1.2.1. The Plan covers the whole of the Portsmouth authority area. As the urban area straddles authority boundaries, and significant trip origins and destinations are located in neighbouring authorities, the Plan also considers movements to and from adjacent parts of Fareham, Gosport and Havant Boroughs and from the Isle of Wight. This is discussed further in Sections 2.3 and 2.5.

1.2.2. In line with the guidance, the Portsmouth LCWIP will cover a 10-year period and be subject to periodic updates.

1.3 LCWIP Governance

1.3.1. The governance arrangements for the LCWIP are as follows:

- Portsmouth City Council Senior Responsible Officer – Felicity Tidbury;
- Portsmouth City Council Project Manager – Andrew Di Marco;
- Consultant Project Manager – James Purkiss, WSP;
- Portsmouth City Council technical expertise – Jo Hamment;
- Portsmouth City Council planning policy inputs – Dan Young and Tom Bell;
- Portsmouth City Council public health inputs - Dominique le Touze; and
- Portsmouth City Council technical support – Dan Hughes.

1.3.2. A working group, principally comprising those listed above, has met periodically to discuss progress and agree the approach at each stage of the LCWIP development.

2 Existing Context

2.1 Data and evidence collected for LCWIP

Introduction

2.1.1. The DfT technical guidance states that LCWIPs should be evidence-led. This chapter briefly summarises the current context in respect of:

- Plans, policies and strategies – these set out proposals for the future location of development and supporting infrastructure across the city;
- Significant current and future journey origins and destinations – this forms the basis for considering cycling and walking networks which can cater for anticipated travel demands;
- Existing cycling and walking network – summarising the infrastructure available and strategic physical barriers; and
- Existing cycling and walking travel patterns – publicly available data on journeys currently undertaken.

2.2 Plans, Policies and Strategies

Planning Policy

Adopted Planning Policy

2.2.1. The Portsmouth Plan is the city's principal adopted planning policy document and was adopted in 2012. The Plan contains policies for a series of strategic sites for major development:

- Tipner – 1,250 new homes and 25,000sqm gross of B1 office development;
- Port Solent – approximately 500 new homes and 3.4ha for marina related operations;
- Horsea Island – approximately 500 new homes and new country park (the latter of which is now under construction);
- City Centre – at least 50,000sqm net of retail development, a minimum of 10,500sqm of office floorspace and supporting town centre uses; and
- North Harbour – around 69,000sqm of new B1 office floorspace.

2.2.2. The Portsmouth Plan is supported by other adopted planning policy. This includes Area Action Plans covering Southsea Town Centre and Somerstown & North Southsea and a series of Supplementary Planning Documents (SPD), some of which cover specific parts of the city. The Seafront Masterplan SPD was adopted in 2010 and the City Centre Masterplan SPD was adopted in 2013.

2.2.3. A revised version of the Seafront Masterplan SPD is in preparation, with two rounds of public consultation taking place in 2018 and 2019. Walking and cycling is one of seven identified themes covered by the document. One of the identified opportunities is the creation of a fully segregated cycle route from Hayling ferry to Clarence Pier.

Replacement Portsmouth Plan

2.2.4. The review of the Portsmouth Plan is in progress and an Issues and Options Consultation was issued in 2017. It identified potential strategic sites expected to accommodate more than 250 dwellings or significant new employment floorspace, as follows:

- Strategic Site 1: Tipner (Tipner West, Tipner East and Tipner Firing Range) for significant levels of new housing;
- Strategic Site 2: Port Solent and Horsea Island, for employment floorspace;
- Strategic Site 3: St. James' Hospital and Langstone Campus for new housing; and
- Strategic Site 4: Lakeside North Harbour for additional employment floorspace.

2.2.5. The consultation also identified six opportunity areas with the potential to accommodate additional development over the medium to long term. The identified areas were the City Centre, Cosham, North End, Fratton, Somerstown and The Seafront.

2.2.6. The 2017 consultation was followed in early 2019 with a consultation on the Future of Tipner & Horsea, which represents the largest area of undeveloped and underused land in the city. This noted that Tipner has the potential to deliver at least 1,200 to 2,200 dwellings, depending on development options. It also noted that Horsea Island may be more suitable for up to 25,000sqm of employment land rather than housing. The consultation identified the need for:

- new walking and cycling links throughout the surrounding area and to key destinations;
- a new road and pedestrian bridge to link Tipner with Horsea Island, with measures to prevent rat running from Port Solent to the M275.

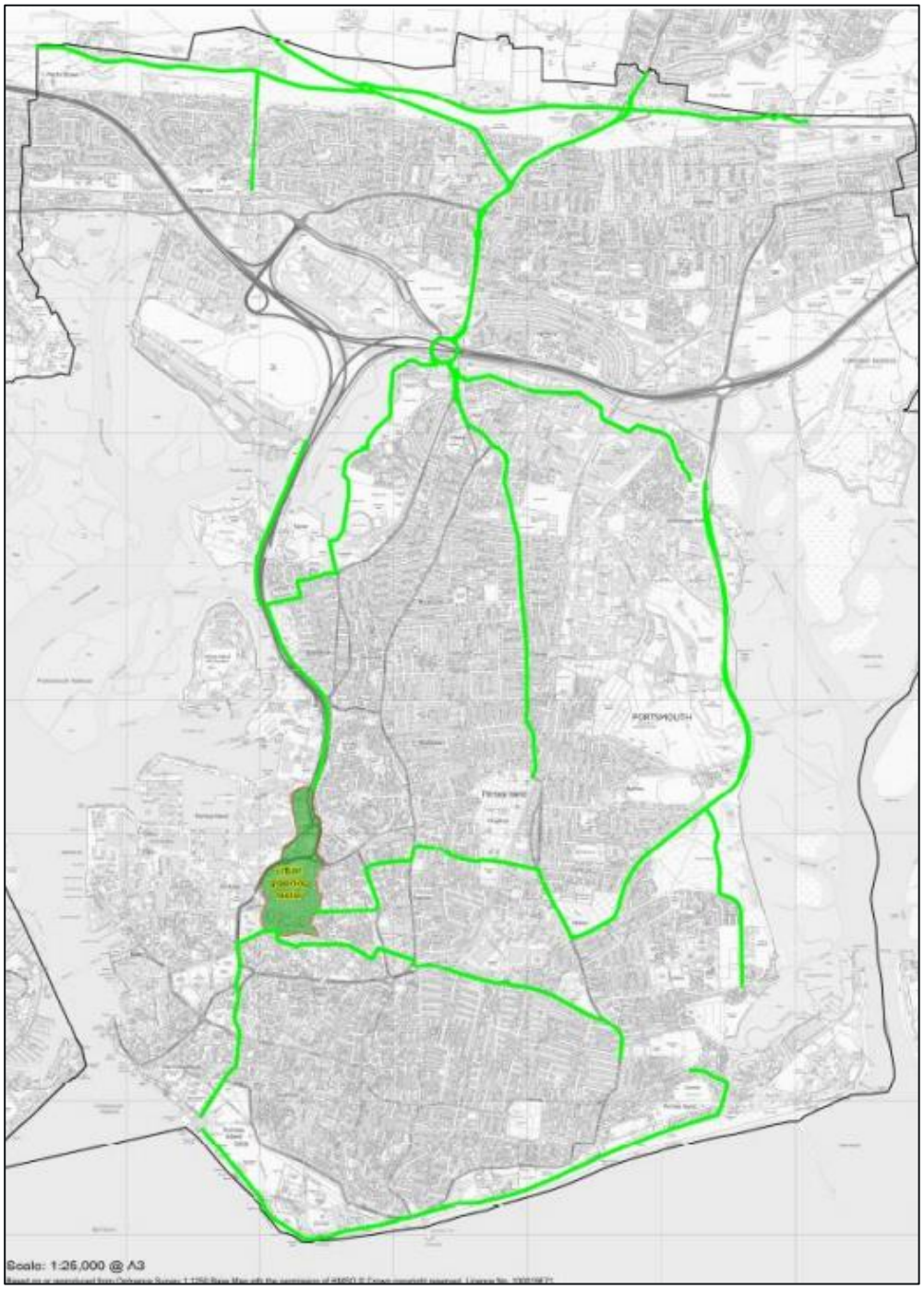
2.2.7. The regeneration of the Tipner Peninsula will represent the most ambitious expansion of the city in over a century. The concept masterplan is due to be completed in December 2019, with the full masterplan finalised by summer 2020. Recent indications are that the site could accommodate 1 million square feet of marine employment land and approximately 4,000 homes. The masterplan is intended to focus on creating a greener, walkable, new district for the city, with health and well-being at its core, supported by bespoke community, retail, and leisure facilities. Development is expected to commence in summer 2023.

2.2.8. Comments were also invited on a summary of evidence and supporting evidence papers during February and March 2019. The Transport Modelling and Transport Assessment Evidence Review published in 2018 considered the potential impacts of new development on congestion and traffic flow. It identified junctions where mitigating works may be required to address traffic impacts generated by new development. It also concluded that a bridge connecting Tipner and Horsea Island is feasible.

2.2.9. The Health and Wellbeing Background Paper identified transport and accessibility as one of the four health themes to be addressed in the new local plan. It noted that safe, attractive, convenient walking and cycling routes were a means by which the built environment can have a positive influence on creating healthy lifestyles and overcoming factors which would otherwise lead to obesity.

2.2.10. The Green Infrastructure Background Paper suggested that the new local plan should include a specific green infrastructure policy. It also recommended that green corridors should be identified across the city which link existing greenspaces and encourage more sustainable forms of transport. The paper included a plan illustrating a draft green grid of these corridors. The identified corridors are shown in Figure 2.1. They include Southsea and Eastney Seafront, an east-west corridor connecting Bransbury Park to Victoria Park, Velder Avenue, Eastern Road, Hilsea Lines and Portsdown Hill.

Figure 2.1 – Draft Green Grid



Note: This map is likely to be updated as the Local Plan progresses, with additional corridors identified or amended in response to consultation feedback.

Air Quality Local Plan

2.2.11. The City Council has declared five Air Quality Management Areas (AQMAs) for locations which are recorded to have levels of nitrogen dioxide which exceed the limits outlined in the National Air Quality Strategy. In response to this, an Air Quality Local Plan is being prepared to address the identified areas of poor air quality within the city.

2.2.12. The latest modelling data identifies two local road sections in central Portsmouth where modelled nitrogen dioxide concentrations are forecast to exceed the European Union limit in 2022. These are A3 Alfred Road (Unicorn Road to Queen Street) and A3 Commercial Road (south of Church Street). However, the Air Quality Local Plan study area covers the whole of Portsea Island.

2.2.13. The Air Quality Local Plan Outline Business Case was approved for submission to government at a special meeting of the Cabinet held on the 29th October 2019. It proposes the following actions be taken to reduce levels of nitrogen dioxide and comply with at least the legal limit value in the shortest possible time:

- A Class B Clean Air Zone, targeting taxis and private hire vehicles, buses, coaches and heavy goods vehicles which do not meet certain vehicle emissions standards, covering a small area in the southwest of Portsea Island, along with:
- Improvements to cycling infrastructure on LCWIP corridors assessed as being of most relevance to reducing vehicle emissions at exceedance locations and near exceedance locations;
- Amendments to Alfred Road / Anglesea Road / Bishop Crispian Way / Queen Street traffic signals;
- Parking measures; and
- A package of financial support, marketing and engagement activity.

Transport Policy

Joint Strategy for South Hampshire

2.2.14. Local Transport Plan strategy and policy covering the sub-region is set out in the Joint Strategy for South Hampshire. It was developed jointly by the three local transport authorities of Portsmouth City Council, Hampshire County Council, and Southampton City Council. The vision of the Solent Transport authorities is to create “A resilient, cost effective, fully-integrated sub-regional transport network, enabling economic growth whilst protecting and enhancing health, quality of life and environment".

2.2.15. This vision will be delivered through the set of fourteen transport policies. Policies relevant to LCWIP and their delivery options are set out below:

- To deliver improvements in air quality;
- To improve road safety across the sub-region;
- To promote active travel modes and develop supporting infrastructure;
- To develop and deliver high-quality public realm improvements; and
- To safeguard and enable the future delivery of transport improvements within the Solent Transport area –
  - Investigating feasibility for provision of a bridge link from Tipner to Horsea Island (for all modes); and
  - Safeguarding land for new railway stations at certain locations, for example at Farlington.

2.2.16. The City Council produces annual Implementation Plans which set out how capital resources allocated to transport will be spent. The 2019/20 Implementation Plan includes citywide expenditure on Early Release Low Level Cycle Signals, Milton Rd / Priory Crescent Junction / crossing improvements and junction improvements at Guildhall Walk / Alec Rose Lane.

Portsmouth Rights of Way Improvement Plan

2.2.17. This statutory plan contains 33 potential actions grouped around five issues. In terms of cycling and walking infrastructure, it identifies the following actions (references in brackets):

- Improve directional signs for key routes and destinations (2.2);
- Work with Network Rail to ensure that railway bridges are suitable for all user groups when they are renewed or replaced (3.1);
- When road bridges are renewed or replaced, work to ensure that access for all user groups is considered (3.2);
- Review road crossing facilities to determine where improved crossings can be created and make improvements (3.3)
- Consult and respond to planning documents to investigate improved crossing facilities and bridges, such as that proposed to link Tipner and Port Solent, and promote access for all user groups (3.4);
- Continue to develop Portsmouth's 20mph speed limits to reduce traffic speeds and make road crossing safer (3.5);
- Work with user groups and land managers to identify priority routes that can be improved and developed (4.1);
- Work with users and user groups to identify barriers, problems and opportunities for improving existing routes (4.3);
- Investigate whether gaps in the rights of way network can be improved to enhance continuity (4.5); and
- Investigate how improved access to the seafront can be created for the benefit of all user groups through the seafront strategy (5.5).

2.2.18. Version 2.0 of the Rights of Way Improvement Plan is currently in development, with the current document based on a plan period ending in 2017.

Investment Plans

Solent Transport Delivery Plan

2.2.19. The Transport Delivery Plan was prepared by the four Solent Transport authorities (Hampshire County Council, Isle of Wight Council, Portsmouth City Council and Southampton City Council) and was published in 2013. It was developed from the Sub-Regional Transport Model Evidence Base. It identifies the prioritised transport schemes and interventions needed to support economic growth over the period to 2026.

Solent Strategic Transport Investment Plan

2.2.20. The Solent Strategic Transport Investment Plan was published by the Local Enterprise Partnership in 2016. It covers the period to 2040 and prioritises economically transformative strategic transport and longer-term investment projects.

Transforming Cities Fund

2.2.21. Portsmouth City Council and Hampshire County Council were one of twelve city regions shortlisted to bid for a share of the DfT's £1.28 billion Transforming Cities Fund, for public transport improvements across South Hampshire. The authorities were successful in winning £4m of Tranche 1 funding. £2.6m of this will be invested in three junction improvements in Portsmouth and Real Time Information installation at bus stops across Portsmouth, Havant and Waterlooville. A further £1.4m will be used to support the extension of the existing Eclipse bus route in Gosport. A further, larger funding bid for Tranche 2 monies will be submitted in November 2019.

Future High Streets Fund

2.2.22. Portsmouth City Council submitted two expressions of interest to government for money from this £1bn national fund to regenerate the Commercial Road and Fratton retail areas. It was announced on the 26th August 2019 that both areas had been shortlisted. Shortlisted locations will each receive up to £150,000 to support the development of detailed project proposals that can be submitted for capital funding of up to £25m per location.

Coastal Defence Schemes

2.2.23. A series of coastal defence schemes are being progressed to implement the Portsea Island Coastal Strategy Study and defend the city from flooding. The planning application for the Southsea Coastal Defence Scheme was submitted in August 2019. The submitted scheme proposes to widen the majority of the pedestrian promenade, and relocate, amend or install new pedestrian crossings. In broad terms it also proposes a two-way cycle lane on Eastney Esplanade segregated from traffic by a kerbline, a contraflow cycle lane adjacent to the landward side of Clarence Esplanade and advisory cycle lanes on South Parade.

2.2.24. Phase 4a North Portsea Island Coastal Defence Scheme, granted planning permission in 2019, includes the construction of an earth embankment with footway on the crest adjacent to Kendall's Wharf on Eastern Road. Phase 4b will include the construction of a seawall along 2.4km of the Eastern Road and is also understood to include pedestrian routes, with a planning application submitted in September 2019.

Other Documents

2.2.25. The City Council has five corporate priorities as follows:

- Make Portsmouth a city that works together, enabling communities to thrive and people to live healthy, safe and independent lives;
- Encourage regeneration built around our city's thriving culture, making Portsmouth a great place to live, work and visit;
- Make our city cleaner, safer and greener;
- Make Portsmouth a great place to live, learn and play, so our children and young people are safe, healthy and positive about their futures; and
- Make sure our council is a caring, competent and collaborative organisation that puts people at the heart of everything we do.

2.2.26. At the Full Council meeting on the 19th March 2019 councillors adopted a notice of motion to declare a climate emergency in Portsmouth. On 24th July 2019 the Cabinet approved proposals to respond the declaration of the climate emergency.

2.2.27. A City to Share was published by Portsmouth Cycling Campaign in 2014 and subsequently adopted by the City Council. It has the vision for Portsmouth to become the pre-eminent cycling city of the UK. It sets five objectives: a safer city; improved health outcomes; a stronger local economy; a better environment and a fairer, more liveable city - with a series of short and long-term actions against each objective.

2.2.28. The strategy included the following infrastructure-related actions:

- Develop protected superhighways for cyclists serving the major routes into the city in the West, Centre and East of the Island following or mirroring the A-roads that provide access for motorists, providing similar direct and uninterrupted connectivity that motorists enjoy. These will offer physical measures to prevent collisions between cyclists, motorists and pedestrians;
- Develop the north-south cycle superhighways into network of direct, high capacity, joined-up consistent cycle tracks. These will provide connectivity to residential streets giving safe cycle access to every property This will include Dutch-style fully segregated lanes and junctions; mandatory cycle lanes, semi-segregated from traffic; and a network of direct back street Quietway routes on our 20mph residential streets;
- Implement a network of direct, high capacity, joined-up consistent cycle tracks designed to safely accommodate the young, the old and the less able-bodied as well as fit adult cyclists;
- Develop visitor hubs for cyclists with provision for cycling storage and designated cycle paths suitable for all in green areas e.g. Baffins Pond, Hilsea Lines;
- Develop quietways and greenways following the city's coastlines and connecting to visitor destinations. As flood defences are renewed cycle routes will be integrated along the coast of the island; and
- Consult on Mini-Holland schemes in Town Centres (e.g. Southsea, North End, Cosham) to become hubs for visitors walking, cycling and arriving by bus.

2.2.29. Stakeholders have also published documents outlining their vision for walking and cycling in the city, as follows:

- London Road Cycle Inspiration Study (Cycling UK 2018); and
- Streets for People (Portsmouth Friends of the Earth, 2019).

2.3 Significant Current and Future Journey Origins and Destinations

2.3.1. The LCWIP technical guidance notes that:

- identifying demand for a planned cycle network should start by mapping the main origin and destination points; and
- the first recommended step for mapping a future walking network involves identifying and clustering origin and destination points.

Origins

2.3.2. The LCWIP technical guidance notes that trips usually originate from the main residential areas. Census output areas were chosen to represent journey origins from existing residential areas. Output areas are an existing category of statistical geography created by the Office for National Statistics (ONS). The ONS choose output area boundaries to ensure each one has a similar population and are as socially homogenous as possible based on tenure of household and dwelling type.

2.3.3. Middle-layer super output areas (MSOAs) were chosen for the LCWIP methodology. These are statistical areas which had populations of between 5,000 and 15,000 at the time of the 2011 census. 25 MSOAs cover Portsmouth (see Figure 2.2). For each output area the ONS creates a single node point known as population-weighted centroids. These centroids form part of an existing ONS dataset, and are nodes located to reflect where the majority of people live within the output area. The centroids were used to represent the start location of journeys from all homes within an output area.

2.3.4. Additional node points were created to represent journeys from homes proposed to be developed in growth areas identified in the adopted and emerging local plan, as follows:

- Horsea Island;
- Port Solent;
- Tipner;
- Langstone Campus / St. James' Hospital sites; and
- City Centre.

2.3.5. The location of these is also identified on Figure 2.2.

2.3.6. As highlighted in Section 1.2, there was also a need to consider cross-boundary journeys from neighbouring authorities, particularly in respect of cycling journeys. There are significant numbers of movements made from origins in Fareham, Gosport and Havant authority areas and from the Isle of Wight to destinations in Portsmouth.

2.3.7. Travel into the city from surrounding authorities were represented in the LCWIP methodology by seven additional origin nodes for different directions of travel, as follows:

- From the Isle of Wight via Wightlink;
- From Gosport via the Gosport Ferry;
- From Fareham and Portchester via road connections north of Portsmouth Harbour;
- From Waterlooville and other settlements along the A3 corridor;
- From Leigh Park and northern Havant;
- From south Havant; and
- From Hayling Island via the Hayling Ferry.

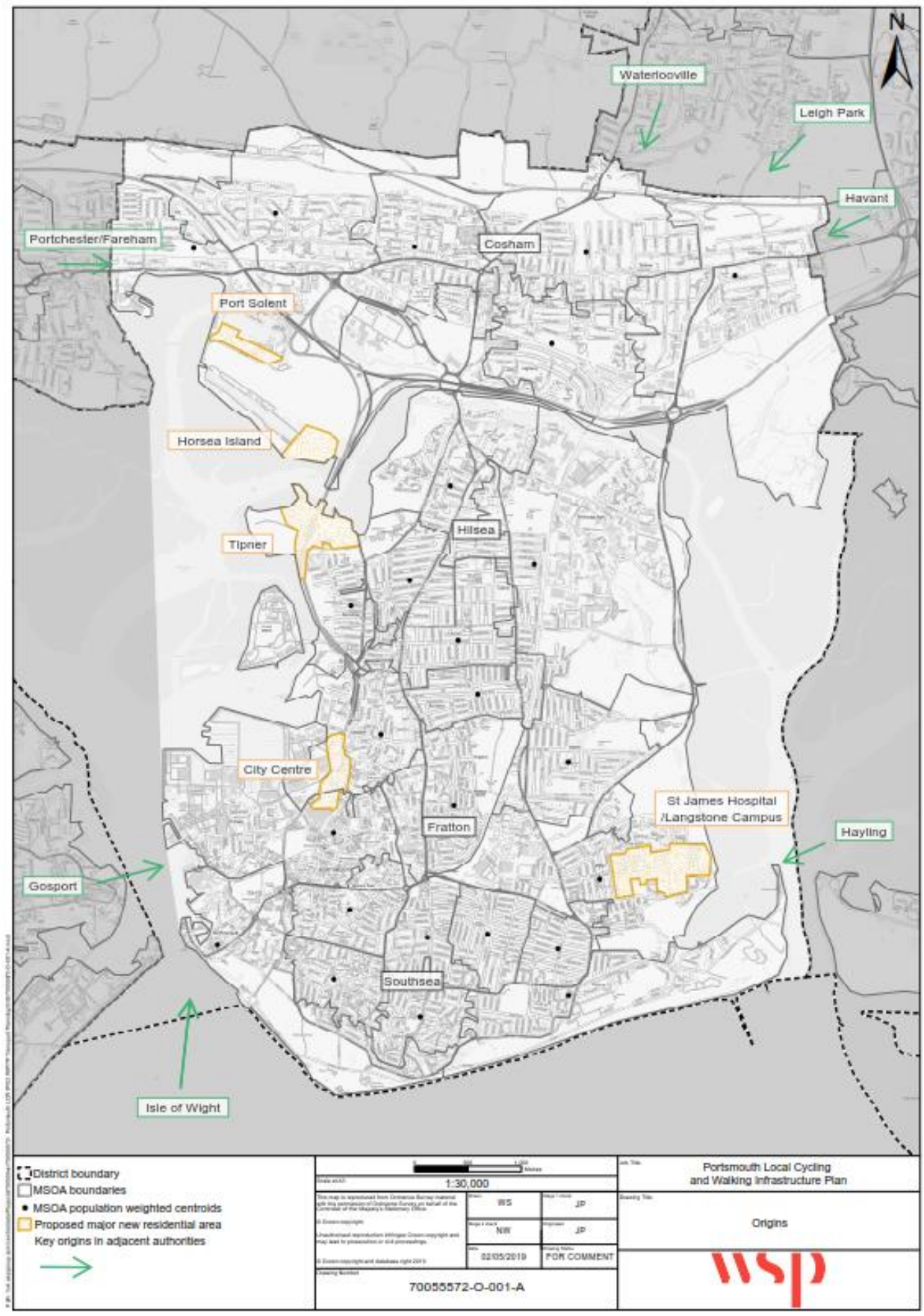
2.3.8. These seven nodes were used to represent all journeys from a surrounding hinterland up to 5km from the City Council boundary. 5km was considered to be a suitable threshold to represent short distance utility journeys which could be made by new or returning cyclists.

2.3.9. Table 2.1 sets out the hinterland output areas whose cross-boundary journeys into Portsmouth were represented by each node.

Table 2.1 – Journey origin nodes and their constituent output areas

Origin Node	Constituent output areas
Gosport	Gosport 001 to 010
Fareham and Portchester	Fareham 008, 010 and 012
Waterlooville	Havant 003, 004, 005, 007 and 011
Leigh Park	Havant 006, 008, 009, 010 and 018
South Havant	Havant 014
Hayling Island	Havant 015, 016 and 017
Isle of Wight	Isle of Wight 001, 003, 004, 005, 006, 007, 008, 010 and 014

Figure 2.2 - Origins used in the LCWIP methodology



Destinations

2.3.10. A number of destination categories were chosen to represent a range of journeys made by different people in the city. The DfT guidance identifies that when planning cycle networks for larger geographical areas, it may be appropriate to include only the most significant trip generators. Destinations were therefore chosen on the basis of their likely significant trip generation potential. The schedule of chosen destinations used for the network planning is shown in Table 2.2 overleaf and their locations identified on the plan in Figure 2.3. More local destinations such as primary schools, GP surgeries and shopping parades tend to be located in each neighbourhood and are represented by the residential origins. Potential neighbourhood-level measures to enable more walking and cycling to local destinations are summarised in paragraph 7.3.17.

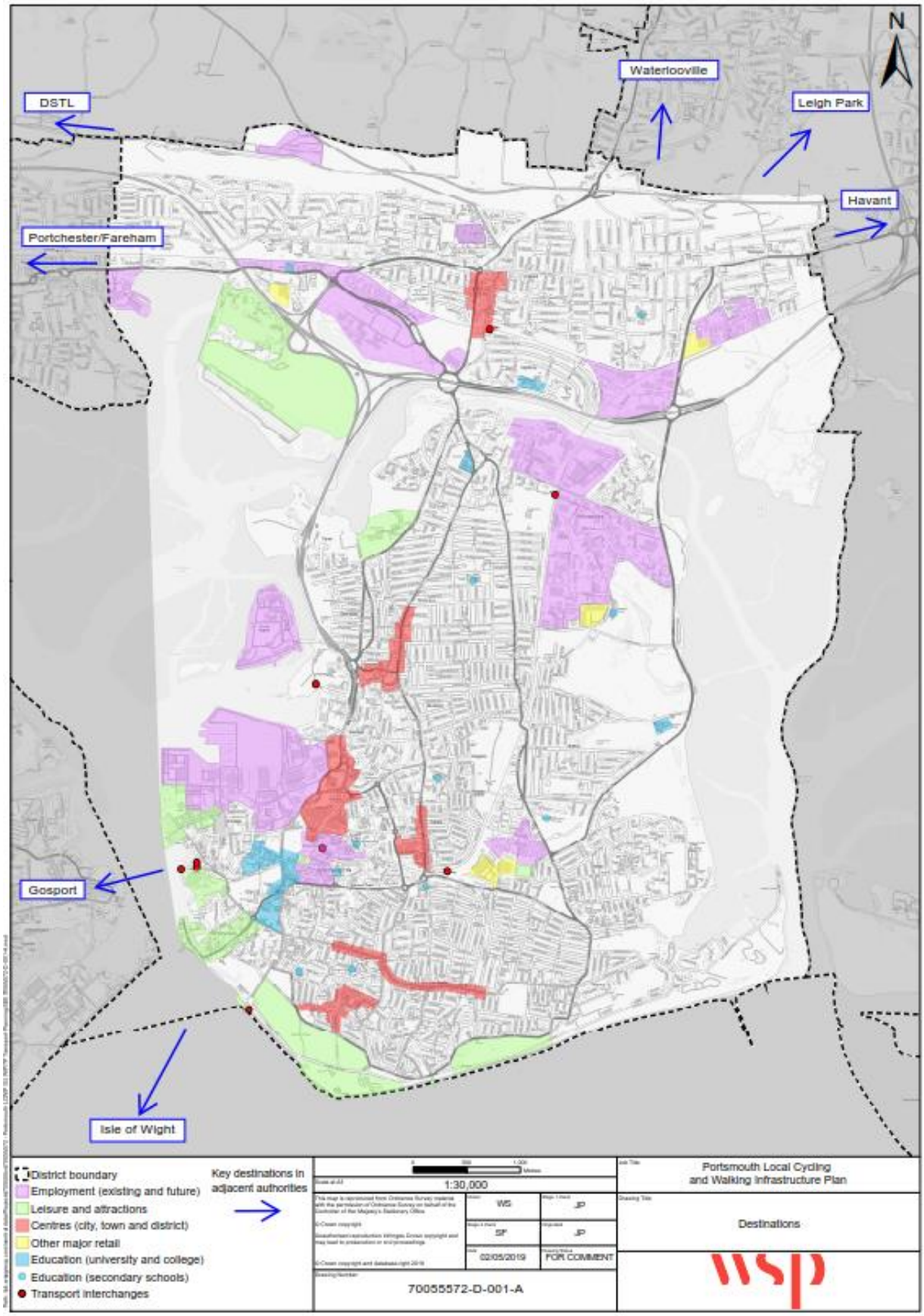
2.3.11. In similarity to journey origins, consideration was also given to cross-boundary journeys made by Portsmouth residents to strategic destinations in neighbouring authorities, particularly in respect of cycling journeys. These were represented in the LCWIP methodology by seven additional destination nodes for different directions of travel, as follows:

- To the Isle of Wight via the ferries and hovercraft;
- To Gosport via the Gosport Ferry;
- To Fareham and Portchester via road connections north of Portsmouth Harbour;
- To the Defence Science and Technology Laboratory (DSTL) and associated employment on Portsdown Hill in the Winchester authority area;
- To Waterlooville and other settlements along the A3 corridor;
- To Leigh Park and northern Havant;
- To south Havant and Langstone Technology Park.

Table 2.2 – Schedule of Destinations with significant trip potential within Portsmouth authority area used in LCWIP development

Key Employment Areas	Centres and Other Major Retail	Leisure attractions	Transport interchanges	Major education facilities
Airport Estate Broad Oak Works City Centre including Civic Offices and Guildhall Square Farlington Industrial Estate Hamilton Road / Castle Trading Estate, Trafalgar Wharf Portchester HM Naval Base Southampton Road Hilsea & Limberline Industrial Estates Lakeside North Harbour / HMRC QinetiQ Technology Park Queen Alexandra Hospital Rodney Road / St Mary's Hospital area Southampton Road / Harbourgate Walton Road Whale Island Naval Base	City Centre (Commercial Road) Gunwharf Quays Southsea Town Centre (Palmerston Road) District Centres – Albert Road & Elm Grove, Cosham, Fratton, North End Fratton Way retail area Ocean Retail Park Sainsbury's Farlington Tesco Cosham	Clarence Pier Eastney Seafront Fratton Park (Portsmouth Football Club) Guildhall Horsea Island Country Park (proposed) Mountbatten Centre Portsmouth Historic Dockyard Old Portsmouth South Parade Pier Southsea Common Southsea Seafront / Southsea Castle / Blue Reef / D Day Museum	Cosham Rail Station Fratton Rail Station Hilsea Rail Station Portsmouth Harbour Rail Station / Gosport Ferry / Isle of Wight Ferry Portsmouth & Southsea Rail Station The Hard Interchange Hayling Ferry Clarence Pier (Hoverport)	Portsmouth University (city centre campus) Portsmouth College Highbury College (two campuses) Secondary Schools: - Castle View Academy - Ark Charter Academy - Admiral Lord Nelson School - Mayfield School - Miltoncross Academy - Priory School - The Portsmouth Academy - Portsmouth High School - Portsmouth Grammar School - St. Edmund's Catholic School - St. John's College - Springfield School - Trafalgar/UTC Portsmouth

Figure 2.3 – Destinations used in the LCWIP methodology



2.4 Existing Cycling and Walking Network

Existing network

2.4.1. In broad terms the network of routes available for cycling is comprised of:

- the carriageways of the city's roads and streets, either mixed together with other vehicles or with cycle lanes delineated by road markings;
- routes parallel to and physically protected from motor traffic, such as by kerbs, and sometimes shared with pedestrians; and
- traffic-free routes, such as across open spaces, and again, sometimes shared with pedestrians.

2.4.2. A range of factors determines the suitability of a route for cycling and the current suitability of routes varies by location. Chapter 7 describes how the suitability of the LCWIP prioritised cycle routes was assessed against criteria.

2.4.3. The network of routes available for walking comprises footways adjacent to carriageways, plus traffic-free routes, such as routes through parks, pedestrianised streets and links within residential estates. It includes the 8km of public rights of way which exist within the authority. In some locations space is shared with cyclists. The quality and suitability of the walking network varies by location; Chapter 7 describes how the suitability of walking routes was assessed as part of the LCWIP.

2.4.4. The network available for cycling and walking is illustrated on the City Council's Active Travel Map. Public rights of way plans are also published online.

Physical barriers to cycling and walking movement

2.4.5. A high-level mapping exercise was undertaken in consultation with City Council officers to identify the strategic physical barriers to cycling and walking movements across the city and key missing links. These barriers are shown in Figure 2.4 and include railways, motorways and dual carriageways. The plan also identifies existing locations where the barriers may be crossed, differentiating between those crossing points which are step-free and those which are not. It identifies the 'missing link' between Horsea Island and Tipner, which is the subject of a bridge proposal (see paragraphs 2.2.6 and 2.2.15).

Figure 2.4 – Strategic Barriers to Walking and Cycling Movement

2.5 Existing Cycling and Walking Travel Patterns

2.5.1. The main publicly available datasets on cycling and walking travel patterns are described below.

Census 2011 data

2.5.2. The census collects data on mode of travel to work, plus home location and employment destination. The ONS aggregated this data and it is reported for journeys between each MSOA. Whilst the data is now several years old it provides a comprehensive dataset.

2.5.3. The PCT website displays the cycle to work flow data interactively. The highest recorded cycling to work flows in Portsmouth from this dataset are set out in Table 2.3. It indicates that in 2011 the highest reported cycle commuting flows were radial journeys to and from neighbourhoods on Portsea Island to the city centre and HM Naval Base.

2.5.4. In terms of cross-boundary flows, the census also recorded 1,096 cycle to work trips into Portsmouth from Gosport Borough, 329 from Havant Borough, 300 from Fareham District and 58 from the Isle of Wight. As the census required respondents to name their main mode of travel, this may under-report levels of cycling to work which are part of a longer journey, such as by ferry.

Table 2.3 – Census 2011 Cycling to work flows of greater than 100 in Portsmouth

Destination MSOA (key employment in MSOA in brackets)	Origin MSOA (main residential areas in brackets)	Number of recorded journeys
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 012 (Copnor / Buckland (Powerscourt Road area))	105
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 014 (Baffins)	107
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 015 (Between Fratton Road and railway line)	110
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 016 (City Centre and Portsea)	126
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 017 (Milton)	118

Source: Census 2011 Table WU03EW

2.5.5. The Datashine Commute website displays MSOA level travel to work data interactively for each mode. The highest recorded walking to work flows in Portsmouth from this dataset are set out in Table 2.4. This indicates that the highest recorded levels of walking were to the city centre and HM Naval Base areas, with other important flows to Gunwharf Quays and key employment in Cosham.

Table 2.4 – Census 2011 Walking to work flows of greater than 250 in Portsmouth

Destination MSOA (key employment in MSOA in brackets)	Origin MSOA (main residential areas in brackets)	Number of recorded journeys
Portsmouth 002 (Queen Alexandra Hospital, Cosham district centre and Southampton Road employment areas)	Portsmouth 002 (East Paulsgrove)	289
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 015 (Between Fratton Road and railway line)	426
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 016 (City Centre and Portsea)	943
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 018 (Somers Town)	374
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 019 (between Goldsmith Avenue and Highland Road)	284
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 020 (Southsea north of Albert Road)	287
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 022 (Southsea south of Elm Grove)	269
Portsmouth 016 (City Centre, Portsea and HM Naval Base)	Portsmouth 024 (Gunwharf Quays and Old Portsmouth)	254
Portsmouth 024 (Gunwharf Quays and Old Portsmouth)	Portsmouth 024 (Gunwharf Quays and Old Portsmouth)	251

Source: Census 2011 Table WU03EW

Schools Census 2011

2.5.6. Until 2011 the statutory schools census collected information on pupils' usual main mode of travel to school. 'Usual' mode of travel was defined as that used most frequently by the pupil throughout the year, and 'main' mode defined as that used for the longest distance. The Department for Education collated this data to identify origin-destination flows at Lower Level Super Output Area scale. These are smaller areas of statistical geography which had populations of between 1,000 and 3,000 at the time of the 2011 census. The PCT was further developed during 2019 to display this travel school data; however the network planning for the Portsmouth LCWIP was already completed by this stage.

2.5.7. The most significant cycling flows to schools (greater than 50 pupils) are summarised below:

- Admiral Lord Nelson School: 121 pupils usually cycling to school, with the greatest share originating from residential areas west of the railway, via Burrfields Road;
- City of Portsmouth Boys' School (now Trafalgar School), Hilsea: 81 pupils usually cycling to school, mostly originating to the south, in neighbourhoods either side of London Road;
- Springfield Secondary School, Drayton: 72 pupils usually cycling to school, mostly from the Drayton and Cosham areas.

Commentary

2.5.8. The data sources referred to above represent the most comprehensive publicly available information on cycling and walking flows. However, the data is now eight years old and does not cover journeys made for purposes other than travel to work and travel to school. Therefore, it excludes travel to shops, local facilities, to visit friends and family, trips made as part of work and so on.

2.5.9. The National Travel Survey 2018 indicates that:

- In respect of cycling, commuting and travel to school (including adults accompanying children) accounted for 35% and 6% of travel respectively. Leisure trips (visiting friends at home and elsewhere, entertainment, sport, holiday and day trip) were equally as important a trip purpose as popular as commuting; and
- In respect of walking, commuting and travel to school (including adults accompanying children) accounted for 8% and 19% of travel respectively. The greatest proportion of trips were made for shopping (22%) and leisure (visiting friends at home and elsewhere, entertainment, sport, holiday and day trip).

Other data sources

2.5.10. Traffic counts are undertaken on selected roads across the city. They tend to be carried out either by the DfT as part of a national data collection exercise, by the City Council, usually to inform specific studies, or by planning applicants preparing planning applications.

2.5.11. Annual average daily flow data for 2019 are reported below. This represents the numbers of cyclists (two-way flows) at selected count points in the city for the period from 1 January 2019 up to and including 19 November 2019:

- A2030 Eastern Road: 336;
- A27 Southampton Road west of Port Way: 254;
- A288 South Parade, Southsea: 254;
- A3 London Road, north of Military Road: 144;
- Eastern Road shared-use path (South of Sword Sands Path): 443;
- Eastern Road shared-use path (south of waterbridge): 472;
- Sydenham Terrace shared-use path: 887; and
- Unicorn Road underpass: 198

2.5.12. Traffic counts tend not to survey numbers of pedestrians. Many are carried out on more major roads, which may be avoided by some cyclists and pedestrians. In addition, as there may be several route options available to cyclists between any given origin and destination, a single traffic count may not capture all cycle journeys.

2.5.13. Some data on footfall (pedestrian counts) is collected for the retail centres of Commercial Road, Palmerston Road (Southsea) and High Street, Cosham. This is reported in the Portsmouth Retail & Town Centres local plan background paper published in 2019. Annual footfall figures for the financial year 2017/2018 were as follows:

- Commercial Road (Primark): 10,128,304;
- Palmerston Road (northern end): 4,783,530; and
- Cosham High Street (Near Crown Bingo): 3,920,433.

Data for the last three years indicates that footfall on Commercial Road and Palmerston Road has declined but in Cosham footfall showed a slight increase between 2016/2017 and 2017/2018.

3 Network Planning for Cycling (Desire Lines)

3.1 Methodology

3.1.1. The DfT technical guidance states that identifying demand for a planned network should start by mapping the main origin and destination points across the geographical area to be covered by the LCWIP.

Origins

3.1.2. The cycle network planning used the origins shown on Figure 2.2.

Destinations

3.1.3. The cycle network planning used the destinations shown on Figure 2.3. To simplify the origin-destination analysis, destinations located in close proximity to each other were clustered. The resulting clusters are shown on Figure 3.1. Each cluster had a single node to represent journeys to and from all the constituent destinations within the cluster. The destination clusters and their constituent destinations are listed broadly north to south in Table 3.1, Table 3.2 and Table 3.3. These tables cover destination clusters on the mainland, Northern Portsea Island and Southern Portsea Island respectively.

Table 3.1 – Destination clusters created as part of cycle network planning process - Mainland

Reference	Constituent destinations
M1	QinetiQ Technology Park
M2	Walton Road / Castle Trading Estate; Castle View Academy
M3	Horsea Island Country Park
M4	Lakeside North Harbour / HMRC
M5	Southampton Road / Harbourgate employment area; Tesco Extra Cosham; Highbury College (Northarbour Campus)
M6	Queen Alexandra Hospital
M7	Cosham District Centre; Cosham Rail Station
M8	Highbury College (Highbury Campus, Tudor Avenue)
M9	Springfield School
M10	Walton Park / Railway Triangle employment areas
M11	Farlington Industrial Estate; Sainsbury's Farlington

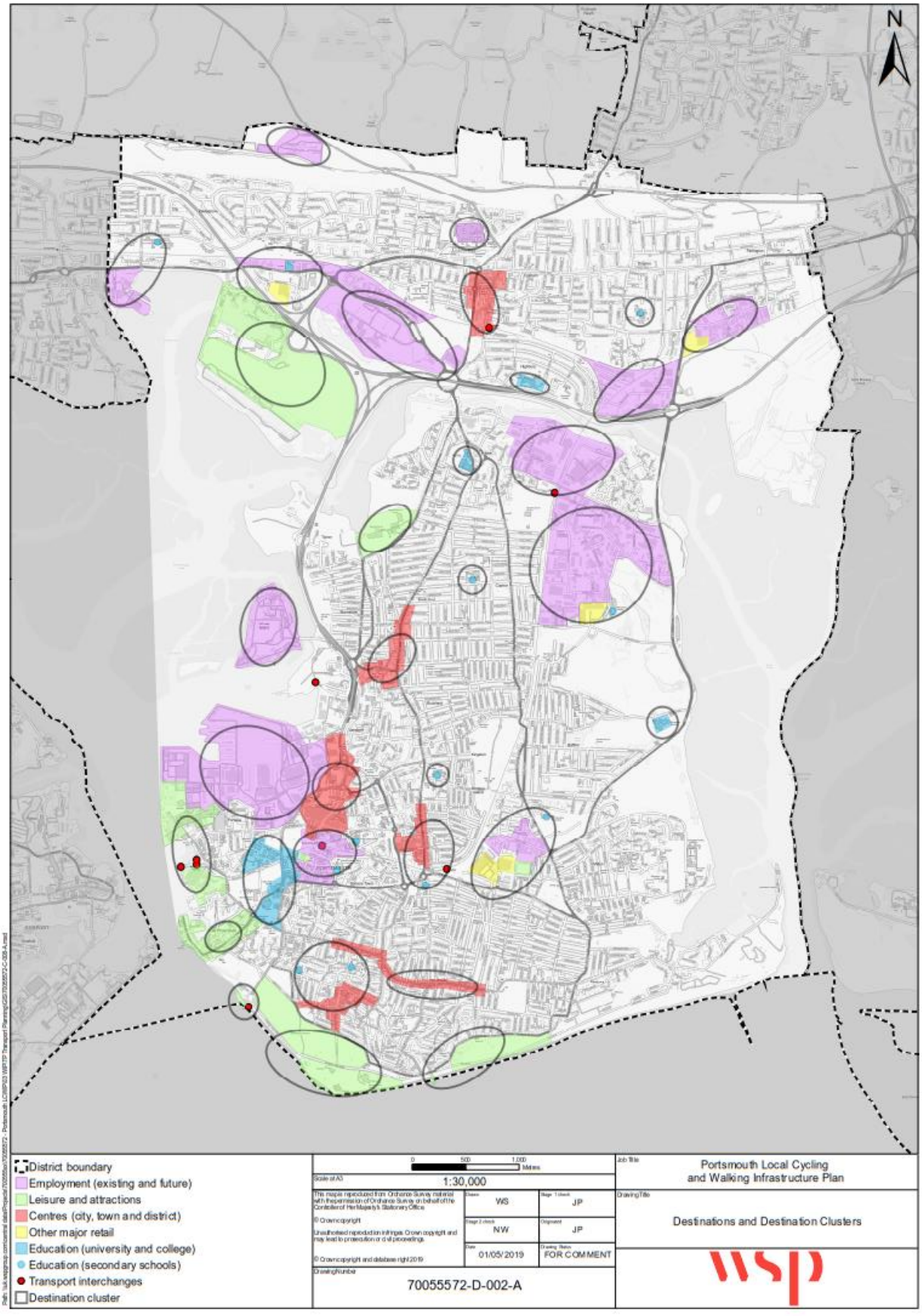
Table 3.2 - Destination clusters created as part of cycle network planning process – Northern Portsea Island

Reference	Constituent destinations
NP1	Trafalgar School / UTC Portsmouth
NP2	Hilsea Rail Station; Hilsea & Limberline Industrial Estates, Broad Oak Works
NP3	Mountbatten Centre
NP4	Mayfield School
NP5	Airport Estate employment areas; Ocean Retail Park; Admiral Lord Nelson School
NP6	Whale Island Naval Base
NP7	Portsmouth International Port
NP8	North End District Centre
NP9	Portsmouth College (Tangier Road)

Table 3.3 - Destination clusters created as part of cycle network planning process – Southern Portsea Island

Reference	Constituent destinations
SP1	HM Naval Base
SP2	City Centre (Commercial Road)
SP3	Portsmouth Academy
SP4	Gunwharf Quays; The Hard Interchange / Gosport Ferry / Isle of Wight Ferry; Portsmouth Harbour Rail Station; Portsmouth Historic Dockyard
SP5	Portsmouth Grammar School; Portsmouth University (City Centre Campus)
SP6	City Centre employment including Civic Offices and Guildhall Square; Ark Charter Academy; The Guildhall; Portsmouth & Southsea Rail Station; St. Edmund's Catholic School
SP7	Fratton District Centre; Fratton Rail Station; Priory School
SP8	Fratton Park (Portsmouth Football Club); Fratton Way retail area; Miltoncross Academy; Rodney Road / St. Mary's Hospital employment areas
SP9	Old Portsmouth
SP10	Clarence Pier (leisure attraction and Hoverport)
SP11	Elm Grove District Centre; Portsmouth High School; St. John's College; Southsea town centre (Palmerston Road)
SP12	Albert Road District Centre
SP13	Southsea Common; Southsea Seafront / Southsea Castle / Blue Reef / D Day Museum
SP14	South Parade Pier; Eastney Seafront
SP15	Hayling Ferry

Figure 3.1 – Destination Clusters used for Cycle Network Planning



3.2 Desire Lines

3.2.1. In order to identify a network of strategic cycling corridors covering the whole of the plan area, origins and destinations were connected with desire lines. Desire lines are crow-fly straight-line connections between origins and destinations and are not initially mapped to existing roads or cycle routes (see chapter 6 for this step in the process). Three different methods were used to identify these, as follows:

- Method 1 – corridors with highest forecast future cycle commuting flows;
- Method 2 – corridors with significant demand for short distance trips to a range of destinations; and
- Method 3 – additional corridors which would provide network coverage across the plan area.

3.2.2. These methods were used as a guide and not an absolute in considering the draft cycle network.

Method 1

3.2.3. The PCT's Government Target (Equality) scenario was used to identify the highest forecast future cycle commuting flows within the plan area. The government target is to double the number of cycling stages made per year over the period between 2013 and 2025. The PCT models how the number of commuting cycling trips might increase across England, based on the length and hilliness of commuting journeys recorded in the 2011 census. The growth in cycling is evenly distributed by age group, by gender, and other socio-demographic factors. This method identified a series of radial routes from neighbourhoods on Portsea Island into the city centre as having the highest forecast future cycle flows.

3.2.4. This method has a number of limitations. As it is based on 2011 census travel to work data, it does not consider trips for any other purposes, such as to education or shops. Additionally, trips to developments which have been completed since 2011, or future development, will not be included. Lastly, two-stage trips, such as to rail stations, will not be included.

3.2.5. Further scenarios were released since the completion of the origin-destination analysis for Portsmouth. They include:

- a Government Target (Near Market) scenario, which models the increase occurring as a function of trip distance and hilliness, plus a number of socio-demographic and geographical characteristics (including age, gender, ethnicity, car ownership, income deprivation); and
- Scenarios based on pupils' travel to schools, based on the 2011 National School Census.

Method 2

3.2.6. Origins and destinations were connected to each other with straight ‘desire lines’ to identify key trends in demand. A 5km threshold was applied to the desire lines to focus on short-distance utility trips. Origins were connected to all the destinations listed in Table 2.2 within 5km. The exceptions were district centres or other major retail areas (retail parks and supermarkets), where each origin was only connected to the nearest example of that destination category.

Method 3

3.2.7. Having identified a series of corridors using the two methods above, the final approach considered a coherent strategic network for the full plan area. This process ensured that connections to key destinations were provided from each residential neighbourhood.

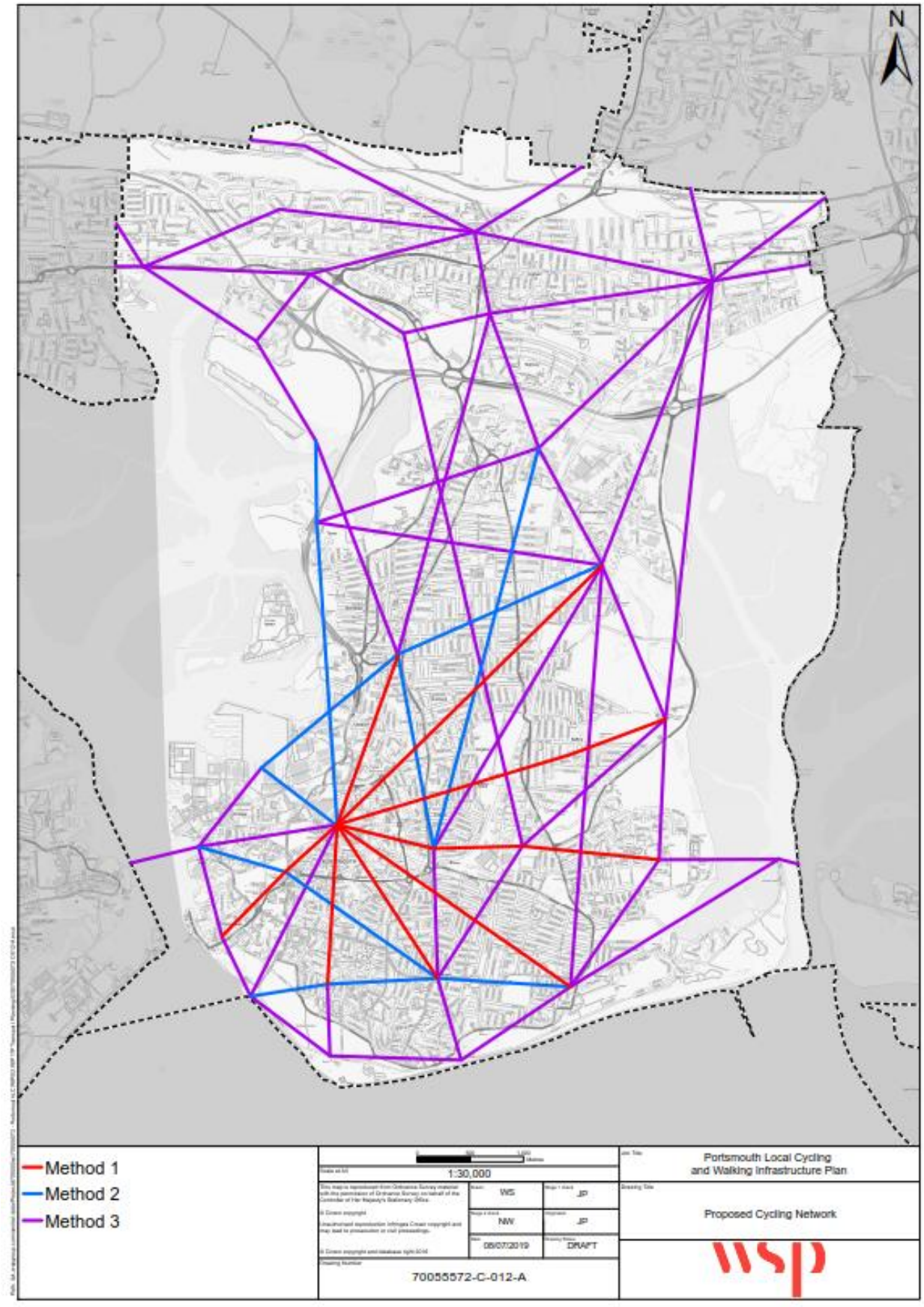
Proposed Strategic Cycling Network

3.2.8. The proposed strategic cycling network is a composite of the three methods, based on forecast future commuter cycling flows, corridors with likely high demand for short-distance cycle trips to a range of destinations and ensuring balanced network coverage. The plan in Figure 3.2 shows how the strategic cycling network was composed of connections identified from each method. The contribution to the straight-line cycling network from each method is summarised below:

- Method 1 (highest forecast future cycle commuting flows, shown as red lines) – this identified routes radiating from Portsmouth City Centre to North End, Hilsea, Baffins, Milton, Eastney, East and West Southsea and Old Portsmouth;
- Method 2 (trends in demand for short-distance trips from analysis, shown as blue lines) – routes were added to the network plan connecting:
    - Destination cluster SP4 (Gunwharf Quays / The Hard Interchange area) to Eastney via destination cluster SP5 (Portsmouth Grammar School / Portsmouth University) and destination cluster SP12 (Albert Road District Centre);
    - Destination cluster SP10 (Clarence Pier) to Eastney via destination cluster SP11 (Southsea town centre and nearby destinations);
    - Destination cluster SP7 (Fratton District Centre / Fratton Rail Station / Priory School) to destination cluster NP5 (Airport Estate employment areas; Ocean Retail Park; Admiral Lord Nelson School);
    - Destination cluster SP7 (Fratton District Centre / Fratton Rail Station / Priory School) to destination cluster NP8 (North End District Centre);
    - Destination cluster SP1 (HM Naval Base) to destination cluster NP5 (Airport Estate employment areas; Ocean Retail Park; Admiral Lord Nelson School);
    - Destination cluster SP1 (HM Naval Base) to destination cluster SP6 (City Centre area); and
    - Destination cluster M3 (Horsea Island Country Park) to destination cluster SP6 (City Centre area); and

- Method 3 (balanced network coverage, shown in purple lines) – comprehensively connecting origins to nearby destinations. This for example included:
  - Links to Queen Alexandra Hospital from surrounding areas, including Paulsgrove, Widley, Drayton, Cosham and Portchester;
  - North-south links along the eastern edge of Portsea Island; and
  - A coastal route connecting the destinations along the southern edge of Portsea Island, from Old Portsmouth to Hayling Ferry via Southsea Seafront.

Figure 3.2 – Proposed Strategic Cycling Network (Straight Line Corridors)



4 Network Planning for Walking

4.1 Core Walking Zones and Key Walking Routes

4.1.1. The LCWIP guidance states that, in planning for walking, local authorities should identify:

- Core Walking Zones; and
- Key Walking Routes.

4.1.2. The guidance gives authorities flexibility in the way they define these zones and routes. The process adopted for Portsmouth referred to the footway hierarchy concept outlined in the Roads Liaison Group document entitled Well-Managed Highway Infrastructure.

4.1.3. Table 4.1 describes how the Code of Practice categories informed the choice of Core Walking Zones and Key Walking Routes. Figure 4.1 illustrates the chosen Key Walking Routes and Core Walking Zone boundaries. Table 4.2, Table 4.3 and Table 4.4 describe the routes and extent of the Key Walking Routes on the mainland, Northern Portsea Island and Southern Portsea Island respectively. The boundaries of the Core Walking Zones and Key Walking Routes were developed in consultation with City Council officers.

4.1.4. The extent of the Core Walking Zones were based on the city, town and district centre boundaries identified in adopted development plan policies PCS4, STC2 and PCS8. The United Services Recreation Ground at Burnaby Road were excluded from the Tier 1 Core Walking Zone boundary. Routes which connected major residential areas to the strategic destinations were chosen as the Key Walking Routes.

Table 4.1 – Identification of Core Walking Zones and Key Walking Routes

Designated Core Walking Zone	Centres and retail designations in The Portsmouth Plan	Equivalent Code of Practice Hierarchy Category and Description
Tier 1 Core Walking Zone	City Centre (Commercial Road, University, Gunwharf Quays)	Prestige Walking Zones - Very busy areas of towns and cities with high public space and streetscene contribution.
Tier 2 Core Walking Zone	Southsea town centre (Palmerston Road) Albert Road / Elm Grove district centre Cosham district centre Fratton district centre North End district centre	Primary Walking Routes - Busy urban shopping and business areas and main pedestrian routes.
Key Walking Routes	Not applicable – Identified as main pedestrian routes across the rest of the city	Primary Walking Routes - Busy urban shopping and business areas and main pedestrian routes.

Figure 4.1 – Core Walking Zones and Key Walking Routes

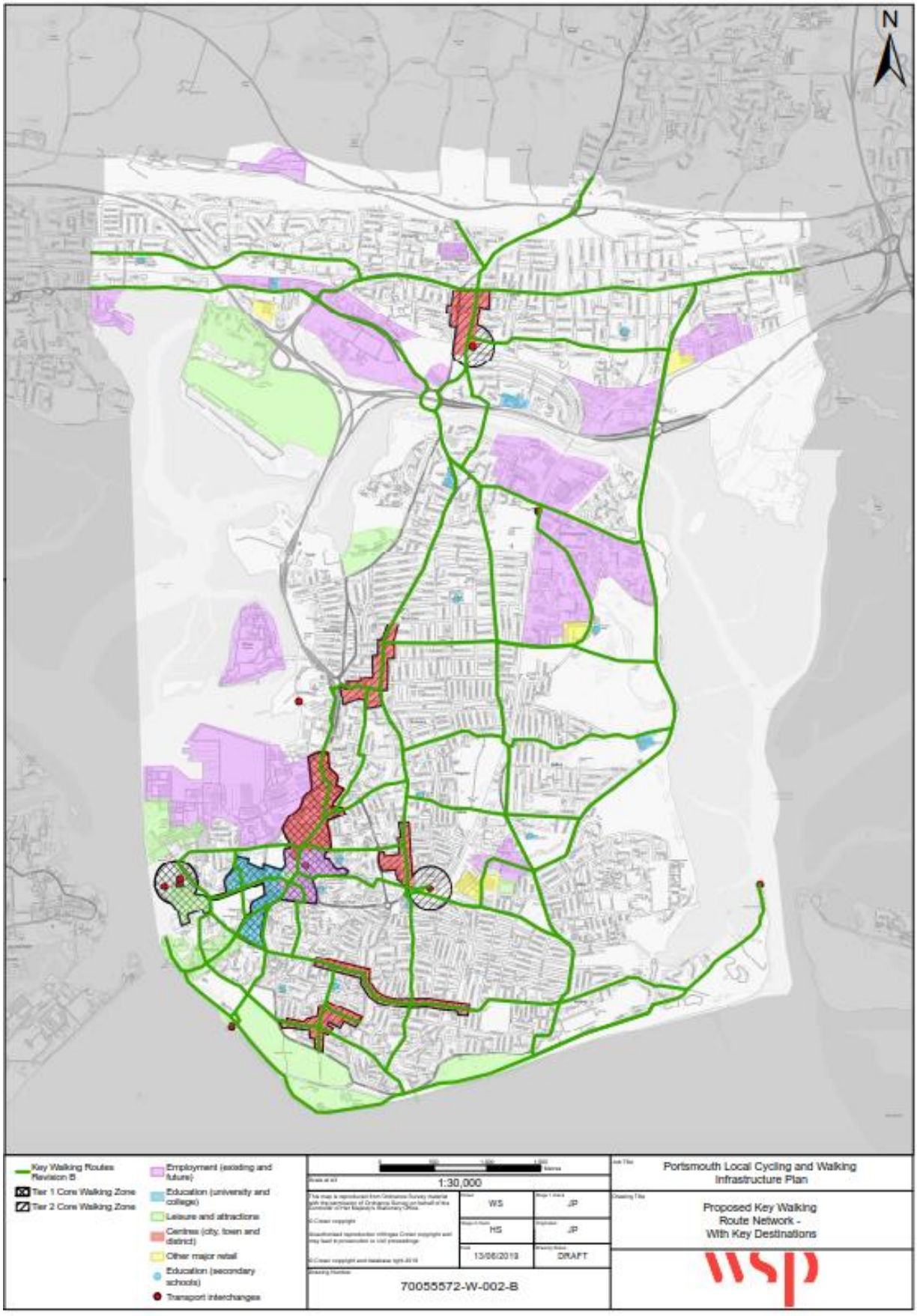


Table 4.2 – Description of Key Walking Routes – Mainland

Roads and routes which comprise the Key Walking Route	Start and End Points
Jubilee Avenue and Allaway Avenue	Authority boundary (Portsdown Road) to Southampton Road
Southampton Road, Spur Road, Havant Road	Authority boundary (Portsdown Road) to Authority boundary (east of Rectory Avenue)
Western Road	Southampton Road to Portsbridge Roundabout
Southwick Hill Road	Queen Alexandra Hospital frontage
London Road, High Street Cosham, Portsmouth Road and Portsbridge Roundabout	Authority boundary (north of Christchurch Gardens) to Ports Creek
Knowsley Road, Lonsdale Avenue, Old Manor Way and Grove Road	High Street Cosham to Eastern Road
The Old Road, Tudor Crescent and footbridge across M27 and Ports Creek	Portsmouth Road to Ports Creek
Eastern Road	Havant Road to bridge across Ports Creek

Table 4.3 – Description of Key Walking Routes – Northern Portsea Island

Roads and routes which comprise the Key Walking Route	Start and End Points
London Road, Kingston Road and Fratton Road	Ports Creek to Fratton Bridge
Copnor Road, Copnor Bridge and Milton Road	London Road to Goldsmith Avenue / Eastney Road junction
Eastern Road and Velder Avenue	Bridge across Ports Creek to Milton Road / Rodney Road junction
Peronne Road	Copnor Road to Ports Creek
Norway Road and Anchorage Road	Copnor Road to Eastern Road
Airport Service Road, Quatremaine Road and Dundas Lane	Hilsea Rail Station to Burrfields Road
Stubbington Avenue and Burrfields Road	Angerstein Road / Gladys Avenue / London Road roundabout to Eastern Road

Roads and routes which comprise the Key Walking Route	Start and End Points
Kingston Crescent, Mile End Road and Commercial Road	London Road to Edinburgh Road
Gamble Road, Malins Road, Sultan Road, Wingfield Street, Lower Wingfield Street and connection to Lake Road	Kingston Crescent to Lake Road
Lake Road	Commercial Road to Fratton Road
Arundel Street	Commercial Road to Fratton Road
New Road	Kingston Road to Copnor Road
Milton Road and Tangier Road	Copnor Road to Eastern Road
St. Mary's Road and Langstone Road	Fratton Road to Eastern Road
Fratton Way and Rodney Road	Goldsmith Avenue to Eastern Road / Milton Road / Velder Avenue junction

Table 4.4 – Description of Key Walking Routes – Southern Portsea Island

Roads and routes which comprise the Key Walking Route	Start and End Points
Queen Street, Bishop Crispian Way and Edinburgh Road	The Hard to Commercial Road
Isambard Brunel Road, Greetham Street, Raglan Street, Somers Road and Sydenham Terrace	Commercial Road / Guildhall Walk junction to Fratton Bridge
Goldsmith Avenue	Fratton Bridge to Milton Road / Eastney Road junction
The Hard, St. George's Road, Museum Road, King's Road, Elm Grove, South Victoria Road, Albert Road, Highland Road, Henderson Road and Fort Cumberland Road	Queen Street to Fort Cumberland Car Park / Melville Road junction
Park Road, pedestrian link to King Henry I Street and King Henry I Street	St. George's Road to Guildhall Square
St. James' Street, Richmond Place and Burnaby Road	Queen Street to Cambridge Road

Roads and routes which comprise the Key Walking Route	Start and End Points
Commercial Road, Guildhall Square, Guildhall Walk, Hampshire Terrace, Landport Terrace, King's Terrace, Jubilee Terrace, Bellevue Terrace and Pier Road	Edinburgh Road to Clarence Pier
High Street, Cambridge Road and Lord Montgomery Way	Broad Street to Hampshire Terrace
Gunwharf Road, Lombard Street, Pembroke Road, Gordon Road, Duisburg Way, Osborne Road and Clarendon Road	St. George's Road to South Parade
Broad Street, Battery Row, Long Curtain walkway, Clarence Parade (Clarence Pier to Blue Reef), seafront walkway from Blue Reef to The Dell, South Parade, Eastney Esplanade, Henderson Road, Melville Road, Fort Cumberland Road and Ferry Road	North-western tip of Old Portsmouth to Hayling Ferry landing
Walkway from Guildhall Square to Winston Churchill Avenue (central library to courts), Middle Street, Eldon Street and Norfolk Street	Guildhall Square to King's Road
Fratton Bridge, Fawcett Road, Lawrence Road and Waverley Road	Sydenham Terrace to Clarendon Road / Granada Road junction
Grove Road South and Palmerston Road	Elm Grove to Clarence Parade
Marmion Road	Grove Road South to Fontwell Road
Eastney Road, Cromwell Road and St. George's Road	Goldsmith Avenue / Milton Road junction to Eastney Esplanade

5 Prioritising Routes for Development

5.1 Introduction

5.1.1. The maps in Chapters 3 and 4 indicate a strategic network of routes for walking and cycling respectively covering the whole city. The LCWIP guidance states that these routes should be audited to determine where improvements are required. A prioritisation process was used to determine an initial list of routes for auditing.

5.1.2. A balanced set of prioritisation criteria were chosen. The criteria covered the following themes:

- Existing and potential future cycling demand;
- Strategic transport projects and priorities;
- Economy;
- Education;
- Housing; and
- Public health.

5.1.3. The criteria, the data used, and parameters applied are set out in Table 5.1. As inferred in para. 2.5.10 and in common with many UK areas, there is currently limited available data on footfall across the city.

5.1.4. Reference numbers were assigned to the cycling corridors for the prioritisation process. As the chosen criteria for cycling routes included existing and potential cycling flows, the prioritisation process needed to be able to capture all relevant origin-destination travel flows. A single reference was therefore given to each desire line corridor (e.g. from Hayling Ferry to Gosport), rather than shorter sections of route. Many of the corridor references overlap with each other for part of their length.

5.1.5. Each Key Walking Route was disaggregated into sections, usually from the connection point with one key walking route to the connecting point with another, and not more than 2km in length. This aligned to 2km distance threshold for Key Waking Routes in LCWIP guidance. These sections were also assigned a reference number.

5.1.6. Each cycling corridor or section of Key Walking Route was then scored against the criteria. The cycling desire line corridors varied in length significantly. To ensure that the prioritisation process did not favour longer distance routes (which would tend to intersect with more homes, key employment areas, and so on), the results were reported on a ‘per kilometre’ basis for the majority of the criteria. Where the criteria resulted in low numbers or binary results (e.g., yes / no answers) these were scored for the route as a whole. The Key Walking Routes were of more consistent lengths and so were considered as a full route.

Table 5.1 – Prioritisation Criteria

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Current and future potential trip making	Existing number of cycle journeys (commuting)	Census 2011 travel to work by bicycle	Origin and destination pairs are within 800m of the route (based on population-weighted centroids)	**Yes**	**No**
Current and future potential trip making	Potential future additional cycle journeys (commuting)	Propensity to Cycle Tool Government Target (Equality) cycling growth scenario	Origin and destination pairs are within 800m of the route (based on population-weighted centroids)	**Yes**	**No**
Current and future potential trip making	Existing and potential future number of walking journeys	Walking network categories (Tier 1 Core Walking Zone, Tier 2 Core Walking Zone)	Route is within 400m of Tier 1 Core Walking Zone / Tier 2 Core Walking Zone	**No**	**Yes**
Public Health	Proximity to AQMAs (as part of measures to reduce car use, and vehicle emissions, in areas with poor air quality)	Extent of AQMAs in the city	Number of AQMAs within 400m of route	**Yes**	**Yes**

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Public Health	Improving transport links to and from deprived communities	Number of MSOAs which are within the top 20% most deprived areas in England & Wales	MSOAs which are wholly or partially within 400m of a route	**Yes**	**Yes**
Public Health	Addressing road safety issues	Recorded Numbers of Killed or Seriously Injured from road collisions	Number of Killed or Seriously Injured cyclists within 400m of a route	**Yes**	**No**
Public Health	Addressing road safety issues	Recorded Numbers of Killed or Seriously Injured from road collisions	Number of Killed or Seriously Injured pedestrians within 400m of a route	**No**	**Yes**
Strategic	Proximity to coastal defence schemes	Proposed extent of remaining elements of North Portsea Island Coastal Scheme (phases 4 and 5) and Southsea Coastal Scheme	Proposed coastal defence scheme is within 400m of route	**Yes**	**Yes**
Strategic	Cross-boundary routes	Local authority boundary	Route crosses local authority boundary	**Yes**	**No**

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Strategic	Proximity to Future High Streets bid area	Future High Streets bid area (Commercial Road area and Fratton district centre)	Number of bid areas within 400m of route	**Yes**	**Yes**
Strategic	Proximity to South East Hampshire Rapid Transit	Proposed South East Hampshire Rapid Transit	Route is within 400m of South East Hampshire Rapid Transit proposed infrastructure scheme	**Yes**	**Yes**
Strategic	Proximity to transport hubs	Locations of rail stations, The Hard Interchange, ferries, hoverport and International Ferryport	Number of transport hubs within 400m of route	**Yes**	**Yes**
Economy	Proximity to businesses	All entries in the Local Land & Property Gazetteer with Basic Land and Property Unit codes CI (industrial), CL (leisure), CM (medical), CN (animal centre), CO (office) and CS (storage).	Number of gazetteer entries within 400m of route	**Yes**	**Yes**

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Economy	Proximity to businesses	Major Employers Map Five size categories – 50-99, 100-249, 250-499, 500-999 and 1000+	Number of major employers within 400m of the route (weighted by size)	**Yes**	**Yes**
Economy	Proximity to retail units	All Portsmouth entries in the Local Land & Property Gazetteer with Basic Land and Property Unit code CR (retail)	Number of gazetteer entries within 400m of route	**Yes**	**Yes**
Economy	Leisure attractions served	The major leisure attractions listed on LCWIP Origin & Destination Map	Number of leisure attractions within 400m of route	**Yes**	**Yes**
Economy	Portsmouth International Port	Location of Portsmouth International Port	Route is within 400m of Portsmouth International Port	**Yes**	**Yes**

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Education	Proximity to education establishments	Pupil and student numbers (Department for Education data supplemented with additional information, where required)	Number of pupils/students enrolled at establishments within 400m of the route	**Yes**	**Yes**
Housing	Existing homes	All Portsmouth entries in the Local Land & Property Gazetteer with Basic Land and Property Unit code RD (dwelling), RH (home in multiple occupation) and RI (residential institution).	Number of additional homes within 400m of route	**Yes**	**Yes**

Theme	Criteria	Data used	Threshold applied	Cycling prioritisation	Walking prioritisation
Housing	Proposed additional homes	Housing & Economic Land Availability Assessment data, October 2018	Net yield of forecast additional homes within 400m of route (where information available). Where no information available housing unit yield estimated by multiplying site area by likely development density. For mixed use sites assumption made that 50% of site would be given over to housing.	**Yes**	**Yes**

5.2 Prioritisation Results – Cycling Desire Line Corridors

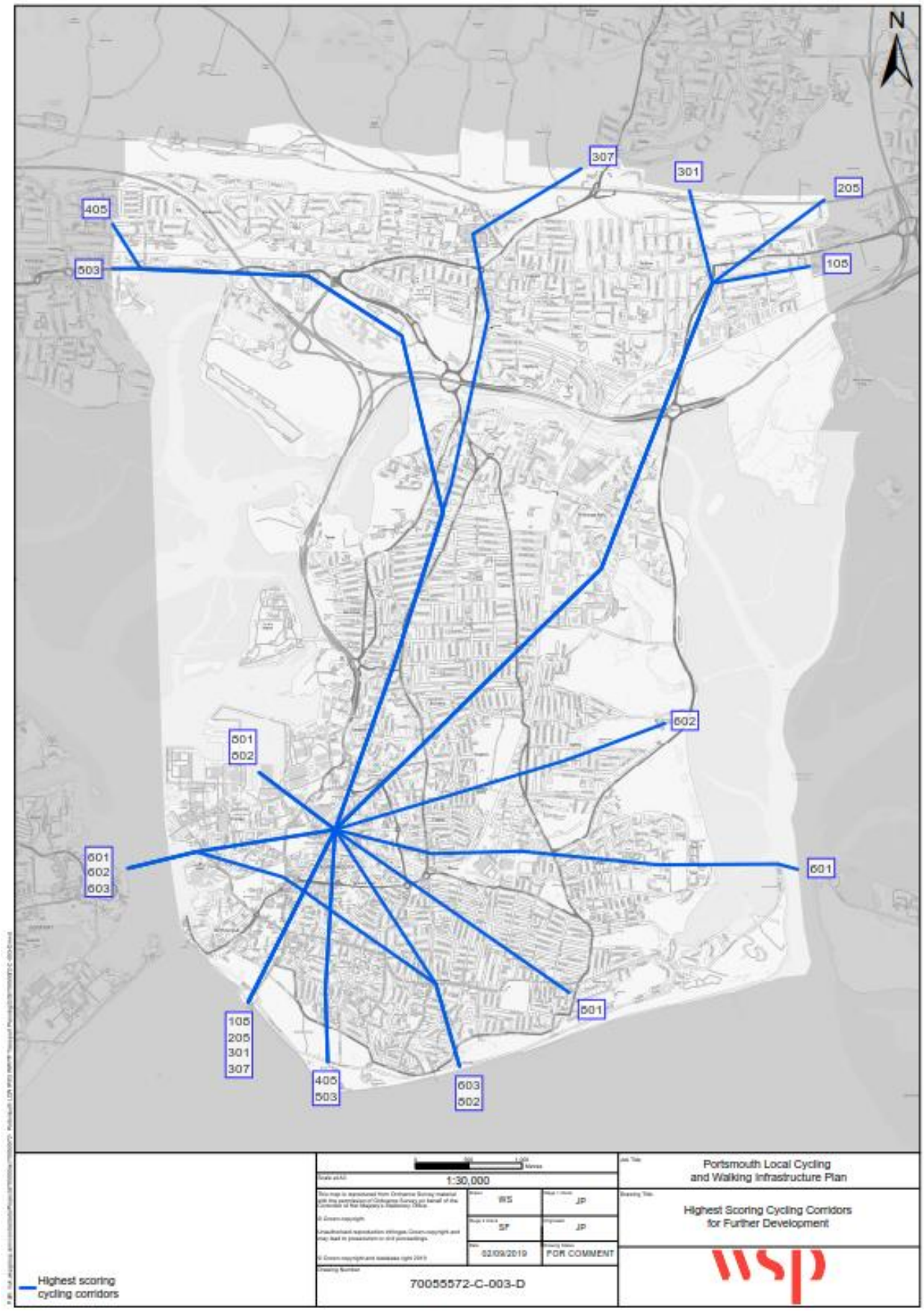
5.2.1. Each cycling desire line corridor was ranked based on its score. Based on the prioritisation scores, it was decided that for this iteration of the LCWIP eleven cycling corridors would be taken forward for further development. These eleven corridors were considered to give a reasonable geographic coverage across the city and cater for a range of potential journeys. Table 5.2 below outlines the highest scoring cycling corridors taken forward for further development.

Table 5.2 – Schedule of Prioritised Cycling Desire Line Corridors

Rank	Reference	Route	Score
1	307	Waterlooville to Clarence Pier via Queen Alexandra Hospital, Cosham & City Centre	65
2=	503	Fareham to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	61
2=	802	Southsea Seafront to HM Naval Base via City Centre	61
2=	801	Eastney to HM Naval Base	61
5	301	Waterlooville to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	60
6=	405	DSTL / North Portchester to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	59
6=	108	Havant to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	59
6=	602	Gosport to Portsmouth College via City Centre	59
9=	205	Leigh Park to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	57
9=	603	Gosport to Southsea Seafront via University and Albert Road	57
11	601	Gosport to Hayling Island via City Centre, Fratton and St. James' Hospital / Langstone Campus development sites	56

5.2.2. Figure 5.1**Error! Reference source not found.** illustrates the location and distribution of the eleven highest scoring cycling corridors taken forward for further development. It is intended that other corridors illustrated on Figure 3.2 will be developed and improved in subsequent iterations of the LCWIP, or as funding opportunities arise. There will also be a requirement to consider how other destinations can be served by the city's cycle network, such as primary schools, health centres, other shopping parades and other facilities. Providing these connections may form a secondary and/or tertiary cycle network for the city.

Figure 5.1 – Highest Scoring Cycling Corridors for Further Development



5.3 Prioritisation Results – Key Walking Routes

5.3.1. Each Key Walking Route was ranked based on its score when assessed against the prioritisation criteria. Table 5.3 and Table 5.4 outlines the outcome of this prioritisation and the Key Walking Routes to be taken forward for further development. To ensure a balance of locations, these comprised the five highest scoring Key Walking Routes within or connecting to the city centre area, and the five highest scoring Key Walking Routes elsewhere across the authority.

Table 5.3 – Prioritised Key Walking Routes – City Centre

Rank	Reference	Route	Score
1=	22	Commercial Road and Lake Road (Edinburgh Road to Fratton Road)	49
1=	33	Arundel Street (Commercial Road to Fratton Road)	49
1=	80	Isambard Brunel Road, Greetham Street, Raglan Street, Somers Road and Sydenham Terrace (Commercial Road to Fratton Road)	49
4	37	King Henry I Street, walkway to Anglesea Road and Park Road (Guildhall Square to Gunwharf Quays entrance)	47
5	79	Walkway from Guildhall Square to Winston Churchill Avenue (central library to courts), Middle Street, Eldon Street and Norfolk Street (Guildhall Square to King's Road)	45

Table 5.4 - Prioritised Key Walking Routes – Outside City Centre

Rank	Reference	Route	Score
1	53	Kingston Road and Fratton Road (Kingston Crescent to Lake Road)	36
2	11	London Road (Copnor Road to Angerstein Road / Gladys Avenue / Stubbington Avenue roundabout)	35
3=	27	Fratton Bridge, Fawcett Road and Lawrence Road (Selbourne Terrace to Albert Road)	33
3=	77	Grove Road South and Palmerston Road (Elm Grove to Clarence Parade)	33
5	68	London Road (Angerstein Road / Gladys Avenue / Stubbington Avenue roundabout to Kingston Crescent)	32

5.3.2.

5.3.3. Figure 5.2 illustrates the location of the ten prioritised Key Walking Routes taken forward for audit. It is intended that other Key Walking Routes illustrated on Figure 4.1 will be developed in subsequent iterations of the LCWIP, or as funding opportunities arise.

Figure 5.2 – Location and Distribution of Prioritised Key Walking Routes

6 Network Planning for Cycling (Route Selection)

6.1 Introduction

6.1.1. Following the prioritisation process, the cycling desire lines were mapped to existing roads and cycle routes. The LCWIP guidance highlights that the clear preference will usually be the most direct route between the origin and destination. It adds that in some cases there may be more than one potential route between origin and destination points or a reason why the most direct route is not suitable for cycling.

6.2 Selecting Routes for Audit

6.2.1. A combination of online cycle route planning tools Cyclestreets and Google Maps combined with City Council officers' local knowledge were used to map desire lines to existing available routes across the city. In some cases, a significant deviation was required to find the nearest available crossing over roads, railways or water. Due to the street layout in much of Portsmouth a balance also often had to be found between identifying the technically shortest route (which may zig-zag through residential streets and be confusing to follow) versus a slightly longer route (which may be easier to follow). The proposed routes for audit were presented to City Council officers and confirmed, or amended in line with their comments, as appropriate.

6.2.2. Figure 6.1 illustrates the outcome of mapping prioritised cycle routes to existing roads. Table 6.1 lists the roads and routes which comprised the prioritised cycle routes. The table also identifies sections which were audited but which the audit process discounted for inclusion on the network plan, taking account of balancing roadspace for different modes (see chapter 7).

6.2.3. Many of the prioritised cycle corridors converge on the Commercial Road / Portsmouth & Southsea Rail Station area in the city centre. In terms of cycling, this area contains heavily trafficked roads and junctions which create severance. It also has pedestrianised areas where cycling is not permitted; a deviation from the desire line is required to make cycle journeys across the city centre.

6.2.4. This area is anticipated to undergo substantial development and change, including revisions to the transport network and street layouts. These changes are however not yet confirmed.

6.2.5. As a result of the uncertainty regarding future city centre layouts the prioritised cycle corridors were not mapped to existing routes in this area. Further study is required to identify north-south and east-west routes which can be made suitable for cycling as part of wider city centre studies.

6.2.6. In line with the guidance, the most direct route was sought whilst also taking account of the route's overall legibility. In the case of route 602 (Gosport to Portsmouth College) the street pattern meant no one single route was preferred and instead two route variants were taken forward for auditing. In the case of route 601 (Gosport to Hayling Island) the deviation from the desire line due to Eastney Lake meant that a route covering Gosport to Langstone Campus / St. James' Hospital destinations (but not connecting to Hayling Ferry) was taken forward.

Figure 6.1 – Prioritised Cycling Routes for Audit

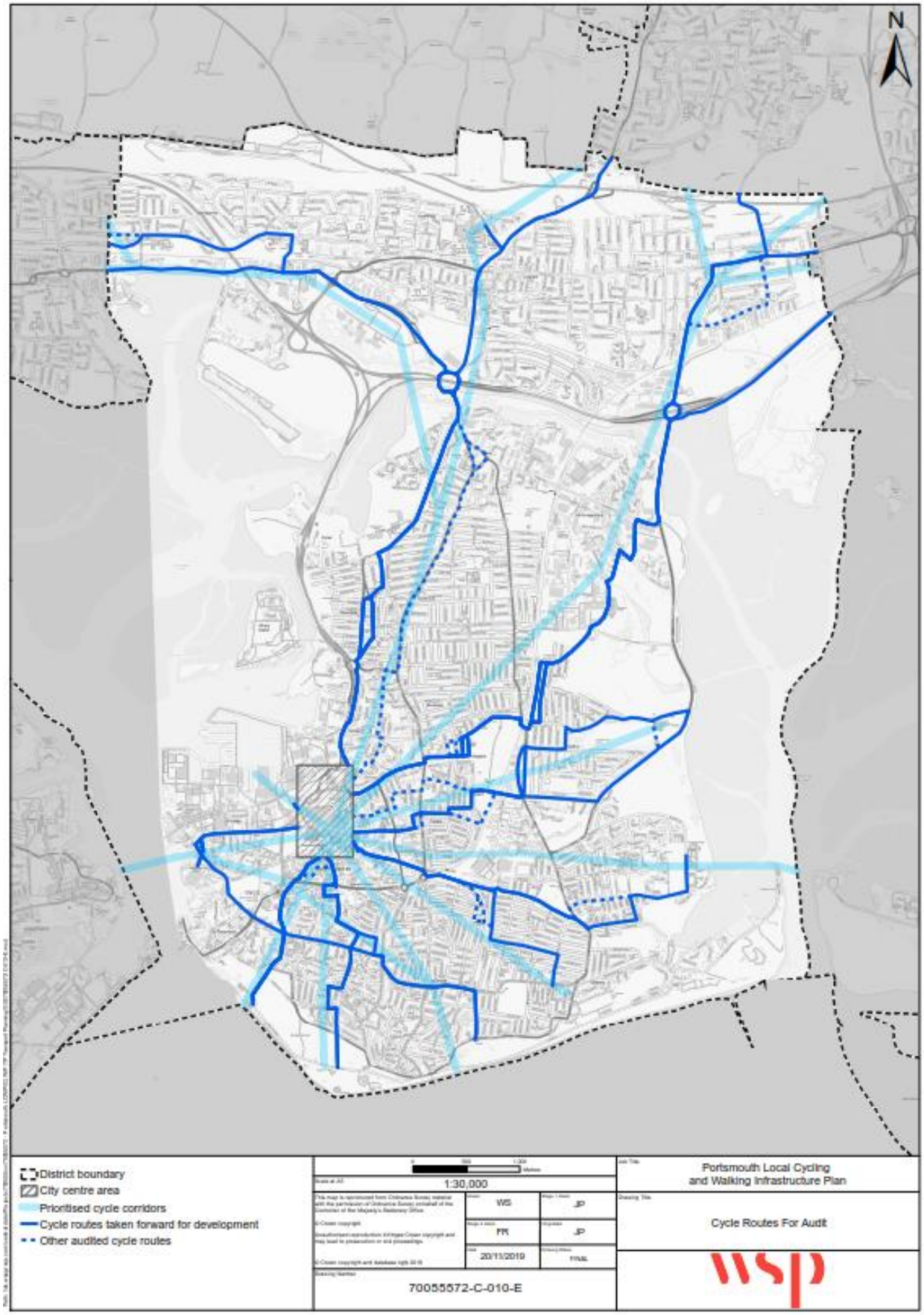


Table 6.1 – Description of Prioritised Cycling Routes for Audit

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
108	Havant to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	National Cycle Network route 22 (authority boundary to Farlington Interchange), A2030 Eastern Road, Anchorage Road, Robinson Way, Airport Service Road, Dundas Lane, Moneyfield Avenue, Dover Road (southbound), Folkestone Road and Martin Road (northbound), Tangier Road, Milton Road, A288 Copnor Bridge, New Road, George Street, Glencoe Road / Daulston Road, Hampshire Street, Shakespeare Road, Manor Road, A2047 Fratton Road, B2152 and A2030 Lake Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	Shearer Road (southbound) and Ernest Road (northbound) Isambard Brunel Road and Alec Rose Lane
205	Leigh Park to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	A2030 Havant Road, A2030 Eastern Road, Anchorage Road, Robinson Way, Airport Service Road, Dundas Lane, Moneyfield Avenue, Dover Road (southbound), Folkestone Road and Martin Road (northbound), Tangier Road, Milton Road, A288 Copnor Bridge, New Road, George Street, Glencoe Road / Daulston Road, Hampshire Street, Shakespeare Road, Manor Road, A2047 Fratton Road, B2152 and A2030 Lake Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	Lower Farlington Road and Fitzherbert Road Shearer Road (southbound) and Ernest Road (northbound) Isambard Brunel Road and Alec Rose Lane

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
301	Waterlooville to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	Crookhorn Lane, Gillman Road, A2030 Havant Road, A2030 Eastern Road, Anchorage Road, Robinson Way, Airport Service Road, Dundas Lane, Moneyfield Avenue, Dover Road (southbound), Folkestone Road and Martin Road (northbound), Tangier Road, Milton Road, A288 Copnor Bridge, New Road, George Street, Glencoe Road / Daulston Road, Hampshire Street, Shakespeare Road, Manor Road, A2047 Fratton Road, B2152 and A2030 Lake Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	Lower Farlington Road and Fitzherbert Road Hampshire Street (Shakespeare Road to Fratton Road) Isambard Brunel Road and Alec Rose Lane
307	Waterlooville to Clarence Pier via Cosham & City Centre	A3 London Road, A3 Northern Road, A3 Portsbridge Roundabout, A3 London Road, A3 Northern Parade, Nelson Avenue, North End Avenue, Penrose Close, A3 Twyford Avenue (northbound) and A3 Stamshaw Road (southbound), Rudmore Roundabout, A3 Mile End Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	A3 London Road (Northern Parade to Kingston Crescent), A2047 Kingston Crescent, Gamble Road, Malins Road, Sultan Road, Wingfield Street and Staunton Street Isambard Brunel Road and Alec Rose Lane

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
307a	Queen Alexandra Hospital to Clarence Pier via Cosham & City Centre	B2177 Southwick Hill Road, A3 London Road, A3 Northern Road, A3 Portsbridge Roundabout, A3 London Road, A3 Northern Parade, Nelson Avenue, North End Avenue, Penrose Close, A3 Twyford Avenue (northbound) and A3 Stamshaw Road (southbound), Rudmore Roundabout, A3 Mile End Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	A3 London Road (Northern Parade to Kingston Crescent), A2047 Kingston Crescent, Gamble Road, Malins Road, Sultan Road, Wingfield Street and Staunton Street Isambard Brunel Road and Alec Rose Lane
405	DSTL / North Portchester to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	Westfield Road and connecting east-west cycle tracks, Allaway Avenue, Marsden Road, Racecourse Lane, A27 Southampton Road, A27 Western Road, A3 Portsbridge Roundabout, A3 London Road, A3 Northern Parade, Nelson Avenue, North End Avenue, Penrose Close, A3 Twyford Avenue (northbound) and A3 Stamshaw Road (southbound), Rudmore Roundabout, A3 Mile End Road, City Centre area, Guildhall Square & Guildhall Walk, A288 Hampshire Terrace, A3 Landport Terrace, A3 King's Terrace, A3 Jubilee Terrace, A3 Bellevue Terrace and A3 Pier Road	Jubilee Avenue A3 London Road (Northern Parade to Kingston Crescent), A2047 Kingston Crescent, Gamble Road, Malins Road, Sultan Road, Wingfield Street and Staunton Street Isambard Brunel Road and Alec Rose Lane

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
503	Fareham to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	A27 Southampton Road, A27 Western Road, A3 Portsbridge Roundabout, A3 London Road, A3 Northern Parade, Nelson Avenue, North End Avenue, Penrose Close, A3 Twyford Avenue (northbound) and A3 Stamshaw Road (southbound), Rudmore Roundabout, A3 Mile End Road, City Centre area, Isambard Brunel Road, Winston Churchill Avenue, St. James' Road, Waterloo Street, Grosvenor Street, Green Road, Cottage Grove, Grove Road North, Grove Road South, Kent Road, Portland Road, Osborne Road, Palmerston Road and Avenue de Caen	A3 London Road (Northern Parade to Kingston Crescent), A2047 Kingston Crescent, Gamble Road, Malins Road, Sultan Road, Wingfield Street and Staunton Street Isambard Brunel Road and Alec Rose Lane
601b	Gosport to St. James' Hospital / Langstone Campus development sites	The Hard, Queen Street, Bishop Crispian Way, City Centre area, East Surrey Street, Bridport Street, Canal Walk, Sydenham Terrace, Fratton Bridge, Goldsmith Avenue, Dunbar Road, Maurice Road, Ironbridge Lane and Locksway Road	Wickham Street and Clock Street Milton Road (Goldsmith Avenue to Locksway Road) and Locksway Road (Milton Road to Ironbridge Lane)

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
602a	Gosport to Portsmouth College via City Centre (southern route)	The Hard, Queen Street, Bishop Crispian Way, City Centre area, Arundel Street, Clifton Street, Stamford Street, Clive Road, Clarkes Road, St. Mary's Road, Langstone Road, Eastern Road, Tangier Road	Wickham Street and Clock Street Crasswell Road, Charles Street, Fyning Street, Common Street, Lords Street, Church Road, Fratton Road, St. Mary's Road Kingston Park Sword Sands Path
602b	Gosport to Portsmouth College via City Centre (northern route)	The Hard, Queen Street, Bishop Crispian Way, City Centre area, Arundel Street, Clifton Street, Stamford Street, Clive Road, Clarkes Road, St. Mary's Road, Milton Road (Northbound), Baffins Road (Southbound), Hayling Avenue, Neville Road and Tangier Road	Wickham Street and Clock Street Crasswell Road, Charles Street, Fyning Street, Common Street, Lords Street, Church Road, Fratton Road, St. Mary's Road Kingston Park
603	Gosport to Southsea Seafront via University and Albert Road	The Hard, St. George's Road, Museum Road, King's Road, Elm Grove, Victoria Road South, Albert Road and Festing Road	None

Strategic Cycle Corridor Reference	Strategic Cycle Corridor Description	Roads and routes which comprise the Strategic Cycle Corridor	Discounted sections not proposed for inclusion
801	Eastney to HM Naval Base via City Centre	Prince Albert Road, Landguard Road, Maxwell Road, Aston Road, Haslemere Road, Pretoria Road and St. Augustine Road, Frensham Road, Goldsmith Avenue, Fratton Bridge, Sydenham Terrace, Canal Walk, Bridport Street, East Surrey Street, City Centre area, Unicorn Road	Devonshire Avenue, Devonshire Square, Francis Avenue and Heidelberg Road (northbound)
802	Southsea Seafront to HM Naval Base via City Centre	Festing Road, Albert Road, Victoria Road South, Elm Grove, St. Andrew's Road, Cottage Grove, Green Road, Grosvenor Street, Waterloo Street, St. James' Road, Winston Churchill Avenue, Isambard Brunel Road, City Centre area, Unicorn Road	None

7 Auditing Routes, Identifying Improvements and Estimating Costs

7.1 Introduction

7.1.1. Once Key Walking Routes were selected, and the prioritised cycling corridors were mapped to existing roads and cycling routes, an auditing process was initiated.

7.1.2. The purpose of auditing routes is to understand whether they are of a suitable standard and appropriate, and if not, what needs to be improved. The auditing process followed the DfT guidance. This allowed a consistent approach to be adopted, and for reasons behind decisions to be documented. As these are new approaches developed and promoted by the DfT, WSP gave a training session to City Council officers and stakeholders on the use of the two tools.

7.2 Walking Route Audits

Audit Methodology

7.2.1. The walking audits used the DfT's Walking Route Audit Tool (WRAT). This identified the standard of existing infrastructure along routes and identified where improvements were needed.

7.2.2. The audit comprises 20 criteria grouped into five themes (attractiveness, comfort, directness, safety, and coherence). Auditors are required to give a score for each criterion of between 0 and 2, where 2 represents good provision and 0 represents poor provision. From these 20 criteria a total score was derived. The accompanying notes to the tool indicate that a score of 70% (i.e., a score of 28 out of a potential 40 points) should normally be regarded as a minimum level of provision overall. Routes which score less than this, and particularly factors which are scored as zero, should be used to identify where improvements are required.

7.2.3. Audits were carried out for the ten prioritised Key Walking Routes identified in Figure 5.2. **Error! Reference source not found.**

7.2.4. The site visits involved walking the route in both directions, noting key issues, and taking photographs. A separate audit was carried for each section with different characteristics, leading to results being collated for 24 route sections.

Key findings from audits

7.2.5. Nine of the 27 audited route sections scored less than 28 out of 40 (the suggested minimum level of provision). The poorly scoring sections comprised:

- Arundel Street, from Buckingham Street to Holbrook Road (KWR 33 section 2);
- Kingston Road, from New Road to Kingston Crescent (KWR 53 sections 1 and 2);
- Lake Road, entire length, from Fratton Road to Commercial Road (KWR 22 sections 1 and 2);
- London Road, from Northwood Road to Merrivale Road, from Hewett Road to Gladys Avenue and from Gladys Avenue to Kingston Crescent (KWR 11 sections 1 and 3 and KWR 68 section 1); and

- Fratton Bridge and Fawcett Road from Selbourne Terrace to Manners Road (KWR 27 section 1).

7.2.6. The highest scoring route sections (scores of 35 out of 40 or above) were as follows:

- Arundel Street and Commercial Road pedestrianised sections (KWR 33 section 1 and KWR 22 section 3);
- Eldon Street and Norfolk Street (KWR 79 section 3);
- Fawcett Road from Manners Road to Addison Road (KWR 27 section 2);
- Palmerston Road pedestrianised section (KWR 77 section 2);
- Pedestrian walkway from Guildhall Walk to Winston Churchill Avenue (KWR 79 section 1); and
- Isambard Brunel Road from Commercial Road to Greetham Street (KWR 80 section 1).

7.2.7. It will be noted that these are generally areas with lower or no traffic levels, highlighting the impact of traffic on the scoring of routes in the WRAT.

7.2.8. Issues were identified for all 27 audited route sections, regardless of their score. Common issues. included:

- Attractiveness category:
  - Sections with limited or no passive surveillance (overlooking from neighbouring land uses), such as in subways;
  - Streets which are within AQMAs (where levels of nitrogen dioxide have been recorded which exceeds the limits outlined in the National Air Quality Strategy), or are within Noise Important Areas, which is a designation based on modelled levels of road traffic noise;
  - Absence of street trees or planting in the highway to enhance the walking environment, provide shade or shelter and absorb carbon dioxide;
  - Uncoordinated or inconsistent paving styles; and
  - Extensive bollards or guardrailing impacting on the quality of the streetscape.
- Comfort:
  - Footways in poor condition, damaged paving slabs and uneven surfaces, creating potential trip hazards;
  - Overhanging vegetation;
  - Vehicles parked on footways;
  - Narrow footways, or footways where the usable space is reduced by direction signs, street lighting columns or bus stop shelters;
  - Requirements for pedestrians to divert to reach crossing points;
  - Significant distances between crossing points on busy roads; and
  - Pedestrian refuges which may not accommodate all pedestrians.
- Directness:
  - Wide roads which result in longer pedestrian crossing distances;

- Delays associated with crossing busy main roads away from zebra or signal crossings; and
- No formalised pedestrian priority when crossing side roads.

- Safety:
  - Pedestrians in close proximity to high traffic volumes or high traffic speeds, or coming into potential conflict with cyclists on a shared-use path;
- Coherence:
  - Road crossings without dropped kerbs or tactile paving to assist blind, partially sighted and mobility impaired pedestrians.

7.2.9. Whilst each of the prioritised walking routes were located on Portsea Island, it can be assumed that the commonly identified issues also affect routes on the mainland. The same audit principles can be applied to any walking route to identify improvements.

Identifying improvements

7.2.10. For every prioritised Key Walking Route, the audit results were used as a prompt to consider the broad types of intervention which have the potential to improve the quality of the pedestrian environment. They included the categories of improvement below:

- Identifying space for street trees or planters, or parklets (usually created from on-street parking spaces);
- Upgrading footway surfaces or paving materials;
- Redesigning side road junctions with tighter geometry, to reduce turning vehicle turning speeds;
- Redesigning major junctions to enable safer, more comfortable, and more direct crossings for pedestrians, including reviewing the extent of pedestrian guardrailing, and removing it where appropriate;
- Widening existing footways, relocating street furniture and redesigning or removing barriers to create comfortable walking conditions and enabling all pedestrians to use the routes, including those using wheelchairs or mobility scooters, people with visual impairments or with pushchairs;
- Constructing wider pedestrian refuges, enabling pedestrians to comfortably wait between traffic lanes;
- Modifying existing or installing new controlled crossings (signal or zebra crossings) on busy roads, with pedestrian detection technology to amend crossing times;
- Constructing continuous footways over side road junctions, to give greater pedestrian priority;
- Constructing new footpaths to satisfy pedestrian desire lines; and
- Installing tactile paving to assist blind and visually impaired pedestrians and constructing dropped kerbs to enable safe and comfortable pedestrian movements.

7.2.11. There are other complementary measures which can ensure that the pedestrian environment is welcoming and inclusive. These include seating to enable less mobile pedestrians to rest at intervals, and extending the coverage of the existing wayfinding boards (in the city centre and Southsea) to other parts of the city.

7.2.12. Some of the identified issues, such as poor air quality, high traffic noise levels and proximity to heavy or fast traffic, are more complex to solve. They will require city-wide programmes (including but not limited to the LCWIP) to enable more cycling, walking and public transport use and less car use. Measures to calm vehicle speeds on urban roads should also be considered to reduce the incidence and severity of collisions involving pedestrians (and cyclists). This could potentially include 20mph speed limits on major roads, as has recently been introduced in other cities.

Summary sheet

7.2.13. An audit summary sheet was prepared for each prioritised Key Walking Route. This set out:

- the audit scores for each route section;
- the existing characteristics and key issues for each section which determine the audit scores; and
- key infrastructure improvements to address issues (subject to feasibility and deliverability considerations).

7.3 Cycling Route Audits

Audit methodology

7.3.1. The cycling route audits assess the suitability of a route against core design outcomes. The objective was to identify the most direct route that was either already suitable, or could be made suitable, for cycling and the types of intervention required to achieve this.

7.3.2. The audits comprised a three-step process:

- Step 1: Pre-site visit preparation, collating relevant information for the audit;
- Step 2: Site visit to assess the existing route/conditions and validate the pre-site visit work; and
- Step 3: Complete (and amend as required) the audit results following the site visit.

7.3.3. The DfT's Route Selection Tool (RST) was used for the cycle route audits. This assesses existing routes against five criteria to determine whether they already satisfy core design outcomes for cycling. The five assessment criteria are:

- Directness – a comparison of how direct the route is relative to the equivalent route for motor vehicles;
- Gradient – how steep the route is;
- Safety – whether there is physical protection from motor traffic, and if not, the speed and volume of motor traffic; in addition whether there is lighting and passive surveillance (overlooking from adjoining properties);
- Connectivity – the number of connections to the surrounding area;

- Comfort – how much space there is for cycling, the surface material, and whether the space is shared with substantial volumes of traffic or substantial numbers of pedestrians.

The RST enables the merits of different route variants to be compared, and a comparison to be made with the potential future state of the route if improvements were to be implemented.

7.3.4. Based on the information set out in the RST, each category was scored between 5 (the highest score) to 0 (the lowest score). The scores in the RST are based on parameters from selected UK cycle design guidance. The directness score was calculated for the route as a whole, whilst the scores for the other for categories was calculated for each individual section, with a combined score for the whole route. Where data was readily available, such as traffic flows for certain road links, or collected from site visits, then it informed the score. Where data was not readily available, such as traffic flows for many minor roads or recorded traffic speeds, then the score was based on assumptions. In most cases speed limits were used as a proxy for actual speed data. Further data will be required to confirm vehicle speeds and flows (and therefore the appropriate improvements) when cycle routes are developed.

7.3.5. The DfT technical guidance notes that the aim of audits is to identify routes which score 3 or above against each design criteria (or could be improved to score 3 or above), ideally with no critical junctions.

7.3.6. The scores for gradient and connectivity are the product of the area through which the route passes and are generally more fixed. In general terms, sections scoring poorly against the safety and comfort criteria are those which do not meet the recommended minimum provision outlined in recognised UK cycle design guidance.

7.3.7. An assessment was also made of the number of critical junctions. These are defined in the RST as those junctions which are considered to have characteristics hazardous to cycling (e.g. high traffic volumes, no segregation from motor traffic or priority over motor traffic, a requirement to cross high-speed slip roads or negotiate large roundabouts).

Key findings from audits

7.3.8. Of the 83 route sections audited, around 25% have scores of 3 or above for all criteria (20 sections) and around 75% have one more criteria scoring less than 3 (63 sections). The key findings in terms of suitability for cycling were as follows:

- Low scores:
  - Many on-road sections score poorly against safety and comfort criteria. This is usually due to them having high traffic volumes, 30mph speed limits and no infrastructure to physically protect cyclists from motor traffic;
  - Off-carriageway paths score poorly against the comfort criteria where there is insufficient width to comfortably accommodate different categories of cycle, or where there are barriers which prevent passage by certain types of cycle;
  - Shared-use paths score poorly against the comfort criteria where there is insufficient width to accommodate both pedestrians and cyclists, and especially where there are high numbers of pedestrians;

- Paths which are unlit or have no passive surveillance (not overlooked by neighbouring land uses); and
- Sections of route which ascend Portsdown Hill or which cross the railway overbridges scored poorly against the gradient criteria.

- High scores:
  - Residential streets with low traffic volumes and 20mph speed limits tended to score well; and
  - Some off-carriageway routes score well where they are sufficiently wide to comfortably accommodate all users.
- Critical junctions: more than 100 critical junctions were identified on the prioritised cycle routes. Of these, approximately 50 were identified where cycle movements would be in potential conflict with heavy motor traffic flows (more than 5,000 vehicles per day) and approximately 40 locations which have wide or flared side road junctions.

Identifying improvements or alternative routes

7.3.9. The audit results and the Route Selection Tool scoring guidance were used as prompts to consider the broad types of intervention which would make each route more suitable for cycling. There was a particular emphasis on sections which had safety and comfort scores of less than 3; however, improvements were identified for almost all sections. In some cases route variants were recommended which were currently, or had the potential to be, more suitable for cycling than the route initially audited.

7.3.10. At this early stage of planning, no particular design was chosen to improve the cycle routes. Instead, the list of improvements was based around the required outcomes – e.g. infrastructure which protects cyclists from motor vehicles or a junction redesign which enables safer cycle crossing movements. Further study will be required to confirm what design options are possible.

7.3.11. Depending on the location and issues, improvements were identified to create more suitable conditions for cycling, such as those outlined below:

- Constructing cycle tracks which are physically protected from motor traffic (see paragraph 7.3.12 for further details), with priority across side roads;
- Widening existing off-carriageway paths, relocating street furniture and redesigning or removing barriers to create comfortable cycling conditions and enable all types of bike to access the routes;
- Upgrading surfaces and cutting back encroaching vegetation;
- Modifying existing controlled crossings (signal or zebra crossings) or installing new controlled crossings on busy roads;
- Replacing subways with surface crossings;
- Redesigning junctions to enable those on bikes to make safer and more comfortable crossings or manoeuvres;
- Redesigning side road junctions with tighter geometry, to reduce vehicle turning speeds;

- Introducing measures to reduce levels of motor traffic on certain roads, for example using bollards to prevent through movements by motor vehicles whilst retaining access for local residents (see the description for low-traffic neighbourhoods overleaf);
- Introducing measures which create carriageway space for protected cycle tracks, such as one-way streets or shuttle traffic signals;
- Permitting two-way cycling in one-way streets (contraflow cycling) to shorten cycle journey distances;
- Modifying existing road closures to enable cyclists to comfortably move between two roads;
- Upgrading existing bridges or constructing new bridges across railways or watercourses to provide suitable path widths for cyclists and pedestrians;
- Installing lighting on unlit routes; and
- Reducing speed limits and introducing physical traffic calming features to slow traffic speeds.

There is an important role for trials to test the impacts of potential improvements before they are finalised, including with experimental traffic regulation orders.

Widths of protected cycle tracks

7.3.12. To achieve an RST comfort score of 3 or above, the space must be a minimum of 1.5m wide for one-way cycling and at least 2.5m wide for two-way cycling. The space for cycling must be physically protected from motor traffic and surfaced in smooth tarmac (if not additional width will be required to account for wobble room on less smooth surfaces). Physical protection can be by means of kerbs (stepped up from, or constructed at the same height, as the carriageway) or light segregation (where cyclists are protected by intermittently placed physical objects, such as planters or posts).

7.3.13. LCWIPs should plan for an increase in cycle trips, and accommodate all cycle designs commonly in use, including cargo bikes, cycles with trailers, handcycles, and adapted cycles. Additional width is likely to be required in many places to futureproof the infrastructure and meet growing demand. On that basis the City Council will aim to achieve a higher comfort score (4 out of 5) where anticipated cycle flows require it and where feasible to do so. This requires minimum standards of 1.8m wide one-way cycle tracks and 3m wide two-way cycle tracks.

7.3.14. The comfort score also assumes that the space for cycling is either not shared with pedestrians, or shared with limited numbers of pedestrians (fewer than 100 pedestrians per hour). Paths for two-way cycling with significant numbers of pedestrians (more than 300 per hour) would need to be at least 3.5m wide to have an RST comfort score of 3. Recent UK design guidance highlights that where space is available, separate infrastructure should be constructed for cyclists and pedestrians (including at junctions) to avoid conflict between different user groups. The LCWIP technical guidance notes that paths of sufficient width, or with separation to enable pedestrians and cyclists to travel side by side and to pass without conflict, will cater for both user groups.

Balancing priorities

7.3.15. Road space is shared between different transport modes and uses. Catering for these different demands can be particularly challenging in dense urban environments. In some locations achieving a cycle route audit score of 3 or above would only be possible if (for example) protected cycle tracks of a suitable width were constructed using road space currently given to other uses. In certain instances, it was considered that such a reallocation of space may not be deliverable.

7.3.16. In some locations a range of different options were identified which each have the potential to improve the route score and make a route more suitable for cycling, each with different pros and cons. However, determining a suitable balance between space for different transport modes, or which option is most appropriate, is a decision for elected members taking into account evidence and stakeholder views.

Complementary measures

7.3.17. Investment in a range of complementary infrastructure elements will support the strategic cycling corridor infrastructure. These including the following measures:

- Low-traffic-neighbourhoods: these are networks of residential streets where through traffic is excluded to make the area safer and more pleasant, with consequential benefits for cycling and walking. One measure to achieve this is to close particular points on the road network to motor vehicles (but enabling cyclists, pedestrians and in some places buses to travel through and retaining access to properties). This is sometimes known as filtered permeability. The closure can either apply at all times or between certain hours. Low-traffic neighbourhoods can also be created by introducing a series of one-way streets for motor vehicles or banning turns for motor vehicles at certain junctions. This concept has been used extensively in the London Borough of Waltham Forest, in conjunction with street enhancements, planting and seating;
- Additional secure cycle parking across the city to meet current and future demand, well-located to journey destinations and catering for different types of cycle and duration of stay. This could for example include cycle hubs at transport interchanges with a range of enhanced facilities. It could also include on-street cycle hangars, to provide safe places for residents to store bikes close to their homes in densely populated areas; and
- Enhanced wayfinding: Clear and consistent signage and road markings to ensure whole routes are easy to follow and are conspicuous, particularly to assist new and returning cyclists. Wayfinding can give directions ahead of and at decision points, confirm the route after junction decision points, and give reassurance of the correct route mid-link.

Summary sheet

7.3.18. An audit summary sheet was prepared for each prioritised cycle route. This set out:

- the audit scores for each route section;
- the existing characteristics and key issues for each section which determine the audit scores, such as traffic flows, speed limits and the presence or absence of cycle infrastructure physically protected from motor traffic;

- key infrastructure improvements required to address issues (subject to feasibility and deliverability considerations) and commentary to support the proposed approach; and
- suggested alternative route sections, where it was considered that constraints would mean that it would not be possible to make the route suitable for cycling.

8 Funding, Prioritisation and Integration into Authority Workstreams

8.1 Cost Estimation

8.1.1. High-level construction costs were estimated for each improvement to understand the broad scale of funding required to deliver all of the priority routes. Cost estimate information was supplied by the City Council for different categories of infrastructure. Costs were quoted in bands to reflect the variance in delivering similar types of infrastructure in different locations due to unique site-specific conditions. The estimates relate to construction costs only and do not allow for costs arising from inflation, utilities and third-party land purchase (if required) or account for optimism bias or margin for error. All potential improvements are subject to further study, feasibility and consultation, each of which has the potential to change cost estimates.

8.1.2. Based on the information provided by the City Council, the broad approximate construction cost estimates for cycling and walking infrastructure are set out below:

- Western Cycle Corridor (Route Refs 307, 307a, 405, 503) = £23m-50m;
- Eastern Cycle Corridor (Route Refs 108, 205, 301) = £28m-78m;
- East-West Portsea Island Cycle Routes (Route Refs 601, 602, 603 801) = £22m-54m; and
- Prioritised Key Walking Routes = £41m to £76m (of which between at least £17m to £29m were likely to be solutions to jointly address walking and cycling issues).

8.1.3. Costs were rounded up to the nearest £million. Due to their site-specific nature, costs were not included in the totals above for options:

- to construct new or replacement bridge structures across the railway line on St. Mary's Road and across Ports Creek at the Eastern Road waterbridge, and
- to realign a section of the A3 Mile End Road southbound carriageway to provide space for a cycle track.

8.2 Prioritising Improvements

8.2.1. An indicative prioritisation exercise was undertaken to consider which interventions may form a short, medium and long-term investment programme. The LCWIP technical guidance describes three categories as follows:

- Shorter-term: improvements which can be implemented quickly or are under development;
- Medium term: improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues (e.g. detailed design, securing planning permissions, land acquisition, etc); and
- Longer-term: more aspirational improvements or those awaiting a defined solution.

8.2.2. The prioritisation process was a two-step process, devised in consultation with authority officers.

Prioritising cycle route improvements

8.2.3. For cycling the prioritisation process was as follows:

Step 1 Prioritisation

8.2.4. Each strategic cycle corridor was ranked by assessing its likely impact against a range of criteria, covering existing and potential future cycling demand, strategic transport projects and priorities, economy, education, housing and public health (see chapter 5). These covered the 'effectiveness' and 'policy' criteria categories in the example prioritisation illustrated in the LCWIP technical guidance. The top ranked corridor from this process was reference 307 (Waterlooville to Clarence Pier via Cosham, North End and City Centre). The highest scoring eleven cycling corridors were taken forward for further development, including route auditing.

Step 2 Prioritisation

8.2.5. Each cycle route section was then assessed against:

- Deliverability and feasibility considerations:
  - Technical feasibility and complexity;
  - Stakeholder receptiveness;
  - Regulatory issues (planning consent, traffic regulation orders, bylaw amendments); and
  - Potential requirements for third party land; plus
- Fit with planned transport schemes, including those being developed for Transforming Cities Fund.

8.2.6. The outcome of the indicative step 2 prioritisation process is set out in Table 8.1 to Table 8.3. Where routes have common sections, the common section is only included once, recorded against the route with the highest ranking from the initial prioritisation process (step 1).

8.2.7. No infrastructure improvements were identified for route 301 section 10 (Moneyfield Avenue, Dover Road, Folkestone Road and Martin Road) and route 601b Section 1 (Locksway Road from the university campus to Ironbridge Lane). The City Council will work with planning applicants of major developments in the vicinity of route 601b section 1 to ensure the road is suitable for cycling.

8.2.8. It should be noted that the prioritisation is indicative and is intended to be flexible, to take account of available funding and changes in circumstances. An approach which prioritises whole corridors is likely to give greatest benefits, but this is reliant on securing large-scale funding. Where possible, routes will be improved as part of a package approach to ensure coherent routes are created.

Table 8.1 – Indicative Prioritisation of Cycling Improvements – Shorter Term

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
307	Waterlooville to Clarence Pier via Cosham & City Centre	1	Section C: Nelson Avenue, North End Avenue & Penrose Close (Northern Parade to Twyford Avenue) Section H: A288 Hampshire Terrace (King Richard I Road to St. Michael's Road (southern end)
503	Fareham to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=2	Section 1: Southampton Road (Portsdown Road to Watersedge bus stop)
802	Southsea Seafront to HM Naval Base via City Centre	=2	Section 3: St. Andrew's Road, Cottage Grove and Green Road (Elm Grove to Brougham Street)
801	Eastney to HM Naval Base	=2	Sections A, B & 4: Frensham Road and Goldsmith Avenue (Devonshire Avenue to Fratton Bridge roundabout)
301	Waterlooville to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	5	Section 1: Crookhorn Lane (authority boundary to Portsdown Hill Road)
405	DSTL / North Portchester to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=6	Section 2: Allaway Avenue shared-use path (Castle View Academy to Bourne Road) Section 4: Marsden Road (Allaway Avenue to Paulsgrove Adventure Playground)
602a	Gosport to Portsmouth College via City Centre (southern route)	=6	Sections B to D: Eastern Road shared-use path (Tangier Road to Langstone Road junction)
601b	Gosport to St. James' Hospital / Langstone Campus development sites	=9	Section B: Ironbridge Lane, Maurice Road and Dunbar Road (Locksway Road to Milton Road) Section 4: Goldsmith Avenue (Priory Crescent to Frensham Road)

Table 8.2 - Indicative Prioritisation of Cycling Improvements – Medium-Term

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
307	Waterlooville to Clarence Pier via Cosham & City Centre	1	Sections A & B: A3 Northern Parade (London Road to Nelson Avenue) Sections E & F: Rudmore Roundabout and A3 Mile End Road (Twyford Avenue / Stamshaw Road to Church Street Roundabout)
503	Fareham to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=2	Section 2: A27 Southampton Road (Watersedge bus stop to Compass Road) Sections 3: A27 Western Road (Southampton Road junction underpass to Portsbridge Roundabout underpass) Section 12: Commercial Road (south) and Isambard Brunel Road (Station Street roundabout to Winston Churchill Avenue) Section G: Winston Churchill Avenue shared-use footway / cycleway, St. James' Road and Waterloo Street (Isambard Brunel Road to Grosvenor Street) Section 16: Avenue de Caen (Clarence Parade to Clarence Esplanade)
802	Southsea Seafront to HM Naval Base via City Centre	=2	Section 1: Festing Road (Eastern Parade to Albert Road) Section 6: Unicorn Road (Bishop Crispian Way to HM Naval Base)
801	Eastney to HM Naval Base via City Centre	=2	Section 6: Canal Walk, Bridport Street and East Surrey Street (Sydenham Terrace to Station Street)
301	Waterlooville to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	5	Section 2: Gillman Road (Portsdown Hill Road to Eveleigh Road) Sections B & 6: Eastern Road (Havant Road to Farlington Interchange) Sections 8 & 9: Anchorage Road, Robinson Way, Airport Service Road, Dundas Lane and former busway (Eastern Road to Moneyfield Avenue) Section C: George Street, Glencoe Road / Daulston Road, Hampshire Street, Shakespeare Road and Manor Road (New Road to Fratton Road) Section 13: Fratton Road and Lake Road (Manor Road to City Centre)

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
405	DSTL / North Portchester to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=6	Section 3: Allaway Avenue (Bourne Road to Marsden Road) Section 5: Racecourse Lane (Paulsgrove Adventure Playground to Southampton Road
602	Gosport to Portsmouth College via City Centre	=6	Section 11: Bishop Crispian Way (Edinburgh Road to Queen Street) Section 12: Queen Street (Bishop Crispian Way to The Hard)
602a	Gosport to Portsmouth College via City Centre (southern route)	=6	Section A: Tangier Road (Portsmouth College entrance to Eastern Road) Section E: St. Mary's Road (Kingston Cemetery entrance to Clarke's Road) Section F: Clarkes Road and Clive Road (St. Mary's Road to Fratton Road)
602b	Gosport to Portsmouth College via City Centre (northern route)	=6	Section 1: Tangier Road (Portsmouth College entrance to Neville Road) Section 3: Baffins Road (Southbound) / Milton Road (Northbound) (Hayling Avenue to Prison Roundabout)
603	Gosport to Southsea Seafront via University and Albert Road	=9	Section 2 & 3: St George's Road and Museum Road (St. George's Square to King's Roundabout)
601b	Gosport to St. James' Hospital / Langstone Campus development sites	=9	Section 3: Goldsmith Avenue (Milton Road to Priory Crescent)

Table 8.3 - Indicative Prioritisation of Cycling Improvements – Longer-Term

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
307	Waterlooville to Clarence Pier via Cosham & City Centre	1	Sections 1-3: A3 London Road and Northern Road (Authority boundary to Cosham Health Centre) Section 5: A3 Portsbridge Roundabout and London Road (Western Road underpass to Northern Parade junction) Section D: A3 Twyford Avenue (northbound) and Stamshaw Road (southbound) (Penrose Close to Rudmore Roundabout) Section G: Guildhall Square & Guildhall Walk (Commercial Road to St. Michael's gyratory) Sections 14 & 15: A288 Hampshire Terrace, Landport Terrace, King's Terrace, Jubilee Terrace, Bellevue Terrace & Pier Road (St. Michael's Gyratory to Clarence Pier)
307a	Waterlooville to Clarence Pier via Queen Alexandra Hospital, Cosham & City Centre	1	Section 1: B2177 Southwick Hill Road (Queen Alexandra Hospital Entrance to London Road)
503	Fareham to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=2	Section 3: A27 Southampton Road (Compass Road to Western Road underpass) Sections 14 & 15: Grosvenor Street, Green Road, Cottage Grove, Grove Road North & Grove Road South, Kent Road, Portland Road, Osborne Road and Palmerston Road (Grosvenor Street to Clarence Parade)
802	Southsea Seafront to HM Naval Base via City Centre	=2	Section 2: Albert Road, Victoria Road South and Elm Grove (Festing Road to St. Andrew's Road)

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
801	Eastney to HM Naval Base	=2	Section 1: Prince Albert Road, Landguard Road, Maxwell Road, Aston Road, Haslemere Road, Pretoria Road and St. Augustine Road (Highland Road to Devonshire Avenue) Section 5: Fratton Bridge and Sydenham Terrace (Goldsmith Avenue to Canal Walk)
301	Waterlooville to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	5	Section 3: Gillman Road (Eveleigh Road to Havant Road) Section A: Havant Road (Gillman Road to Eastern Road) Section 7: Eastern Road (Farlington Interchange to Anchorage Road) Section 11: Tangier Road, Milton Road, Copnor Bridge & New Road (Folkestone Road to George Street)
405	DSTL / North Portchester to Southsea Common via Lakeside North Harbour, North End, City Centre & Southsea Town Centre	=6	Section 1: Westfield Road path, Jubilee Avenue & Allaway Avenue (Portsdown Road to Castle View Academy)
108	Havant to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	=6	Sections 1 & 2: National Cycle Network route 22 (Farlington Marshes route from authority boundary to Farlington Interchange)
602	Gosport to Portsmouth College via City Centre	=6	Section 6: St. Mary's Road (Prison Roundabout to Kingston Cemetery entrance) Section G: Stamford Street, Clifton Street and Arundel Street (Fratton Road to 20mph limit west of Holbrook Road) Section 10: Arundel Street (20mph limit west of Holbrook Road to Buckingham Street)

Strategic Cycle Corridor Ref	Strategic Cycle Corridor Description	Stage 1 Prioritisation Rank	Route Description
602a	Gosport to Portsmouth College via City Centre (southern route)	=6	Section 5: Langstone Road (Eastern Road to Prison Roundabout)
602b	Gosport to Portsmouth College via City Centre (northern route)	=6	Section 3: Neville Road and Hayling Avenue (Tangier Road to Baffins Road)
205	Leigh Park to Clarence Pier via Farlington, Hilsea Employment Area (South) & City Centre	=9	Section 1: Havant Road (authority boundary to Lower Farlington Road)
603	Gosport to Southsea Seafront via University and Albert Road	=9	Section 1: The Hard (Hard Interchange to St. George's Square) Section 4: King's Road and Elm Grove (King's Roundabout to St. Andrew's Road)

Prioritising Key Walking Route improvements

8.2.9. For walking routes, a tailored approach was adopted.

Step 1 Prioritisation

8.2.10. Each prioritised Key Walking Route was ranked by assessing its likely impact against a range of criteria covering strategic transport projects and priorities, economy, education, housing and public health (see chapter 5). These covered the 'effectiveness' and 'policy' criteria categories in the example prioritisation illustrated in the LCWIP technical guidance.

Step 2 Prioritisation

8.2.11. Each prioritised Key Walking Route was prioritised according to:

- Proximity to AQMAs, where additional walking trips generated by enhanced pedestrian infrastructure has the potential to improve poor air quality;
- Fit with planned transport schemes, including those being developed for Transforming Cities Fund; and
- Proximity to the Future High Streets bid areas (covering the Commercial Road area and Fratton district centre).

The outcome of this indicative step 2 prioritisation process is set out in Table 8.4, Table 8.5 and Table 8.6.

Table 8.4 - Indicative Prioritisation of Key Walking Route Improvements – Shorter term

Key Walking Route Reference	Key Walking Route Description
KWR 33 section 3	Arundel Street (Holbrook Road to Fratton Road)
KWR 27 section 1	Fratton Bridge and Fawcett Road (Selbourne Terrace to Manners Road)
KWR 53 sections 1-2	Kingston Road (Kingston Crescent to Lake Road)
KWR 22 sections 1-3	Lake Road (entire length)
KWR 68 section 1	London Road (Kingston Crescent to Angerstein Road / Gladys Avenue / Stubbington Avenue roundabout)
KWR 11 section 3	London Road (Hewett Road to Angerstein Road / Gladys Avenue / Stubbington Avenue roundabout)

Table 8.5 - Indicative Prioritisation of Key Walking Route Improvements – Medium term

Key Walking Route Reference	Key Walking Route Description
KWR 33 sections 1-2	Arundel Street (Commercial Road to Holbrook Road)
KWR 80 section 1	Isambard Brunel Road (Commercial Road to Greetham Street)
KWR 80 section 3	Somers Road (Raglan Street to Sydenham Terrace)
KWR 80 section 4	Sydenham Terrace (Somers Road to Fratton Bridge)
KWR 37 section 1	King Henry I Street and walkway to Anglesea Road (Guildhall Square to Anglesea Road)
KWR 37 section 2	Park Road (Anglesea Road to St. George's Road)
KWR 79 section 3	Eldon Street and Norfolk Street (Sackville Street to King's Road)
KWR 11 section 2	London Road (Merrivale Road to Hewett Road)
KWR 27 section 2	Fawcett Road (Manners Road to Addison Road)

Table 8.6 - Indicative Prioritisation of Key Walking Route Improvements – Longer-term

Key Walking Route Reference	Key Walking Route Description
KWR 80 section 2	Greetham Street and Raglan Street (Isambard Brunel Road to Somers Road)
KWR 79 section 1	Unnamed walkway from Guildhall Square to Winston Churchill Avenue
KWR 79 section 2	Middle Street (Winston Churchill Avenue to Sackville Street)
KWR 11 section 1	London Road (Northwood Road to Merrivale Road)
KWR 27 section 3	Lawrence Road (Addison Road to Albert Road)
KWR 77 section 1	Grove Road South (Elm Grove to Palmerston Road)
KWR 77 sections 1-2	Palmerston Road (entire length)

8.2.12. All of the shorter-term Key Walking Routes identified to be progressed in the shorter-term are located within AQMAs.

8.3 Funding and Appraisal

8.3.1. Funding for local transport improvements comes from a variety of sources, including – but not limited to - government departments and Local Enterprise Partnerships. In many cases funding from central government or Local Enterprise Partnerships is awarded following a competition to which the City Council can submit bids. The aims and objectives of each fund will vary, and so some local transport improvements will be better suited to some funds rather than others.

8.3.2. In many cases the City Council will prepare a business case to demonstrate how well the proposals meet the objectives and the beneficial impact they will bring (known as transport appraisal). Some of the LCWIP identified improvements may come forward as part of two City Council funding bids currently being prepared for submission to central government, the Transforming Cities Fund and Clean Air Fund. Background work for the LCWIP is already being included in the transport appraisal for these two funding bids.

8.3.3. As it is not yet certain what funds will be targeted to deliver other elements of the LCWIP, no additional appraisal was undertaken at this stage.

8.4 Application of LCWIP and Integration into Authority Workstreams

8.4.1. The LCWIP identifies networks of strategic cycling and walking networks and identified infrastructure improvements for a selection of prioritised routes. It also outlines the other strategic cycling corridors and Key Walking Routes across the city which are to be developed when opportunities allow in future iterations of the LCWIP.

8.4.2. The LCWIP is intended to be applied in the following ways:

- Contributing the achieving the Council's corporate priorities, and tackling the Climate Emergency;
- Bidding for funding – The City Council will use the LCWIP as the basis for future funding bids to improve walking and cycling infrastructure;
- Transport Policy – The LCWIP will inform the preparation of the new Local Transport Plan and the Rights of Way Improvement Plan;
- Planning Policy – The LCWIP forms part of the evidence base supporting the Replacement Local Plan, ensuring that walking and cycling infrastructure are given appropriate weight in future planning decisions; and
- Development Management – The local plan requires planning applicants to mitigate the transport impact of new developments. Planning applicants and the City Council's development management officers will be able to use the LCWIP to ensure new developments deliver parts of the identified network of strategic cycle routes and Key Walking Routes.

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