



ADUR & WORTHING
COUNCILS

Joint Strategic Committee
9 June 2020
Agenda Item 6

Key Decision: No

Ward(s) Affected: All

Local Cycling & Walking Infrastructure Plan - establishing the network of the future through consultation

Report by the Director for the Economy

Executive Summary

1. Purpose

- 1.1. The purpose of this report is to seek approval to adopt the final version of the Adur & Worthing Local Cycling and Walking Infrastructure Plan (LCWIP): a high level, strategic network plan for safe and accessible future cycling and walking infrastructure provision.
- 1.2. This report outlines recently published government guidance for walking and cycling provision relating to the COVID-19 pandemic; and seeks member approval for urgent work with West Sussex County Council on local improvements in line with the Adur & Worthing LCWIP. The published guidance documents are: [Traffic Management Act 2004: network management in response to COVID-19](#); and [Coronavirus \(COVID-19\): safer public places - urban centres and green spaces](#).
- 1.3. A Draft version of the LCWIP was presented to the Joint Strategic Committee on 7th November 2019, where Members approved the draft version being taken through Public Consultation between November 2019 and January 2020.

- 1.4. The report presents the outcomes of the public consultation, in particular, the overwhelming support for improved cycling and walking infrastructure provision (see section 4). It seeks approval for amendments made to the Plan as a result of consultation responses.
- 1.5. The Plan was produced with the consistent support and input from the Adur & Worthing Cycling & Walking Group; and oversight and support from West Sussex County Council.

2. Recommendations

In relation to the Adur & Worthing LCWIP:

- 2.1. To note the outcomes of the Public Consultation;
- 2.2. To approve the amendments made to the cycling network routes and walking zones listed at paragraph 4.7 (Worthing) and 4.8 (Adur) in response to the consultation; and
- 2.3. To approve the formal adoption of the Final LCWIP and the utilisation of the document to support funding or investment opportunities on the network.
- 2.4. To delegate authority to the Director of Economy & Place in consultation with the relevant Executive Member to make minor design amendments to the Plan prior to publication.

In relation to the COVID-19 guidance from government for interventions on the traffic network and in public spaces to allow for social distancing and active travel:

- 2.5. That the Director for the Economy be granted delegated authority in consultation with the Leaders of Adur District and Worthing Borough Councils to:
 - 2.5.1. Work with, agree proposals and submit representations to West Sussex County Council for the implementation of emergency interventions on the road networks to include emergency traffic regulation and road closure orders.
 - 2.5.2. Develop proposals for 'safer public spaces', working with West Sussex County Council where their involvement is required; and also
 - 2.5.3. Allocate finance secured through the Business Rate Pool for these interventions in anticipation of the distribution of the £250,000,000 government finance allocated for these emergency measures.

Background and Context

- 2.6. At the Joint Strategic Committee on 7th November 2019, Members approved that the Draft LCWIP be taken through a public consultation to engage the public on their views of the Draft Plan. At the same meeting, members agreed to submit the Draft LCWIP to DfT. The Plan was submitted in November 2019 to assist the case for allocation of government funding.
- 2.7. A proposed final Adur and Worthing LCWIP has been produced following public consultation and a process of amendments responding to the consultation. The LCWIP can be seen at Appendix 1. Outcomes of the consultation can be seen at Appendix 2.
- 2.8. The Department for Transport (DfT) encourages all local authorities including Boroughs and Districts, to prepare a Local Cycling and Walking Infrastructure Plan (LCWIP). LCWIPs are intended to offer a strategic approach to providing safe and accessible walking and cycling routes in support of the Government's Cycling and Walking Investment Strategy 2017 (CWIS).
- 2.9. LCWIP's are high level documents that provide strategic overview to guide provision of future cycling and walking infrastructure and support greater adoption of active travel options. Key aims of an LCWIP are to:
 - 2.9.1. identify cycling and walking infrastructure improvements for future investment in the short, medium and long term;
 - 2.9.2. ensure that consideration is given to cycling and walking within both local planning and transport policies and strategies; and
 - 2.9.3. make the case for future funding for walking and cycling infrastructure
- 2.10. Adur and Worthing Councils have committed to producing an LCWIP in the strategic vision: *Platforms for Our Places*, and in *Sustainable AW* the councils Sustainability Framework. The LCWIP aligns with many local policies and programmes including: the emerging *Worthing Local Plan* and adopted *Adur Local Plan*; the *Public Health Strategy*; *Air Quality Management Area Action Plans*; *AWC Sustainable Travel Plan*; and the *Public Realm, Seafront and Town Centre Improvement Programmes*.
- 2.11. Encouraging greater use of walking and cycling through improved infrastructure is a key means to reduce emissions associated with motorised

transport. Transport is responsible for over a third of carbon emissions nationally and locally. The need to address this has been heightened since the councils declared Climate Emergency in July 2019.

- 2.12. The Councils have worked with transport planning consultants Sustrans and Transport Initiatives, to develop and finalise the Draft LCWIP.
- 2.13. The production of the Plan will help to make the case to West Sussex County Council for locations, and to the DfT for funding, to prioritise Road Space Reallocation for safe social distancing for walking and cycling during and post the COVID-19 pandemic following government guidance issued 9 May 2020.

3. Government guidance on COVID-19 walking and cycling provision

- 3.1. On 9 May 2020, the government issued statutory guidance [Traffic Management Act 2004: network management in response to COVID-19](#). The guidance refers to a once in a generation opportunity to deliver a lasting transformative change in how we make short journeys in our towns and cities.
- 3.2. On 13th May, the government issued [Coronavirus \(COVID-19\): safer public places - urban centres and green spaces](#). This guidance sets out a process to identify issues and interventions for maintaining social distancing in urban centres and green spaces.
- 3.3. At the Coronavirus briefing on May 9th 2020, Secretary of State Grant Shapps announced £250 million for pop-up bike lanes and other interventions to accommodate social distancing for pedestrians. DfT announced on 27 May 2020 West Sussex could be awarded up to £784,000 under Phase 1 of the *Emergency Active Travel Funding Indicative Allocations*. Further funding will be available if the county council demonstrates effective delivery against Phase 1.
- 3.4. The emergency interventions referred to include:
 - 3.4.1. pop-up bike lanes;
 - 3.4.2. wider pavements; and
 - 3.4.3. cycle and bus only streets.
- 3.5. The Covid-19 public health crisis has had a significant impact upon the lives and health of local people, as well as significant economic consequences. It has also resulted in cleaner air and quieter streets and an increase in residents cycling and walking.

- 3.6. As people start to go back to work, there is a need for residents to carry on cycling and incorporate active travel into their commute. With public transport capacity reduced and a government message to avoid using public transport wherever possible, significant congestion would result unless an increased range of alternative sustainable options, including cycling, is facilitated.
- 3.7. With a continued emphasis on physical distancing, there is a need to ensure local infrastructure provides enough space for safe distancing while cycling and walking, and, over time, restaurants and cafes may also need more space to be able offer a service outside their premises.
- 3.8. The government therefore expects local authorities to make significant changes to their road layouts to give more space to cyclists and pedestrians. Such changes will help embed altered behaviours and demonstrate the positive effects of active travel. The government guidance urges local authorities to consider how towns and cities can do what is necessary to ensure transport networks support recovery from the COVID-19 emergency and provide a lasting legacy of greener, safer transport.
- 3.9. Similarly, the government has asked local authorities to explore potential temporary interventions related to social distancing in urban centres and green spaces. This will be particularly important in focal zones, which are those areas with the densest development and where high levels of footfall are expected.
- 3.10. Two officer task groups have been set up within the councils to work with West Sussex County Council and local stakeholders on: the implementation of guidance to make changes to the traffic network in response to COVID-19; and the following of guidance to create safer public places - urban centres and green spaces.
- 3.11. The implementation of changes to the road network can only be carried out by West Sussex County Council as the Highways Authority. The councils have already made strong representations to the County, and are working proactively with them on prospective interventions. Members are asked to approve that officers work with lead members and the County Council to plan and deliver interventions at Recommendation 2.4.1.
- 3.12. The proposed final LCWIP provides an evidence based approach for routes and locations suitable for the types of interventions contained in the government guidance referred to at 3.1 and 3.2.

4. Public Consultation Process and Analysis

- 4.1. The public consultation on the Draft LCWIP was open from Monday 18th November 2019 until Monday 6th January 2020, both for online and offline responses. The deadline was extended to Monday 13th January to capture additional feedback, including from Lancing and Sompting Parish Councils.
- 4.2. The public consultation was delivered through three formats:
 - 4.2.1. an online questionnaire;
 - 4.2.2. self-service public exhibitions in Worthing Town Hall and The Shoreham Centre for the duration; and
 - 4.2.3. dedicated LCWIP specialist drop-in sessions, supported by Sustrans, on Thursday 19th December 2019.
- 4.3. The consultation was promoted through existing networks, newsletters and social media channels. A boosted post on Facebook reached over 12,000 people. Direct emails were sent to community and public sector stakeholders, including key sectors such as education.
- 4.4. The online questionnaire contained 22 questions; a third in an 'open' format to allow consultees to fully express their views. Questions from the online questionnaire were used at events to enable open and transparent feedback on the proposed Plan.
- 4.5. The consultation generated over 350 responses, the majority coming through the online questionnaire. This is higher than the 217 responses received during the 2018 Worthing Local Plan consultation, and higher than those received for the WSCC Cycling Strategy Consultation. An analysis of the consultation responses is attached appendix 2. Some of the key results were:
 - 4.5.1. 89% supported the principle of improving cycling infrastructure;
 - 4.5.2. 85% supported the principle of improving walking zones;
 - 4.5.3. 81% stated they would cycle more if cycle routes were improved
 - 4.5.4. 85% stated they would walk more if walking zones were improved
 - 4.5.5. 191 comments were submitted on specific cycle routes which supported and/or suggested ways the routes could be improved
 - 4.5.6. 77 comments were submitted on specific walking zones which supported and/or suggested ways the walking zones could be improved
- 4.6. The positive response was coupled with detailed feedback regarding a number of cycling routes and walking zones. The feedback related to either

the removal or amendment of a route, additional route considerations or the beginnings of route prioritisation.

- 4.7. As a result of specific comments on particular routes in Worthing, the following changes have been made to the LCWIP. Members are asked to approve these recommended changes:

Worthing - Location	Recommended changes to LCWIP	Reason
Chesswood Farm Allotments Route 202	Removal of the route through the allotment site	Concern from allotment holders over site security
The mile long Avenue of Ilex Oaks Route 201	Removal of route through the Ilex Avenue Bridleway. Cycle route moved to an on road route	Objections raised regarding a Deed which restricts hardstanding on the bridleway.
George V Avenue to the Sea Lane Café and along the Greensward adjacent to Marine Drive Route 200	Keep the route in. Make note in the text that the route should aim to avoid shared space where possible, and utilise beach side for path extension, minimising impact on the Greensward where possible.	Concern over collision/safety issues due to proximity of cyclists and pedestrians on the relatively narrow seafront path.

- 4.8. As a result of specific comments on particular routes in Adur, the following changes have been made to the LCWIP. Members are asked to approve these recommended changes:

Adur - Locations	Recommended changes to LCWIP	Reason
New Monks Farm Route 320	Add as a new secondary routes	In accordance with proposals in the approved planning application.
Sompting Estate Route 211	Make changes to the detail of the route through Sompting Estate.	To amend the route following discussions with Sompting Estate on the likely route following the EPIC Project to redirect Teville Stream.
Mill Hill Route 335	Add as a new secondary route	Well used link up to the Downs

Coombes Road, from A27 northwards Route 321	Added as a new secondary route	Well used link up to the Downs and commuting route to Steyning
Stoney Lane, Holmbush roundabout to Middle Road Route 336	Add as a new secondary cycle route.	Well used by students cycling to Shoreham Academy.

4.9. The public consultation also revealed a number of possible interventions ‘on the network’ that would need to be considered by Worthing Borough and Adur District Councils, in partnership with West Sussex County Council (as the Highway Authority). This would require the support of partner and community organisations and examples included cycle campaigns and improved cycle storage. The implementation of these schemes would need to be balanced against available resources.

5. Further engagement and communication

5.1. Assisted by transport consultants, the Councils undertook an in-depth review of the large volume of consultation feedback during Spring 2020. The review resulted in amendments to ensure the final LCWIP was supported by the local community, and responded appropriately to the responses received.

5.2. Within the consultation feedback, the Councils received high quality, detailed insight into specific route improvements. Whilst the Final LCWIP will focus on the high level strategic network, the Councils will keep these comments on file as they will assist in the detailed design of routes as they come forward.

5.3. The proposed amendments to the cycle routes and walking zones referred to at paragraph 4.7 and 4.8 were presented to the Adur & Worthing Cycling & Walking Action Group (AW CWAG), members and senior officers. There was approval of all the proposed changes by those consulted.

5.4. Worthing Borough and Adur District Councils are one of a number of Councils developing their LCWIP across West Sussex. This extraphase of consultation also included dialogue with West Sussex County Council (WSSCC), as the Highway Authority, and neighbouring local authorities to ensure any outflow and inflow routes or zones are coordinated. WSSCC were positive and supported the changes articulated in paragraph 4.7 and 4.8.

- 5.5. The Final LCWIP will be an evolving document that will need to be reviewed on a periodic basis.
- 5.6. The Plan presents indicative routing for a cycle network and walking zones. Further consultation will be undertaken on the detail of routes. In relation to prospective emergency interventions on the road network in response to the COVID-19 guidance: significant transport schemes are normally subject to a full consultation process before any changes are implemented. However, this is an emergency situation and temporary measures may be implemented by West Sussex County Council under delegated powers, particularly when there is a risk to the public. If any measure requires a formal Traffic Regulation order (TRO) then the proper legal process will be followed.

6. Next Steps

- 6.1. It is recommended that the proposed final Adur & Worthing LCWIP be formally adopted.
- 6.2. Findings of the LCWIP will be used to guide and inform delivery of interventions in line with government guidance on COVID-19.
- 6.3. The adoption of the Adur & Worthing LCWIP will feed into the overall West Sussex cycling and walking network that is being coordinated and prioritised by WSCC. This will include input from South Downs National Park LCWIP and other neighbouring authorities. WSCC intends to create a combined prioritised list of routes by the end of 2020 to be progressed as funding becomes available. As many of the routes are likely to require external funding contributions it is envisaged that the prioritised list will serve to support future funding bids, as well as directing CIL, s106 contributions, and other local funding. The prioritised list of LCWIP routes will also inform a review of the West Sussex Walking & Cycling Strategy, planned for later this year.
- 6.4. In advance of the LCWIP, WSCC has been developing the Shoreham and Worthing Area Sustainable Transport Package feasibility studies to assess cycling improvements along key routes across Adur and Worthing. These routes appear in the proposed final LCWIP. This includes consideration of upgraded cycling facilities along the following corridors:
 - 6.4.1. Adur: A route along the A259 from Shoreham Adur Ferry Bridge to the boundary with Brighton and Hove at Fishersgate/Portslade (dialogue is continuing with Brighton and Hove City Council about the connection of this route to Hove Lagoon) .

- 6.4.2. Adur: Routes around Lancing and Sompting along from the A27 to the A259 along Grinstead Lane/South Street and Busticle Lane/Western Road , and a route from The Templars along Upper Brighton Road/West Street/Cokeham Road/Crabtree Lane to Mash Barn Lane .
- 6.4.3. Worthing: A route from Grove Lodge along the A24 Broadwater Street West/Broadwater Road/Chapel Road to South Street and a spur on the A259 North St/High St connecting via Steyne Gardens to Worthing Promenade .
- 6.4.4. Worthing: A route from Durrington Tesco via Romany Road/Columbia Drive/Durrington Lane/The Boulevard/Shafesbury Avenue/Worthing Leisure Centre/Robson Road/Trent Road/George V Avenue to Goring seafront at Western Parade.

6.5. Further to the infrastructure improvements, an adopted LCWIP will also provide clear geographical guidance to develop and deliver ‘on the network’ Interventions. The public consultation also highlighted the need to increase cycle storage and the possibility of transport campaigns to encourage a further uptake of cycling and walking across Adur and Worthing. With a high level network this provides greater clarity where these interventions are required, however greater analysis will be required.

7. Financial Implications

- 7.1. The Councils have received a £70,000 grant from the Business Rate Pool to support the cost of the production of the LCWIP. This grant has been used to fund the consultants, initially Sustrans and more recently Transport Initiatives, to support the development of the plan, including the public consultation analysis. To date £28,000 has been spent / committed for consultants.
- 7.2. The remaining finance allocated to LCWIP development through Business Rates Pool may be required to pay for design and implementation of emergency interventions, or for up front payment prior to government funding being distributed.

8. Legal Implications

- 7.1 By adopting the LCWIP, the councils set out their strategy in relation to cycling and walking infrastructure within its areas which can then be progressed with WSCC and other local partners.

If specific delegated authority is given to the Director for the Economy in consultation with the Leaders of the Council, this will allow timely proposals

relating to road and other public spaces under the control of WSCC to be developed and forwarded to WSCC. Whilst it will be a decision for WSCC as to whether or not Traffic Regulation Orders are made, making clear proposals that reflect the needs of the community, particularly taking into account social distancing measures and the need to reduce traffic and increase sustainable forms of transport, make it more likely that these measures will be implemented.

- 7.2 Under Section 111 of the Local Government Act 1972, the Council has the power to do anything that is calculated to facilitate, or which is conducive or incidental to, the discharge of any of their functions.
- 7.3 Section 3(1) of the Local Government Act 1999 (LGA 1999) contains a general duty on a best value authority to make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness.
- 7.4 S1 of the Localism Act 2011 empowers the Council to do anything an individual can do apart from that which is specifically prohibited by pre-existing legislation.
- 7.5 In spending the grant funding referred to in clause 7.1, the Council must ensure compliance with any grant funding terms and conditions and where relevant spend the money in accordance with its Contract Standing Orders.

Background Papers

- Adur & Worthing Draft LCWIP (including appendices), Final proposed Plan, see Appendix 1
- Adur & Worthing Draft LCWIP Consultation report, see Appendix 2
- [JSC report, 7th November 2019, Local Cycling & Walking Infrastructure Plan: making walking and cycling safer and easier](#)
- [Reallocating road space in response to COVID-19: statutory guidance for local authorities, Department for Transport guidance Published 9 May 2020](#)
- [Coronavirus \(COVID-19\): safer public places - urban centres and green space, Ministry of Housing, Communities & Local Government guidance Published 13 May 2020](#)

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Sustainability & Risk Assessment**1. Economic**

- The LCWIP is intended to deliver transport infrastructure that can accommodate the future needs of the area, addressing planned development and population growth and reducing associated congestion that will follow.
- With congestion predicted to increase by as much as 51% by 2050, it is crucial that to maintain a vibrant economy, transport infrastructure is provided in Adur & Worthing that provides alternatives to car travel to maintain good transport flows for business travel; commuting; visitor movement; leisure and utility trips.

2. Social**2.1 Social Value**

- Improved cycling and walking infrastructure can increase safety and accessibility; helping more communities to make cycling and walking their first choice for shorter journeys and as part of longer ones. Cycling and walking provides the cheapest form of transport compared with car travel and public transport. It also brings health benefits through active travel.

2.2 Equality Issues

- Improved cycling and walking infrastructure can increase safety and accessibility; helping more communities to make cycling and walking their first choice for shorter journeys and as part of longer ones. Cycling and walking provides the cheapest form of transport compared with car travel and public transport. It will cater for those that do not or cannot afford a car. It also brings health benefits through active travel.

2.3 Community Safety Issues (Section 17)

- The delivery of any aspects of the LCWIP will be explored under feasibility work which will involve consultation on details to ensure the infrastructure delivered will increase and not decrease public safety. A number of

interventions 'on the network' will support community safety, e.g. cycling campaigns.

2.4 Human Rights Issues

- Once the LCWIP is adopted, the different elements of the infrastructure network and interventions will be conducted in consultation with residents, businesses and community groups associated with that piece of infrastructure.

3. Environmental

- The LCWIP will significantly assist in delivering a safe and accessible cycling and walking infrastructure for Worthing and Adur. This is a crucial step in delivering a more sustainable transport system.
- Transport emissions account for over a third of carbon emissions in Adur & Worthing. Unlike other sectors, transport emissions locally have been rising since 2013. Transport emissions make up over one third of carbon emissions from Adur and Worthing, so reducing carbon emissions associated with transport is a significant challenge in the effort towards being carbon neutral. Cycling and Walking are both zero carbon forms of transport.

4. Governance

- Production of the LCWIP aligns with Platforms for our Places, and will influence the emerging Worthing Local Plan, aligns with the current, and will influence future reviews of the Adur Local Plan.
- It will offer a robust policy direction from which to work with the Highways Authority and Highways England on sustainable transport provision.

Adur & Worthing Councils

Local Cycling & Walking Infrastructure Plan



ADUR & WORTHING
COUNCILS



sustrans
JOIN THE MOVEMENT



We received an overwhelming positive response at the consultation. I'm delighted to support this plan to improve our cycling and walking infrastructure across the Borough



Dan Humphreys
Leader (Worthing Borough Council)



It's clear that our residents and visitors to the District would cycle and walk more with improved routes. This plan provides us with a fantastic foundation to create the network of the future



Neil Parkin

Leader (Adur District Council)

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Our Vision

To create a place where walking and cycling becomes the preferred way of moving around Adur and Worthing.

In setting this vision and seeking these outcomes wider benefits will be delivered. People will only walk and cycle more when they feel safe to do so, and in places to which they are attracted. So the broader vision is of 'liveable' neighbourhoods, commercial, leisure and retail spaces where people want to spend time and where people feel confident to cycle and walk, and parents feel it is safe for children to play without constant supervision. These are places where people want to stay and associate rather than simply pass through inside a motor vehicle.

The Councils share the government's ambition: To make cycling and walking the natural choices for shorter journeys and as part of a longer journey



We share the ambition to achieve this through:

Better Safety

A safe and reliable way to travel for short journeys

- Streets where cyclists and walkers feel they belong, and are safe
- Better connected communities
- Safer traffic speeds, with low speed limits
- Where appropriate to the local area
- Cycle training opportunities for all children

Better Mobility

More people cycling and walking - easy, normal and enjoyable

- More high quality cycling facilities
- More urban areas that are considered walkable
- Rural roads which provide improved safety for walking and cycling
- More networks of routes around public transport hubs and town centres, with safe paths along busy roads
- Better links to schools and workplaces
- Technological innovations that can promote more and safer walking and cycling
- Behaviour change opportunities to support increased walking and cycling
- Better integrated routes for those with disabilities or health conditions

Better Streets

Places that have cycling and walking at their heart

- Places designed for people of all abilities and ages so they can choose to walk or cycle with ease
- Improved public realm
- Better planning for walking and cycling
- More community-based activities, such as led rides and play streets where local places want them
- A wider green network of paths, routes and open spaces

Transport emissions account for over a third of carbon emissions in Adur & Worthing. Unlike the power sector where emissions have fallen by around 50%, transport emissions locally (and nationally) have been virtually unchanged since 2013. The Councils have committed to reducing carbon emissions, yet transport is the most difficult sector to decarbonise. Increasing walking and cycling offers the greatest hope for change.

This Local Cycling and Walking Infrastructure Plan (LCWIP) has been developed and set against the backdrop of these challenges and opportunities. The Councils' are keen to create more walking and cycling networks for their social, economic and environmental benefits.

The Plan has been developed by Sustrans and Adur & Worthing Councils, with the support of local stakeholders, in particular the Adur & Worthing Walking and Cycling Action Group, West Sussex County Council and the West Sussex LCWIP Partners Group. The document has been produced using LCWIP Technical Guidance published by the Department of Transport in 2017.

The Councils' LCWIP will contribute to achieving and improving on the targets of the Government's Cycling & Walking Investment Strategy, which aims to:

- Double levels of cycling by 2025 (from 2013 base levels)
- Reduce each year the rate of cyclists killed or injured on English roads
- Reverse the decline in walking activity, and Increase the percentage of children aged 5-10 who usually walk to school.

The LCWIP also aligns with the West Sussex Walking & Cycling Strategy 2016-26 which aims to: support economic development by facilitating travel to work and services without a car; reduce congestion and pollution by encouraging and enabling people to travel without a car; increase levels of physical activity to help improve physical health; help to maintain good mental health and staying independent later in life; increase the vitality of communities by improving access by bicycle and on foot; and help people to access rural areas and enjoy walking and cycling.

It will do this by taking a strategic approach to improving conditions for cycling and walking, assisting the councils and stakeholders to:

- Identify cycling and walking infrastructure improvements for future investment in the short, medium and long term
- Ensure that consideration is given to cycling and walking within both local planning and transport policies and strategies
- Make the case for future funding for walking and cycling infrastructure

Walking and cycling reduces greenhouse gas emissions and the adverse links between motorised road transport and health

Here are 200 people in 177 cars



Here are 200 people on bicycles



Images of downtown Seattle's 2nd Avenue

From the International Sustainability Institute's Commuter Toolkit poster

617 THOUSAND admissions where obesity was a factor

An increase of 18% on 2015/16

1 IN 5 of year 6 children classified as obese

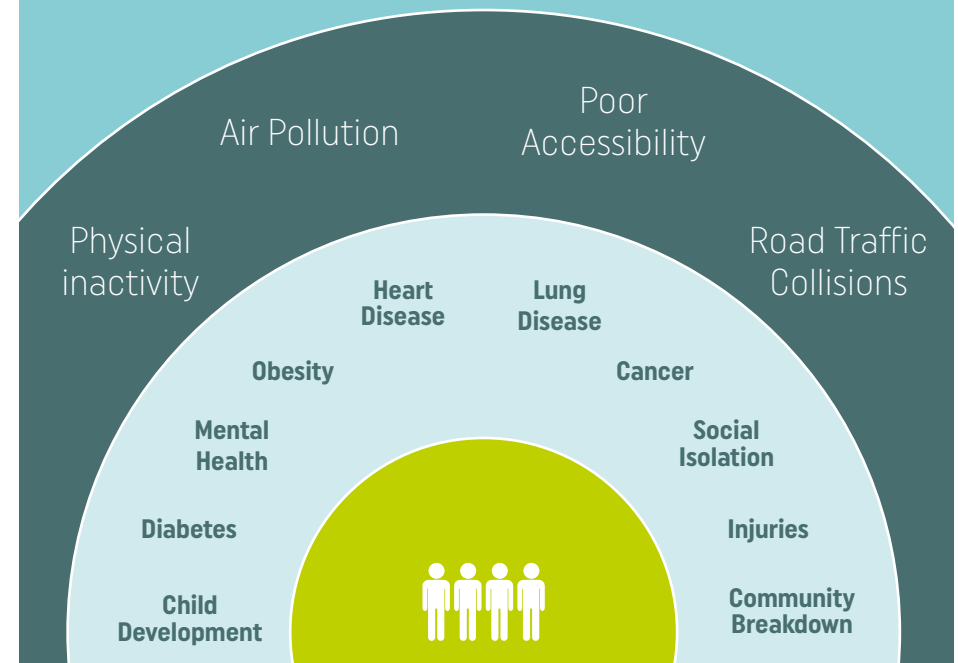
1 in 10 of reception year children classified as obese

26% of adults classified as obese

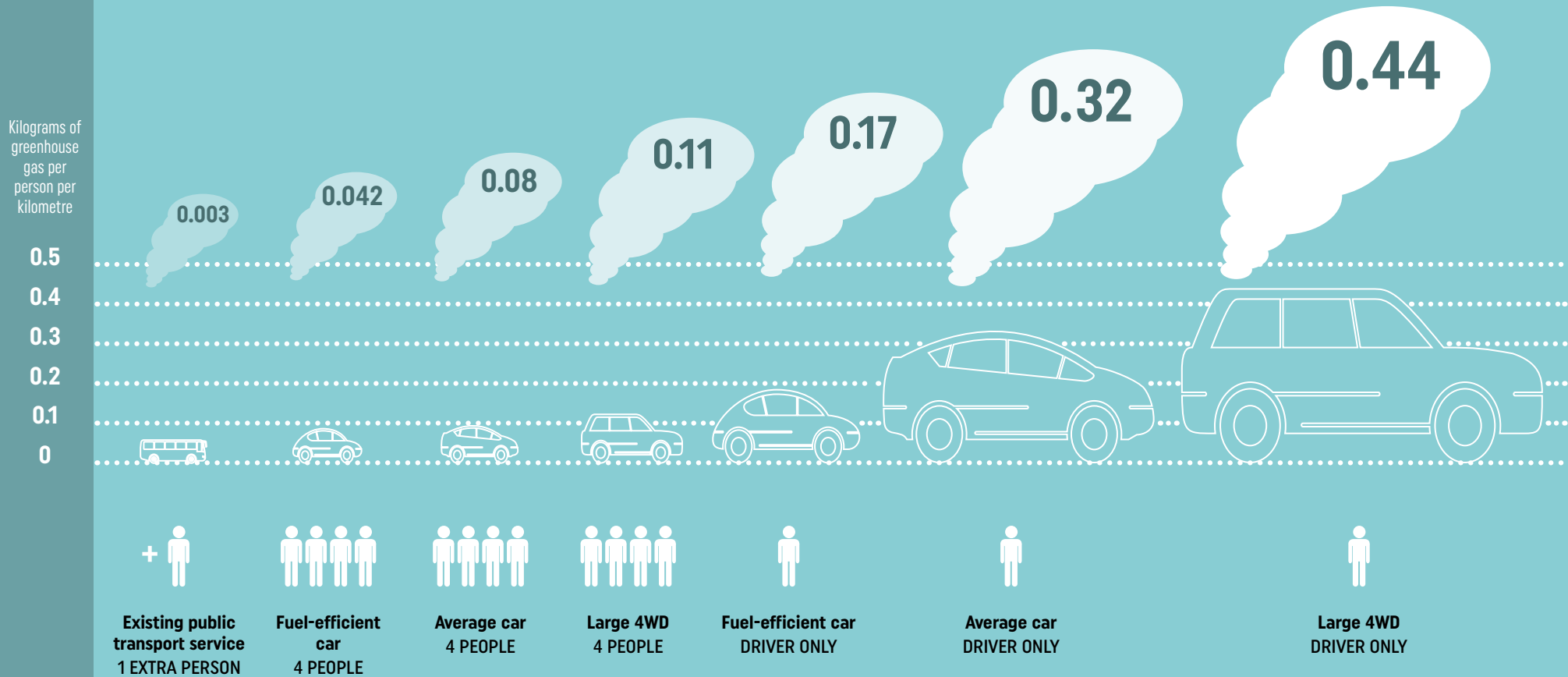
Up from 15% in 1993, but has remained at a similar level since 2010

Source: Statistics on Obesity, Physical Activity and Diet England: 2018

Key adverse links between motorised road transport and health



Greenhouse gas emissions from different forms of transport



Worthing Cycling Network







Routes

- 200** Goring–Fishersgate (seafront)
- 210** Goring– Fishersgate (A2032, A27 & A270)
- 310** Worthing–Findon Valley
- 320** Lancing Beach–North Lancing
- 330** Shoreham–District Boundary

Secondary Cycle Routes

- 201** Ferring–Worthing
- 202** Shoreham–Southwick


Proposed Walking and Cycling Network

-  Primary Cycle Route
-  Secondary Cycle Route
-  Primary Walking Zone
-  Secondary Walking Zone
-  2km Walking Zone
-  WSCC STP Routes

Trip Generators

Employment



2011 Census Workzones - Density of Employment

-  50 + Jobs Per Hectare

Retail

-  Shopping Areas






Education

-  Secondary School
-  Further Education

Services & Amenities

-  Leisure
-  Hospital

Other

-  Town Centre Boundaries
-  Public Rights of Way
-  Railway Station
-  Development Sites
-  Administrative Boundary



Worthing Walking Network

Walking Routes

311 Lyons Farm-Worthing

201 & **202** East Worthing-Worthing

Proposed Walking Network

 Secondary Cycle Route

 Primary Walking Zone

 Secondary Walking Zone

 2km Walking Zone

 WSCC STP Routes

Trip Generators

Employment


2011 Census Workzones - Density of Employment

 50 + Jobs Per Hectare

Retail

 Shopping Areas

Education

 Secondary School

 Further Education

Services & Amenities

 Leisure

 Hospital

Other

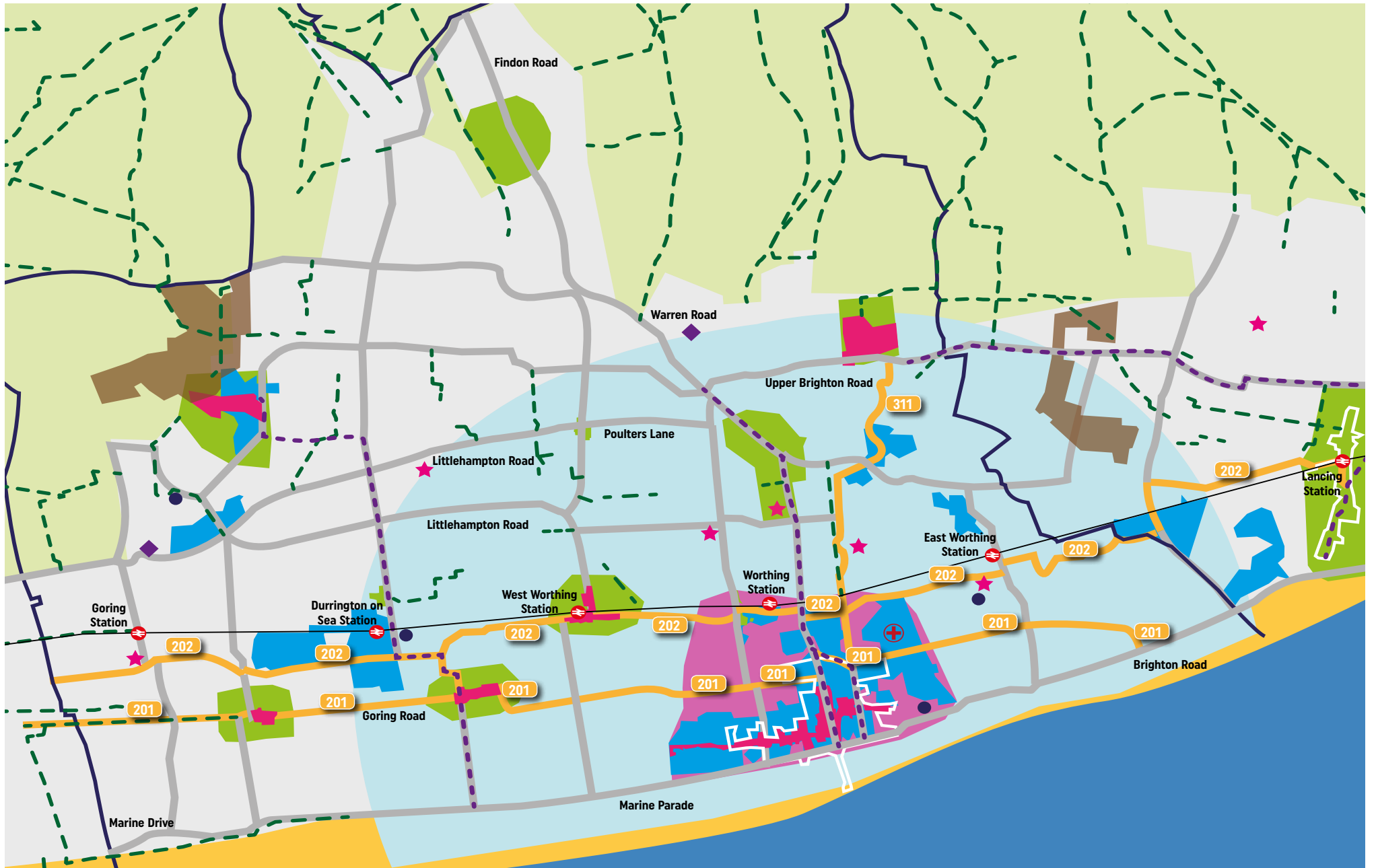
 Town Centre Boundaries

 Public Rights of Way

 Railway Station

 Development Sites

 Administrative Boundary



Adur Walking & Cycling Network







Routes

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- 201** Ferring–Worthing
- 202** Shoreham–Southwick
- 211** Roman Road - Dominion Way
- 313** Halewick Lane - A259 Seafront
- 321** Cecil Pashley Way - West Beach Road
- 332** New Barn Road - Middle Road
- 333** Upper Kingston Lane - A259 Seafront
- 334** Mile Oak Road - Watling Road
- 335** Mill Hill
- 336** Stoney Lane
- 336** New Monks Farm


Proposed Walking and Cycling Network

-  Primary Cycle Route
-  Secondary Cycle Route
-  Primary Walking Zone
-  Secondary Walking Zone
-  2km Walking Zone
-  WSCC STP Routes


Trip Generators

Employment



2011 Census Workzones - Density of Employment

-  50 + Jobs Per Hectare

Retail

-  Shopping Areas






Education

-  Secondary School
-  Further Education

Services & Amenities

-  Leisure
-  Hospital

Other

-  Town Centre Boundaries
-  Public Rights of Way
-  Railway Station
-  Development Sites
-  Administrative Boundary



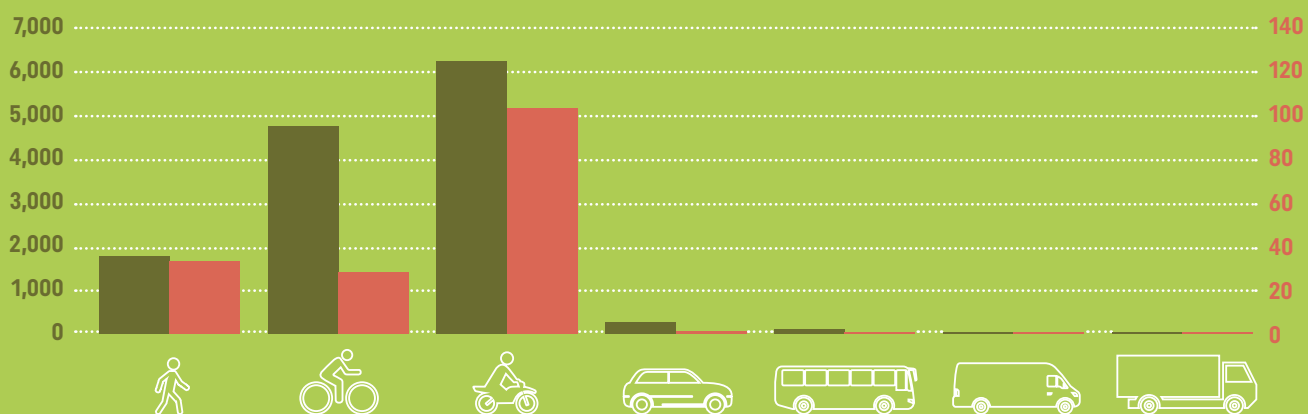
Doubling levels of cycling by 2025

The number of people cycling is currently very low across England, although in areas like Cambridge and Oxford much higher levels are recorded. Prior to the 1950's, miles cycled were high but between the 1950's to the 1970's this fell dramatically and is only now starting to rise again. Levels are a long way off compared to 1940's levels when 15 billion miles were cycled a year compared to 3 billion now.

The number of cycling trips made per person since 2002 hasn't changed, although people that do cycle are cycling further. A very small minority of people in England cycle five times a week: 3.4% but in Adur and Worthing it's even less at 3.2% and 1.5% respectively (NTS 2017). Trips made by the general public, are just 2% by bicycle, 26% on foot, whilst 61% are made by car.

Most people (41%) agree that journeys of less than 2 miles made by car could just as easily be walked (British Social Attitudes Survey). However, whilst 81% of trips under a mile are made by walking, this drops to 30% for trips between 1 and 2 miles; and for trips between 2-5 miles, car and van trips make up the majority share at 60%. (NTS 2017)

Casualty rate per billion passenger miles



Reducing each year the rate of cyclists killed or injured on English roads

Pedestrians and cyclists are much more vulnerable on the road than people in cars. It's crucial the roads are made safer for cyclists and pedestrians so people feel confident and safe to use these methods of travelling. Per billion vehicle miles, 1,011 pedal cyclists are killed or seriously injured, in comparison to 26 car drivers. In West

Sussex between 2010-14 on average there were 65 cyclists reported killed or seriously injured each year. Most serious accidents involving cyclists in collisions happen at, or near a road junction, with T-junctions being most common and roundabouts being particularly dangerous for cyclists. The severity of injuries suffered by cyclists increases with the speed limit: riders are more likely to suffer serious or fatal injuries on higher speed roads

MODAL SHARE



OTHER

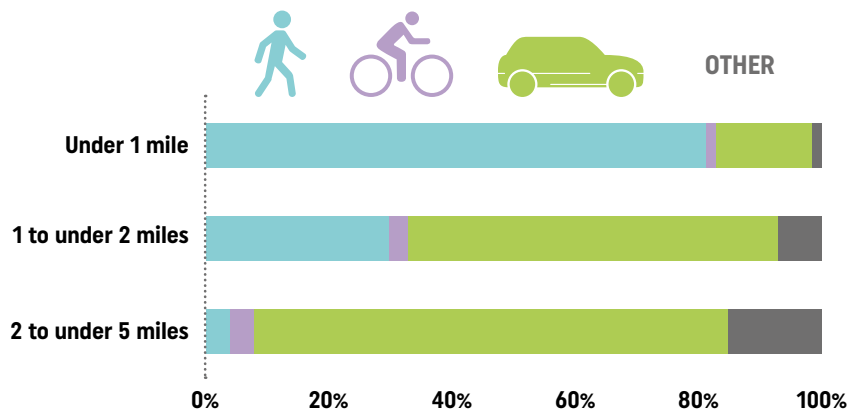
TRIPS



DISTANCE



Source: English 2019 National Travel Survey



Reversing the decline in walking activity

Across England, walking is slowly on the increase. In 2017, the average number of walking stages and the average miles travelled per person per year increased since 2012/13 (2017 NTS). However, only about a third of people walk at least 10 minutes five times a week. In England this is 32%, in West Sussex 33.4%, in Adur 35.5% and in Worthing 36.6%. There has been a significant decrease in West Sussex residents that walked for 10 mins, five times per week, this is down from 46.9% in 2012/13.

Increasing the percentage of children aged 5-10 who usually walk to school.

The number of children walking to primary school is at the lowest figure ever. This is despite a small increase in walking trips for all ages. In the 1970s, 70% of primary school children walked to school, but now only 50% of pupils usually do so. Such a decline impacts on children's health, air

quality, traffic congestion and road safety. The proportion of primary school children walking to school in 2017 is the same as it was in 2002 (51%); but the proportion of secondary school children walking to school has decreased from 2002 levels (45%) down to 35% (2017 NTS). Local statistics are not available.

Transport and health impacts

Walking and cycling are good for our physical and mental health. Switching more journeys to active travel will improve health, quality of life and the environment, and local productivity, while reducing costs to the public purse. These are substantial 'win-wins' that benefit individual people and the community as a whole.



Some key messages from Public Health England on the benefits of Active Travel

- Physical inactivity directly contributes to 1 in 6 deaths in the UK and costs £7.4 billion a year to business and wider society
- Growth in road transport has been a major factor in reducing levels of physical activity and increasing obesity
- Building walking or cycling into daily routines are the most effective ways to increase physical activity
- Short car trips (under 5 miles) are a prime area for switching to active travel and to public transport
- Health-promoting transport systems are pro- business and support economic prosperity. They enable optimal travel to work with less congestion, collisions, pollution, and they support a healthier workforce

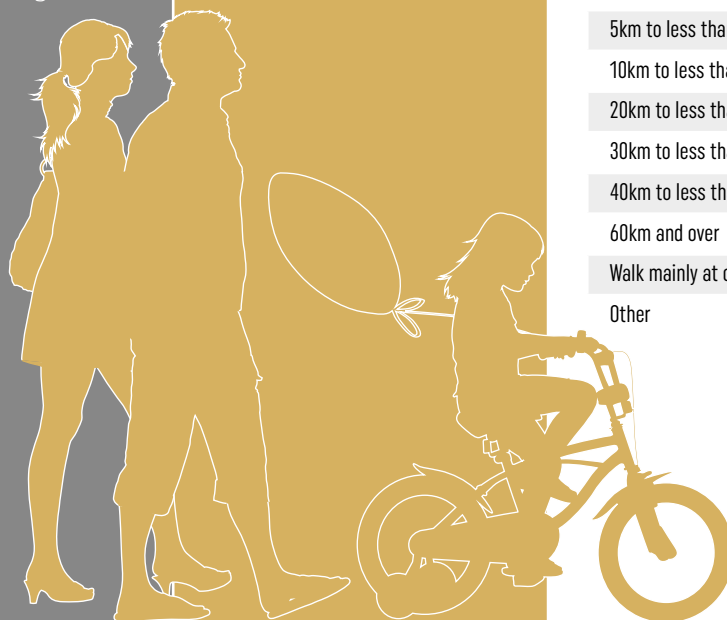
Adur & Worthing

This is the first Joint Local Cycling and Walking Infrastructure Plan (LCWIP) for Adur and Worthing Councils and It supports the development of safe routes for cycling and walking and will increase the uptake of active and sustainable travel modes throughout Adur and Worthing.

As part of its Public Health Strategy 2018 - 2021 which sets out five priorities for action. Priority 2 seeks to contribute to improved environmental sustainability. The Councils have a key role in improving environmental resilience in Adur and Worthing through developing sustainable transport opportunities, creating the opportunities and networks for communities to walk and cycle safely, managing local air quality, using innovation, planning and design and supporting the network of environmental community groups in our areas.

The vision underpinning this LCWIP is:

To create a place where walking and cycling becomes the preferred way of moving around Adur and Worthing.



The Covid-19 impact

The current Covid-19 crisis will undoubtedly significantly change patterns of work with many people working closer to or from home once it has passed. However, it may be some time before a clear picture of the level of change emerges. Despite this, existing data from the 2011 census suggests that prior to the crisis there was significant potential to increase walking and cycling to work, particularly in Worthing where 48% had a work journey of 5km or less compared to 35% in England and 33.2% in West Sussex overall. The figure for Adur is 33.5%.

Table 2 below shows the figures for all work journeys and distances.

Length of Journeys	Adur District	Shoreham -by-Sea	Worthing Borough	West Sussex	South East	England
Less than 2km	16.6%	17.4%	24.9%	17.7%	16.6%	16.6%
2km to less than 5km	16.9%	12.7%	23.1%	15.5%	16.2%	18.4%
5km to less than 10km	20.2%	24.7%	6.8%	13.1%	14.2%	17.3%
10km to less than 20km	12.3%	9.9%	10.9%	14.5%	13.7%	15.3%
20km to less than 30km	3.8%	3.8%	5.6%	5.9%	7.1%	5.7%
30km to less than 40km	3.8%	4.6%	2.5%	3.1%	3.7%	2.6%
40km to less than 60km	1.3%	1.4%	2.2%	5.2%	4.0%	2.3%
60km and over	4.4%	5.7%	4.6%	4.0%	4.0%	3.1%
Walk mainly at or from home	10.2%	12.4%	10.4%	12.2%	11.8%	10.3%
Other	10.4%	12.1%	9.0%	8.9%	8.9%	8.5%

Air Quality

Issues of poor air quality within Adur and Worthing are primarily a result of traffic emissions. In Adur, two Air Quality Management Areas (AQMAs) have been declared at Shoreham High Street and Old Shoreham Road, Southwick. The Brighton (Portslade) AQMA borders the district boundary. Adur has an Air Quality Action Plan (2007) (under review). In Worthing, there is one AQMA which encompasses Offington Corner (A27/A24 junction), Grove Lodge and Lyons Farm (A27 Upper Brighton Road). Worthing has an Air Quality Action Plan (2015) (due for review in 2020). Both Councils use the Sussex Air Quality and Emissions Mitigation Guidance 2019 to assist with assessing and mitigating the air quality impacts of new local development.

A new Sussex-air project has been funded for 2020/21 to expand the previous work with primary schools close to AQMAs to encompass additional primary schools and extend the work to some secondary schools across Sussex. AWC also works with West Sussex County Council Inter Authority Air Quality Group to improve air quality whilst promoting behaviour change.

Measured levels of nitrogen dioxide (NO₂) fell during 2019, although a single monitoring site close to Grove Lodge roundabout continued to exceed the 40 µg/m³ annual mean objective for NO₂ in 2019. No monitoring sites in Adur exceeded the annual mean objective in 2019. Due to continued reductions in NO₂ levels at Southwick, AWC plans to revoke the Southwick AQMA. Monitoring of particulates in both Adur (PM₁₀) and Worthing (PM_{2.5}) show the relevant objectives currently being met.

Carbon Emissions

Adur and Worthing Councils are committed to work towards becoming a Carbon Neutral council by 2030. The Councils have also committed to the UK100 Cities pledge to achieve 100% clean energy across Adur and Worthing by 2050. Emissions from transport will be calculated under the Carbon Reduction Plan and monitored annually. The declaration states: "Actions will include virtually eliminating carbon emissions from council energy and transport use through almost entirely ceasing fossil fuel use", with a "shift to electric vehicles".

Carbon emissions in Adur and Worthing have been decreasing since government monitoring began in 2005. Between 2005 and 2017, per capita annual emissions have reduced from 5.9 to 3.6 tonnes CO₂ in Adur and 5.6 to 3.1 tonnes CO₂ in Worthing. Whilst this is good news, looking in greater detail, domestic and industrial/commercial emissions have been steadily falling, but transport emissions are now higher than in 2012. As transport emissions make up over one third of carbon emissions from Adur and Worthing, reducing them is crucial in the effort to become carbon neutral.

The Covid19 crisis has seen reduced levels of NO_x air pollution and carbon emissions and it remains to be seen what the longer term outcome for both will be once the crisis had passed. However, maintaining the reductions that have undoubtedly occurred is another strong reason for ensuring that the measures in the LCWIP are implemented as quickly as possible.

West Sussex County Council

As the Highway Authority the County Council is a critical stakeholder responsible for the majority of the roads in the area.

The West Sussex Transport Plan 2011- 026 provides strategic direction for transport within Worthing and Adur, focusing on promoting economic growth; tackling climate change; providing access to services; employment and housing; and improving safety, security and health. The Plan seeks to ensure that all new development within West Sussex supports and contributes to; increasing the use of sustainable modes of transport ('smarter choices'). Enabling more people to walk, cycle or use public transport will help to reduce costs associated with traffic congestion as well as creating healthier, inclusive and attractive places to live and work.

The West Sussex Walking and Cycling Strategy (2016-2026) includes over 300 potential new routes that were suggested by local stakeholders. These can be divided into four categories:

Inter-community utility cycle routes

Inter-community leisure cycle routes

Urban cycle improvements

Walking-only schemes

The County Council has stated it will prioritise investment in inter-community utility cycle routes and urban cycle improvements. With the advent of LCWIPs the County Council has undertaken to focus on routes that connect places and to use the LCWIP process to develop business cases for such routes. This will complement the work of the district and borough councils, who are focussing on routes within their local areas. In addition, the South Downs National Park Authority is looking at routes that connect into the Park. Once the LCWIP work has been completed the County Council will review the potential routes listed in the West Sussex Walking & Strategy and reprioritise these as appropriate.

In addition, the County Council has already started to investigate improvements to walking and cycling facilities in Adur and Worthing through Area Sustainable Transport Package (STP) feasibility studies and Road Space Audits. These aim to support planned development and economic growth. The County Council and AWC are working together to ensure this work dovetails with LCWIP development. Routes that are being explored under the STP work are identified on the proposed primary and secondary cycling routes later in this document.

South Downs National Park

South Downs National Park Authority (SDNPA) published their Cycling and Walking Strategy 2017- 2024 with an ambition that:

- The National Park is home to a network of largely traffic free routes providing opportunities for a range of users of differing abilities and ages, who are using the network for recreation and daily utility journeys.
- The network is easily reached from all communities within and near to the National Park and is well connected to public transport.
- Visitors and residents enjoy excellent cycling and walking recreational facilities and information throughout the National Park on trails, at visitor attractions, amenities and accommodation providers.

The Vision Map of Strategic Routes and Promoted Trails identifies two strategic routes linking the National Park with Adur & Worthing:

- Worthing to Washington, along the A24 corridor
- Downs Link, Shoreham to Steyning
- Mill Hill, Shoreham to ???



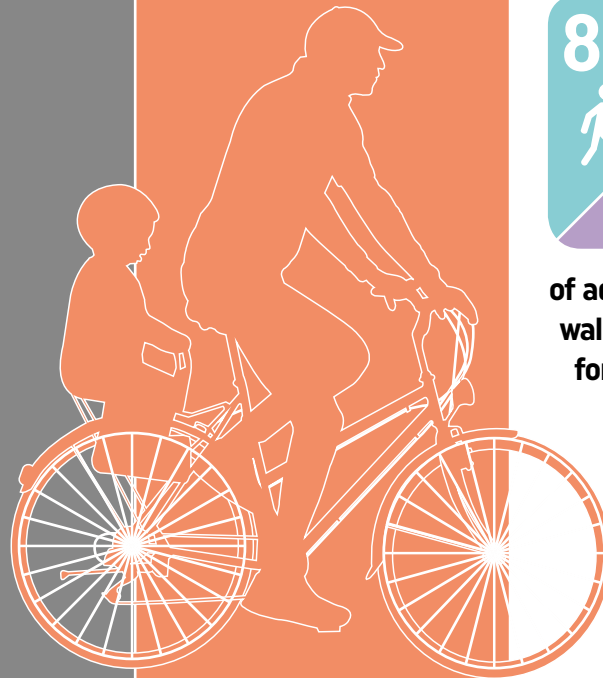
89%
of all local
people asked
support
improving the
cycling network

Worthing Borough

Worthing is one of the largest towns in West Sussex bordering Adur District to the east and Arun District to the north and west. Some of the northern parts of Worthing Borough are within the SDNP, including Cissbury Ring. Worthing is a compact town and the Built-up Area takes up over 2,282 hectares of the borough's geographical area (3,369 ha). The population of Worthing Borough was 110,025 in 2018.

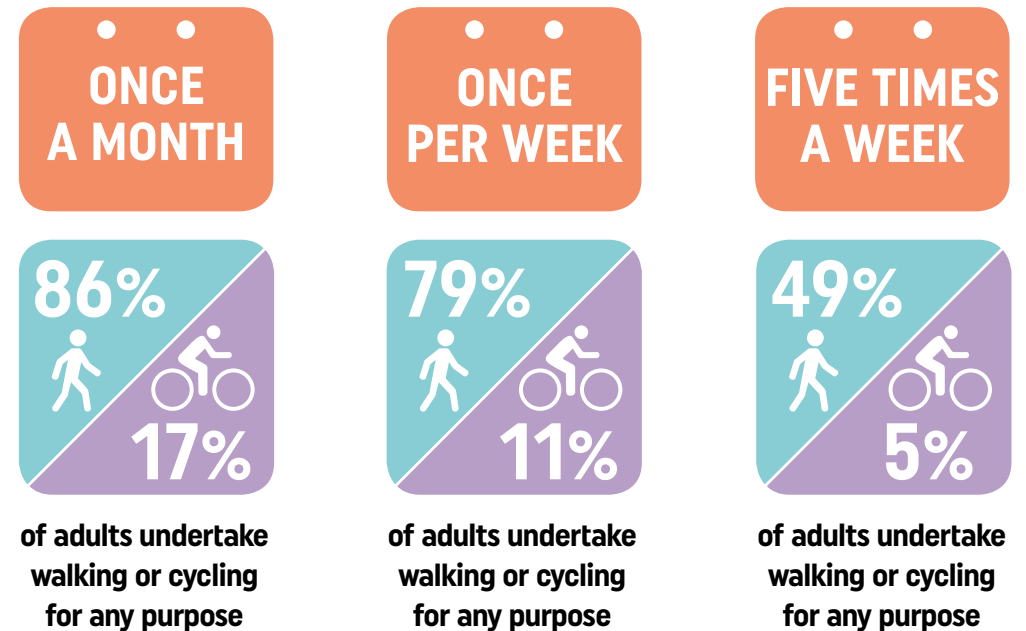
The vision underpinning this LCWIP is:

To create a place where walking and cycling becomes the preferred way of moving around Adur and Worthing.



Cycling & Walking in Worthing

Department for Transport Statistics for 2016/17 reveals that within the borough of Worthing:



These figures are **higher than the West Sussex average**

Worthing has the **highest walking and cycling statistics** for these measures out of the all Districts and Boroughs in West Sussex

National Cycle Network (NCN) Route 2 runs through Sussex from Worthing to Rye. Brighton to Hastings via Polegate is a part of the Downs and Weald Cycle Route. Worthing to Chichester is still under development. In Worthing NCN2 uses a shared route with pedestrians along the promenade, which currently ends at George V Avenue in West Worthing.

There is also a cycle route from Worthing railway station to Findon Valley in the north, which is on a shared path north of the A27, but largely an on-road signed route to the south towards the town centre. There are sections of shared use path along the A2032 Littlehampton Road to the west of the Borough, however these do not provide a continuous route towards central Worthing. There are additional largely on-road signed cycle routes from Goring Road in the west and Sompting to the north east, which link to the town centre.

There is a pedestrian zone in the centre of Worthing as well as footways that extend across most of the local road network including the A27. This provides users with access on foot across the urban area and to towns and villages in the near vicinity as well as into the SDNP. Pedestrians also share the beachfront promenade with cyclists (Worthing Local Plan Transport Assessment, 2018).

The current provision of pedestrian and cycling facilities across the town are unable to support and maintain sustainable travel. Much of the network is disjointed and suffers from inadequate signing, unsafe crossing points and poor surfacing. However, the NCN2 cycle route along the seafront is the most popular cycle route in West Sussex, with a weekday average of over 637 cyclists recorded near to Brooklands Park in 2018, indicating that there is great potential to grow active travel in the Borough.

81%

of all local
people asked
would cycle
more if routes
were made
safer and easier



Planning Policy Context

The Worthing Core Strategy, adopted 2011, recognises that car ownership in Worthing is slightly higher than the national average and, like most urban environments, the town is characterised by areas of heavy road congestion, especially during morning and evening peaks. This is especially prevalent around the northern edge of the town, where the A27 provides Worthing's only long distance through route. The A24 provides the main road link into the town from the north. The A259 coast road that connects Worthing to centres at Lancing and Shoreham-by-Sea to the east and Littlehampton to the west, also experiences significant peak time congestion.

Strategic Objective 7 of the Core Strategy seeks to:

"Improve accessibility and to ensure that a sustainable transport network is provided that is integrated with new development and promotes a modal shift towards more sustainable modes of transport."

The Core Strategy seeks to deliver sustainable transport through Policy 19: Sustainable Travel to improve walking and cycling networks to create sustainable links between the town centre and the suburbs.

Worthing Borough Council is developing a new Local Plan for Worthing, targeted for adoption by summer 2021. The draft sets out to improve connectivity and promote a more integrated and sustainable transport network as well as facilitate improved opportunities for active travel. To achieve this, the Local Plan seeks to locate and design development and supporting infrastructure to minimise the need to travel by car and promote sustainable travel, to:

- **Provide** an integrated, safe and sustainable transport system to improve air quality, reduce congestion & promote active travel. Strategic Objective 20
- **Promote** the creation of strong, vibrant and healthy communities and seek a reduction in health inequalities through the enhancement and accessibility of safe active travel routes. Policy CP7 Healthy Communities
- **Promote** opportunities for active transport and accessible and well-connected walking, cycling and public transport; ensure potential impacts of development on transport networks are addressed; and to reduce poor air quality. Policy CP24 Transport

It is currently estimated that approximately 4,000 additional dwellings and 100,000m² employment sites will be built by 2033. Given the need to mitigate the transport impacts arising from the level of growth, it is vital that a functional and sustainable transport system is in place.

The Worthing Infrastructure Delivery Plan (IDP) identifies infrastructure requirements needed to support future growth which includes walking and cycling. The IDP is a live document and will be updated in tandem with the preparation of the Worthing Local Plan. The IDP and this LCWIP will complement each other.

To inform and support the development of the new Worthing Local Plan, the Council commissioned the Worthing Local Plan Transport Assessment which demonstrates the traffic implications of potential new land use development and identifies an associated package of transport improvements.

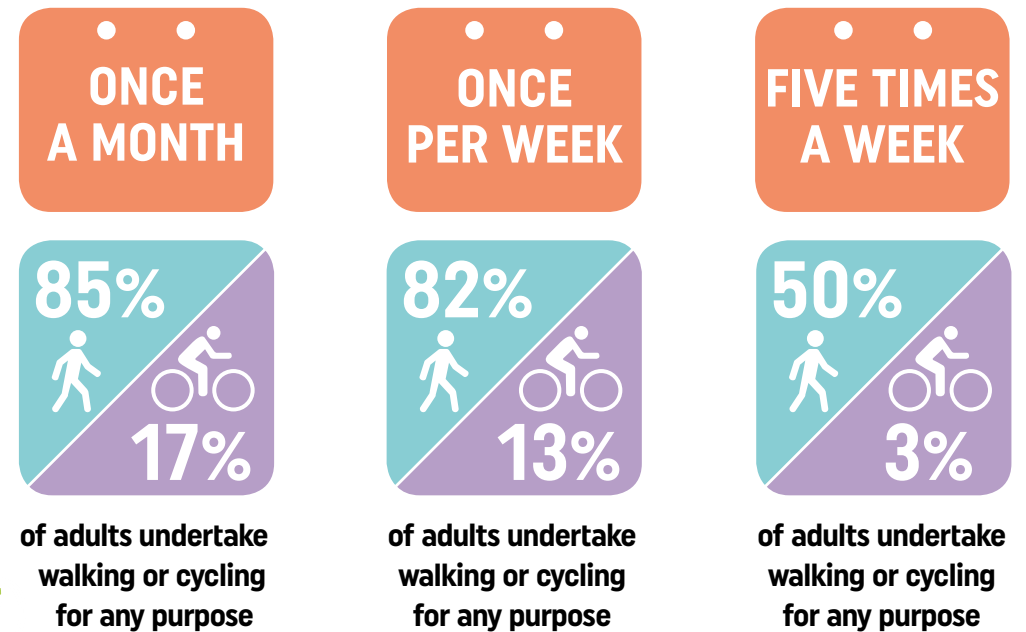
Adur District

Adur District covers Shoreham-by-Sea, Southwick, Fishergate, Lancing and Sompting. It is located on the south coast between the Sussex Downs to the north and the English Channel to the south. It borders Worthing to the west and Brighton and Hove to the east. Over half of Adur District (53%) lies within the National Park boundary, although the population in this area is very low.



Cycling and Walking in Adur

Department for Transport Statistics for 2016/17 reveals that within the district of Adur:



The cycle infrastructure in the district includes National Cycle Network (NCN) Route 2. Improvements to a section of the NCN2 route through the District are being developed under the Sustainable Transport Package (STP) work by WSCC. The recently constructed Adur Ferry Bridge, provides a new shared pedestrian and cycle crossing, that links Shoreham with Shoreham Beach and which forms part of NCN 2.

These figures are **higher than the West Sussex average**

NCN Route 223, which is also known as the 'Downs Link', a 37 mile bridleway, runs along the River Adur from Shoreham (mostly traffic free) to Guildford. There are other unconnected sections of cycle facilities in Adur, for example on Upper Shoreham Road between Buckingham Road and Eastern Avenue, and at the Upper Shoreham Road Holmbush Roundabout.

The Monarch's Way long distance path passes through Adur District connecting Hove with Shoreham Harbour, following NCN2 along Basin Road South. Signage along the final stretch of the route is non-existent, and improvements could be made to the route in this area. There are many footpaths/public rights of way leading from the urban parts of Adur into the countryside to the north.

The main local transport route running east – west (the A259) is a poor environment for pedestrians and cyclists. The road is busy, noisy and dusty with HGV and minerals / waste uses along the frontage and being characterised by poor public amenity, although it is subject to redevelopment proposals including STP improvements to the NCN2 cycle facilities. The A270 (Old Shoreham Road) is an alternative route but this also blighted by high volumes of traffic, an Air Quality Management Area (AQMA) and an unwelcoming environment.

Planning Policy Context

The Adur Local Plan adopted in 2017, is a strategy for development in Adur (excluding the SDNP) up to 2032. One of the key issues identified is the need to address road congestion and related air and noise pollution whilst improving the existing transport network and

facilitating the development of sustainable transport measures. Roads particularly affected include the A27, A259 and the A270. This, along with anticipated future development, could worsen congestion and lead to poorer air quality by 2032, especially in the AQMAs, unless measures are taken to mitigate these impacts and encourage modal shift. Objective 9 of the Adur Local Plan is:

"To improve connectivity within and to Adur's communities as well as to Brighton and Worthing, achieve more sustainable travel patterns and reduce the need to use the private car through public transport services and infrastructure, demand management measures, and new and enhanced cycle and footpaths."

Adur Local Plan's policies seek to promote opportunities for active transport and accessible and well-connected walking, cycling and public transport; ensure potential impacts of development on transport networks are addressed; and to reduce poor air quality.

Over the period of the Local Plan to 2032 it is anticipated that over 3,700 dwellings will be delivered along with over 40,000 m² of employment land.

The Adur Infrastructure Delivery Plan (IDP) identifies infrastructure requirements including for walking and cycling needed to support future growth identified in the Adur Local Plan. This LCWIP will also link up with the IDP. The Adur Local Plan was also informed by the Adur Local Plan and Shoreham Harbour Transport Study 2013, the Report Addendum 2014 and Second Addendum 2016.

Shoreham Harbour

Adur District Council is working with its partners (Brighton & Hove City Council; West Sussex County Council; Shoreham Port Authority) on a joint project to regenerate Shoreham Harbour and surrounding areas. The Joint Area Action Plan (JAAP) was adopted in 2019. Objective 5 of the JAAP states:

"To improve connections and promote sustainable transport choices through ensuring new developments are well served by high quality, integrated and interconnected networks, improved pedestrian, cycling and public transport routes and reducing demand for travel by private car in innovative ways."

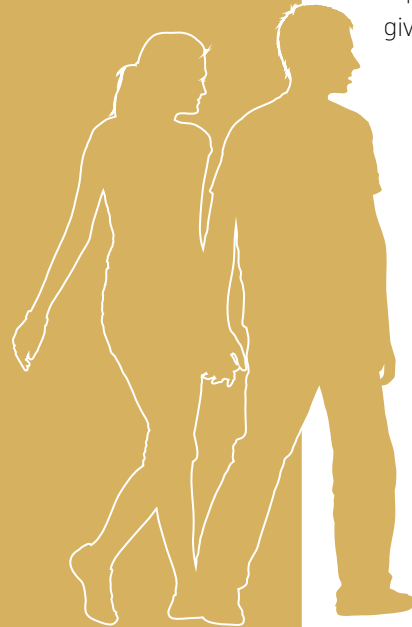
Sustainable transport is supported in a range of policies in the JAAP which itself is also supported by the Shoreham Harbour Transport Strategy (2016).





Case Studies

In addition to the Government's Cycling and Walking Investment Strategy, a number of local authorities and devolved administrations have published their own strategies for increasing levels of walking and cycling and some of these are summarised below, together with a few practical examples.



London Cycling Design Standards

The Mayor of London has set out his vision for cycling and his aim to make London a 'cyclised' city. Building high quality infrastructure to transform the experience of cycling in our city and to get more people cycling is one of several components in making this happen. This means delivering to consistently higher standards across London, learning from the design of successful, well used cycling infrastructure and improving substantially on what has been done before. It means planning for growth in cycling and making better, safer streets and places for all.

The six core design outcomes, which together describe what good design for cycling should achieve, are: Safety, Directness, Comfort, Coherence, Attractiveness and Adaptability.

Adaptability is a measure in the Cycling Level of Service assessment matrix, with scores given against the following factors:

- Public Transport Integration
- Flexibility
- Growth enabled

The key point here is that provision must not only match existing demand, but must also allow for large increases in cycling.



Greater Manchester: Made to Move

The goal in Manchester is to double and then double again cycling in Greater Manchester and make walking the natural choice for as many short trips as possible. The intention is to do this by putting people first, creating world class streets for walking, building one of the world's best cycle networks, and creating a genuine culture of cycling and walking. According to the 2011 Census, the proportion of commuters who cycled to work in Greater Manchester was 2.2%.

To make the vision a reality, the aim is to create dedicated networks for walking and cycling. This means building segregated cycling routes on main roads and through junctions supported by traffic-calmed cycling routes. It also means improving the quality of the public realm and better wayfinding to make walking short journeys much easier.



The key actions being undertaken are:

- Publish a detailed, Greater Manchester- wide walking and cycling infrastructure plan in collaboration with districts.
- Establish a ring-fenced, 10 year, £1.5 billion infrastructure fund, starting with a short term Active Streets Fund to kick-start delivery for walking and cycling. With over 700 miles of main corridors connecting across Greater Manchester, this is the scale of network being aimed for.
- Develop a new, total highway design guide and sign up to the Global Street Design Guide.
- Deliver temporary street improvements to trial new schemes for local communities.
- Ensure all upcoming public realm and infrastructure investments, alongside all related policy programmes, have walking and cycling integrated at the development stage.
- Develop a mechanism to capture and share the value of future health benefits derived from changing how we move.
- Work with industry to find alternatives to heavy freight and reduce excess lorry and van travel in urban areas.

Cycling Action Plan for Scotland

A shared national vision for a 10% modal share of everyday journeys by bike is being targeted, with a related clear aspiration for reduction in car use, especially for short journeys, by both national and local government. A long term increase in sustained funding is required, with year-on-year increases over time towards a 10% allocation of national and council transport budgets as Edinburgh is achieving. The primary investment focus is on enabling cycling through changing the physical environment for short journeys to enable anyone to cycle.

There is commitment to a shared vision of 10% of everyday journeys by 2020 by bike, and positively promoting modal shift away from vehicle journeys which will over time reduce car use for local trips.

At its meeting on 9 February 2012, Edinburgh City Council committed to spend 5% of its 2012/13 transport budgets (capital and revenue) on projects to encourage cycling as a mode of transport in the city, and that this proportion should increase by 1% annually. This funding would be used to support the delivery of the Active Travel Action Plan (ATAP). In 2010, the Council approved its ATAP, which seeks to build on the high level of walking in Edinburgh and the growing role of cycling. It set targets of 10% of all trips and 15% of journeys to work by bike by 2020. These targets are incorporated in the Local Transport Strategy.

South West City Way, Glasgow

From 2014 to 2016, the estimated number of cycling trips on the route of the South West City Way increased by 70%, from 115,450 trips by bike in 2014 to 195,800 in 2016. In 2016, cycling trips made up 22% of all estimated trips on the route. An estimated 43.5% of journeys made on the South West City Way in 2016 were journeys to or from work.



Old Shoreham Road, Hove, Sussex

Closer to home, Brighton & Hove City Council reallocated road space on Old Shoreham Road in 2012 and introduced "hybrid" cycle lanes, with low-level kerbs separating bicycles from motor vehicles and from the footway. The improvements also included:

- Full segregation for cyclists from motor vehicles, achieved by providing a low kerb edge
- Improvements to side road junctions to make crossing the road easier for pedestrians and people with mobility problems.
- Shared areas for cyclists and pedestrians at bus stops.
- A new zebra crossing across Old Shoreham Road at Chanctonbury Road.



Bike Life

Sustrans 2017 Bike Life report is the UK's biggest assessment of cycling in seven major cities: Belfast, Bristol, Edinburgh, Birmingham, Cardiff, Greater Manchester and Newcastle.

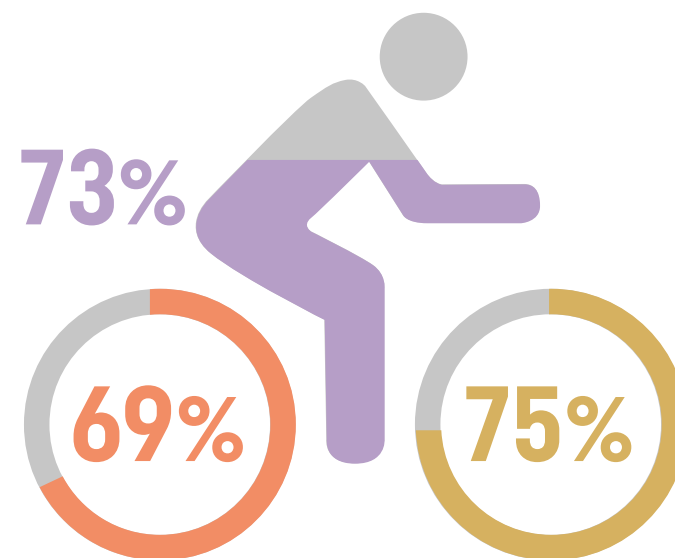
Bike Life is inspired by the Copenhagen Bicycle Account and is an analysis of city cycling development including infrastructure, travel behaviour, satisfaction, the impact of cycling and new initiatives. The information in the report comes from local cycling data, modelling and a representative survey of over 1,100 residents in each city conducted by ICM Unlimited, social research experts. There is widespread public support for creating dedicated space for cycling.

64% of residents would cycle more if roadside cycle routes were created, physically separated from traffic



78% of people support building more protected roadside cycle lanes, even when this could mean less space for other road traffic, including 74% of residents who do not ride a bike

73% of residents think investing in more space for walking and cycling or buses is the best way to keep their city moving rather than more space for cars



69% think more cycling would make their city a better place to live and work

75% of people would like to see more money spent on cycling in their city

Liveable Cities and Towns

Sustrans believes that dedicated high quality walking and cycling routes are only part of the overall picture and it is important to regard all public highways as public space and not solely movement corridors for motor vehicles. With this in mind, Sustrans offer the following general principles when designing liveable cities and towns.

1

Ensure that every child who can has the opportunity and confidence to walk and cycle safely to school using high quality walking and cycling routes.



2

Support schools, workplaces and local communities to make walking and cycling the easiest and most attractive option for everybody who can to get around.



3

Create '20 minute neighbourhoods' – places where people can meet most of their everyday needs within a 20-minute walk of their home.



4

Radically reduce the volume and speed of vehicles on main roads, across city and town centres and local high streets – creating places where motorised transport is guest.



5

Remove the through-traffic from our residential areas – creating social streets where walking has priority.



6

Ensure every town and city is served by a dense network of protected cycle routes across urban areas, complemented by off- road routes and routes on quiet streets, as well as walkable routes to and within urban areas. Routes should be attractive, fully accessible, and make people feel safe and secure.

7

Support work to ensure that appealing, comprehensive, affordable and innovative public transport options are available for all, and integrated with walking and cycling.



8

Green our urban areas and ensure everyone can easily access high quality green spaces and green corridors that are good for and connect us to nature.



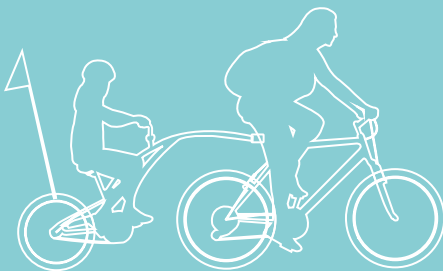
9

Embrace the potential of cargo bikes to replace vans and cars in the transportation of goods, services and people, whilst removing the negative impacts of freight in the urban environment.



10

Give everyone the opportunity to take up cycling by providing cycles, including electric and adapted, improving cycle parking, and expanding public cycle scheme provision, inclusiveness and integration.



11

Use evidence, insight and stories to make a compelling case for change and win hearts and minds.



12

Encourage a new public debate on motorised transport use – a citizens' assembly which considers the radical and immediate intervention needed to reduce unnecessary journeys by motor vehicles, fairly.



13

Ensure the real cost of motorised transport and its impact on current inequality and future generations is recognised in cross-departmental government decision making, and investment in sustainable and active travel is prioritised.



14

Support diversity in transport and planning, so that decision makers are better representative of the communities that they serve. This is key to making walking and cycling attractive and inclusive activities.



A low traffic neighbourhood is the term used to describe an area-based approach to traffic management to support walking and cycling. They work best when applied an entire urban area or traffic cell (the area between mains roads and natural boundaries). This is because traffic is best managed across an area and doing something on a road by road basis will often just move the problem.

In a Low Traffic Neighbourhood a range of measures are introduced to make it more difficult for motor traffic to travel through an area. Features include one-way streets, banned turns and features called modal filters where roads are closed to motor traffic (at one end or in the middle) removing the ability of non-local traffic to drive along a street.

Access to all addresses by motor vehicle is still possible and deliveries and servicing can still take place. Only the ability for motor traffic to travel through residential area is removed. This removes popular short cuts for car drivers sometimes known as rat-runs. The removal of non-local traffic allows streets to be redesigned and spaces to be repurposed to people and greening. People can enjoy the streets in which they live, socialise, plant new spaces and children can play out.

The removal of through motor traffic reduces local speeds and volumes which in turn improves safety, enabling more active and sustainable travel, and increase the sense of place and community. This benefits local air quality, public health, social inclusion and mobility, and a wide range of other social, environmental and economic factors.

Whilst there are lots of streets in the UK that have been closed to through traffic the introduction of area-wide low traffic neighbourhoods in the UK is rare.

In Europe, the introduction of low traffic neighbourhood type measures is commonplace even in smaller towns and villages.

Once bypassed towns are filtered to prevent through traffic traveling through meaning local journeys are normally walked or cycled.

The most well-known low traffic neighbourhood project in the UK is the Mini-Holland programme in Waltham Forest. The award-winning programme includes 6 low traffic neighbourhoods introduced across Leyton, Leytonstone and Walthamstow, as part of a £27 million programme to make the borough a great place to walk and cycle.

In the region of 8 square kms of the borough has been included in the programme to date, with streets turned from busy through routes into quiet places to live, spend time and play. Over 50 streets have been closed to through traffic including local high streets that have been repurposed as part pedestrianised places for people.

Large parts of the adjoining towns are now quiet residential areas free of through traffic. Areas of planting, street trees and places for people have been added to local streets. Streets around schools are closed to traffic meaning school children walk, cycle or scoot to school and issues associated with the school run being driven are mitigated.



Concerns were raised that putting through traffic back onto main roads would cause congestion. As with other places that have introduced similar schemes this did not materialise.

In Walthamstow Village overall motor traffic levels fall by over 50% inside the low traffic neighbourhood area and by 16% including the main roads. Motor traffic levels have subsequently reduced on other main roads as other area schemes have been completed.

Concerns around businesses losing trade have not been realised either with businesses located in the calmed areas thriving.

However, the aims associated with mode shift and increases in walking and cycling have been realised.

A study by the University of Westminster found that people living in the Walthamstow Village area walked and cycled more than those who didn't live in the area by a significant 42 minutes a week (32 mins walking and 9 mins cycling) on average.

A study by the Kings College Air Quality Research Group found that 50,000 less homes were exposed to NO levels that exceeded EU levels and 5 year old children were likely to live on average 9 weeks longer due to increased levels of activity and improved air quality.

Many London boroughs are now working in implementing similar projects as part of the Liveable Neighbourhood programme. Further north proposals have been developed for 27

modal filters for Levenshulme in greater Manchester, part of Chris Boardman's Bee Network. More recently the government has specifically mentioned Low Traffic Neighbourhoods as a mechanism to support the aspired increase in walking and cycling as part of the countries' recovery from the impact of Covid-19.

In Lambeth, the Council is already accelerating its programme of low traffic neighbourhoods in response to the need for more space for people to walk and cycle safely. Transport for London have also included low traffic neighbourhoods as one of the options London boroughs can consider, to provide more space for walking and cycling trips as part of their Streetspace for London response to the global pandemic.

Low traffic neighbourhoods are best developed and delivered in partnership with the local community. This means expert local knowledge is used to form proposals that provide the right conditions for active travel and the local ownership of streets and spaces. Popular approaches include using on-line engagement platforms and co-design sessions with the community to take ideas and issues and turn them into robust proposals that are welcomed additions to the local streetscene.

This local ownership of proposals translates into community involvement in maintaining greenspaces, new community links and importantly increased levels of walking and cycling and reduced local car use.



Methodology

Sustrans was commissioned by AWC in December 2018 to support the development of a Local Cycling and Walking Infrastructure Plan (LCWIP). The scope of the work was limited to utility trips to work, education and shopping of up to 5km. It does not include consideration of leisure trips outside the urban areas.

Sustrans approach was to review all existing identified schemes and proposals in each of the towns and to plot these on an Earthlight GIS platform. This followed with identification of gaps in the network with support from local stakeholders and surveying potential routes on foot and bicycle. The methodology adopted was informed by the Design Guidance published as part of the Active Travel (Wales) Act 2013, the London Cycling Design Standards (first published 2005, latest update 2016) guidance on developing a coherent cycle network and the LCWIP Technical Guidance (published 2017).

Sustrans role is to:

- **Identify new and improved walking and cycling routes for prioritisation**
- **Align with key Council policies and programmes that support local economic growth, improvements to health and well-being and the environment**
- **Engage key local stakeholders**



LCWIP Technical Guidance

Under the guidance, the key outputs of LCWIPs are:

- a network plan for walking and cycling which identifies preferred routes and core zones for further development
- a prioritised programme of infrastructure improvements for future investment
- a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network

This report addresses the first and third outputs, but further work will be needed for the second output.

The LCWIP process has six stages as set out below:

1. *Determining Scope*

An initial meeting was held with key stakeholders identified by AWC to establish the geographical extent of the LCWIP, and arrangements for governing and preparing the plan.

2. *Gathering Information*

Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.

3. *Network Planning for Cycling*

Identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the type of improvements required.

4. *Network Planning for Walking*

Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.

5. *Prioritising Improvements*

Prioritise improvements to develop a phased programme for future investment.

6. Integration and Application

Integrate outputs into local planning and transport policies, strategies, and delivery plans.

Stage 1 was determined by AWC who will lead on Stages 5 and 6 together with West Sussex County Council. Sustrans is responsible for Stages 2, 3 & 4.

Gathering Information

Comprehensive information and data sources were provided by AWC, which was augmented by publically available datasets from the 2011 Census (e.g. population and employment), DfT Traffic Counts, Road Traffic Accidents, schools, public amenities and previous consultation plans exploring existing and new networks. Review and analysis of the data was undertaken using a bespoke online map created on Sustrans Earthlight platform. The main trip generators were identified and an initial network mapped out to link residential areas with these locations.

A stakeholder workshop was held at an early stage of the process (30 January 2019) to test Sustrans assumptions and to gather useful information from local people. They were asked to identify barriers to walking and cycling, including crossing points of the main barriers (roads, railways, rivers), which form the nodes in the network. Large blank maps were provided for people to draw on, as well as background maps on the local transport network with information on trip generators from the Sustrans GIS database.

The outcomes from this workshop are summarised in the barriers to movement map, which shows existing crossings of the A27, the railway line and River Adur, which are the main barriers in the area. Traffic counts from the DfT have been used to show the major roads in the area, which will need separate provision for walking and cycling due to the high traffic flows.

These crossing points determine the shape of the network to a significant extent, but no new crossings of the railway and the River Adur have been identified at this stage. Crossings of the A27 have been considered by Highways England and WSCC. In particular, the three crossings of the River Adur influence the west-east movement between Sompting, Lancing and Shoreham.

Existing walking and cycling network

The main existing routes comprise National Cycle Network (NCN) Route 2 along the seafront between West Worthing and Hove and the Downs Link (NCN Route 223) on the former railway line between Steyning and Shoreham. Aside from some sections of shared path in the Durrington and Findon Valley areas, there are also some poorer quality routes in Worthing, which comprise narrow advisory cycle lanes on busy streets such as the A259 Goring Road, or the signed routes linking Findon Valley and Worthing station, and Sompting and Worthing town centre, on quieter roads.

There is an extensive Rights of Way network, particularly in the South Downs National Park away from the urban areas. The urban public footpaths do not comprise a comprehensive walking network, although they will be locally useful for trips on foot. With the exception of the Ilex Way public bridleway at Goring, the urban Rights of Way have limited value for horse riding and cycling.

Suggested walking and cycling network

Sustrans was supplied with a number of datasets indicating potential walking and cycling routes, which provided a useful starting point for our network design. This includes a number of routes plotted by local residents as part of a consultation exercise in 2016 managed by the County Council with support from Sustrans and our Route Assessment and Transport Evaluation (RATE) tool. This exercise has informed what has been labelled the "West Sussex Network" as shown on the suggested network map. These routes indicate a reasonably dense network in Worthing and Shoreham, but very little in Sompting and Lancing.

A further dataset of routes supplied by AWC from the Adur & Worthing Walking and Cycling Action Group overlaps strongly with the first dataset, but shows a comprehensive dense network across the whole urban area. This was derived from an earlier consultation exercise with local residents and community groups and has been labelled as the "Walking and Cycling Action Group Suggested Network".

Trip generators

An important starting point in designing a walking and cycling network is to determine the likely origin and destination points for everyday trips to work, school, shopping and leisure. The two trip generators maps in the following pages give a visual indication of these destinations, including: employment areas, secondary schools, shopping areas, hospitals, leisure or sports centres. Future development sites give an indication of potential future transport demand.

There is a significant concentration of trip generators in both town centres, especially retail and employment, but there are also large employment sites at West Durrington, Goring, Broadwater and South Lancing. Secondary schools are dispersed across the whole area, but with some concentration in central Worthing. Leisure and sports centres are also dispersed across the whole area.

Population densities are generally higher in central areas and more dispersed further out, which suggests that short trips are likely to be concentrated in these central areas. However, all residential areas are within 5km of most destinations, providing a strong argument in favour of a comprehensive walking and cycling network across the whole urban area.

Propensity to Cycle data

The cycle commute map for Worthing based on census 2011 flow data indicates that Worthing town centre is an important destination, with flows radiating to all parts of the town. The coastal cycle route appears to be well used and there is a strong flow between West Durrington and the town centre. The existing 2011 cycle flows in Adur are much lower and it is difficult to draw any conclusions from this data. It should be noted that commuting is only 14% of all trips nationally.

The school travel map for Worthing shows strong flows in the vicinity of the secondary schools in the central area and weaker but significant flows throughout the urban area, mostly away from the town centre. The Census 2011 school travel map for Adur indicates a number of existing flows that could form the basis of a network, albeit at lower demand levels than for Worthing. It should be noted that education and escort to education is only 13% of all trips nationally.

We have also analysed the short car trips under 5km for journeys to work, on the basis that these might reveal the potential for modal shift towards walking and cycling. These show strong flows into the two town centres, but also significant flows within the main urban areas of Worthing, Sompting & Lancing and Shoreham. Flows between these three areas are much weaker, probably reflecting the greater actual road distances involved. This map suggests that there is good potential for modal shift across the whole urban area.

Commuting, education and escort education trips only account for 27% of all trips in England, so there is a danger that too much weight is given to these types of trip, because the data is readily available from the Census 2011. Shopping accounts for 18% of all trips and leisure 22% so arguably we should focus on these trips, but unfortunately there is limited data available. The full breakdown from the National Travel Survey of English residents published in July 2019 is shown in the table below:

Journey purpose	Annual trips	Percent
Commuting	188	14.16%
Business	43	3.27%
Education	94	7.04%
Escort education	80	6.00%
Shopping	245	18.42%
Other escort	116	8.76%
Personal business	130	9.75%
Visit friends at private home	127	9.58%
Visit friends elsewhere	70	5.26%
Sport / entertainment	99	7.48%
Holiday / day trip	61	4.57%
Other including just walk	76	5.71%
All	1,329	

Network planning for cycling

There is a wealth of information to consider when planning a cycle network for Adur and Worthing, as described above. Our approach was to work through all the data, switching layers on and off within our GIS mapping system to test the emerging network. The sequence below reflects the series of maps on the following pages:

LCWIP ref	Map ref	Analysis	Recommendations
5.40	Barriers to movement	Crossing points and major roads	New crossings if required
4.4	Existing walking and cycling network	Quality, value for local journeys	Improvements if required
4.5	Suggested walking and cycling network	Value for local journeys	Add or remove routes if required
5.9	Trip generators	Map all important origins and destinations	Ensure the network swerves all major destinations
4.8	Propensity to Cycle Tool (cycle commute, cycle to school and short car trips)	Existing trips and modelled increases	Design network to accommodate the major flows
5.23	Proposed walking and cycling network	Test against core design outcomes	Improvements if required

The proposed network largely coincides with the "West Sussex Network" and the "Walking and Cycling Action Group Suggested Network", but is a less dense network than either of these datasets. We have taken the advice in para. 5.21 of the LCWIP Technical Guidance that "it will take time to develop a network with a tight density, and wider mesh widths of up to 1000m would be expected within the initial phases of the network's development". Further routes can be added at a later stage to create a denser network, but our advice is to start with fewer routes and implement them to a high standard. The proposed network is denser within the central areas of both Districts, closer to the ideal density of 400m between routes.

The primary routes are judged to be the most popular and strategic routes, linking residential areas with the key trip generators. Secondary routes can be locally important but are less strategic as they fill the gaps in the primary network. Some sections of secondary routes may have higher flows than parts of the primary routes, so the distinction between primary and secondary is not a reliable guide to investment priorities.

The proposed network has been visually tested against the Propensity to Cycle data and there is a high degree of correlation between the two networks, with all the major employment sites and secondary schools served by the proposed network as shown on the map. The proposed network also serves the main shopping areas, hospitals, leisure or sports centres and development sites.

The Route Selection Tool has been used to assess Route 201 between Ferring and Worthing town centre as an example of the use of this tool, which is part of the LCWIP technical guidance.

Trip generators and key constraints have been identified for each route and summarised in a table before the proposed network maps. Some of these constraints may not be possible to resolve, so alternative routes may need to be considered.

Network planning for walking

We have assumed that the trip generators for walking are the same as those for cycling, albeit that shorter distances will be involved (less than 2km). The proposed cycle network provides a suitable framework for walking trips, although it is recognised that a much finer-grained network is required for walking since most streets have footways. When the cycle network is designed, it will be vital to ensure that people on foot do not have a reduced level of service, for example no existing footways to be converted to shared use without widening. All crossings on the cycle network must accommodate people on foot and on bikes.

We have identified primary and secondary walking zones, with the two town centres as the primary zones. The secondary zones are based on local shopping centre locations as defined by the local authority. The LCWIP Technical Guidance (para 6.15) suggests that core walking zones should have a minimum diameter of 400m, so we have extended the zones out from the boundaries given by the local authority to account for this. Key walking routes should extend up to a 2km radius from the core walking zones, as shown by the buffer on the map. As a first approximation, we have assumed that the cycle network within this 2km radius will comprise the key walking routes.

The main gateways into Worthing and Shoreham town centres have been identified and these are described in the following pages. All walking routes within the core walking zone should be audited, but that is beyond the scope of this report.

All other key walking routes should also be audited and three routes have been chosen to demonstrate the process of using the Walking Route Audit Tool. Route 311 links Northbrook Business Park, Downsbrook Middle School, St Andrew's High School for Boys, Worthing town centre and Worthing Hospital, using residential streets and a short length of the B2223. Public footpath 3137 runs parallel to the on-road route and has been assessed separately. Routes 201 and 202 link East Worthing with Worthing town centre.

Door to door journeys

In addition to planning for local trips on foot and by bike, it is important to ensure that longer distance journeys are made as easy as possible by integrating walking and cycling networks with public transport interchanges.

The concept of the "door-to-door" journey was introduced by the Campaign for Better Transport in 2011, leading to the publication of a Government door to door strategy in 2013. The emphasis is on access to public transport interchanges at both ends of the journey – perhaps walking or cycling from home to the train station, then picking up a hire bike to the final destination.

The government strategy focuses on four areas:

- Accurate, accessible and reliable information about the different transport options for their journeys;
- Convenient and affordable tickets, for an entire journey;
- Regular and straightforward connections at all stages of the journey and between different modes of transport
- Safe, comfortable transport facilities.

As most public transport journeys involve a mode change, interchange between these is very important. Users do not want to have to go out of their way to access the next mode. It also needs to be clearly signed, passengers often have short connection times so need reassurance they will be able to locate their next waiting time within their time frame.

Larger interchanges, such as train station to bus station, should also have facilities appropriate to usage. If there is shelter from the elements, a safe place to wait and possibly additional facilities such as a coffee shop then wait times can seem shorter than they actually are. It is also very useful to provide real-time information at interchanges.

Where users are not taking a motorised form of transport to access or exit their next mode of transport then interchange is still as important. Cycling facilities needs to be safe and secure and in an accessible place for changing modes quickly. This is the same for bike hire facilities. Walking and cycling routes need to be well signed giving distances and potentially times to key destinations. Provision for taxis, good pedestrian access and, where appropriate car parking, also need to be made.

Implementation

The inclusion of a route in the network plan is no guarantee that it will be implemented. While we have made every effort to ensure that our proposals are practical, it has to be recognised that there are competing demands for highway space and further feasibility and detailed design work will be necessary. In some cases, this may mean that a route is moved to an alternative parallel alignment.

It should be noted that this report is not a feasibility study, but a high level assessment, and all proposals would need to be subject to further feasibility work, then detailed design development and consultation in due course. We recognise that there are other competing demands for road space, including cars, parking, buses, taxis and parking. Proposed road space reallocations for walking and cycling will need to carefully consider implications across all modes, although the ultimate aim must be to reduce the dominance of motor vehicles, thereby easing congestion.

If schemes are to be progressed, they will need to be prioritised for inclusion in delivery programmes alongside other proposals, with schemes subject to the appropriate level of business case development.

Key constraints for each of the proposed LCWIP routes are listed in a table that precedes the two proposed network maps for Worthing and Adur. Start and end points, length of route and trip generator are also listed.

Propensity to Cycle Scenarios

The aim of the PCT is to inform planning and investment decisions for cycling infrastructure by showing the existing and potential distribution of commuter cycle trips and therefore inform which investment locations could represent best value for money. PCT uses two key inputs:

- Census 2011 Origin and Destination commuting data (O-D data)
- Cycle Streets routing

The model estimates cycling potential adjusted for journey distance and hilliness as well as predicting the likely distribution of those trips using the Cycle Streets routing application.

The model can be applied to consider different scenarios such as: Gender Equality, where women cycle as frequently as men; Go Dutch, if cycling levels were the same as in the Netherlands; and, Government Target, where cycling levels meet the target for current government's aim for cycling.

There are a number of limitations to this model which should be considered especially when making decisions based on the patterns shown. These limitations include the data only showing travel to work and school trips, therefore only 27% of all journeys. Travel to shopping and for leisure is not included. The data also misses out the minor stages of multi-stage commuter trips so cycle journeys to train stations and bus stops are not represented. Lastly the distribution of journeys is a prediction of the likely route taken based on the Cycle Streets routing algorithm and not the actual routes being used.

It is worth noting that whilst the model builds an assessment of cycling propensity, it does not segment potential users, or provide any insight into people on foot. Although this model does provide planners with an overview to identify areas for appropriate investment for cycling trips to work, it does not provide further information on those potential cyclists and their personal attributes and behaviours to help design the most effective interventions.

The first map shows current levels of cycling to work, which are above average in Worthing. The second map shows the Government Target scenario, which indicates a modest increase in commuter cycling trips.

The third map shows the "Go Dutch" scenario, which indicates that a significant proportion of commuter trips could be made by bike.

While the Government Target scenario models relatively modest increases in cycle commuting, the Go Dutch scenario is an ambitious vision for what cycling in England and Wales could look like. People in the Netherlands make 28.4% of trips by bicycle, fifteen times higher than the figure of 1.6% in England and Wales, where cycling is skewed towards younger men. By contrast in the Netherlands cycling remains common into older age, and women are in fact slightly more likely to cycle than men. Whereas the cycle mode share is 'only' six times higher in the Netherlands than in England for men in their thirties, it is over 20 times higher for women in their thirties or men in their seventies.

The Go Dutch scenario represents what would happen if English and Welsh people were as likely as Dutch people to cycle a trip of a given distance and level of hilliness. This scenario thereby captures the proportion of commuters that would be expected to cycle if all areas of England and Wales had the same infrastructure and cycling culture as the Netherlands.

PCT is an open source transport planning system, part funded by the Department for Transport. It was designed to assist transport planners and policy makers to prioritise investments and interventions to promote cycling. More information is available from the PCT website: www.pct.bike/m/?r=west-sussex

We have created a series of maps based on data available on the PCT website, which are displayed on the following pages:

- Commuter and school travel area data for West Sussex, based on the Census 2011, Government target and Go Dutch scenarios
- Commuter route data for Worthing and for Adur, based on the three scenarios
- School route data for Worthing and for Adur, based on the three scenarios
- Commuter short car trips based on Census 2011 data

Worthing existing barriers & crossings

DfT Traffic 2016 Traffic Counts

Total Vehicle Average Daily Flow (AADF)

- ◆ 0-5000
- ◆ 0-5000 - 10,000
- ◆ 10,000 +

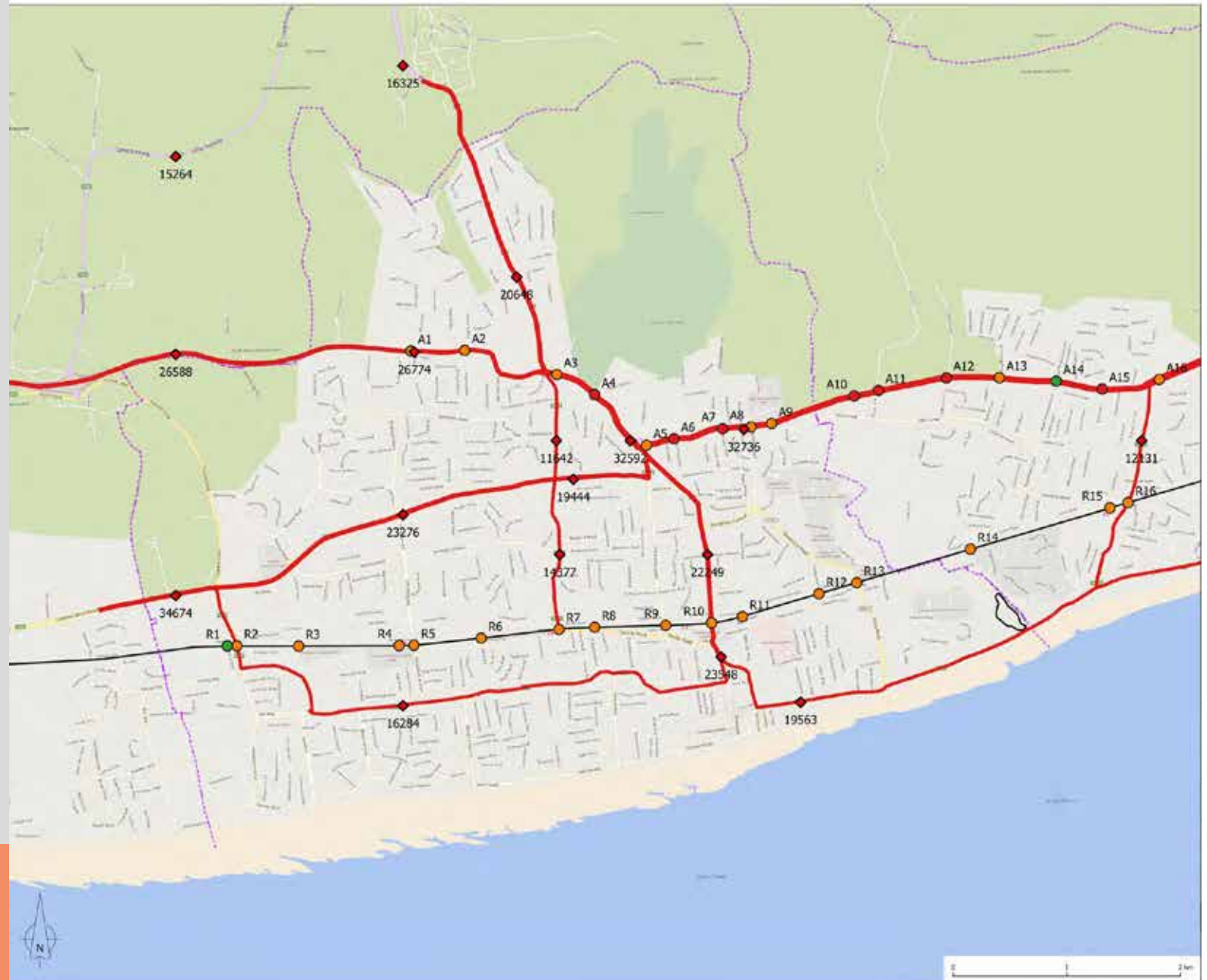
Road Barriers

Traffic Volumes

- 10,000 - 20,000
- 20,000 - 30,000
- 30,000 - 40,000
- 40,000 +

Barrier Crossing Point Quality Rating

- Green
- Amber
- Red
- 10,000 - 20,000
- - - 10,000 - 20,000



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Ordnance Survey 100024321 & 100018824"

Adur existing barriers & crossings

DfT Traffic 2016 Traffic Counts

Total Vehicle Average Daily Flow (AADF)

- ◆ 0-5000
- ◆ 0-5000 - 10,000
- ◆ 10,000 +

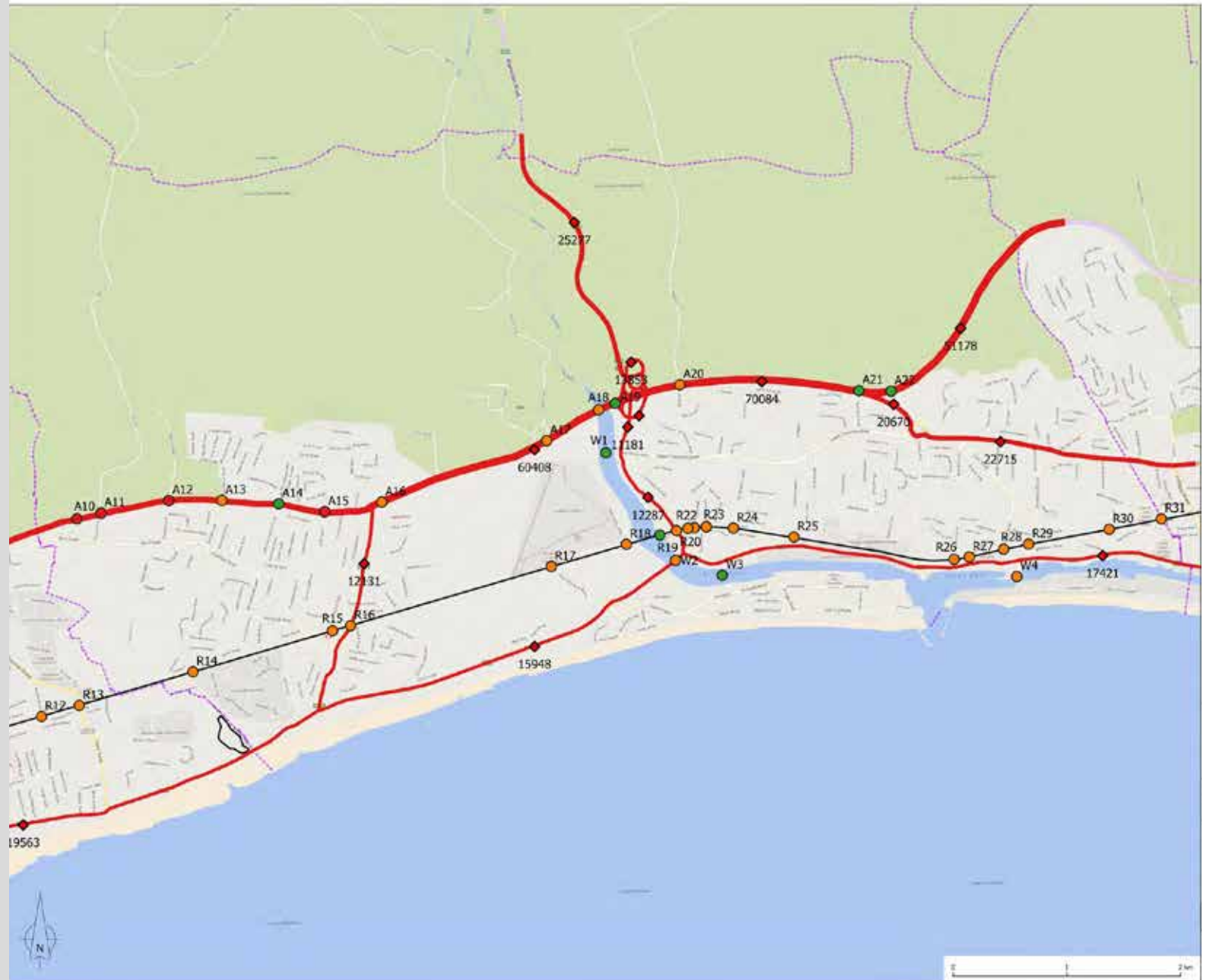
Road Barriers

Traffic Volumes

- 10,000 - 20,000
- 20,000 - 30,000
- 30,000 - 40,000
- 40,000 +

Barrier Crossing Point Quality Rating

- Green
- Amber
- Red
- 10,000 - 20,000
- - - 10,000 - 20,000



Barriers to movement

Many of the crossing points of three barriers (A27, railway and River Adur) were identified by stakeholders in the January 2019 workshop and we have added some from A27 studies and some from our own investigation.

Barriers to Movement

Crossings are classified according to a simple "traffic light" system, where...

Green = good quality crossing

Amber = existing crossing, improvements needed

Red = new crossing needed

The tables opposite describe each crossing and lists recommendations for improvement. It is unlikely that all crossings will be needed where they are close together. Further feasibility assessment is necessary to understand the key constraints, including impact on traffic flows on the A27.



Crossings of the A27

Ref	Class	Route	Existing	Recommendations
A1	Amber	302	Staggered signal crossing	Upgrade to Toucan and improve links
A2	Amber	n/a	Single stage Pelican	Upgrade to Toucan and improve links
A3	Amber	310	Single stage Pelican	Upgrade to Toucan and improve links
A4	Red	n/a	None	New crossing to link with brideway
A5	Amber	210	Staggered signal crossing	Upgrade to Toucan
A6	Red	210	Uncontrolled crossing	Install signal crossing
A7	Red	210	Uncontrolled crossing	Install signal crossing
A8	Amber	210	Staggered signal crossing	Improve crossing with larger waiting areas
A9	Amber	311	Staggered signal crossing	Improve crossing with larger waiting areas
A10	Red	n/a	None	New crossing for public footpath
A11	Red	n/a	None	New crossing at Church Lane
A12	Red	n/a	None	New crossing at Dankton Lane
A13	Amber	313	Staggered signal crossing	Improve crossing with cycle provision
A14	Green	n/a	Footbridge with ramps	n/a
A15	Red	n/a	Uncontrolled crossing	New crossing at West Lane
A16	Amber	210	Staggered Puffin crossing	Improve links north of crossing
A17	Amber	210	Two stage Pelican	Improve links on both sides
A18	Amber	n/a	Bridge over footpath	Improve surface
A19	Green	330	Bridge over Downs Link	n/a
A20	Amber	n/a	Bridge under minor road	n/a
A21	Green	332	Bridge under brideway	n/a
A22	Green	n/a	Bridge under restricted byway	n/a

Crossings of the River Adur

Ref	Class	Route	Existing	Recommendations
W1	Green	210	Old Shoreham Bridge	n/a
W2	Amber	202	Norfolk Bridge	Potential for segregated cycle paths
W3	Green	200	Adur Ferry Bridge	n/a
W4	Amber	202	Shoreham Harbour Lock	Improve walk and cycle provision

Crossings of the railway

Ref	Class	Route	Existing	Recommendations
R1	Green	300	Level crossing	n/a
R2	Amber	n/a	Bridge under A259	Potential for segregated cycle paths
R3	Amber	301	Subway	Improve cycle provision on approaches
R4	Amber	n/a	Stepped footbridge	n/a
R5	Amber	302	Level crossing	Improve cycle provision
R6	Amber	n/a	Ramped footbridge with shallow steps	Improve signage and cycle provision
R7	Amber	303	Level crossing	n/a
R8	Amber	n/a	Stepped footbridge	Improve signage and cycle provision
R9	Amber	304	Level crossing	Improve walk and cycle provision
R10	Amber	310	Bridge under A24	Install segregated cycle paths
R11	Amber	311	Narrow subway, cyclists dismount	Improve links on both sides
R12	Amber	n/a	Ramped footbridge	Improve signage and cycle provision
R13	Amber	312	Bridge over Western Road	Potential for segregated cycle paths
R14	Amber	313	Bridge under B2223	n/a
R15	Amber	202	Level crossing	Improve cycle provision
R16	Amber	320	Bridge under A2025	Install segregated cycle paths
R17	Amber	321	Bridge over New Salts Farm Road	Improve cycle provision
R18	Amber	202	Viaduct over footpath and access track	Improve cycle provision
R19	Green	330	Viaduct over riverside path	n/a
R20	Amber	n/a	Bridge over A283	Improve cycle provision and access to riverside
R21	Amber	n/a	Bridge over Victoria Road	n/a
R22	Amber	n/a	Narrow bridge over West Street	Traffic management in wider area
R23	Amber	n/a	Bridge over Southdown Road	n/a
R24	Amber	331	Level crossing	n/a
R25	Amber	n/a	Level crossing	Improve walk and cycle provision
R26	Amber	333	Bridge over Kingston Lane	n/a
R27	Amber	n/a	Narrow bridge over Victoria Road	Traffic management in wider area
R28	Amber	202	Narrow bridge over Grange Road	n/a
R29	Amber	n/a	Bridge over B2167	n/a
R30	Amber	n/a	Stepped footbridge	Improve signage and cycle provision
R31	Amber	n/a	Stepped footbridge	n/a

Existing walking & cycling network

- Traffic Free
- Proposed NCN Route
- Public Rights of Way
- Administrative Boundary
- On-Road
- Local Cycle Network
- Railway Station



Suggested walking & cycling network

— West Sussex Network

— Walking & Cycling Action Group Suggested Network




Worthing trip generators and local attractors

Employment

2011 Census Workzones

Density of Employment (Jobs per Hectare)

 20-50


 50 +

Population

2011 Census Population Density

(People per Hectare)


 0-50

 50-100


 100+

Trip Generators


Retail

 Shopping Areas


Services


 Hospital


Leisure

 Leisure or Sports Centre

Schools

 Primary School


 Secondary School

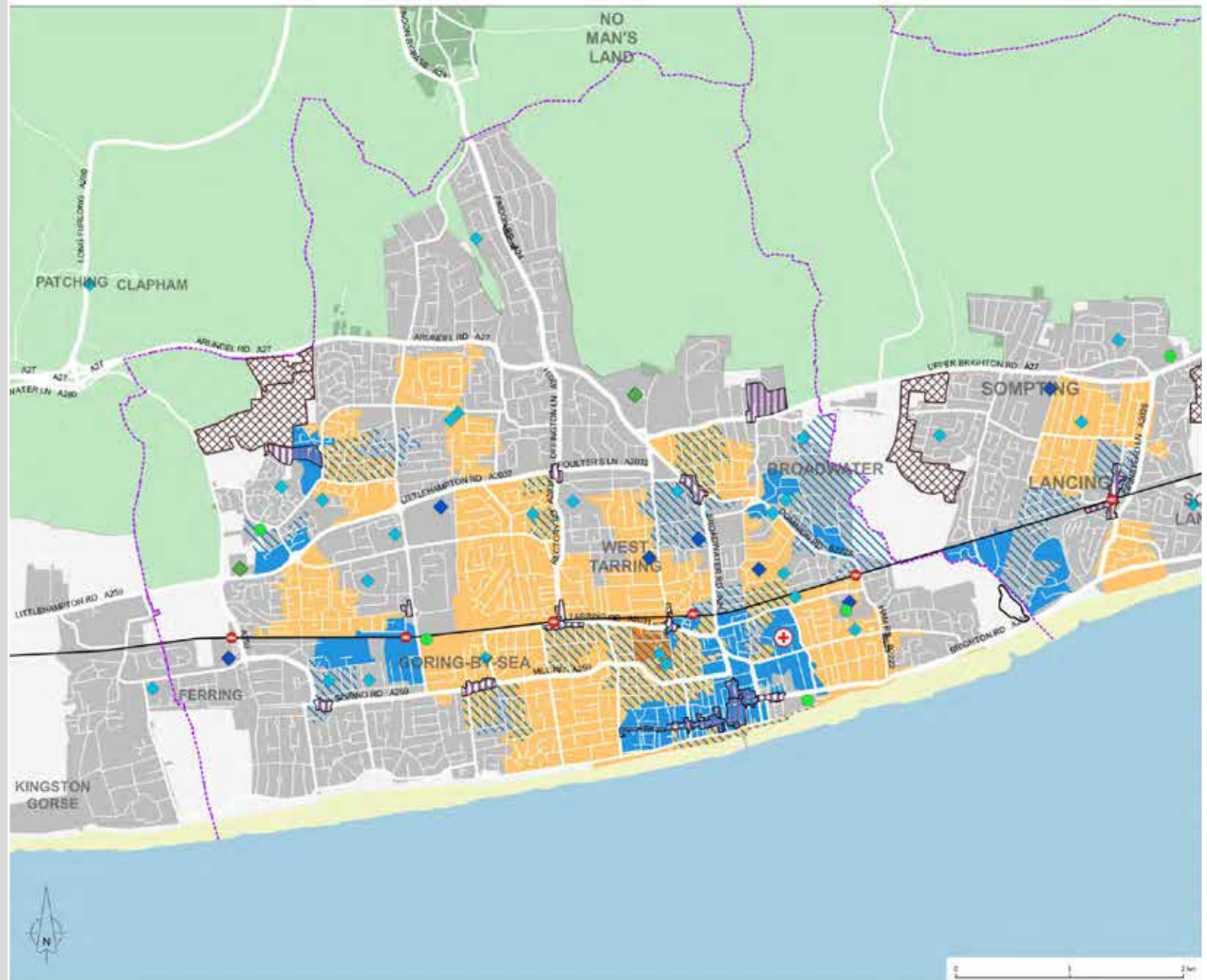
 Further Education

 Future Development Sites

Other

 Administrative Boundary

 South Downs National Park



Adur trip generators and local attractors

Employment

2011 Census Workzones

Density of Employment (Jobs per Hectare)

 20-50


 50 +

Population

2011 Census Population Density

(People per Hectare)


 0-50

 50-100


 100+

Trip Generators


Retail

 Shopping Areas


Services


 Hospital


Leisure

 Leisure or Sports Centre

Schools

 Primary School


 Secondary School

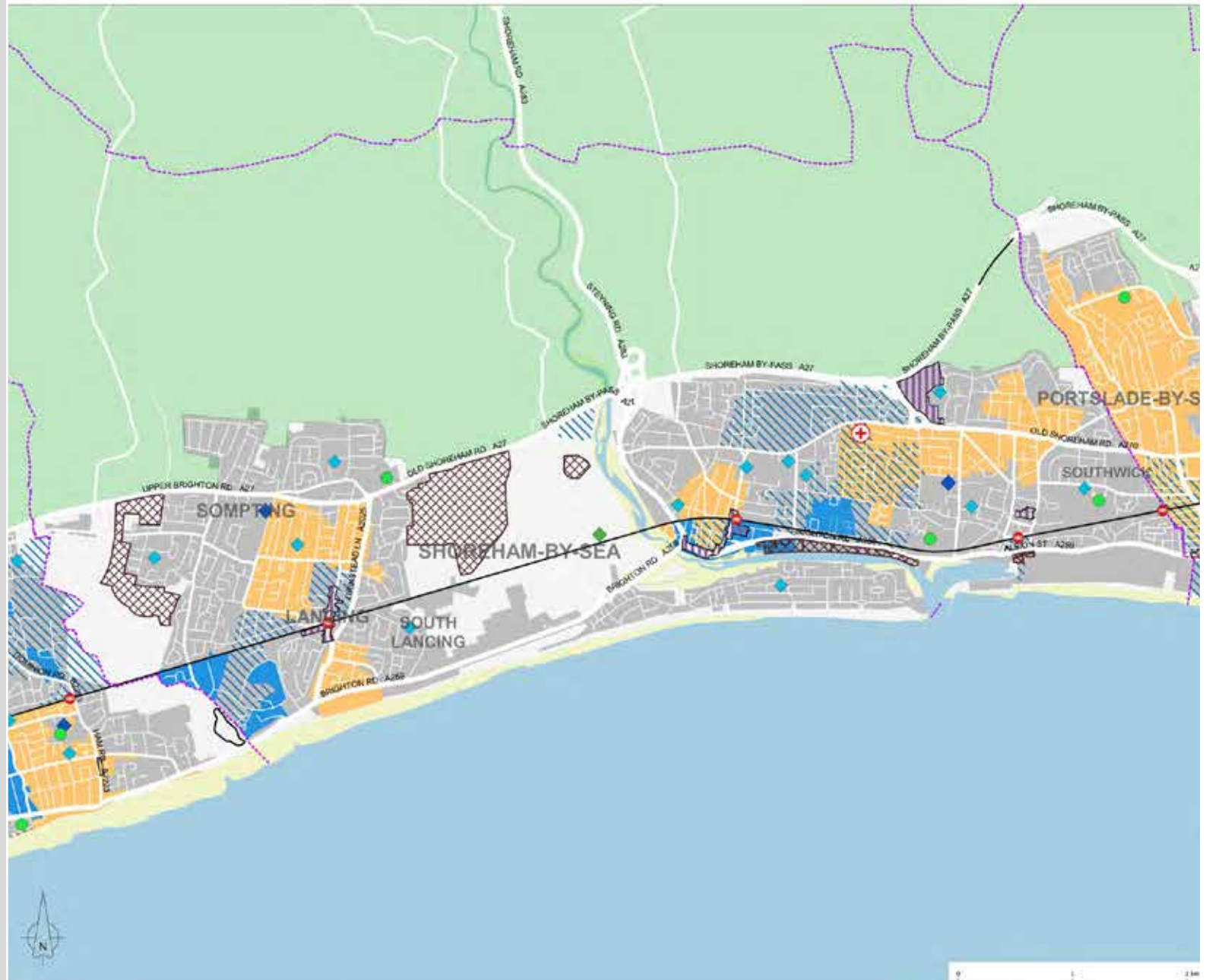
 Further Education

 Future Development Sites

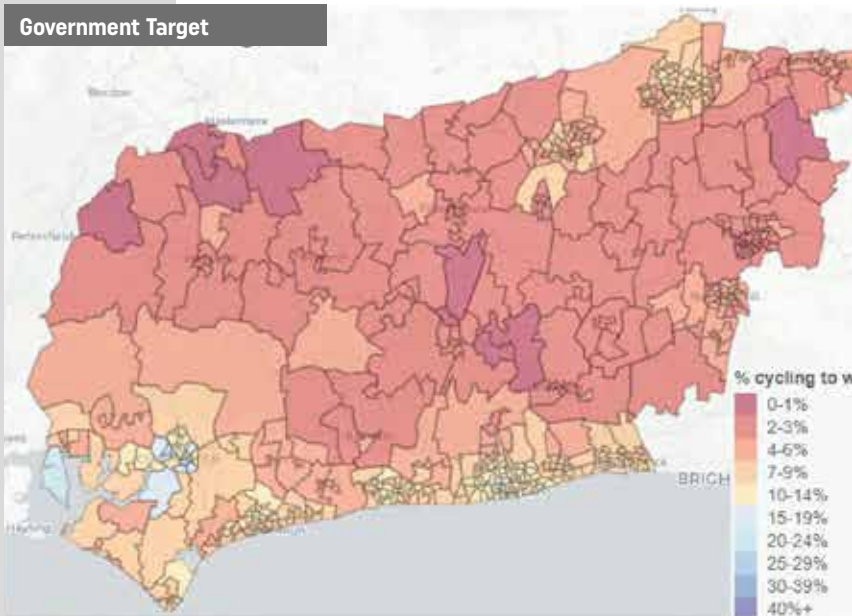
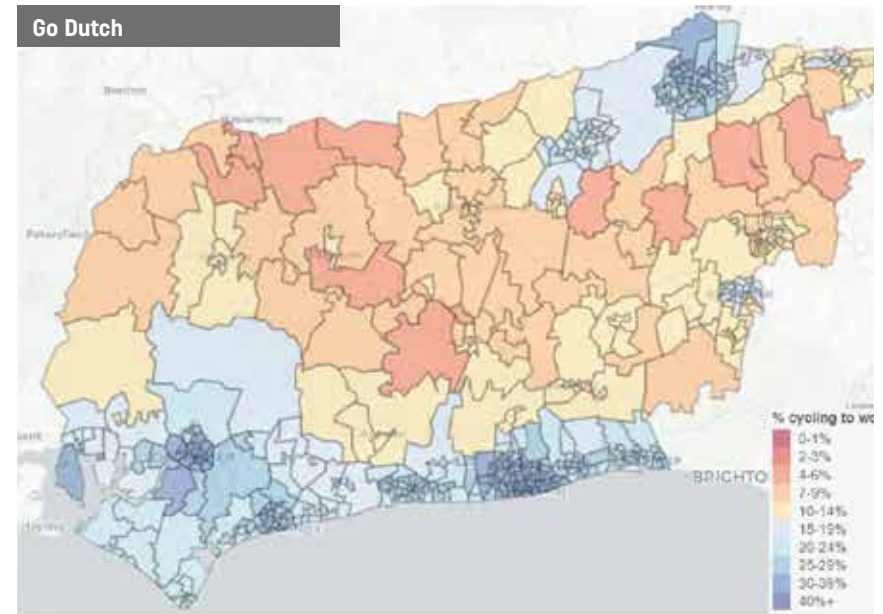
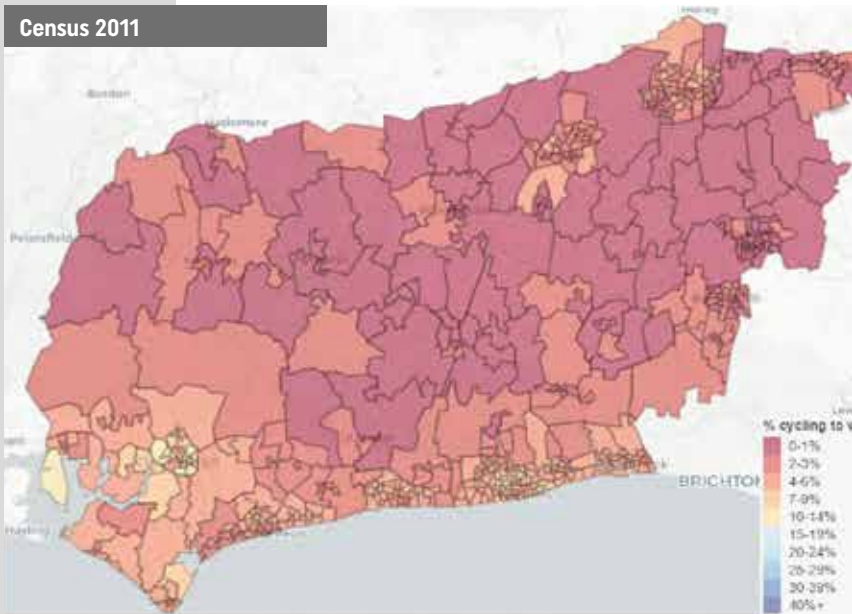
Other

 Administrative Boundary

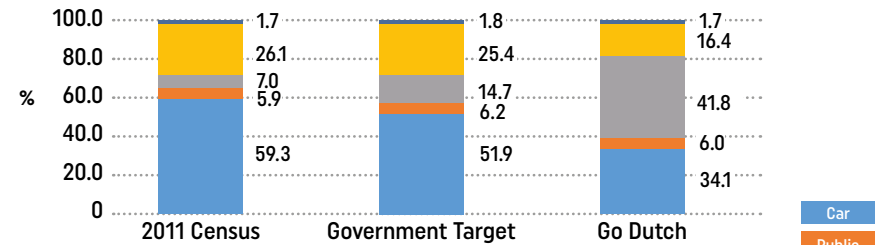
 South Downs National Park



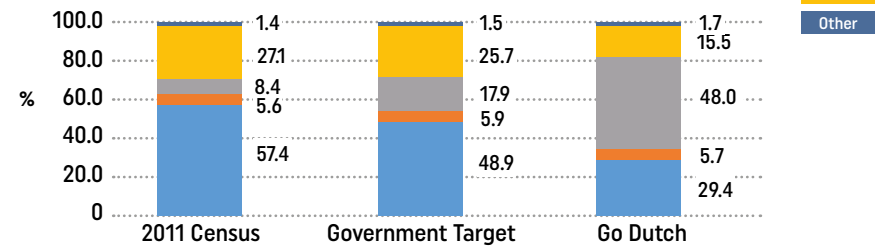
PCT Commute Data



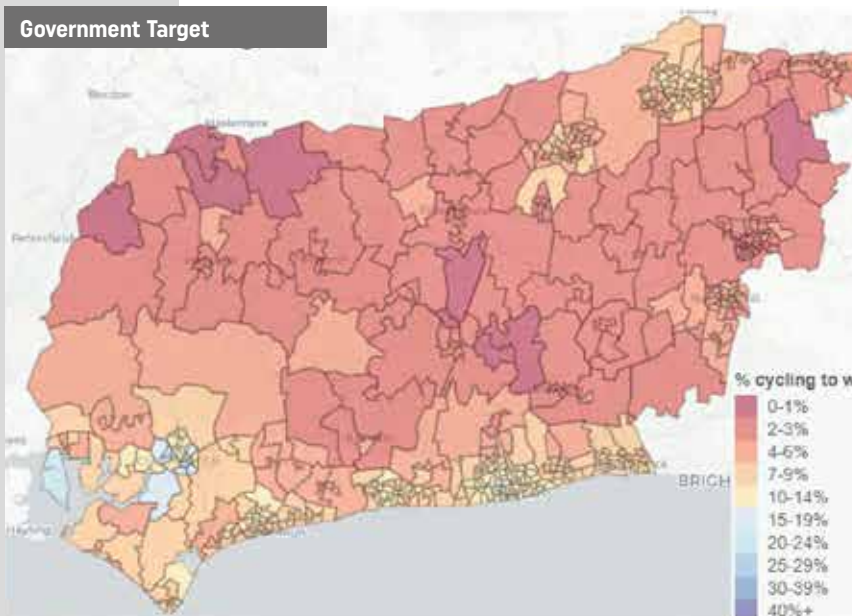
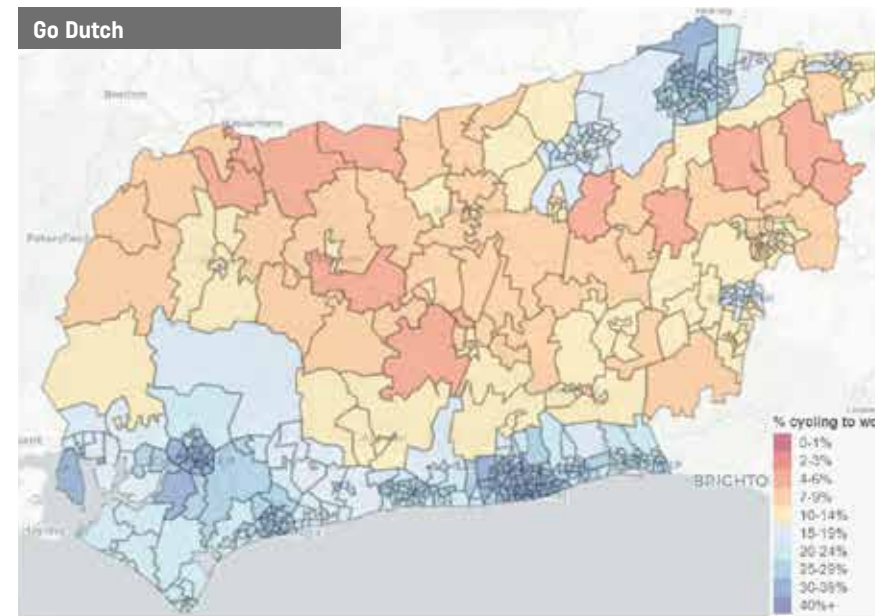
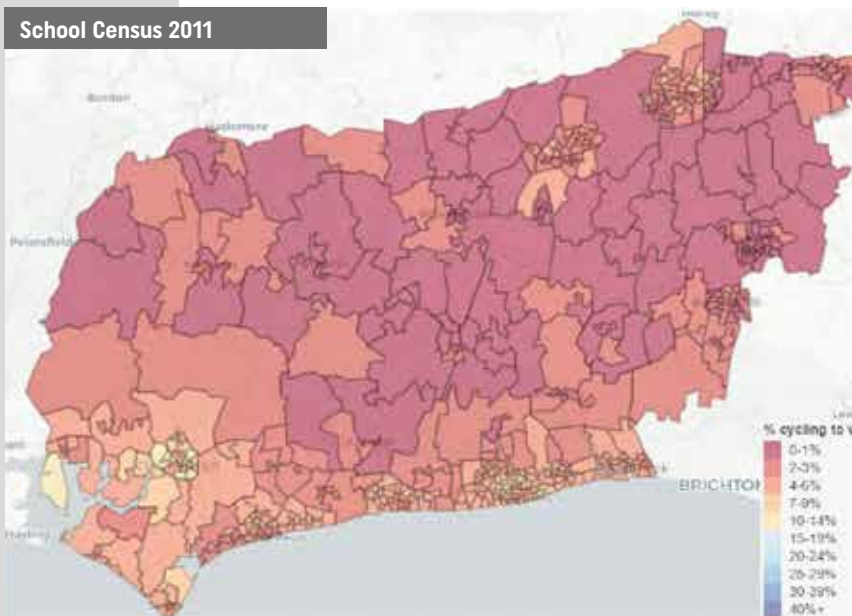
Modal Split Commute Trips Within Adur Borough



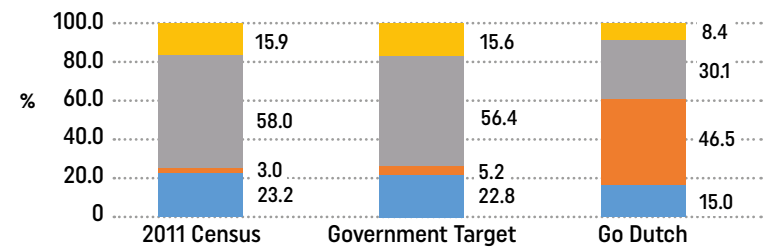
Modal Split Commute Trips Within Worthing Borough



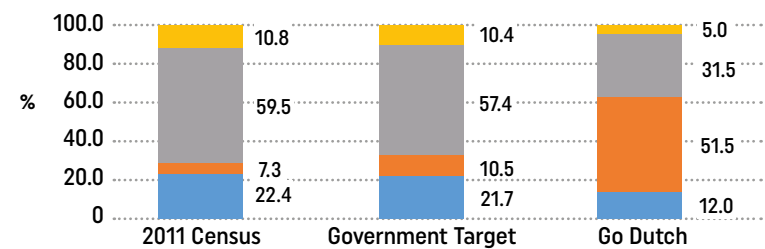
PCT School Data



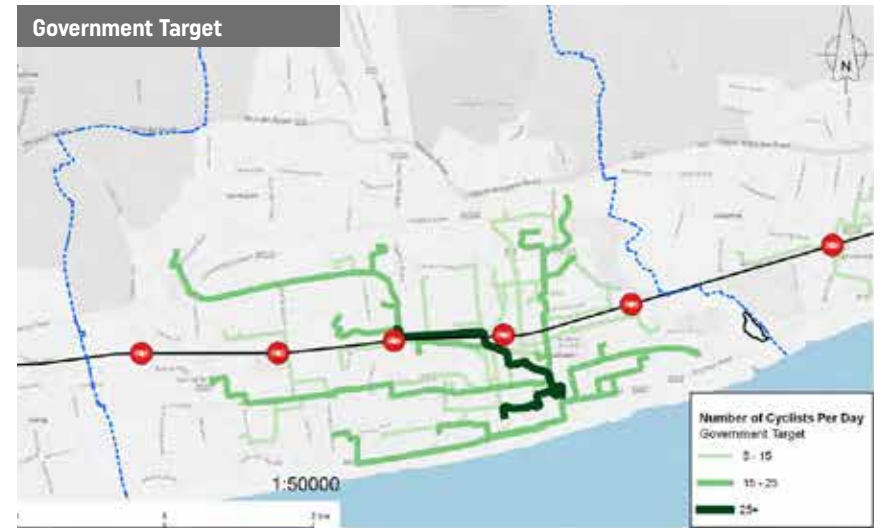
Adur Borough School Trips



Worthing Borough School Trips

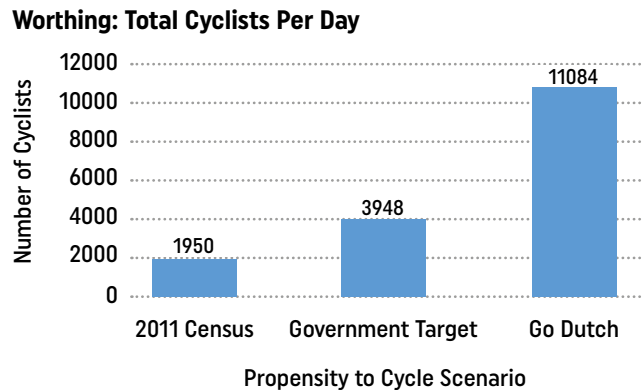


Worthing PCT Commute Data



These maps of cycling routes to work are derived from Census 2011 data, so do not reflect any recent changes in employment sites. If the local priority is enabling more people to cycle to work, then these travel patterns are a useful guide to routes where investment is needed. However, it must be remembered that commuting is only 14% of all trips.

In Worthing, there is clearly huge potential for increasing cycle trips to work. The Government target would see a doubling of trips, while the Go Dutch scenario suggests that cycling could increase more than five-fold.

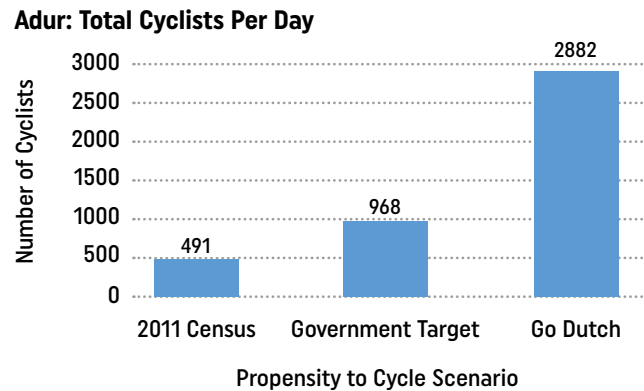


Adur PCT Commute Data

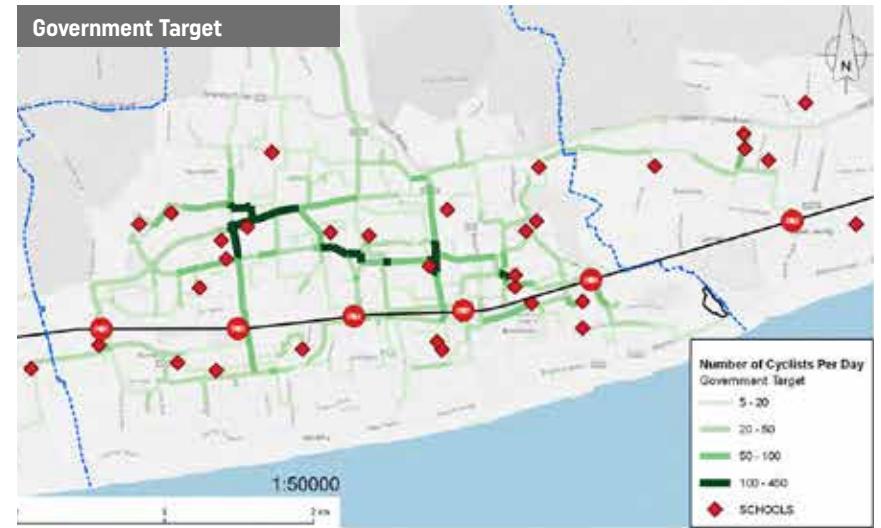


In Adur, there are fewer commuting trips overall, which reflects the smaller population and longer journey distances to work. The Government target would see a doubling of trips, while the Go Dutch scenario suggests that cycling could increase nearly six-fold.

The NCN2 shared path at Brooklands Park is the busiest recorded stretch of cycle route in West Sussex. It is possible that the PCT tool is under-representing cycle flows in Adur, although most trips along the seafront may not be for commuting.

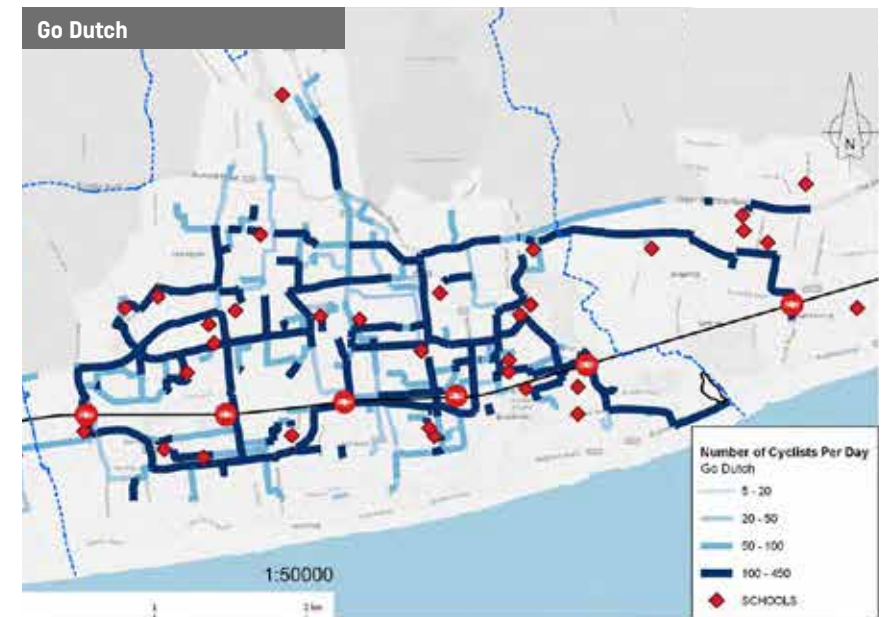
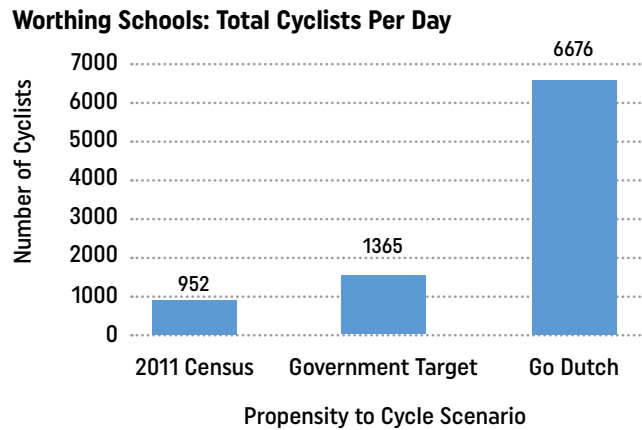


Worthing PCT School Data

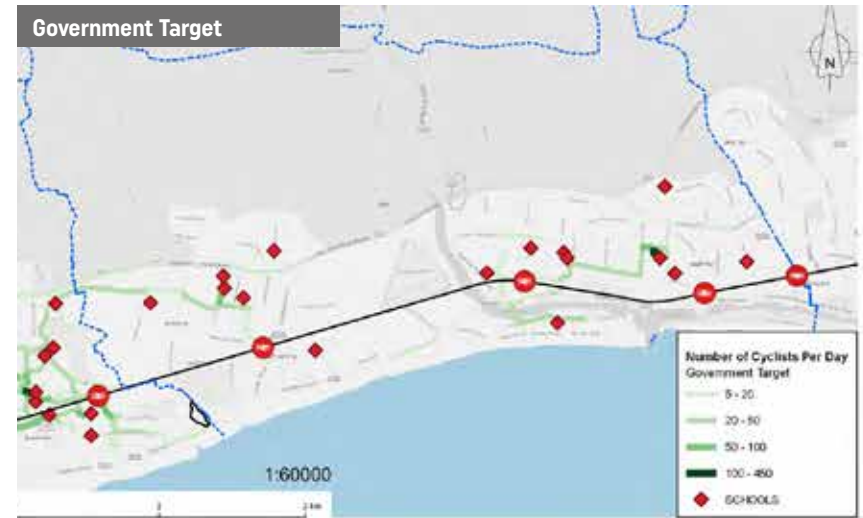
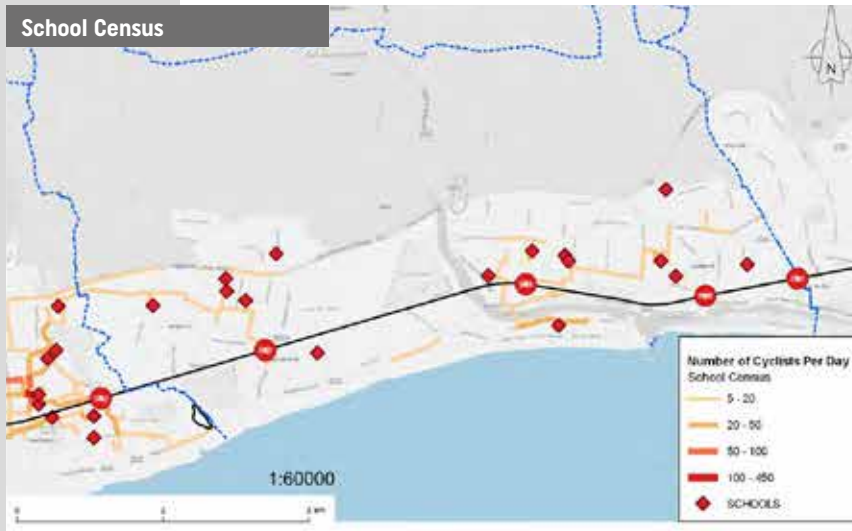


These maps of cycling routes to school are derived from School Census 2010/11 data, so do not reflect any recent changes in school sites or catchment areas. If the local priority is enabling more students to cycle to school, then these travel patterns are a useful guide to routes where investment is needed. However, it must be remembered that education and escort to education is only 13% of all trips.

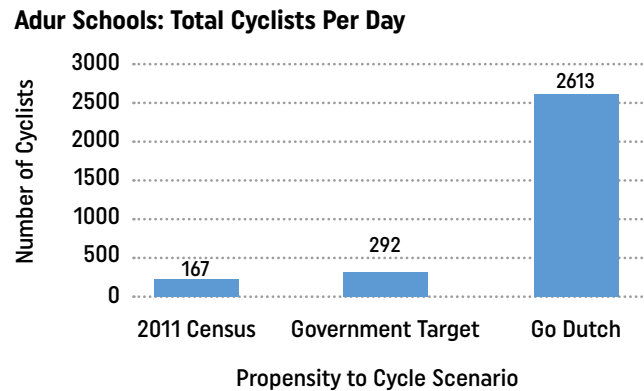
In Worthing, the Government target would see a modest increase of 43% in cycling to school, while the Go Dutch scenario suggests that cycling could increase to seven times 2010/11 levels.



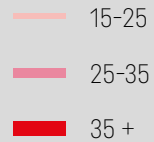
Adur PCT School Data



In Adur, the number of cycling trips to school in 2010/11 was much lower than in Worthing, even after allowing for the smaller population. The Government target would see a modest increase of 75% in cycling to school from low levels, while the Go Dutch scenario suggests that cycling could increase to over 11 times 2010/11 levels.



Adur & Worthing 2011 Census Commuters by Car (Journeys Under 5km)



Employment

Density of Employment (Jobs per Hectare)

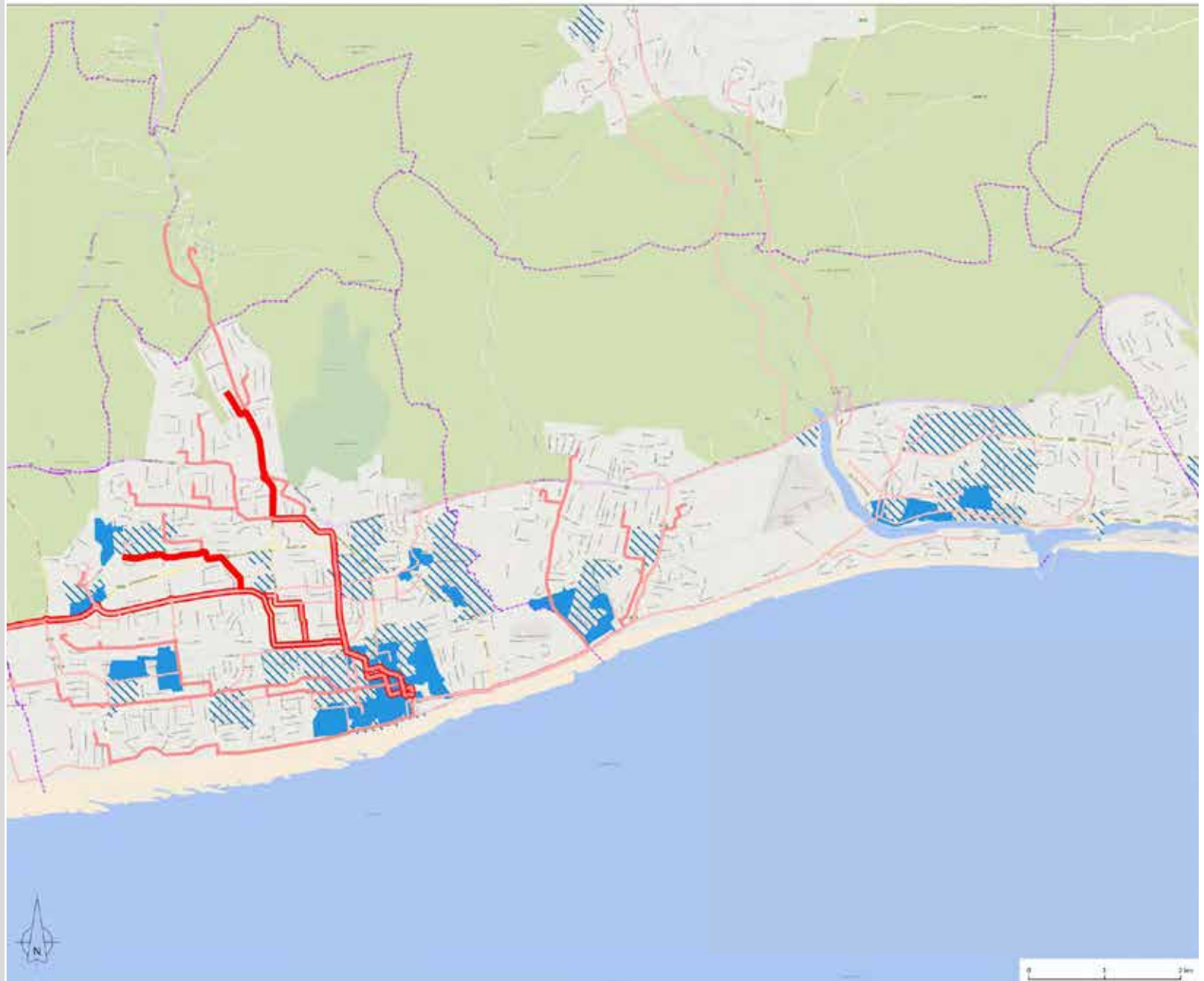


Other

Administrative Boundary

One weakness of the PCT cycle commute model is that it is based on existing trips by bike and will tend to emphasize those routes that are already being used. The target market for new cycle trips is people currently driving short distances to work. This map shows the car trips under 5km from the Census 2011 travel to work data, mapped to the best available roads.

Unsurprisingly, many of the same corridors are indicated for car trips as they are for cycle trips, with some notable exceptions. For example, the A24 from Findon Valley to Worthing town



Text cut required

Summary of proposed cycle routes with key constraints

Route	Class	Km	Start Point	End Point	Trip Generators	Key Constraints
200	Primary	16.9	Marine Dr j/w Amberley Dr	A259 Fishersgate Terr j/w Brambledean Rd	Seafront, Worthing town centre, Splashpoint, Shoreham town centre, Southwick local centre, development sites	Goring Greensward (Village Green), width of seafront path, A259 Brighton Rd highway width
201	Secondary	7.8	Sea Lane Ferring	Brougham Rd j/w A259 Brighton Rd	Goring local centre, Goring Rd shops, Our Lady of Sion School, Worthing town centre, Worthing Hospital, East Worthing local centre	A259 Richmond Rd and Lyndhurst Rd highway width
202 West	Secondary	9.6	Goring Way j/w Singleton Crescent	South St j/w A2025 Grinstead Lane	Chatsmore High School, Durrington employment zone, West Worthing local centre, Worthing town centre, railway stations, Worthing Hospital, Davison High School, Lancing local centre	A2031 Tarring Rd/Teville Rd highway width, on-St parking and trees in footway, access to allotment site, Western Rd rail bridge
202 East	Secondary	6.9	Cecil Pashley Way j/w New Salts Farm Rd	Basin Rd South at District boundary	Shoreham Airport, Shoreham town centre, railway stations, Shoreham Academy, Southwick local centre	Private land at Shoreham Airport, A259 Norfolk Bridge highway width, Middle Rd highway width
203	Secondary	4.2	Palatine Rd j/w A2032 Littlehampton Rd	Georgia Avenue j/w Beaumont Rd	West Durrington employment zone, Worthing High School, Bohunt School, St Andrew's High School	Residential Rds highway widths and on-St parking, crossing of A24
210	Primary	17.7	A259 j/w Ferring Lane	A270 Old Shoreham Rd j/w Applesham Way	Northbrook College, West Durrington employment zone, Durrington High School, Worthing College, Lyons Farm retail and business park, Sompting local centre, Robert Woodard Academy, New Monks Farm, Lancing College, Southlands Hospital, Holmbush retail park	Capacity at key junctions, A2032 Poulter's Lane highway width, Broadwater Village Green, A27 Upper Brighton Rd highway width
211	Secondary	6.3	Romany Rd j/w Yeoman Rd	Harrison Rd j/w Dominion Wy	West Durrington retail and business parks, Worthing College, BRdwater local centre, BRdwater business park	Residential Rds highway widths, trees in verge
212	Secondary	2.2	A27 at Arun boundary	A27/A24 junction at Offington Corner	Worthing College	A27 Arundel Rd highway width
300	Secondary	3	Titnore Lane j/w Titnore Way	Aldsworth Avenue j/w Marine Drive	West Durrington development, Northbrook College, Chatsmore High School	A2032 Goring Crossways crossing, highway widths
301	Secondary	3.3	Titnore Way j/w Titnore Lane	Sea Lane j/w Marine Drive	West Durrington development, West Durrington employment zone, Goring local centre, Goring railway station, Seafront	Railway subway
302	Secondary	6.5	Bost Hill j/w A24 Findon Rd	George V Avenue j/w West Parade	Durrington employment zone, Goring Rd shops, Worthing Leisure Centre, development sites, Durrington railway station, Seafront	Residential Rds highway widths
303	Secondary	3.7	A2031 Offington Lane j/w A27 and A24	Grand Avenue j/w West Parade	West Worthing local centre, West Worthing railway station, Seafront	Highway widths, capacity at Thomas A Beckett junction
304	Secondary	2.6	South Farm Rd j/w A2032 Poulter's Lane	West Buildings j/w Marine Parade	Worthing High School, Our Lady of Sion School, Worthing town centre, Worthing railway station, Seafront	Highway widths, Broadwater Village Green, West Buildings one-way St
310	Primary	6.1	A24 Findon Rd j/w Bost Hill	South St j/w Marine Parade	Findon local centre, Worthing College, BRdwater local centre, Northbrook College, Worthing High School, Worthing railway station, Worthing town centre, Teville Gate development site, Seafront	A24 Warren Rd highway width, A24 Broadwater shops highway width and parking, capacity at key junctions

Summary of proposed cycle routes with key constraints continued

Route	Class	Km	Start Point	End Point	Trip Generators	Key Constraints
311	Secondary	3	Morland Avenue j/w Upper Brighton Rd	The Steyne j/w Marine Parade	Lyons Farm retail and business park, BRdwater business park, St Andrew's High School, Worthing Hospital, Worthing town centre, Seafront	B2223 Dominion Rd crossing, narrow railway subway, A259 High St highway width
312	Secondary	3.1	Loose Lane j/w West St	B2223 Ham Rd j/w A259 Brighton Rd	West Sompting Strategic Allocation, BRdwater business park, Davison High School, East Worthing local centre, East Worthing railway station, Seafront	Private farm land and West Sompting development, B2223 Ham Rd highway width
313	Secondary	3.1	Halewick Lane j/w Howard Rd	Western Rd j/w A259 Brighton Rd	Sompting local centre, Lancing business park, Brooklands Park, Seafront	Western Rd highway width, A259 Brighton Rd crossing
320	Primary	2	Grinstead Lane j/w A27 Old Shoreham Rd	The Perch on Lancing Seafront	New Monks Farm, Lancing local centre, Lancing railway station, Seafront	A2025 South St highway width
321	Secondary	2.7	Cecil Pashley Way j/w Old Shoreham Rd	Kings Crescent j/w West Beach Rd	Shoreham Airport, Seafront	Private land at Shoreham Airport, A259 Brighton Rd crossing
330	Primary	4.4	Disused Cement Works	A259 High St j/w East St	Downs Link, Shoreham town centre	A259 High St highway width, crossing of A283 at Ropetackle
331	Secondary	1	The Drive j/w Downside	Buckingham Rd j/w Rosslyn Rd	Shoreham town centre, Shoreham railway station	Highway widths
332	Secondary	1	New Barn Rd j/w A27 bridge	Hammy Ln j/w Middle Rd	Southlands Hospital	Highway widths
333	Secondary	1.6	Upper Kingston Lane j/w Hawkins Crescent	Kingston Lane j/w A259 Brighton Rd	Shoreham Academy	A270 Old Shoreham Rd crossing, highway widths
334	Secondary	1.6	Mile Oak Rd j/w Ridgeway	Watling Rd j/w Park Lane	Southwick local centre, Southwick railway station	B2167 Watling Rd highway width



85%

of all local people
asked support
proposed primary
& secondary
walking zones



Glossary of terms

Advanced Stop Line (ASL)



A second stop line at traffic signals for cycles, ahead of the stop line for motor traffic, with a waiting area marked with a cycle symbol and extending across some or all of the traffic lanes. Some ASLs are accessed by a cycle lane.

Bus gate



An entry point across a road where only buses (and possibly cycles and/or taxis) are allowed through. It can be enforced by signs, lifting bollards and/or cameras.

Continuous footway



A way of providing priority for people walking over turning vehicles at side roads by continuing the footway surface across the junction, providing strong visual priority to pedestrians. A 'continuous cycleway' can be added in a similar way for a cycle lane or track.

Contraflow cycling



Where cycles are allowed to travel in both directions on streets that are one-way for motor traffic. It can be implemented using lane markings and signing (with or without some form of physical protection), or by using signing only at the entrance to the contraflow section.

Footway (pavement)



A part of the highway for sole use of people walking. Where a footway runs alongside a road, it is commonly referred to as a pavement (see 'Shared use').

Floating bus stop (bus stop bypass)

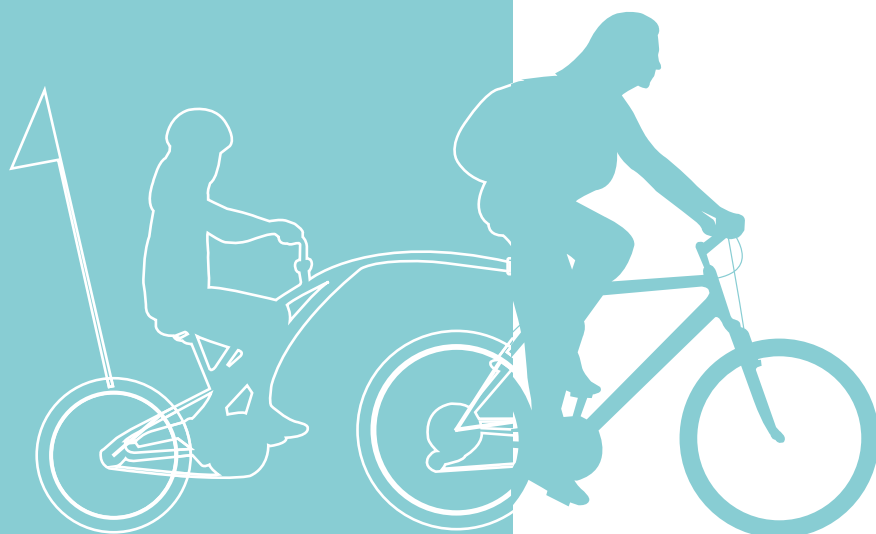


A way to continue a cycle lane or track behind a bus stop so that cycles do not have to interact with buses. May be at the same level as the footway, or kerbed, and some have zebra crossings for bus passengers to cross the cycle area.

Light segregation



The use of intermittently placed objects, such as bollards, posts or a low kerb, to separate and protect a cycle facility (usually a mandatory cycle lane) from motor traffic.



Cycle bypass



A form of physical separation for cycles enabling them to avoid a restriction for other road users such as traffic signals and chicanes.

Cycle lane - advisory



A dashed white line marking out a strip along the carriageway intended for cycles. Motor vehicles should not enter the lane unless it is unavoidable but are not legally prohibited from doing so.

Cycle lane - mandatory



A solid white line marking out a strip along the carriageway for the exclusive use of cycles (usually full time but may be limited hours only). Motor vehicles are legally prohibited from driving in the lane.

Cycle parking



Formal provision for locking cycles, ranging from hoops ('Sheffield stands') to lockers and compounds. Cycle parking should be fit-for-purpose, secure and well located, and allow all types of cycles to be parked.

Dropped kerb



A feature to allow people walking to avoid the need to step up or down, usually at formal crossings. Must be flush so that wheelchair and pushchair users have easy level access.

Foot/cycle bridge



A bridge crossing any road or other barrier for use by pedestrians, possibly shared with cycles. May be ramped and should not be stepped only to allow inclusive use.

Liveable neighbourhood



An area of streets (usually mostly residential) where through motor traffic is removed or reduced and calmed to provide a better, more liveable neighbourhood to support walking, cycling, play and community use.

Modal filter (road closure)



A permanent or part-time road closure for motor traffic with access for pedestrians and cycles. It may be enforced by physical measures or signs only (and in London only by cameras).

Narrowing



Physical narrowing of the carriageway on one or both sides to shorten pedestrian crossing distances, with dropped kerbs or flush raised table and tactile paving.

Parallel crossing



A crossing similar to a zebra crossing, which can be used by cycles as well as pedestrians. May be on a raised table.

Parklet



A small landscaped area with features such as planting, seating or other public realm features, usually located in place of a former car parking space.

Pedestrian/cycle refuge or island



A physical island in the carriageway to support pedestrian (and sometimes) cycle crossing movements, as well as cycle right turns. May be on a raised table. Should be wide enough to accommodate all users.

Glossary of terms continued

Pelican crossing



A signal controlled crossing for pedestrian use only. May be on a raised table.

Public realm improvements



Measures which improve the look and feel of an area, including improvements like tree planting, seating, art and other features to make public spaces more attractive.

Raised table



A raised section of the carriageway, used to slow traffic and make it easier for pedestrians to cross.

School Street



Section of street outside a school with restricted access during school pick-up and drop-off times, enforced by bollards, signs or (in London only) cameras.

Side road zebra markings



Zebra markings across the mouth of a side road junction without Belisha beacons. These are not yet legal – if approved they will formalise and strengthen pedestrian priority that already exists in Highway code rule 170.

Single stage crossing



A crossing point where pedestrians and/or cycles are able to cross a road or junction in one movement without having to wait on a refuge island.

Tactile paving



Paving that helps people with visual impairments to understand the street environment by using changes in texture or colour.

Toucan crossing



A signal controlled crossing that can be used by both pedestrians and cycles. May be on a raised table.

Segregated cycle track



A cycle facility, physically separated from areas used by motor vehicles and pedestrians. It may be next to, or completely away from the carriageway.

Separation



A physical feature separating space used by cycles and pedestrians on a traffic-free path, such as a kerb, white line or surfacing in different colours or materials.

Shared use path



A path which is shared by pedestrians and cycles but where motor traffic is not permitted. It can include footways alongside carriageways as well as routes completely away from roads, like in parks.

Side road treatment



Features which slow traffic turning in or out of a side road and enable easier pedestrian movement across the junction head. May include narrowing, tightening of corners and/or a raised table.

Traffic calming



Features which physically or psychologically slow traffic such as speed humps.

Underpass / subway



A crossing under a road or other barrier for use by pedestrians, possibly shared with cycles or with an adjacent section for cycling. Usually ramped and should not be stepped only to allow inclusive use.

Wayfinding



Over-arching term for measures to help people orient themselves and navigate from place to place. Includes directions signs both off and on a carriageway / path, surface markings, maps and any other information to assist pedestrians and cyclists with route planning.

Zebra crossing



Pedestrian only crossing with Zebra markings and Belisha beacons. May be on a raised table.



APPENDIX 2

Adur & Worthing LCWIP – analysis of responses - initial outputs

Consultation responses are still being analysed due to the high volume of comments received. Initial outputs are as follows:

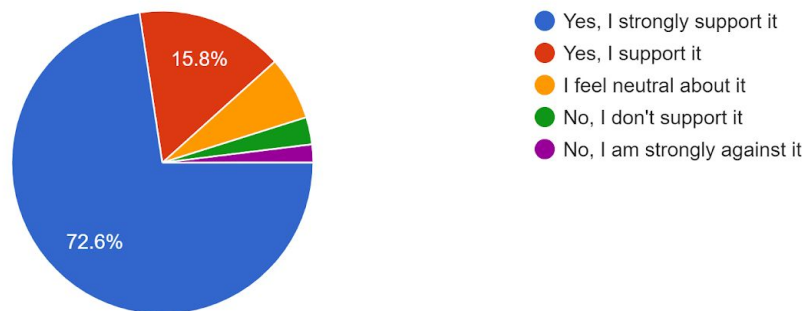
- Over 350 responses were received under the LCWIP consultation - an incredibly positive response
- 88% supported the principle of improving cycling infrastructure
- 84% supported the principle of improving walking zones
- There were 191 comments on how cycle routes could be improved
- There were 77 comments on how walking zones could be improved
- Many of these related to opposition to the route through Chesswood Allotments (route 202) and Ilex Way (route 201)

Online Portal

There were 312 questionnaire responses from individuals via the online portal. The following charts illustrate responses to some of the key questions:

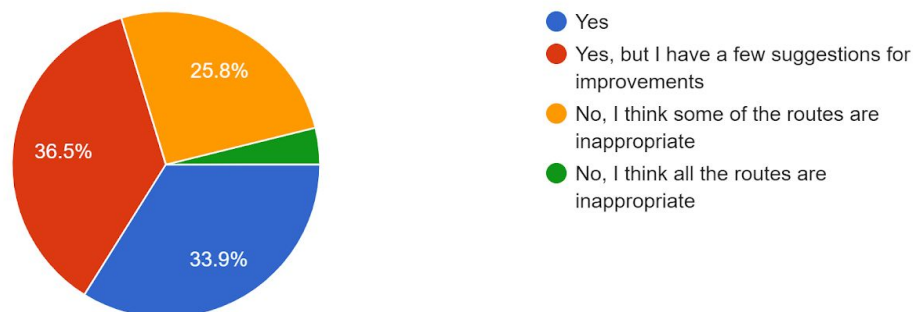
Do you support the principle of improving the cycle network?

310 responses



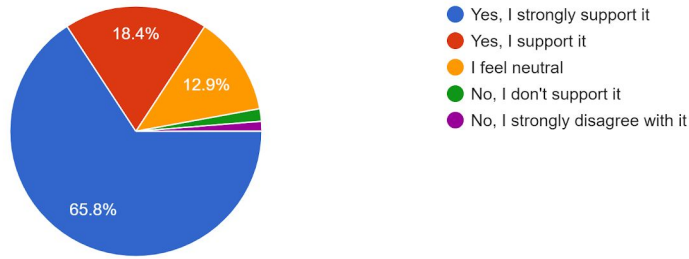
Are you happy with the primary and secondary cycling routes that have been outlined in this plan?

310 responses



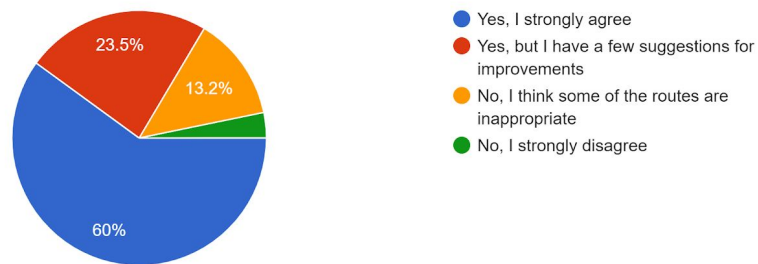
Do you support the principle of identifying and improving walking zones?

310 responses



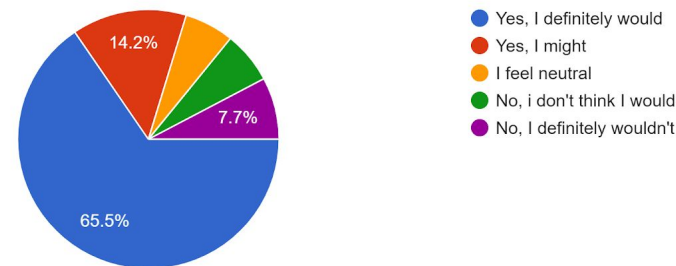
Do you agree with the primary and secondary walking zones that have been identified in this plan?

310 responses



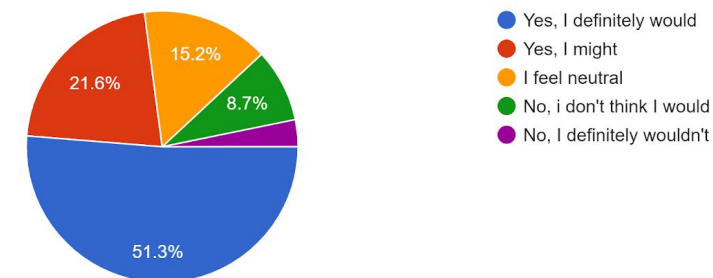
If cycling infrastructure was improved and made safer and easier, would you cycle more?

310 responses



If walking infrastructure was improved and made safer and easier, would you walk more?

310 responses



Question: Cycling routes

“Please outline the changes you would like to see – where possible please use route numbers shown on the plans for reference. Where available please include a justification / evidence for your suggestion (500 words max)”

Analysis of comments:

Response topics	Description	No. of comments
Specific safety issue	Safety issues at specific sites will be raised	20
Specific issue (allotments)	Comment regarding the proposals for cycle and pedestrian access through allotments	31
Specific issue (Greensward/Ilex)	Comment regarding proposals for the Greensward and Ilex	29
Additional route suggestion (may not specify)	Comments suggesting either specific routes not included in the LCWIP or more general unspecific suggestion e.g. for an area	37
Route design suggestion/issue (or query with LCWIP primary/secondary designation)	Comments about design issues with proposed primary or secondary routes or questions over the designation of those routes	44
Route connectivity issue	Issues over design of proposed routes and how they connect to each other or to key destinations	6
Surfacing/maintenance issue	Request for better surfacing or maintenance, may or may not be site specific	11
Lighting	Request for lighting of route/routes	1
Access issue (includes suggested closure or change of permissions on paths etc.)	A mix of requests over improved access for walkers and cyclists and restrictions in access for motor vehicle users.	7
Against shared use	Comments broadly opposing use of shared use paths	8
Control/management issue (includes policing)	Comments requesting better policing and management of paths and routes, e.g. control of dogs, cycle speeds, car parking etc.	5

Non cycle specific measures	Requests for improvements such as 20 mph zones and traffic calming that are not cycle specific	4
Clarity of draft LCWIP document	Questions over the clarity and content of the draft LCWIP document	4
Cycle parking	Request for improved cycle parking. Very few in this section of comments as this is covered in a different question	3
Generalised comments	Comments that were very unspecific and while not negative did not inform the discussion	3
Other, mainly opposed views	A catch all category for the less constructive and supportive comments. One or two comments may not be strictly negative or unsupportive	11

Question: Cycling - top 3 routes

‘There are a number of routes on this plan, both primary and secondary. Please can you identify the top THREE routes (or sections of route) that you consider should be a priority for improvement?’

Of the around 180 responses that indicated support for specific routes, the following table shows the level of support for different routes.

Support for different routes - favourites shown in red

	1 st preference	2 nd preference	3 rd preference	TOTAL
200	72	34	20	126
201	8	6	7	21
202	33	24	26	83
203	0	2	2	4
210	24	36	20	80
211	2	3	0	5
213	1	0	0	1
300	1	2	1	4

301	1	1	1	3
302	3	3	0	6
303	0	1	0	1
304	1	3	1	5
310	22	19	5	46
311	1	5	3	9
313	2	2	0	4
320	1	3	7	11
330	2	2	9	13
331	1	5	2	8
332	0	1	0	1
333	0	1	2	3
334	0	2	0	2

Combining the three preferences, there is a clear indication of support for the following routes as the top four priorities:

- Route 200 Seafront route. Marine Drive Goring, j/w Amberley Drive to A259 Fishersgate Terrace j/w Brambledean Road.
- Route 202 Goring Way, Worthing to Basin Road South at Adur District boundary
- Route 210 Goring–Fishersgate. A259 j/w Ferring Lane A270 to Old Shoreham Road j/w Applesham Way.
- Route 310 A24 Findon Road j/w Bost Hill to South Street j/w Marine Parade

Question:

“What else could make cycling easier and safer in Adur and Worthing?”

The chart below shows the level of support for each answer. *Answers in order of greatest renumber of responses.*

Response topics	Description	Number of respondents that selected this
-----------------	-------------	--

Cycle parking a. Racks b. Secure parking c. Both racks & secure	Respondents chose: Racks 43 Secure parking 65 Racks & secure parking 75	183
Signage	Any form of signage either on posts etc. or painted on carriageway etc.	166
Cycle campaigns and education	This was broadly interpreted by respondents to mean positive campaigns to encourage more cycling, and educational campaigns aimed at drivers and non-cyclists to bring better behaviour towards cyclists and a minority of respondents who wanted campaigns aimed at cyclist to make them behave better.	126
Motor vehicle restrictions and enforcement	Anything that translated as restrictions on motor vehicles and enforcement. E.g. filtered permeability, motor traffic free zones, tackling pavement parking, traffic calming and lower speed limits. Enforcement against close passing	39
Infrastructure	Anything that translated into a request for a form of infrastructure	37
Cycle enforcement and anti-cycling measures	This is a mix of enforcement of cycle lighting, anti-social cycling and other more draconian suggestions such as banning cycling from roads etc.	16
Maintenance	Of surface, cycle infrastructure, street furniture, cycle racks etc.	9
Remove shared paths	While there were a few requests for more sharing of pavements (recorded as infrastructure) there were more against the use of shared use paths	5
Lighting	Lighting	3
Cycle training	A small mix from Bikeability to tests etc.	2
Bike carriage on public transport	As stated (e.g. facilities on trains)	1

Question: Walking zones

“Please outline the changes you would like to see – where possible please identify which zone you are referring to. Where available please include a justification / evidence for your suggestion (500 words max)”

Answers in order of greatest renumber of responses

Topics 4	Description	Number of respondents that selected this
Route or core zone suggestions (may not be specific)	There are a number of requests to enlarge core zones and also more generally over how they were designated	17
Allotments	A number restated their opposition to access through the allotments	12
Against shared use	As stated	7
Specific safety or design improvements	Safety and design issues at specific sites	5
General improvements to walking environment	Quite wide and general comments e.g. “The areas should be safe and pollution free.”	5
Clarity of draft LCWIP	Negative comments about the clarity and format of the Draft LCWIP.	3
Other comments	Comments that while not necessarily negative are nonetheless unconstructive	3
Environmental enhancement	Requests to make the walking environment nicer with planting etc.	2
More pedestrian priority	As stated	2
Pavement parking ban	As stated	2
Access restrictions	For motor vehicles	2
Motor traffic reduction	As stated	2
Control and/or management	To manage shrubbery in private gardens encroaching on paths. To control of speeding cyclists & mobility scooters on prom	2
Maintenance issues	As stated	1

Lighting	As stated	1
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