

Technical transport study for Petersfield Town

On behalf of **Petersfield Town Council**

August 2018

Document reference: HF17241514

Strategic Transport
Hampshire County Council
The Castle
Winchester SO23 8UD

01962 832122
nicola.waight@hants.gov.uk
hants.gov.uk/sharedexpertise

CONTROL SHEET

Issued by: Hampshire Services
Economy, Transport and Environment
Hampshire County Council
Second Floor, EII Court West,
The Castle,
Winchester,
SO23 8UD

Tel: 01962 832122

Client: Petersfield Town Council

Project: Technical transport study for Petersfield Town

Status: Draft for Client review

Date: August 2018

Document Production Record

Issue	Purpose/Status	Prepared by	Checked	Approved	Date
01	Draft for Client Review	AT/NW	DM	DM	23.7.2018
02	Final	AT/NW	DM	DM	31.8.2018

Hampshire Services has prepared this report in accordance with the instructions of the above named client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk

Contents

Contents.....	3
Executive Summary	8
1. Background to study	9
1.1. Introduction to Petersfield	9
1.2. The Study.....	11
2. Aims and Structure	14
3. Policy	15
3.1. National Policy Planning Framework (NPPF).....	15
3.2. Adopted Local Plan	15
3.3. Emerging Local Plan	16
3.4. Petersfield Neighbourhood Plan.....	16
3.5. Town Centre Vision.....	18
3.6. Hampshire County Council Local Transport Plan 3 (2011-31)	18
3.7. Traffic Management Guidance Policy 2014	19
3.8. Design Manual for Roads and Bridges (DMRB).....	20
3.9. Manual for Streets and Manual for Streets 2.....	20
3.10. Hampshire’s Walking and Cycling Strategies	21
3.11. Local Transport Note 1/11 – Shared Space.....	22
3.12. CIHT Creating Better Streets: Inclusive and Accessible Places (2018) ...	23
4. Existing town.....	24
4.1. Key routes and destinations	24
4.2. Highway network.....	24
4.3. Traffic analysis	25
4.4. Public transport	27
4.5. Walking and cycling	34
5. Mode share and trip distribution.....	37
5.1. 2011 Census journey to work.....	37
6. Planning.....	42
6.1. Planning Authority	42
6.2. Highway Authority	43
6.3. Recent development applications	43
7. Traffic regulation and deliveries	45

7.1.	Traffic restrictions.....	45
7.2.	Business views on parking and deliveries.....	47
7.3.	Summary.....	48
7.4.	Recommendations	48
8.	Personal Injury Collisions	49
8.1.	Collision Analysis	49
8.2.	Summary.....	52
8.3.	Recommendations	52
9.	Parking	53
9.1.	Car parks.....	53
9.2.	On-street parking	55
9.3.	Town Centre car parks.....	59
9.4.	Town Council owned car parks	67
9.5.	Cycle parking	67
9.6.	Summary.....	69
9.7.	Recommendations	70
10.	Traffic counts and audits	71
10.1.	Motor vehicle traffic counts and link capacity analysis.....	71
10.2.	Through traffic.....	75
10.3.	Pedestrian traffic.....	75
10.4.	Pedestrian audit.....	81
10.5.	Cycle traffic.....	82
10.6.	Cycle audit	85
10.7.	Wayfinding	88
10.8.	Summary	88
10.9.	Recommendations.....	89
11.	Shared space	91
11.1.	Summary	91
11.2.	Recommendations.....	92
12.	Summary of findings.....	92
12.1.	Traffic regulations and deliveries	92
12.2.	Personal injury collisions.....	93
12.3.	Parking.....	93

12.4.	Traffic counts and audits	93
12.5.	Shared Space	94
13.	Recommendations.....	95
14.	Conclusion and next steps	98

Figures

Figure 1	Boundary of Petersfield Wards.....	10
Figure 2	Percentage of population with no car availability (Census, 2011)	10
Figure 3	Petersfield Neighbourhood Plan – Getting Around objectives and policies	11
Figure 4	Town Spine	12
Figure 5:	Town Centre Vision from Petersfield Neighbourhood Plan	13
Figure 6	Petersfield Neighbourhood Plan area	16
Figure 7	LTP 3 Objectives for Market Towns	19
Figure 8	Categories to replace “shared spaces” as set out in CIHT Inclusive and Accessible Spaces (2018).....	23
Figure 9:	Petersfield Highway Context	24
Figure 10:	Google traffic description.....	26
Figure 11:	Bus services in Petersfield	28
Figure 12:	Petersfield Station usage 1997-2017	32
Figure 13	Walking and cycling routes in Petersfield.....	35
Figure 14:	Modal split of journeys to work - MSOAs covering Petersfield (East Hampshire 011 and 012 combined)	37
Figure 15:	In and out commuting by car (as driver) MSOA East Hampshire 011	38
Figure 16:	In and out commuting by car (as driver) MSOA East Hampshire 012	39
Figure 17:	In and out commuting by train MSOA East Hampshire 011	39
Figure 18:	In and out commuting by train MSOA East Hampshire 012	40
Figure 19:	Summary of commuting patterns, all modes combined (source: consultant’s analysis of Datashine Commute).....	40
Figure 20	National Travel Survey 2016 – Purpose Share	41
Figure 21	residential allocations from Petersfield Neighbourhood Plan	42
Figure 22	Traffic management and regulations in Petersfield	46
Figure 23 –	Plot of Petersfield PIC Data (red box)	49
Figure 24	Zoomed plot of PIC Data.....	50
Figure 25	Parking signage	54
Figure 26	Wednesday on-street parking across the day	56
Figure 27	Saturday on street parking across the day	58
Figure 28	Car parks and pedestrian routes towards the town centre	60
Figure 29	Pedestrian survey area (Google map)	76
Figure 30	Pedestrian counts over the survey period	76
Figure 31	Mode of transport Wednesday	77
Figure 32	Mode of transport Saturday.....	78

Figure 33: Origins of visitors on Wednesday	79
Figure 34: Origins of visitors on Saturday	79
Figure 35 Reason for visit - Wednesday	80
Figure 36 Reason for visit Saturday	80
Figure 37 Cycle count locations	82
Figure 38 Cycle counts by site	83
Figure 39 Cycle counts by time - Wednesday	84
Figure 40 Cycle counts by time - Saturday.....	85
Figure 41 CIHT categories to replace “shared space”	91

Tables

Table 1: Bus Services serving the centre of Petersfield	29
Table 2 Summary of recent development applications.....	44
Table 3 Summary of business surveys.....	47
Table 4 Severity of Incidents by year	50
Table 5 Casualties by Mode of Transport.....	51
Table 6: Illegal and inconsiderate parking observed over 12 hour Wednesday survey	57
Table 7 Illegal and inconsiderate parking observed over Saturday survey period....	58
Table 8 Car Parks in Petersfield.....	61
Table 9: Official cycle parking	68
Table 10: Link capacity assessment.....	73
Table 11 Pedestrian demographics.....	77
Table 12: Summary of Cycling Level of Service Assessment	86
Table 13 Recommendations of the study	97

Appendices

- 1 Google traffic analysis
- 2 Level crossing down time
- 3 Level crossing high level assessment
- 4 Petersfield society response
- 5 Response from Cycling UK local branch
- 6 Census data
- 7 Datashine maps
- 8 Datashine analysis
- 9 Business survey template and summary of responses
- 10 Personal Injury Casualty plot and report
- 11 High street parking assessment
- 12 Town Centre car park assessment
- 13 Audit of walking routes into town from interceptor car park
- 14 Love Lane/The Avenue car park data

- 15 Cycle parking audit
- 16 Motor vehicle traffic counts and capacity analysis
- 17 Assessment of through traffic
- 18 Pedestrian counts
- 19 Pedestrian intercept survey template and summary of responses
- 20 Pedestrian audit
- 21 Cycle counts
- 22 Cycle audit
- 23 Audit of wayfinding

Executive Summary

Hampshire Services has been commissioned by Petersfield Town Council to undertake a technical transport study in support of the delivery of the Town Centre Vision. Hampshire Services is the consultancy arm of Hampshire County Council; every effort has been made within this report to ensure that all recommendations comply with policies of Hampshire County Council as the Highways Authority.

To support the future development of the “Town Spine Brief” the following main aims were agreed for this Transport Study:

- Compile a traffic evidence base (including motor vehicle, pedestrian and cycle movements, and including public transport) to define the existing transport situation along the Town Spine in Petersfield
- Identify the impact on the surrounding highway network of a potential reduction of through-traffic and on-street car parking along the Town Spine
- Assess car parking capacity to understand if on-street parking could be reduced along the Town Spine

In addition, the study supports local ambitions to enhance the status of Petersfield as a gateway to the South Downs National Park by reviewing public transport links to the town, and walking and cycling routes starting in the town and heading onwards to other areas of the National Park.

The findings of the study suggest that the links on the identified alternative routes to the Town Spine could accommodate the projected increase in traffic flow from reassigned traffic to achieve a level of traffic suitable for shared space. It is recommended that junction assessments should now be undertaken to be sure that no junction improvements would be required in support of the delivery of the Town Centre Brief aspirations.

Moreover, the assessments within this study have found that up to 77 vehicles park on the Town Spine at any one time and that there is sufficient spare capacity that this number could be accommodated within existing car parks around the town centre. The Causeway car park and the Rail Station (but only at the weekend) have the most capacity to cater for reallocation of parking. In the future, decking of the Causeway car park could be investigated if further parking is required.

Overall, the findings of this study conclude that there is significant potential to move towards a “Shared Space” environment. This would be more accommodating of the desired pedestrian and cycle movements. Local roads and car parks are likely to be able to cater for a redistribution of demand brought about by reduced traffic flows and parking on the Spine.

Hampshire Services would be very happy to continue to support the Town Council with the next steps in the development of a design for the Town Spine.

1. Background to study

1.1. Introduction to Petersfield

Petersfield is a market town in East Hampshire with a population of around 15,000. The town can be characterised by its compactness, historic square and numerous listed buildings. It is a popular location and an attractive place to live and work. The town's population is ageing, with an increasing number of elderly residents, in a similar pattern to many other similar areas in Hampshire.

The town is within the South Downs National Park; and is a gateway to the South Downs National Park. The National Park Authority is the statutory planning authority for the town. The first local plan covering the entire park was submitted for examination in Spring 2018 and the Inspectors report is anticipated in Autumn 2018. Petersfield's Neighbourhood Plan was written prior to the submission of this document, and includes proposals for the centre of Petersfield, known as the "Town Centre Vision".

Petersfield is served by a rail station which has frequent services connecting to London Waterloo to the north, and Portsmouth to the south. The A3 connecting Portsmouth to London lies to the west of the town, and the A272 passes east to west connecting Winchester to Midhurst and beyond.

Compared to the Hampshire average (at 14.7%), Petersfield has a slightly higher percentage of homes without access to a car, at an average of 16.4% across all six Petersfield wards. St Peter's Ward (see Figure 1) is the most central Ward and has the highest level of homes with no access to a car at 31.9% (see Figure 2).

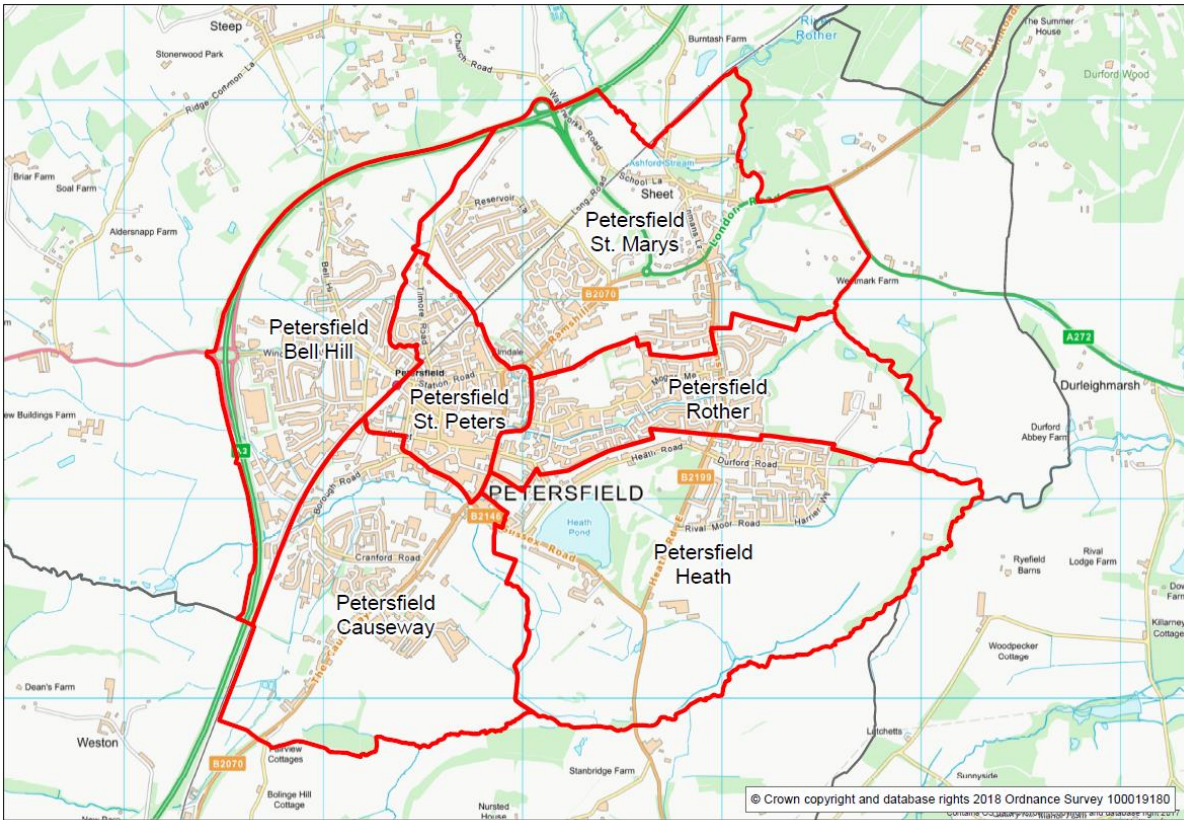


Figure 1 Boundary of Petersfield Wards

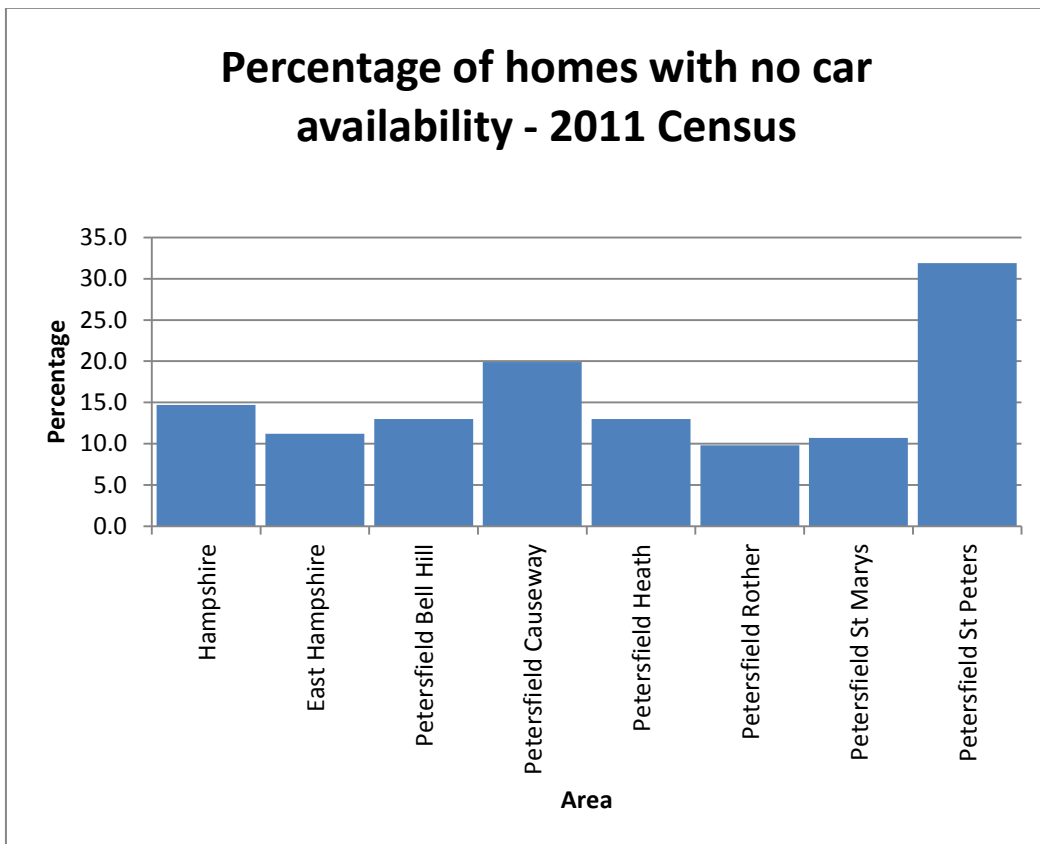


Figure 2 Percentage of population with no car availability (Census, 2011)

1.2. The Study

Hampshire Services has been commissioned by Petersfield Town Council to undertake a technical transport study in support of the delivery of the Town Centre Vision outlined in the [Petersfield Neighbourhood Plan](#) (adopted September 2015).

This vision was developed by the Petersfield Town Centre Steering Committee comprising town, district and county councils, the South Downs National Park Authority (SDNPA), and the Petersfield Society.

The Neighbourhood Plan has a number of “Getting Around” objectives and policies, shown in Figure 3 below.

OBJECTIVES	SUPPORTING POLICIES
GAO1 Make Petersfield a more pedestrian and cycle friendly place to live	GAP1 Provide pedestrian, cycle, and mobility scooter access to the town centre from new developments
	GAP2 Improve the town's pedestrian and cycle network
	GAP3 Making our streets safer
GAO2 Improve the town centre spine from the station through to the war memorial, making it more pedestrian friendly, accessible to cyclists and enhancing its overall vitality	GAP4 Create a Shared Space and/or pedestrian/cycle priority friendly street design for the Town Centre Spine including the Market Square
GAO3 Improve both the management and provision of parking throughout the town	GAP5 Provide multi-level car parking at the railway station and north side of the Tesco car park
	GAP6 Create access to Festival Hall car park off Tor Way
	GAP7 Improve parking signage, designation / delineation and increase parking control zone
	GAP8 Work with others to provide parking management that responds to user needs
GAO4 Encourage sustainable travel including local public transport and street environments that significantly reduce the impact of traffic on the town's community life	GAP9 Improve the provision of bus services and co-ordination of services

Figure 3 Petersfield Neighbourhood Plan – Getting Around objectives and policies

The policies focus on making Petersfield a more pedestrian and cycle accessible town, delivering a shared space scheme in the town centre, to manage traffic and car parking within the compact streetscape, and encouraging sustainable transport.

The Neighbourhood Plan contains a Town Centre Vision which focuses on delivering a shared space scheme along the “Town Spine.” This “Town Spine” is defined as the route east to west between the railway station and the war memorial, taking in Lavant Street, the southern part of Chapel Street, and the High Street including The Square.

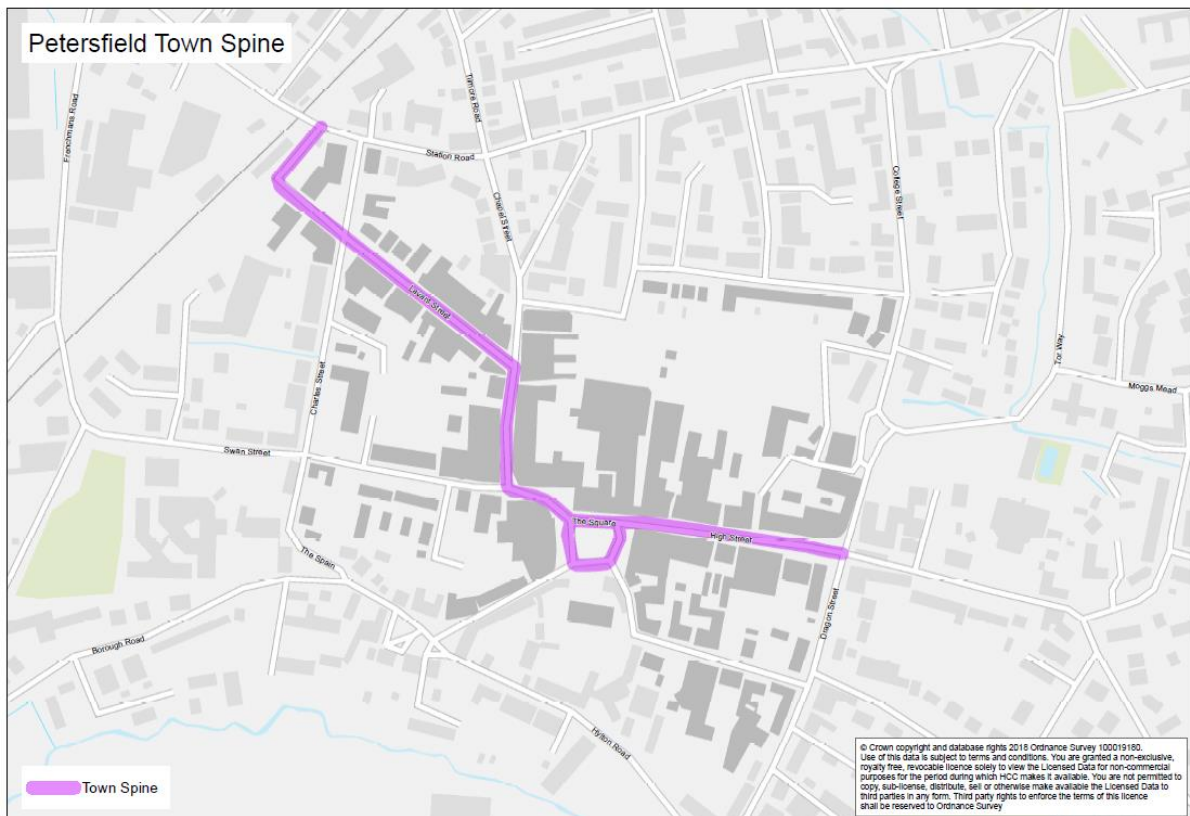


Figure 4 Town Spine

Section 11.2 of the Neighbourhood Plan describes the Town Centre Vision in more detail. See figure

Objectives of a shared space scheme:

- Reduce vehicle speeds
- Improve pedestrian and cyclist safety
- Create a 'café society' feel
- Promote walking and cycling throughout the town
- Encourage a larger shopping footfall in the town centre
- Eliminate illegal parking – clearer parking control zone area and signage
- Improve the first impression of the town for visitors arriving at the railway station

Features:

- Creation of a shared space environment starting at the railway station and extending down the High Street to the war memorial. Areas included are shown in yellow on the above map. See also artist's impressions at Figure 12, Figure 13 and Figure 14
- Mixture of shared space and pedestrian/ cycle friendly streets. Remove segregation of vehicles and pedestrians
- Removal of traffic signs incompatible with shared space design
- Provision of pedestrian-friendly street furniture – benches, trees/bushes, green spaces, water features, sculptures
- Provision of a limited number of parking bays
- Pedestrian and cycle-friendly Chapel Street, upper Lavant Street

Figure 5: Town Centre Vision from Petersfield Neighbourhood Plan

The Vision aims to design an attractive, versatile town centre which shares public spaces and manages movement. It aims to give more priority to pedestrians and people cycling by reducing traffic flow and parking along the Town Spine, delivering “shared space”, increasing footfall, introducing more crossing points, slowing traffic speeds and improving street design to reflect the town’s importance within the National Park.

The Town Centre Steering Committee has developed a draft brief for a public realm enhancement scheme focussing on the Town Spine, also known as “the “Town Spine Brief.” To support the “Town Spine Brief” before it is issued for tender, this technical transport study will gather a traffic evidence base which defines the existing transport situation in Petersfield. It will establish how traffic behaves currently in the town. This will assist in developing options and influencing designs for the Town Spine to ascertain the types of measures that will be required in the future design to achieve the outcomes sought.

2. Aims and Structure

To support the future development of the “Town Spine Brief” the following main aims were agreed for this Transport Study:

- Compile a traffic evidence base (including motor vehicle, pedestrian and cycle movements, and including public transport) to define the existing transport situation along the Town Spine in Petersfield
- Identify the impact on the surrounding highway network of a potential reduction of through-traffic and on-street car parking along the Town Spine
- Assess car parking capacity to understand if on-street parking could be reduced along the Town Spine

In addition, the study supports local ambitions to enhance the status of Petersfield as a gateway to the South Downs National Park by reviewing public transport links to the town, and walking and cycling routes starting in the town and heading onwards to other areas of the National Park.

To address these aims, the report is structured as follows:

- Section 3 sets out the policy context from a national to a local level, including up to date guidance on inclusive and accessible spaces
- Section 4 provides an overview of the highway network and transport within the town
- Section 5 explains the mode share in the town using data from the 2011 Census
- Section 6 describes the roles of the planning and highway authorities and provides details of recent larger planning applications and related transport schemes in and close to the study area
- Section 7 describes the context of traffic management in the town and gives a summary of business surveys undertaken as part of this study, highlighting where deliveries are made
- Section 8 provides a summary of personal injury collisions over the latest five year period
- Section 9 assesses current levels of parking on and off street and looks to see if on-street parking could be accommodated elsewhere
- Section 10 assesses current volumes and flows of traffic around the Town Spine and looks to see if traffic volumes could be reduced on the Spine and accommodated on alternative routes. This section also looks at current pedestrian and cycle flows to provide a baseline for future comparison
- Section 11 discusses the principal of shared space in light of recent CIHT guidance and applies the guidance to the Town Spine
- Section 12 summarises the study
- Section 13 makes recommendations for the next steps towards implementing a scheme
- Section 14 sets out conclusions and recommended next steps

Where new analysis has been undertaken, summaries and recommendations are included.

3. Policy

3.1. National Policy Planning Framework (NPPF)

NPPF 2012 promotes a 'presumption in favour of sustainable development', which is defined by five principles as set out in the UK Sustainable Development Strategy:

- “living within the planet's environmental limits”;
- “ensuring a strong, healthy and just society”;
- “achieving a sustainable economy”;
- “promoting good governance”; and
- “using sound science responsibly.”

NPPF emphasises the importance of design, stating that *"good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people."*

The policy has 12 core planning principles to guide and develop plan making and decision taking. Both place making, and the importance of creating places and spaces conducive to walking and cycling are within these 12 planning principles.

Environmental impacts of traffic and transport should be considered at the earliest stages of plan making and development proposals.

Good design, including patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.

A revised NPPF draft was the subject of consultation in March 2018. The revision seeks to refresh and update the previous guidance. The revised document is due for publication later in the summer (2018). The emphasis of the document is still expected to support the delivery of sustainable development.

3.2. Adopted Local Plan

Currently, Petersfield has its planning policy framework set out in a Local Plan: Joint Core Strategy (JCS); which was adopted by East Hampshire District Council on 8 May 2014 and by the South Downs National Park Authority on 26 June 2014. This Local Plan covers the entire district of East Hampshire, including the National Park, and was prepared in partnership between both Planning Authorities.

The Plan acknowledges the importance of Petersfield for services and facilities for both visitors to the National Park and for those living in rural communities around its periphery. Retaining access to and from the town is key to providing these two roles. The Plan did not contain any allocations for the town of Petersfield.

3.3. Emerging Local Plan

Petersfield is covered by the [South Downs National Park Draft Local Plan](#), which was submitted to the Planning Inspectorate in Spring 2018 and is currently at Examination in Public. This emerging plan covers only areas within the National Park. East Hampshire are in the process of developing a new Local Plan for areas of the district outside of the National Park.

A decision on the soundness of the South Downs Plan is expected in Autumn 2018. On adoption it will replace the JCS and is a heavily landscape-led plan, based on the statutory purposes and duty for National Parks as specified in the Environment Act 1995 recognising the importance and significance of the town and its character and setting with the context of the National Park.

3.4. Petersfield Neighbourhood Plan

[Petersfield Neighbourhood Plan](#) 2013-2028 (adopted September 2015) covers the parish of Petersfield (Figure 6).

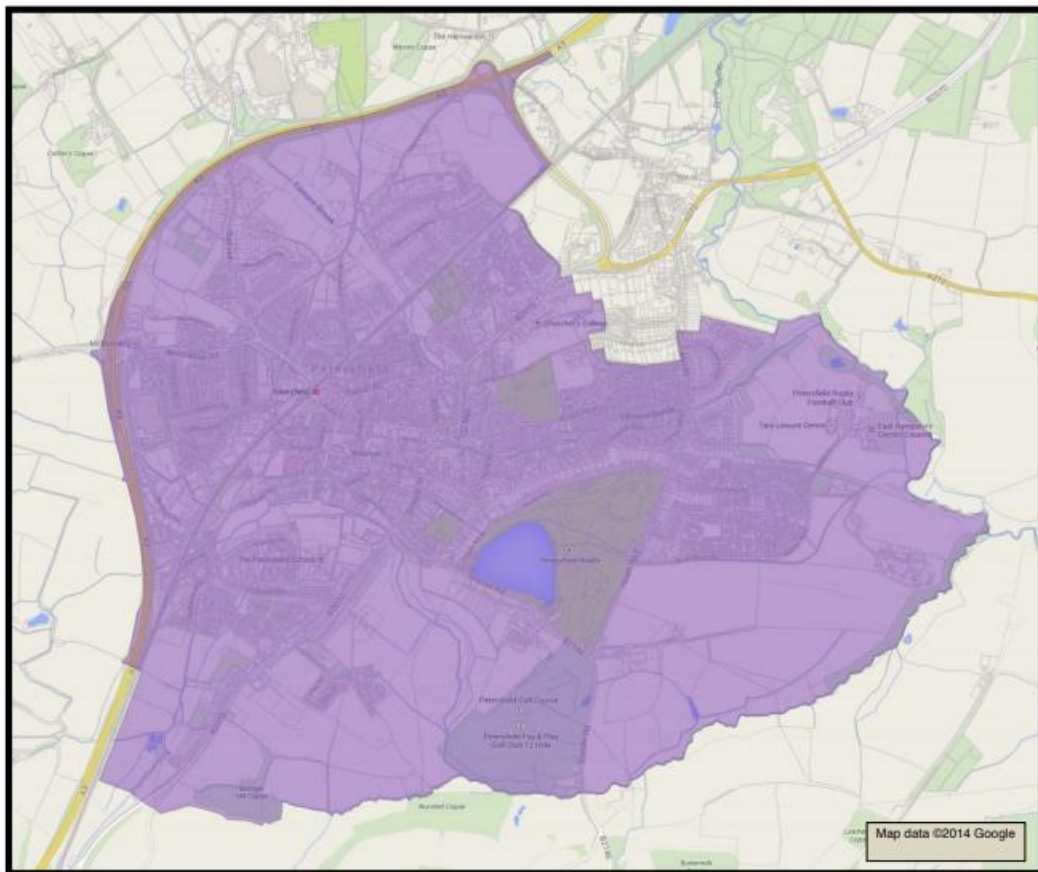


Figure 6 [Petersfield Neighbourhood Plan area](#)

The Plan was a community project, sponsored by the Town Council which aims to shape future development within the town through a series of objectives and supporting policies, whilst being mindful of principles and policies set out in the Joint Core Strategy produced by the SDNPA and EHDC.

Chapters 5 'Getting Around' and 11 the 'Town Master Plan' are most pertinent to this study.

Chapter 5 'Getting Around' contains a series of problem areas and or issues in the town which require attention. Some of these refer to problem junctions, others to traffic speeds, rat running and the perceived problem of car parking management. It also sets out the desire to make the town more pedestrian and cycle friendly. The main spine running through the town is identified, which runs west to east, starting at the rail station, running down Lavant Street, along Chapel Street, through The Square and along the High Street to war memorial.

There are four objectives and nine policies that shape this chapter. Further details can be found in chapter five of the [Neighbourhood Plan](#).

Objective GAO1-4 forms the basis on which the concept of the "Town Spine Brief" has been developed.

The Neighbourhood Plan sets out a parking strategy to aid parking throughout the town, detailed in policies GAP5, GAP7, HP8 and GAP8. In summary the parking strategy has five themes:-

- Ensure new development has adequate off street car parking.
- Increase parking capacity in the town (possible multi-level car parks).
- Introduce residents parking zones in all areas close to the town centre.
- Ensure that all development has sufficient off- street parking.
- Introduce preferential business rates in multi-level car parks.

Chapter 11; is the 'Town Master Plan' which proposes a series of pedestrian and cycling improvements to address some of issues identified in the 'Getting Around' chapter and to improve the towns walkability. A strategy for dealing with the perceived issues surrounding car parking is highlighted. This strategy encourages visitors to the town to use 'interceptor' car parks rather than driving into the town centre and also, if the need is demonstrated, to make additional car parking capacity.

'Shared space' within the town centre is a concept which is referred to in the Town Centre Vision, the idea is to make the streets of the town more pedestrian friendly whilst still maintaining access for vehicles. Shared space is a concept referenced in [Manual for Streets \(2\)](#) 2014 (Department for Transport) in which slow moving vehicular traffic together with pedestrians and cyclists all share the space defined as carriageway and footway, in a variety of forms. Traffic speeds and flows are generally low, with less marking and signage, all highway users use the space in a

more considered and managed way to coexist. The design of a street and the integration of low volumes of vehicles and higher volumes pedestrians/cyclists are generally recognised as the key to achieving successful 'shared space'.

3.5. Town Centre Vision

Also within Chapter 11 of the Neighbourhood Plan is the Town Centre Vision. The key aspirations of this vision are identified as:-

- A shared space town centre – pedestrian friendly but still open to vehicles,
- Redevelopment of the Frenchman's Road area to create a modern business hub,
- Redevelopment of the infant school and Hylton Road area
- Enhancement of the central car park and Physic Garden area
- Redevelopment of the Festival Hall area.

3.6. Hampshire County Council Local Transport Plan 3 (2011-31)

Hampshire's current Local Transport Plan (LTP3) is written in two parts: a 20-year Strategy, which sets out a long-term vision for how the transport network of Hampshire will be developed, which clearly articulates how the LTP will contribute to achieving progress on the County Council's corporate priorities; and a three-year Implementation Plan.

It builds on previous local transport plans and seeks to make improvements to the transport system that will benefit people living and working in Hampshire. The Transport Vision is to create "*safe, efficient and reliable ways to get around a prospering and sustainable Hampshire*".

Of relevant to this study is Chapter 6; Central Hampshire and The New Forest, which covers the area of East Hampshire. This area is characterised as being predominately rural in nature with a series of small market towns providing many of the essential local services. The two national parks are dominant in these locations. LTP 3 states that within the National Parks, the following measures will be progressed through future LTP Implementation Plans:

- Closer partnerships with neighbouring counties to ensure co-ordinated approaches to transport for the National Parks
- Managing the road network to protect and enhance the area's rural character
- Reduction of 'sign clutter'
- Supporting local sustainable tourism through footpath, cycle, equestrian, public transport and rights of way improvements, and enhancing the network to allow increased leisure use

The LTP makes specific reference to Hampshire Market Towns, stating their essential role as service centres for rural hinterlands and setting out the following objectives:

- Delivery of the local measures contained within Town Access Plans
- Working closely with District Councils and other providers to encourage well signed and suitably located parking
- Support for Quality Bus Partnerships within Winchester and other towns
- Work to enhance environmental and streetscape quality where affordable
- Encourage employers and schools to develop and implement travel plans to improve access by all transport modes and encourage flexible working patterns
- Exploring the potential of providing ‘mini park and ride’ schemes
- Meeting the needs those with mobility difficulties through accessible bus services, and community transport
- Invest in the development of walking and cycling routes in Winchester and the other towns
- Work with Town Councils to support community-driven transport solutions

Figure 7 LTP 3 Objectives for Market Towns

3.7. Traffic Management Guidance Policy 2014

Hampshire County Council as the Highway Authority has a statutory responsibility for the maintenance and management of all highways maintainable at public expense within the county. The Traffic Management Policy and Guidance is one of a series of policy documents which sets out how the County Council manages, maintains and is developing transport infrastructure. The need for traffic management measures is evidence-led and needs to satisfy one of the following criteria, although priority will be given to locations with a history of accidents:-

- Improve the safety of all road users – changes that help achieve a reduction in casualties or reduce the potential for injury;
- Keep traffic moving – resolving proven congestion hotspots, parking and obstruction issues;
- Address communities’ concerns about traffic-related issues – addressing issues that have an adverse impact on the quality of life for local residents.

The majority of traffic controls and restrictions that can be applied to the highway require a Traffic Regulation Order (TRO). There are a number of internal and external documents which provide guidance on traffic management, including Manual for Streets and Manual for Streets 2, produced by the Department for Transport (DfT).

3.8. Design Manual for Roads and Bridges (DMRB)

The Design Manual for Roads and Bridges 1992 (DMRB) is a series of 15 volumes that provide standards, advice notes and other documents relating to the design, assessment and operation of trunk roads, including motorways. It is produced and updated by Highways England who has responsibility for trunk and the motorway network in England.

While originally developed in relation to trunk roads and motorways, Hampshire County Council uses DMRB Volume 5, Section 1, part 3 (Advice note 79/99) to assess link capacity of the wider highway network. This advice note has been used to assess the link capacity of alternative routes to the Town Spine. Highway Link Capacity is defined as the maximum sustainable flow of traffic passing in one hour, under favourable road and traffic conditions.

3.9. Manual for Streets and Manual for Streets 2

Manual for Streets (MfS) is published by DfT and relates to the design principles of residential streets; it provides an alternative to the Design Manual for Roads and Bridges (DMRB) which focuses on trunk roads and motorways. MfS advocates that streets should not be designed just to accommodate the movement of vehicles, but that it is important that highway design places a increasing priority on meeting the needs of pedestrians, cyclists and public transport users, so that growth in these modes of travel is encouraged. Streets should be attractive places that meet the needs of all highway users.

Manual for Streets 2 (MfS2) seeks further to bridge the gap between MfS1 and the Design Manual for Roads and Bridges (DMRB) to deliver more contextually sensitive designs for both new and existing streets and goes beyond residential areas to include both urban and rural situations, including town centres. MfS2 demonstrates that the advice given in MfS can be applied to a highway regardless of the speed limit and that it does not have to be in a residential context. MfS2 therefore recommends that designers should use its principles as a starting point for any scheme affecting non-trunk roads.

Hampshire County Council has a [Companion Guide to Manual for Streets](#) to help practitioners to understand the locality of any proposed development and to design spaces which are locally distinctive. It should be used in conjunction with the Department for Transport's 'Manual for Streets' when looking to design new schemes.

3.10. Hampshire's Walking and Cycling Strategies

Hampshire Walking Strategy (January 2016): was prepared in response to increasing interest in walking at both a national level and specifically within the county. The strategy has been developed to reflect four key aims:

1. To provide a clear statement on Hampshire County Council's overall aspiration to support walking in the short, medium and long term;
2. To provide a framework to support the development of local walking strategies;
3. To provide a means to prioritise the County Council's funding to the best value for money investments for walking; and
4. To support the County Council in realising additional funding opportunities for walking measures.

The strategy is intended to complement the wider transport policies presented within the County Council's Local Transport Plan. The walking strategy also complements and supports the Hampshire [Countryside Access Plan](#) which describes how rights of ways and access to the countryside will be managed over the coming years.

Hampshire's Cycling Strategy (September 2015) accompanies the Hampshire Local Transport Plan (LTP). Policy 12 seeks investment "in sustainable transport measures, including walking and cycling infrastructure, principally in urban areas, to provide a healthy alternative to the car for local short journeys to work, local services or schools; and work with health authorities to ensure that transport policy supports local ambitions for health and well-being". Cycling supports many policy agendas including public health, economic development, tourism and the environment.

The cycle strategy has also been developed with four key aims:

1. To provide a clear statement on Hampshire County Council's overall aspirations for cycling in the short, medium and long term;
2. To provide a strategic framework to support the planning and development of cycling measures with local partners including District Councils;
3. To provide a means to prioritise available funding for cycling to the best value for money investments; and
4. To support the County Council in attracting new investment from funding partners for cycling and other associated sustainable transport measures.

The strategy does not identify specific cycling routes; this task passes to each district.

3.11. Local Transport Note 1/11 – Shared Space

Local Transport Note (LTN) 1/11 (Department for Transport, 2011) defines Shared Space as *‘A street or place designed to improve pedestrian movement and comfort by reducing the dominance of motor vehicles and enabling all users to share the space rather than follow the clearly defined rules implied by more conventional designs’*. In essence, it focuses on achieving high streets which are well designed spaces, giving vehicles less formal demarcated space and offers flexibility of movement to pedestrians and cyclists. The suggested outcome is ambiguity. Drivers therefore reduce their speeds to interpret the behaviour of pedestrians, cyclists and other motorists. Shared space also offers flexibility of space and allows different uses or activities to be incorporated within it e.g. café culture and events.

For high levels of sharing, a design speed of no more than 20 mph, and preferably 15 mph or less, is necessary.

The key to changing the way the high street or other public spaces function is to understand how the street currently operates. This understanding relies on establishing an evidence base, which this technical study is providing.

The suggested baseline data required in order to consider a shared space scheme is set out in paragraph 5.8 of LTN 1/11. Although most of the evidence requirements are met within this study, there are some additional information requirements to fully meet the suggested baseline, some of which do not relate directly to transport. There is sufficient evidence to support the recommendations in this study. Any remaining items could be picked up at the design stage.

3.12. CIHT Creating Better Streets: Inclusive and Accessible Places (2018)

This recently published [document](#) provides current best practice in relation to “shared space” schemes and describes how this label is misleading and has previously attracted criticism.

It reviews a long list of these types of schemes from around the UK to “*frame a number of recommendations both for further work and for improvements in the way that street improvement schemes are undertaken so that authorities can achieve designs that meet the needs of all of their users.*”

The document suggests replacing the term “shared space” with the following three categories:

a) Pedestrian prioritised streets

Streets where pedestrians feel that they can move freely anywhere and where drivers should feel they are a guest (e.g., Leonard Circus). Under current legislation, this does not give formal priority to pedestrians.

b) Informal streets

Streets where formal traffic controls (signs, markings and signals) are absent or reduced. There is a footway and carriageway, but the differentiation between them is typically less than in a conventional street. (e.g., Poynton)

c) Enhanced streets

Streets where the public realm has been improved and restrictions on pedestrian movement (e.g., guardrail) have been removed but conventional traffic controls largely remain (e.g., Walworth Road).

Figure 8 Categories to replace “shared spaces” as set out in CIHT Inclusive and Accessible Spaces (2018)

4. Existing town

4.1. Key routes and destinations

As the historic town of Petersfield has evolved, it has remained compact and permeable to its residents and visitors. The town centre remains within a 10-15 walk from most of the residential areas and from open areas such as the Heath and long distance rights of way (e.g. The Hangers Way). The compactness, access to facilities and the provision of recreational space all serve to make the town an attractive place to both live and to visit.

4.2. Highway network

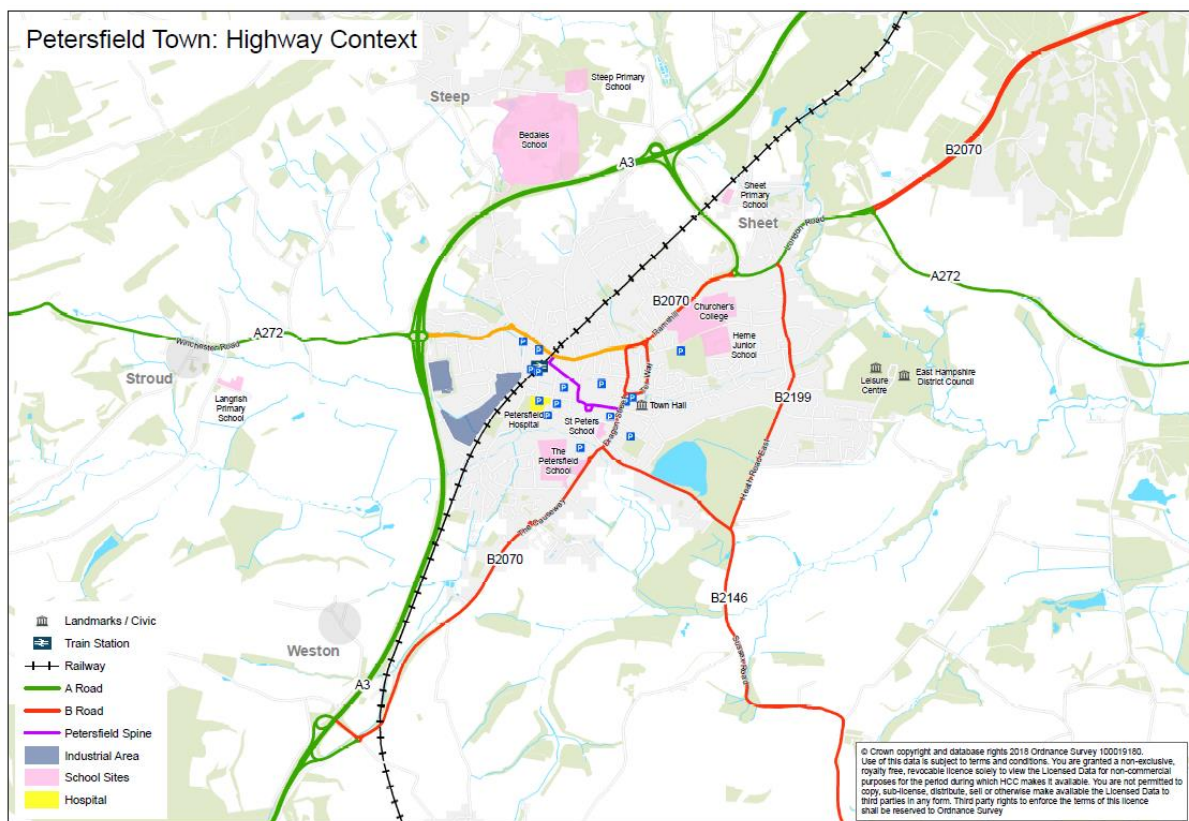


Figure 9: Petersfield Highway Context

The principal road network consists of the A3 between Portsmouth and London via Guildford which passes to the west and north of the town (the A3 Petersfield bypass was opened in 1993 removing significant through traffic from the town) and the A272 provides an east to west connection between Winchester and Midhurst.

There are a total of three junctions on the A3 that vehicles can use to access the town; from the south via the B2070, from the west at the junction with the A272; and approaching the town from the east via the A272 leading onto the B2070, Ramshill.

Those vehicles using the A272 travelling east to west are signposted onto the A3 for a short length to avoid entering the town along Winchester Road.

The town centre lies south of Winchester Road and is encircled with Chapel Street, The Spain, Hylton Road and the B2070. The town is compact and has at its centre a large surfaced car park (320 spaces) with links on all aspects, making it very accessible for pedestrians. Running west to east through the town centre is the 'Town Spine' (study focus, see Section 1.2). The Town Spine is c.1km in length.

Lavant Street

Of note, a recent scheme has been delivered at the northern end of Lavant Street (phase 1) which included wider footways, dropped kerbs at the junction of Chapel Street and Charles Street, revised on-street parking arrangements, better signing and wayfinding, definition of the station forecourt as a destination and opportunities for planting.

A second phase of this scheme has been designed but has been put on hold subject to completion of this study, and finalisation of the Town Spine Brief. Details of this scheme are available from Hampshire County Council, and an artist's impression is included within the Neighbourhood Plan.

4.3. Traffic analysis

Methodology: Using Google Maps, an assessment of the typical peak AM and PM congestion was undertaken. Google Maps traffic function works by analysing Global Position Systems (GPS) transmitted to Google by mobile phone users calculating the speed of users along a particular length of road. Whilst it is recognised that not all car drivers will have suitable mobile phones to enable this data to be collected, as the data relates to speed, as opposed to volume, it is considered that the sample of mobile phone users will be statistically significant and suitable to provide a good picture of traffic congestion. The map is able to generate live traffic conditions, and typical conditions for days and times of the week. The main routes are highlighted using different colours to indicate the speed of traffic and the risk of delay. Routes indicated by a green line have traffic moving at normal road speeds (assumed to be the speed limit); routes coloured orange represent users experiencing slower traffic speeds; and those routes indicated as red or dark red indicate traffic delays - the darker the red, the slower the traffic is moving.

Analysis was carried for the weekday AM (7am-10am) and PM peaks¹ (4pm-7pm) for a typical weekday (Wednesday) and for a Saturday (10am-12 noon). This analysis that follows should be reviewed alongside the mapping for each of the AM and PM peaks which is included as Appendix 1.

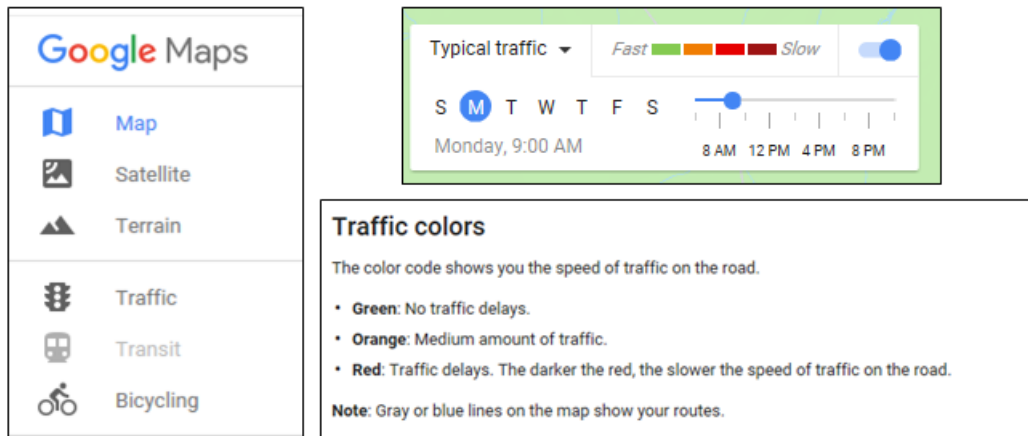


Figure 10: Google traffic description

Weekday

For the weekday AM peak the analysis showed that nowhere in the town experienced heavy traffic congestion, only green or orange levels of congestion were shown in the mapping. Starting at 0700, orange levels of traffic were visible on Station Road, College Street/Dragon Street, and the B2070 east of Tor Way. By 0800 more of Station Road had turned orange, mainly in an eastbound direction. Tor Way, Heath Road and the westbound carriageway of High Street/Swan Street also turned orange. By 0900 more of Swan Street was orange, as was the junction of Tor Way/College Street/Dragon Street/College Street. This remained the same at 1000 suggesting the traffic was not just associated with the morning commute. The mapping clearly shows light to moderate traffic conditions (green and orange) between 7am and 10am on weekdays.

In the weekday PM peak, traffic at 1600 is very similar to that seen at 1000, by 1700 traffic eases on the junction of Tor Way/College Street and further on College Street. Frenchmans Road is now showing some orange sections. By 1800 traffic eases on College Street/Dragon Street but increases on Frenchmans Road (still orange). 1900 shows essentially the same as 1800 suggesting the traffic is not just associated with the evening commute. The maps clearly show light to moderate traffic conditions (green and orange) between 1600 and 1900 on weekdays.

¹ AM and PM peaks as defined by Department for Transport's National Trip End Model Presentation Program, TEMPro

Saturday

At the weekend (Saturday) nowhere in the town experienced heavy (red) congestion, but many areas experienced moderate or orange congestion. Levels of congestion showed to be higher on the Saturday compared to the Wednesday which may reflect an increased number of visitors to the town centre. From 1000 Station Road is orange in the vicinity of the level crossing. The junction of College Street Tor Way is also orange. Heath Road eastbound, and High Street/Swan Street and Frenchmans Road westbound are all orange. 1100 shows a very similar picture. By 1200 all of College Street is orange, but traffic has eased on Frenchmans Road.

Summary

In conclusion, the analysis suggests that on both weekdays and Saturdays, traffic is generally low or moderate with no areas highlighted red, although the levels on Saturday are shown as slightly worse than the weekdays. The data therefore shows that typically traffic flows across the town without significant delays.

4.4. Public transport

Bus services

Given the compact nature of the Spine, bus services are reviewed in terms of inward travel, i.e. bringing visitors to the town, as opposed to travel by bus within the town. This is supportive of local ambitions to boost the status of the town as a gateway to the National Park.

The bus stops serving the Town Spine are located at the western end of Lavant Street, at the junction of Swan Street/The Square and immediately south of the junction of the High Street and Dragon Street. All bus stops are conveniently located for those visiting the town centre. At each location there is a bus shelter (partially enclosed) timetable information and seating. The bus shelters are maintained by Petersfield Town Council and in good condition. Figure 11 shows services and routes within Petersfield.

The following services are available;

- Stagecoach Service 37/38, Petersfield to Havant,
- Stagecoach Service 54, Petersfield to Chichester
- Stagecoach 737- South Downs College - Petersfield to Bordon, via Liss.
- Stagecoach Service 67 Petersfield to Winchester
- Stagecoach Service 91/92/93 Petersfield to Midhurst
- Wheel Drive Service 71, Petersfield to nearby Froxfield,
- Wheel Drive Service 94 Petersfield circular service, and Buriton.
- Xelabus Service X17, Petersfield to Bishops Waltham

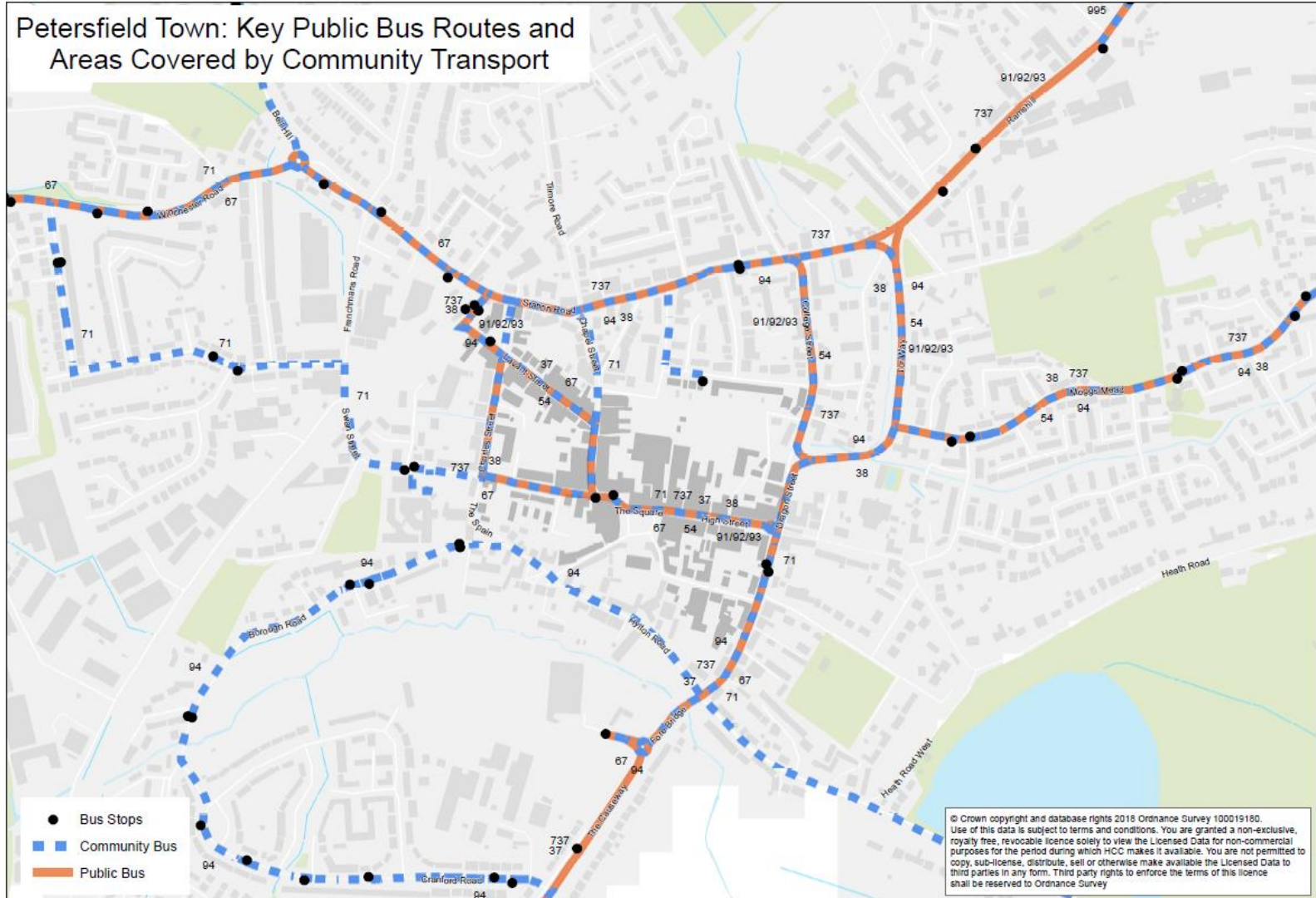


Figure 11: Bus services in Petersfield

National Express operates a coach service between Portsmouth and London, with two daily departures towards London Victoria, and one return.

Table 1 shows the level of service provided by the buses serving the centre of Petersfield. The table shows that there is a reasonable level of service for the core of the day, but limited evening services. Moreover, the table highlights that there are no bus services on Sunday.

Public services are those run by commercial operators (although some do receive council subsidies) and community services are those more akin to a dial-a-ride service which are often locally organised and can be volunteer led.

It should be noted that HCC has recently held a consultation on the future of subsidised public transport services. Subsidised services in Petersfield include the 38 Alton to Petersfield, 71 Froxfield to Petersfield and 94 Buriton to Petersfield. These services will form part of an upcoming review which will seek to make savings through changes to financial support for services of this type across the County.

Table 1: Bus Services serving the centre of Petersfield

Service	Route	Frequency of buses		
		Monday-Friday	Saturday	Sunday
37/737 Stagecoach	Petersfield – Havant	Runs at c.40 minute intervals from 6:45, then hourly from 09:30. Last service at 18:40. The 737 provides additional services on this route to serve the local colleges.	Runs at c.1 hour intervals beginning at 06:48 from Clanfield. Services run hourly from Petersfield from 08:20 until last service at 18:20.	No service
	Havant – Petersfield	Runs at c.20 minute intervals beginning at 06:00 from Waterlooville. Hourly services from Havant commence at 10:00. Last service at 18:05. The 737 provides additional services on this route to serve the local colleges.	Runs at c.1 hour intervals beginning at 07:10 until last service at 18:05.	No service
38 Stagecoach	Petersfield – Alton	Runs at c.2 hour intervals beginning at 07:03/07:23 from Petersfield. The last service is at 18:13.	No service	No service

	Alton – Petersfield	Runs at c.2 hour intervals beginning at 08:30 from Alton. The last service is at 17:40.	No service	No service
54 Stagecoach	Petersfield – Chichester	Services from Petersfield rail station begin at 09:30 and run at c.2.5 hour intervals until the last service at 16:45.	Same as weekday service.	No service
	Chichester – Petersfield	Runs at c.2 hour intervals beginning at 08:25, with the last service at 17:50.	Same as weekday service.	No service
67 Stagecoach	Winchester – Petersfield	Runs at c.2 hour intervals beginning at 07:07/07:29 from Alresford. Services from Winchester commence at 09:00. Last service at 17:50.	Runs at c. 3 hour intervals. First service at 09:00. Last service at 17:50.	No service
	Petersfield – Winchester	Runs at c.2 hour intervals beginning at 06:55. Last service at 18:15.	Runs at c. 3 hour intervals. First service at 07:25. Last service at 16:25.	No service
71 Wheel Drive	Warren Corner – Petersfield	Single service runs Wednesdays and Fridays at 09:12.	No service	No service
	Petersfield – Warren Corner	Single service runs Wednesdays and Fridays at 12:27.	No service	No service
91/92/93 Stagecoach	Petersfield – Midhurst	Runs at c. 90 minute intervals beginning at 07:07, and ending at 12:30. The service resumes at 14:30 with approximately hourly services. The last service is at 18:10.	Same as weekday service.	No service
	Midhurst – Petersfield	Runs at c. 90 minute intervals beginning at 07:55, and ending at 11:15. The service resumes at 14:00 with hourly services until 16:00. The last service is at 17:40.	Same as weekday service.	No service

94 Wheel Drive	Petersfield circular service (and Buriton)	Runs at c.2 hour intervals. First service at 08:10. Last service at 16:21	No service	No service
	Petersfield circular service (and Buriton)	Runs at c. 1 hour intervals. First service at 08:39. Last service at 16:49.	No service	No service
X17 Xelabus	Bishops Waltham – Petersfield	Two services run at 10:10 and 13:10 on Wednesdays only.	No service	No service
	Petersfield – Bishops Waltham	Two services run at 11:12 and 14:12 on Wednesdays only.	No service	No service

Community transport

Petersfield Voluntary Care Group provides services into Petersfield to enable those with less mobility or without public bus services to access services and facilities offered in the town. Use of the bus is by prior arrangement (bookings by phone). The minibus stops in the High Street outside Winton House, which provides administrative support for the services.

Rail services

The town has a rail station, which is situated to the west of the town centre on Lavant Street close to the junction with Station road. A level crossing operates on Station Road. There is also a pedestrian footbridge across the level crossing.

Petersfield Railway Station is popular with the local community and is attracting increasing passenger numbers. Site visits suggest that the car park is regularly full on weekdays from 9am, suggesting that it is well used by those commuting all day. The station is on the Portsmouth Harbour to Waterloo line, passing through Guildford, Woking and Clapham Junction on its route north. The station and service are operated by South Western Railway.

There is a station building comprising of a ticket office and waiting area and a pedestrian subway providing stepped access between both platforms. The station has a variety of facilities for passengers including parking for 304 vehicles, 6 cycle lockers and over 150 cycle stands. There is a bus stop outside the forecourt and a drop off/set down area for two vehicles outside the station building. In addition, there is a taxi rank serving the rail station with provision for 4-5 vehicles at any one time. Site visits suggest the taxi rank is frequently overused with taxis filling most of the available arrival area space.

The station is well used and passenger numbers are increasing year on year. In 2016/17 station users (entries and exits) were recorded as 1,432,978 up by just over

50,000 from 2015/16, and increasing from 854,438 in 1997/98 (Office of Rail & Road). Passenger numbers at the station from 1997 to 2017 are shown in Figure 12.

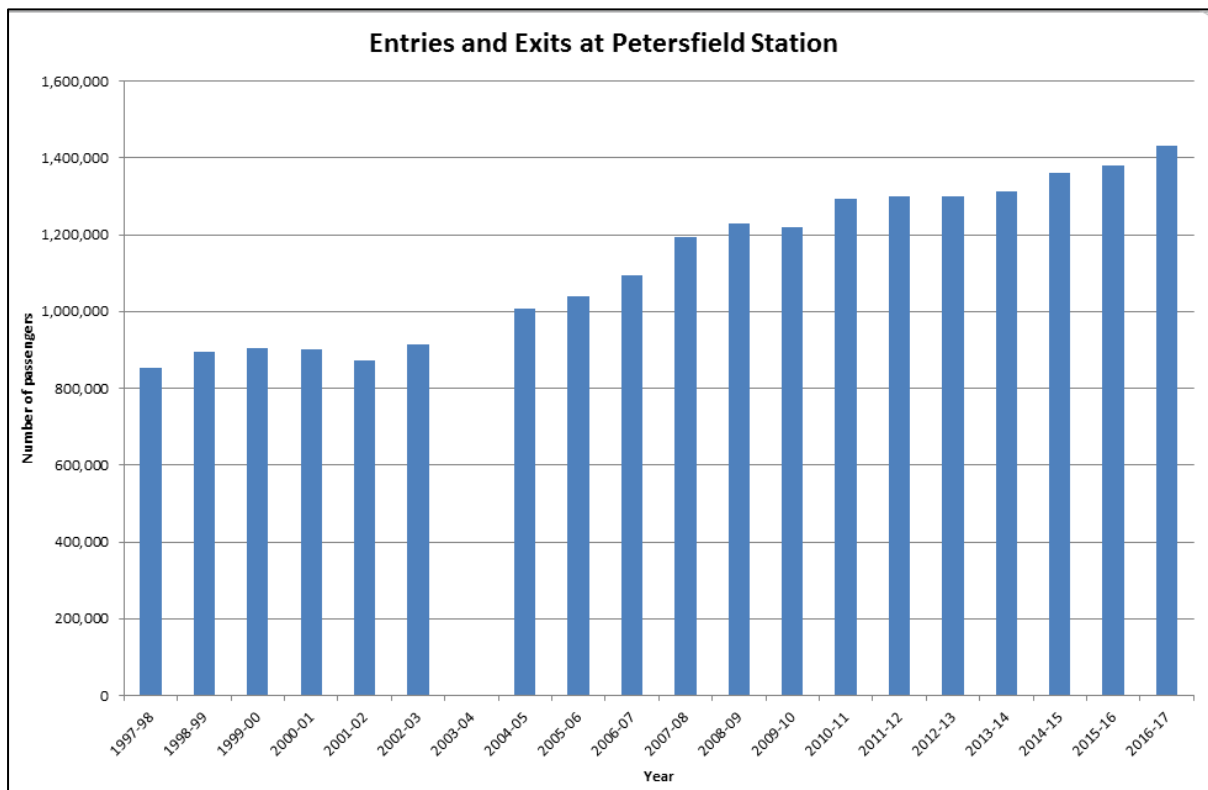


Figure 12: Petersfield Station usage 1997-2017

* Data for 2003/4 is missing from the data set.

Services from the station serve destinations towards Portsmouth, and London Waterloo.

Towards London in the AM peak hours (considered to be 0600-0800 to arrive before 0900) there are up to five services an hour. In the PM (1600-1800) there are up to four services an hour. The journey to London can take as little as 60 minutes, making the town attractive for London commuters.

Towards Portsmouth in the AM peak hours (considered to be 0700-0900 due to the shorter duration of train trip at c.30 minutes) there are up to three services and hour, and four in the PM peak hours (1600-1800).

At the weekends, three services an hour run towards London Waterloo, and three an hour towards Portsmouth for the majority of the day.

There is some signage and mapping at the station advertising the South Downs National Park. However, given the good level of train frequency at the station, and the proximity to the town centre and leisure routes, it is considered that the station could be further developed and enhanced to attract more visitors to Petersfield. A

focus on attracting more visitors by rail could also reduce demand for town centre parking.

Opportunities could include improved signage to the town from the station, enhanced visitor facilities, development of walking and cycling routes (maps and leaflets) from the station (e.g. in cooperation with the local Community Rail Partnership). In particular, more could be done to welcome tourists looking for onward walking and cycling experiences e.g. carriage of bikes on local buses, and development of a bike hub at the station with rental bikes (including electric bikes), pumps and tools for repair.

More could be done to advertise onward bus services from the station to key tourist destinations such as Queen Elizabeth Country park (buses run every hour from the station and the trip takes c.12 minutes). There are currently no bus services on Sundays; provision of Sunday services could encourage more visitors to the town and the National Park. These opportunities would require future liaison with South Western Railway who manage the train station and local services.

Level crossing movements and Frenchman's Road

The railway line crosses Station Road and is controlled by an at grade barrier. As above, Petersfield benefits from a high level of rail accessibility, and whilst this is very beneficial to those travelling by rail, the barrier movements regularly result in queuing traffic in both directions on Station Road throughout the day. Data provided by South Western Railway (who operate the station), included as Appendix 2 shows that the barrier is 'down' on average for three minutes at any one time during a typical day, with the longest barrier down time being 10 minutes. During the average weekday there are 106 barrier movements, equating to a down time of 5 hours and 21 minutes, or around 20% over a 24 hour period. During the average weekday between 7am and 7pm there are 70 barrier movements, equating to a downtime of 3 hours and 33 minutes, or just under 30% of the time over a 12 hour period.

Locally it is felt that rat-running via Frenchmans Road occurs to avoid the level crossing, particularly when cars approaching from the west can see that traffic is queued for the level crossing. A high level assessment of movements on Frenchmans Road in the weekday peak hour (0800-0900) was undertaken to see if there was any difference in average vehicle flows – comparing the time when the barrier is up, with the time when it is down to see if the evidence supported this assumption. The data showed very little difference in flows between up and down time and therefore does not support this assumption. It is recommended that a turning count and additional surveys are undertaken at this location to further assess the assumption, if this remains a concern. The comparison of data is included as Appendix 3.

South Western Railway are currently considering significant timetable changes as part of a long term strategy aimed at increasing the number of train services across

the Wessex Network. Should these changes proceed, it is likely that increased trains numbers will result in increased barrier downtime at Petersfield Station.

Taxis

There are taxi ranks located at the rail station entrance (Lavant Street), The Square and the High Street. The taxi rank at the station accommodates a total of 4-5 taxis, on site observations show that there are generally more than 4 taxis located here and that they do on occasion obstruct the entrance to the car park to the south of the rail station building. The Square has a single taxi space and the High Street has a further two spaces for taxis.

4.5. Walking and cycling

Petersfield is well served by long distance footways, The Shipwrights Way and Hangers Way bisect north-south through the town, both using in part the Town Spine. These routes connect the town to areas of countryside and onward to nearby villages and towns, providing recreational routes. There are a number of town centre footways and footpaths which provide connectivity and access, they are in the main surfaced and legible. Development to the south of the town is providing new shared routes into the town. Similarly, NCN route 22 overlaps the Shipwrights Way and passes through the town centre.

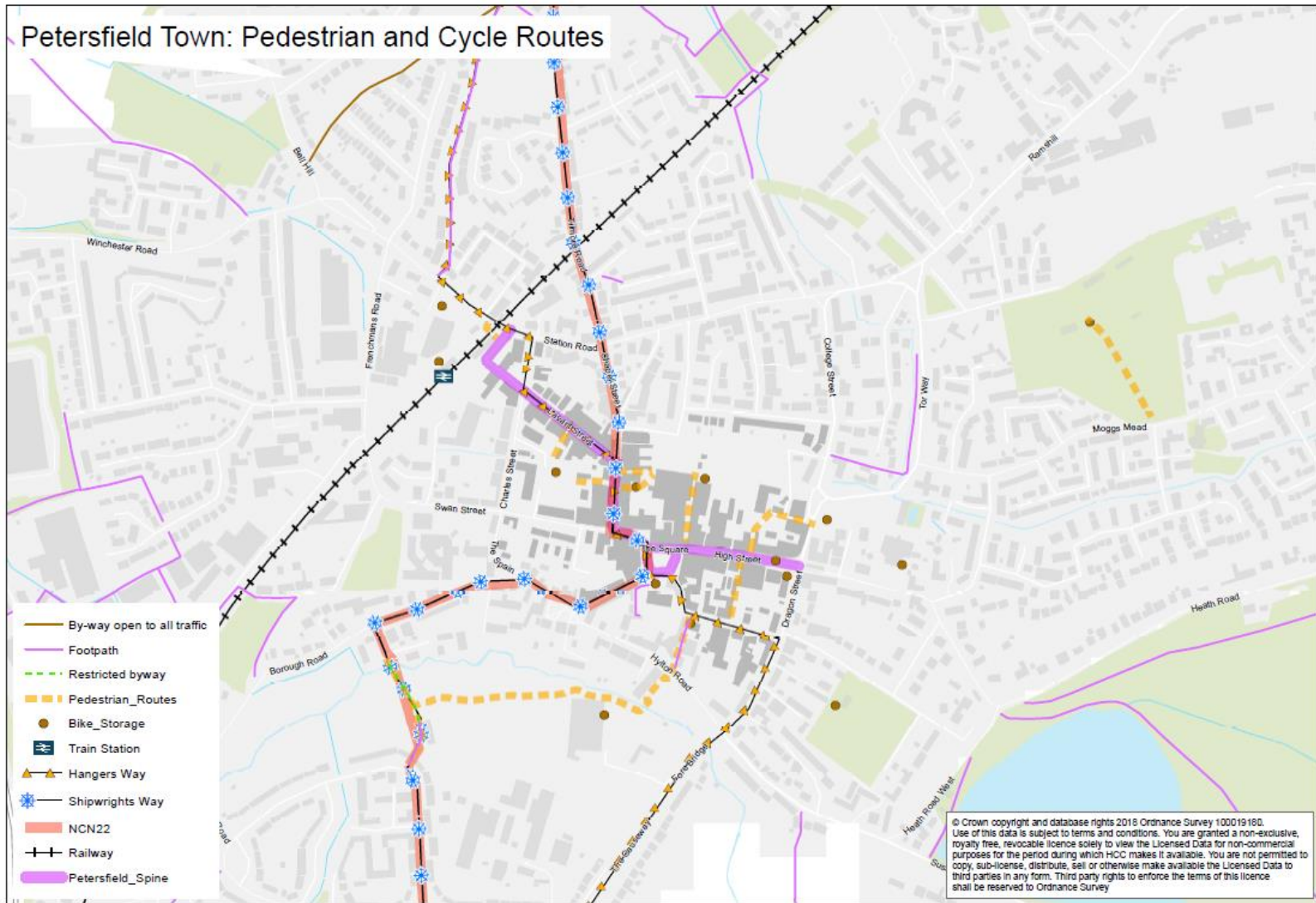


Figure 13 Walking and cycling routes in Petersfield

As part of this study, local groups were contacted and asked for any feedback on the provision of access to and within the town.

The local disability forum did not respond.

The Petersfield Society stated '*Whilst the quality of life for pedestrians in the town centre is felt to be good, traffic flows through the town centre are too high and the attitude of many drivers has yet to include being courteous to pedestrians and cyclists*'. They also raise concerns that the level crossing on Station Road was causing traffic delays and vehicle idling (linking this to poor air quality). Their full response is included as Appendix 4.

The Ramblers did not reply.

The local cycling group (part of Cycling UK, formally the CTC) stated that 'all present cycle routes within or around the town are intermittent with sections that could be considered either unsafe or uncomfortable to cycle. This must be addressed if people who don't consider cycling on the roads to be safe are to be converted'. They also felt that traffic speeds were too fast and traffic was too close to cyclists on roads with excessive on street parking and that this discouraged residents from cycling into town. They expressed the view that additional cycle storage was required in the town and that the junction of Hylton/Dragon/Sussex Rd junction was unsafe for cycling. The reasons cited were that the sight lines are inadequate for vehicle speeds and the cobbles are damaged, trapping cycle tyres and destabilising the bike. Their full comments are included as Appendix 5.

In summary, in relation to pedestrian and cycling environments it is felt that traffic speeds and flows are too high. There were no comments made about the footways/footpaths serving the town, but there were comments made about areas/locations for improvement within the town for cyclists. The comments about the provision of cycle infrastructure in the town support the recommendations in the Petersfield Neighbourhood Plan and are reflective of the evidence gathered in the cycle audit undertaken as part of this study.

5. Mode share and trip distribution

5.1. 2011 Census journey to work

This section sets out the data collected through the 2011 Census in response to the question “how do you usually travel to work?” (the only travel related question in the Census questionnaire). The question relates to the mode for the longest part of the trip e.g. if a trip involves walking a short distance and then taking a longer train journey, the train journey will be recorded by the walk will not. Data is available at a very local level of granularity but is only collected every ten years. Full results are included as Appendix 6.

Petersfield has a population of around 15,000 (2017) with 57% of the population aged 40 and over and 17.5% are aged 70 years and over. The population is spread over two middle super output areas (MSOAs), East Hampshire 012 covering the more urban centre of Petersfield, and East Hampshire 011 covering the wider area of Petersfield.

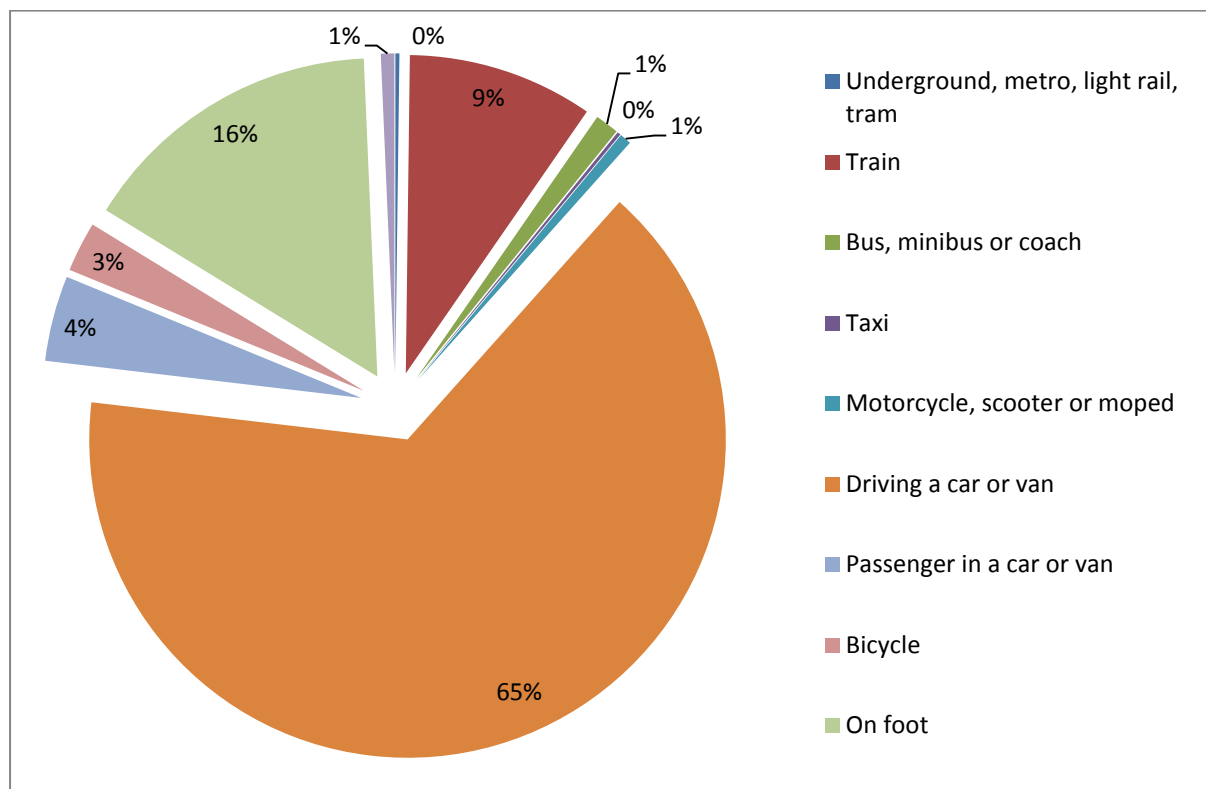


Figure 14: Modal split of journeys to work - MSOAs covering Petersfield (East Hampshire 011 and 012 combined)

Looking at the commuting patterns of the towns working population, there is dominant use of the car to get to work; however this is below the average for East Hampshire which is 74% (at an average of 65% across the two MSOAs covering Petersfield). The national average is 60%.

Train use is another area with notable differences. The national average is 6% but the Petersfield MSOAs show a level of 9% likely reflecting a high level of use of Petersfield Station for work trips. This reflects the fact that a number of residents are commuting by rail to London.

Walking to work is popular within the town; the 16% of journeys to work on foot and are all likely to be within the town. Although higher than the national and county averages, this is reflective of the town centre setting. Cycling levels were around the same as the national average.

Datashine Commute

Datashine Commute uses the 2011 Census data to visualise the commuting journeys people take by mode of transport. As the two most popular modes, the figures below show the main origins and destinations for travel by car (as driver) and train for the two Petersfield MSOAs. These figures are also included as Appendix 7.

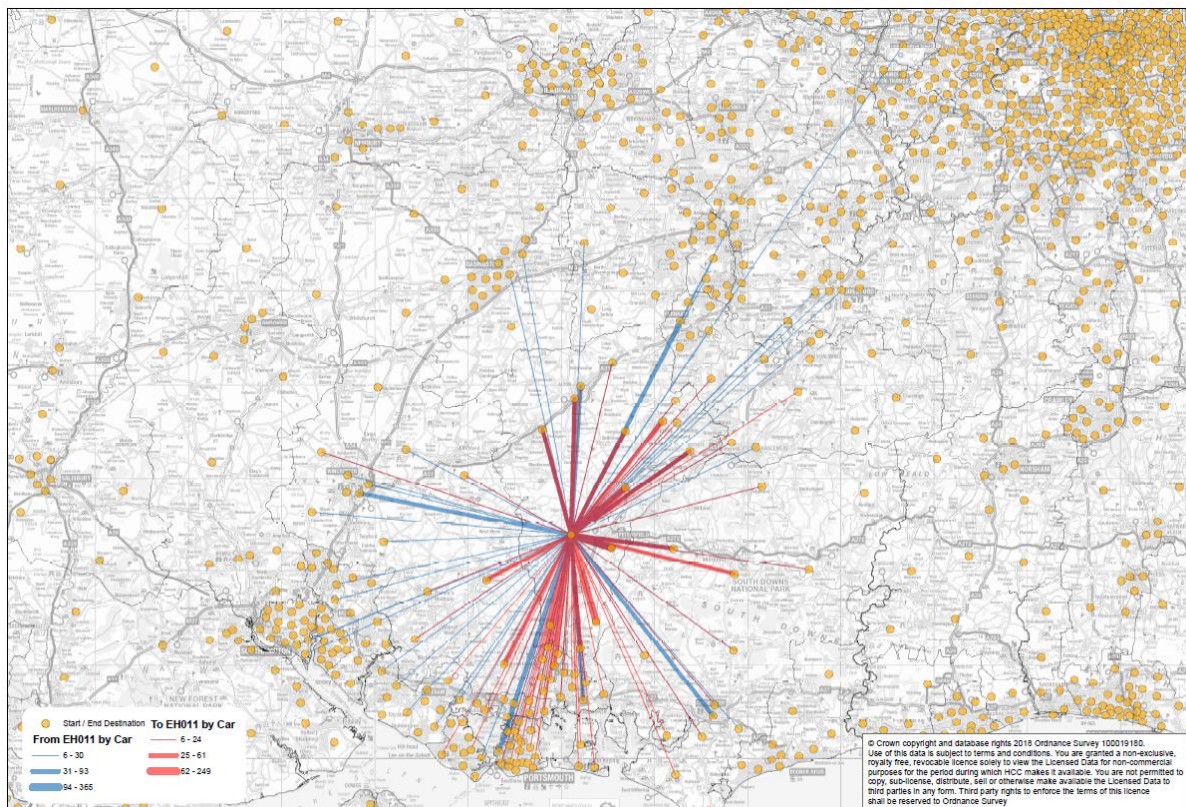


Figure 15: In and out commuting by car (as driver) MSOA East Hampshire 011

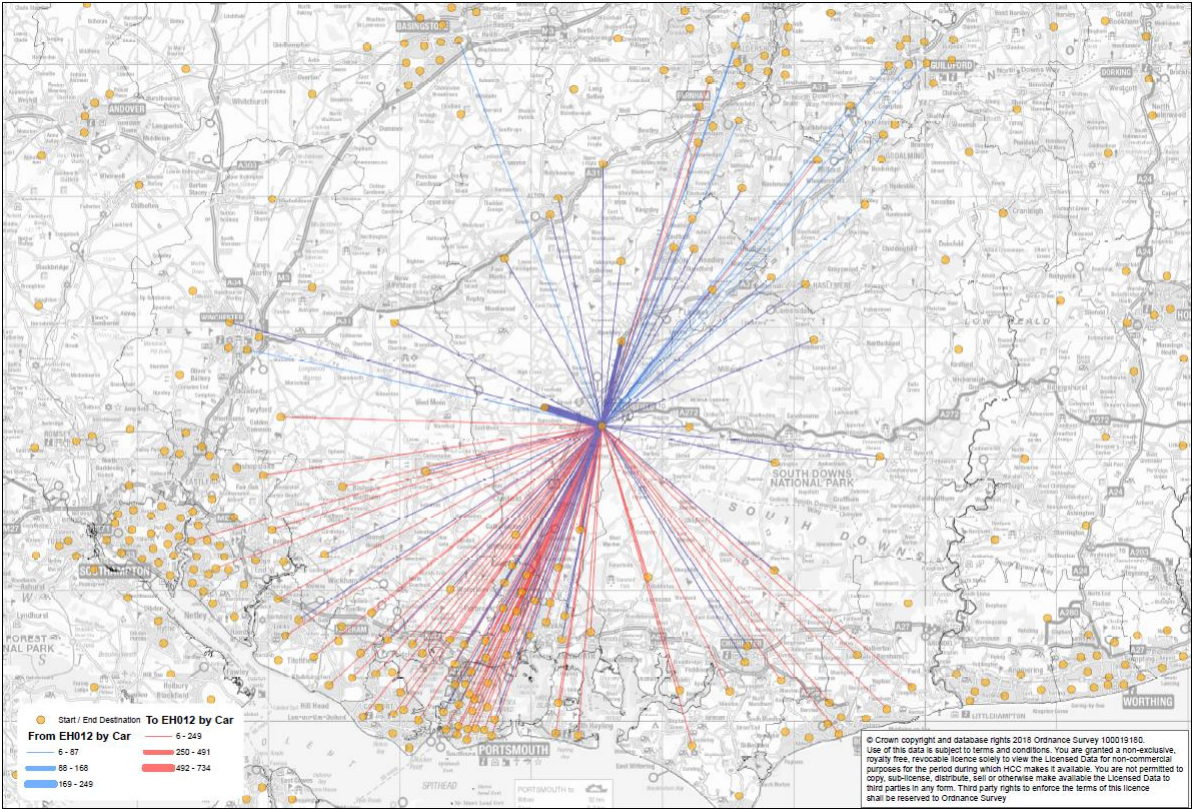


Figure 16: In and out commuting by car (as driver) MSOA East Hampshire 012

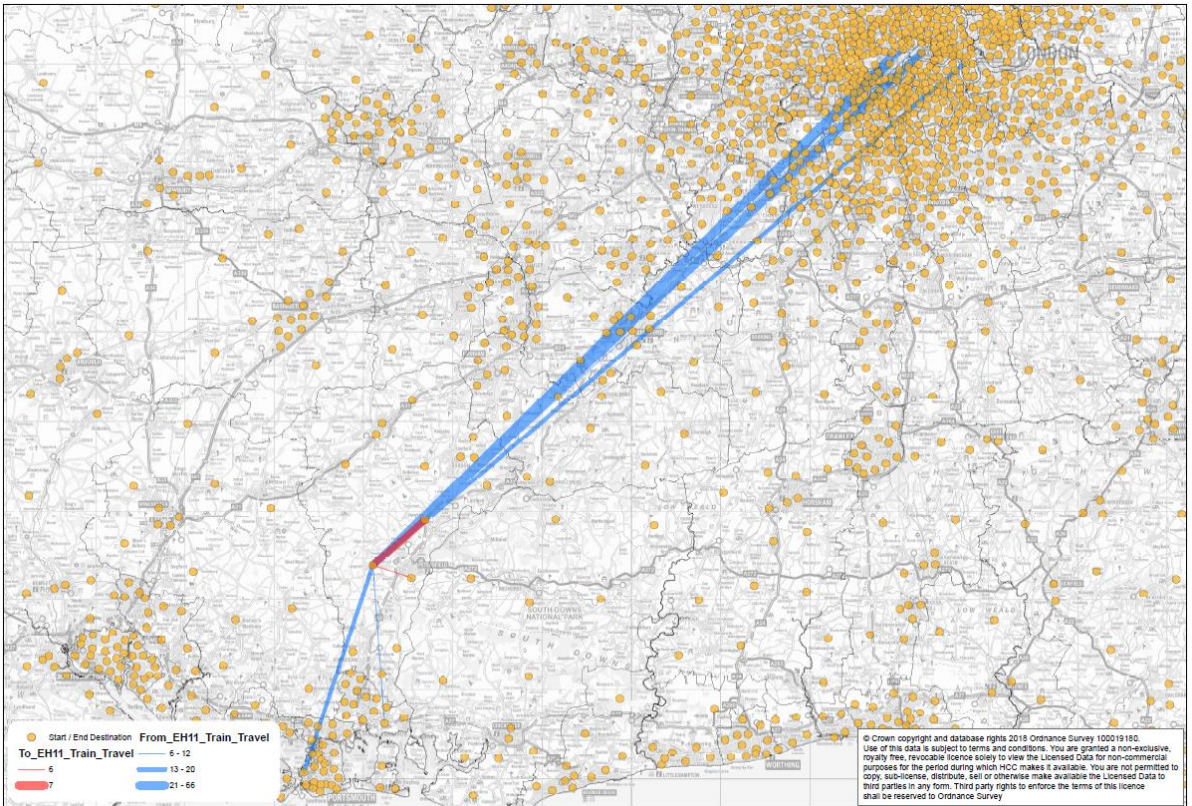


Figure 17: In and out commuting by train MSOA East Hampshire 011

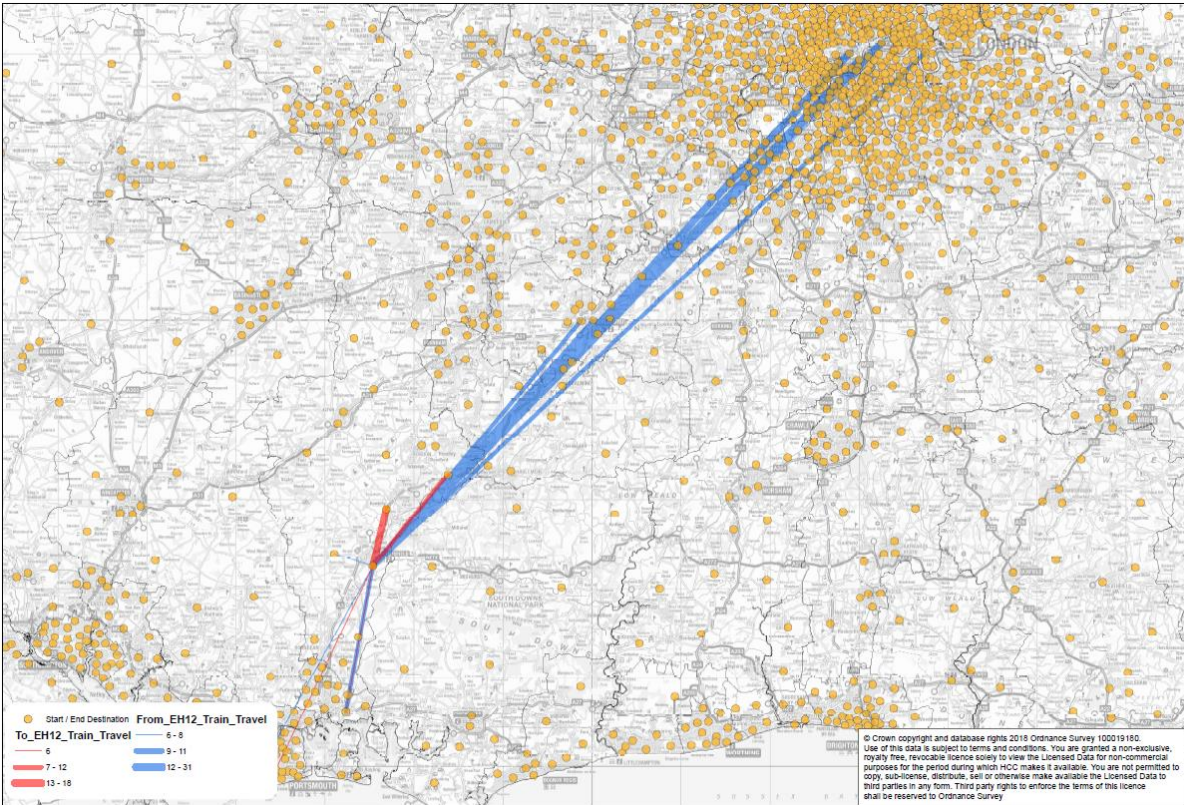


Figure 18: In and out commuting by train MSOA East Hampshire 012

Using this commuting data for all modes combined, an analysis of self containment has been calculated for the two MSOAs (Appendix 8). It suggests that the town has a low self containment level, of 31% which equates to 3,173 daily trips within the town for work purposes made by those living in the two MSOAs.

Inward commuting exceeds the outward commuting and together they equate to 10,903 trips daily in addition to those trips already made within the town, making a total of 14,810 daily work trips within the town by all modes. A total of 1,523 residents stated that they worked from home in 2011. This figure is likely to be on the increase, as national trends indicate more working from home.

Self containment (includes working from home)	31%
Outward Commuting	27%
Inward Commuting	36%
Other (working abroad/on installations)	5%
Total	100%

Figure 19: Summary of commuting patterns, all modes combined (source: consultant's analysis of Datashine Commute)

The assessment suggests that inward commuters travel from a variety of locations close to Petersfield, but also travel a greater distance from other destinations further south e.g. Waterlooville, Havant and Portsmouth.

Outward commuters travelled to a variety of locations including Portsmouth, Winchester, Chichester and Farnham.

Dominant rail destinations were Guildford, Haslemere, Woking and London to the north, and Havant and Portsmouth to the south.

It should be noted that the National Travel survey (which collects data every year, but at a much less detailed level of granularity) suggests that commuting constituted 15% of trips and 20% of all distance travelled nationally in 2016.

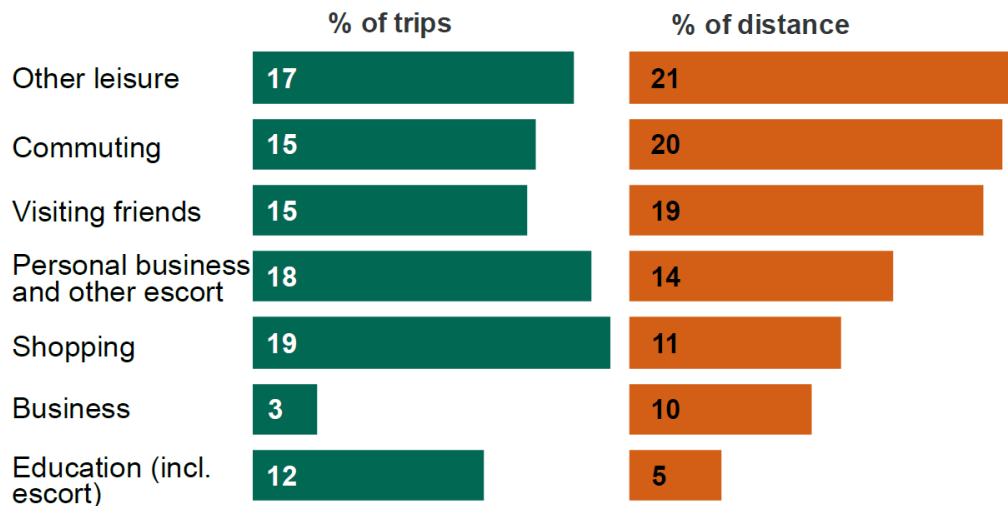


Figure 20 National Travel Survey 2016 – Purpose Share ²

2

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633077/national-travel-survey-2016.pdf

6. Planning

6.1. Planning Authority

The South Downs National Park Authority (SDNPA) is the planning authority with responsibility for Petersfield Town. At the time of writing, it has recently submitted its local plan for examination.

Petersfield has its own Neighbourhood Plan: The Petersfield Neighbourhood Plan 2013-2028, which was set out in accordance with the preceding Local Plan (Joint Core Strategy). It sets out a vision for the town that reflects the aspirations of the local community whilst being mindful of National Planning Guidance and guidance from the SDNPA. It sets out policies which it is hoped will shape the way in which the town will develop. It includes [local allocations](#) for a variety of uses, including residential developments shown in Figure 21. The Neighbourhood Plan was developed and ratified in accordance with the Neighbourhood Planning Regulations 2012. More details can be seen in Section 3.4.

Ref.		no. of dwellings	
H1	Land at Causeway Farm	Up to 200	
H2	Land north of Buckmore Farm and west of Bell Hill	101	Self or Custom Build only (see HP7)
H3	Penns Field	89	
H4	Land south of Larcombe Road	71	
H5	Land south east of the Causeway	71	Planning permission already granted for 71 dwellings
H6	Town centre redevelopment opportunities	58	See section 11.2 for further detail
H7	Land west of the Causeway	64	
H8	Land south of Durford Road	Minimum of 48	Housing for an ageing population (see HP3)
H9	Hampshire County Council Depot off Paddock Way	42	
H10	Existing Community Centre site	10	Only viable once a new Community Centre has been provided elsewhere
H11	Land north of Reservoir Lane	11	Self or Custom Build only (see HP7)
H12	Land at Bulmer House site off Ramshill	40	Housing for an ageing population (see HP3)
Total		805	

Figure 21 residential allocations from Petersfield Neighbourhood Plan

6.2. Highway Authority

Hampshire County Council is the highway authority for Petersfield and is a statutory consultee on transport matters for planning applications.

Any revisions to the highway network or to the management of traffic would either need to be delivered or approved by Hampshire County Council.

6.3. Recent development applications

Table 2 sets out a summary of recent planning applications in the local area and any relevant transport implications associated with those applications. Those implications relevant to the Town Spine are shown in red.

Development	App. Number	Dwellings	Contribution	Associated projects
Causeway Farm, Petersfield	SDNP/15/05258/F UL	200	£700,000	<ul style="list-style-type: none"> - Junction improvements, including pedestrian and cycle measures at the Sussex Road/Hylton Road/Dragon Street crossroads. - Improvements to Lavant Street - Phase 2 Charles Street to Chapel Street including environmental and footway improvements. - Improve cycle and pedestrian links from the site to Petersfield town centre destinations including the High Street, Petersfield Railway Station and to link to existing network with the South Downs National Park. - Traffic calming at 6 locations in Petersfield: Pulens Lane/London Road junction, Pulens Lane/Durford Road, Moggs Mead/Tor Way junctions, Station Road, Chapel Street and High Street and associated approach roads. - Larger pedestrian focused space for the whole town square area with possible vehicular access restrictions.
Penns Field, Petersfield	SDNP/15/06484/F UL	85	£300,670	<ul style="list-style-type: none"> - Traffic calming Pulens Lane. - Traffic calming measures on Heathfield Road and Barnfield Road - Petersfield to Midhurst cycle route. - Improvements to junction of Pulens Lane with London Road.
Larcombe Road, Petersfield	SDNP/15/01296/F UL	79	£298,855	<ul style="list-style-type: none"> - Improved access to the site including cycle lanes along Borough Road. Widening and upgrading the footpath from Drum Court to Borough Hill. - Improvements to junction of Pulens Lane with London Road. - Improvements to the cycle lanes along the B2070 Causeway to link on to the NCN22. - A scheme of localised and minor traffic measures within Larcombe Road.
Land South of Causeway, Petersfield	SDNP/13/04617/F UL	71	£329,000	<ul style="list-style-type: none"> - Improvements to Petersfield Railway Station. - Pedestrian crossing across Dragon Street/Causeway Junction. - Pedestrian crossing to service Petersfield School.

Table 2 Summary of recent development applications

7. Traffic regulation and deliveries

7.1. Traffic restrictions

The current traffic regulation orders covering Petersfield Town are set out in the East Hampshire Parking Consolidation Order 2012 (shared with Hampshire Services by HCC's Traffic Management Team). There have been amendments made to this original order in years 2013, 2015 and 2016 to reflect subsequent changes to control and regulation within the town. The traffic management agency agreement with East Hampshire District Council commenced in April 2016 and a review of the Traffic Management Policy introduced in summer 2016. Liaison with EHDC has been undertaken to ensure the most recent data is included within this report.

Traffic management orders attempt to control and regulate car parking, stopping, loading and unloading and regulating traffic speeds and movements in the town. The Town Spine has on-street parking restrictions (designated parking bays with free parking for half an hour, and single yellow lines) in Lavant and Chapel Street and a parking restricted zone in The Square and High Street. There are designated loading bays, provision made for taxis and public transport (bus stops) at Swan Street/The Square and High Street. The speed limits are set at 30mph in Lavant and Chapel Street and 20mph through The Square and along the High Street.

Figure 22 shows the traffic management and regulations in place in Petersfield.

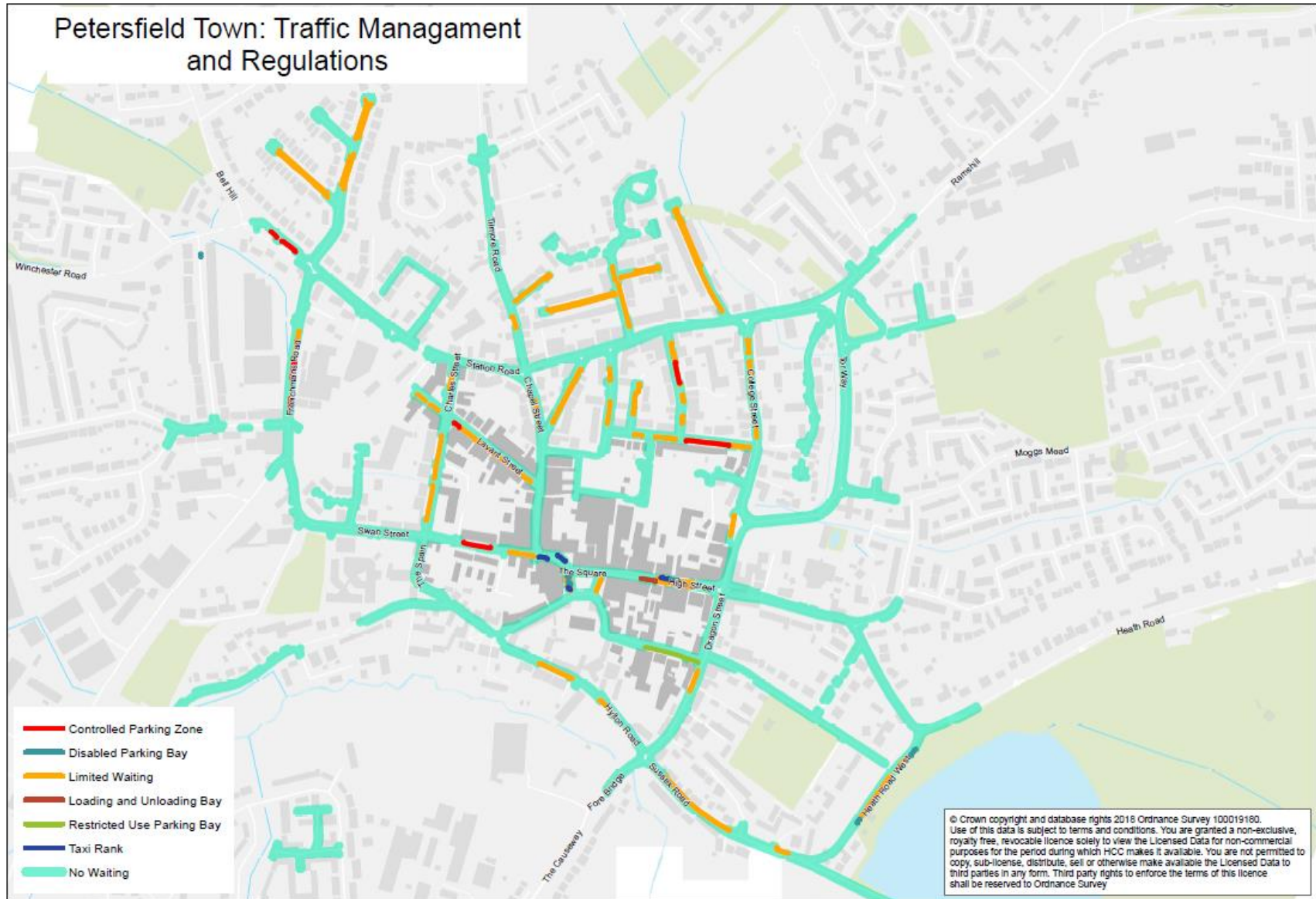


Figure 22 Traffic management and regulations in Petersfield

There are also residents parking zones in place in around the rail station and other areas close to the Town Spine. The traffic regulations are enforced by civil enforcement officers from East Hants District Council, who issue penalty charge notices (PCNs) issued.

7.2. Business views on parking and deliveries

In March 2018 all business located along the Town Spine were written to and asked to complete a short questionnaire. The questionnaire sought to establish details concerning deliveries, loading, access and car parking for each business. The responses to the questionnaire were used to determine which businesses needed access for deliveries from the highway and what requirements this may place on the future design of the Town Spine.

A total of 141 businesses were written to; the response rate by street varied, with rates between 30 and 55% which is considered to be a good response rate. This is encouraging and suggests that businesses would be keen to engage as stakeholders in the future design of the Town Spine. A summary of the responses is set out in Table 3 below, a copy of the questionnaire and a more detailed summary table are included as Appendix 9.

Location	Summary of responses
Lavant Street	A total of 14 responses were received from a possible 33 businesses in Lavant Street, providing a 42% response rate. Almost all businesses receive deliveries from the road in front of their premises. Most deliveries are made between 9-5.30pm on a daily basis. Visitors have a preference for morning visits and use Swan Street car park.
Chapel Street	Of the 36 businesses in Chapel Street a total of 20 replied to the questionnaire, giving a 55% response rate. Most businesses who replied had deliveries from the street between 9am and 5.30pm on a weekly basis. Most do not have rear car parking. Responses reported that the majority of customers favour lunchtime for shopping and use the Central car park out of preference.
The Square	Of the 28 businesses in The Square a total of 9 replied to the questionnaire, giving a 32% response rate. The majority of premises take deliveries from the street, although a number did have rear access. Most deliveries take place during the day between 9-5.30pm. Customers have a tendency to use the High Street or The Square to park and lunchtime is the most popular time to visit
High Street	Of the 31 businesses in the High Street a total of 12 replied to the questionnaire, giving a response rate of 38%. Most deliveries occur from the street in front of businesses. Most deliveries are by small vans/lorries taking place on a daily basis. Most customers use the Central car park and make most visits during the morning and lunchtime.

Table 3 Summary of business surveys

7.3. Summary

A review of parking regulations has found that there are a number of different parking restrictions in place around the Town Spine.

Results of the business survey suggested that a large number of deliveries are made on-street rather than via rear access to properties, and that many businesses do not have rear access.

Furthermore, site visits observed that HGVs and smaller vans and lorries frequently park in areas other than designated bays e.g. at eastern end of High Street, and on-street, at The Square. For example, during one site visit on a Wednesday (market day) an HGV delivery blocked the carriageway at The Square for c. 20 minutes forcing other drivers to drive on the pedestrianised area to pass. It is therefore essential that deliveries and suitable on-street facilities are a key consideration of the future design.

Restricting deliveries to set time frames may not be suitable for the types of businesses in Petersfield, and it is recommended that further consultation would be required over future proposals to ensure that unsuitable HGV and smaller delivery vehicle parking does not continue in the future.

7.4. Recommendations

- Ensure on-street deliveries are suitably catered for in future design to reduce current levels of inappropriate parking
- Engage shop owners as stakeholders in future design

8. Personal Injury Collisions

8.1. Collision Analysis

Reported Personal Injury Collision (PIC) data has been obtained from Hampshire Constabulary for the five year period 01.02.2013 to 31.01.2018 (60 months). The data is taken from the national STATS19 database; a comprehensive record of all transport related incidents that were reported to the police and where an injury or fatality has occurred. Figure 23 shows the geographical extent of the data survey. A full report and plot are included as Appendix 10.

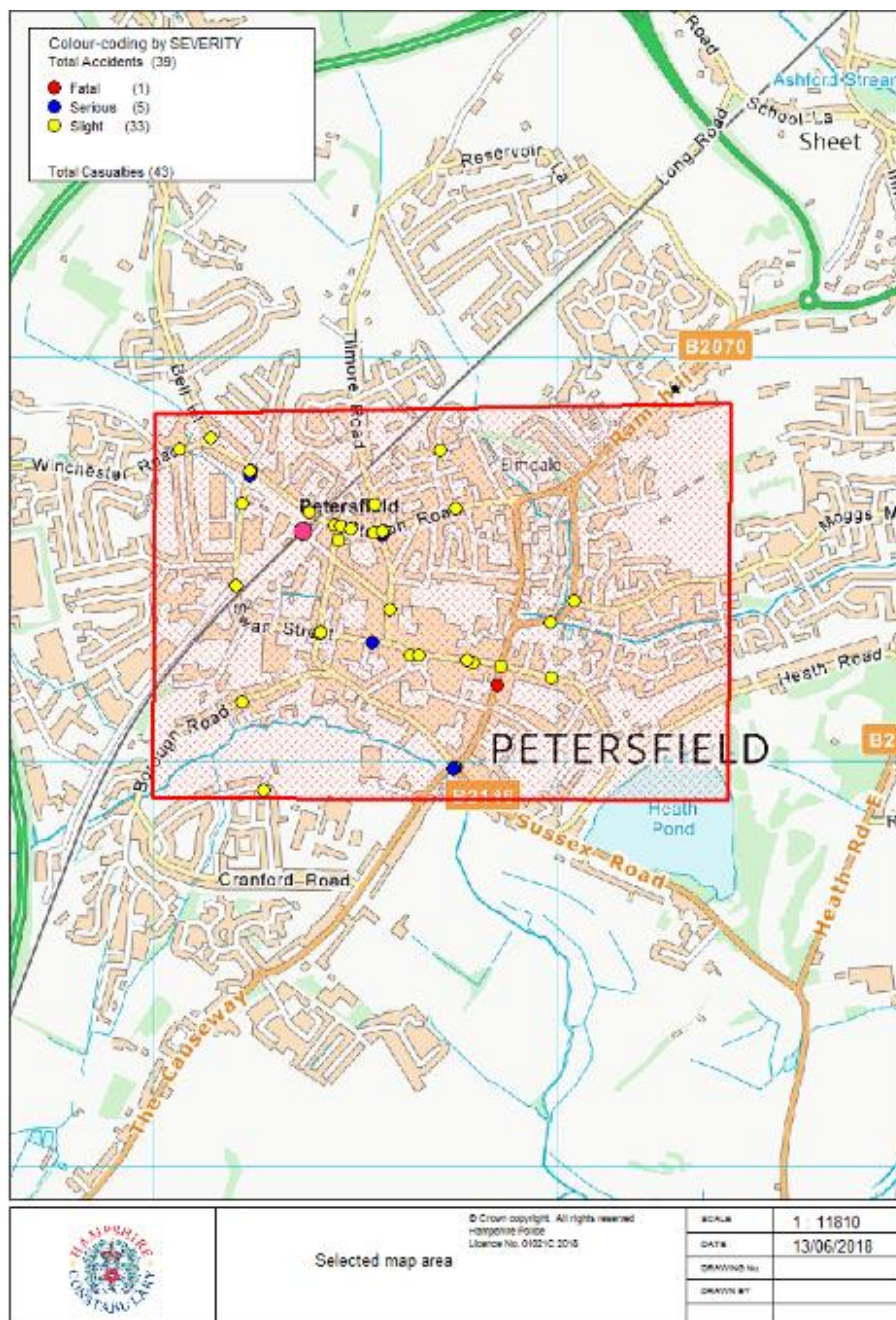


Figure 23 – Plot of Petersfield PIC Data (red box)

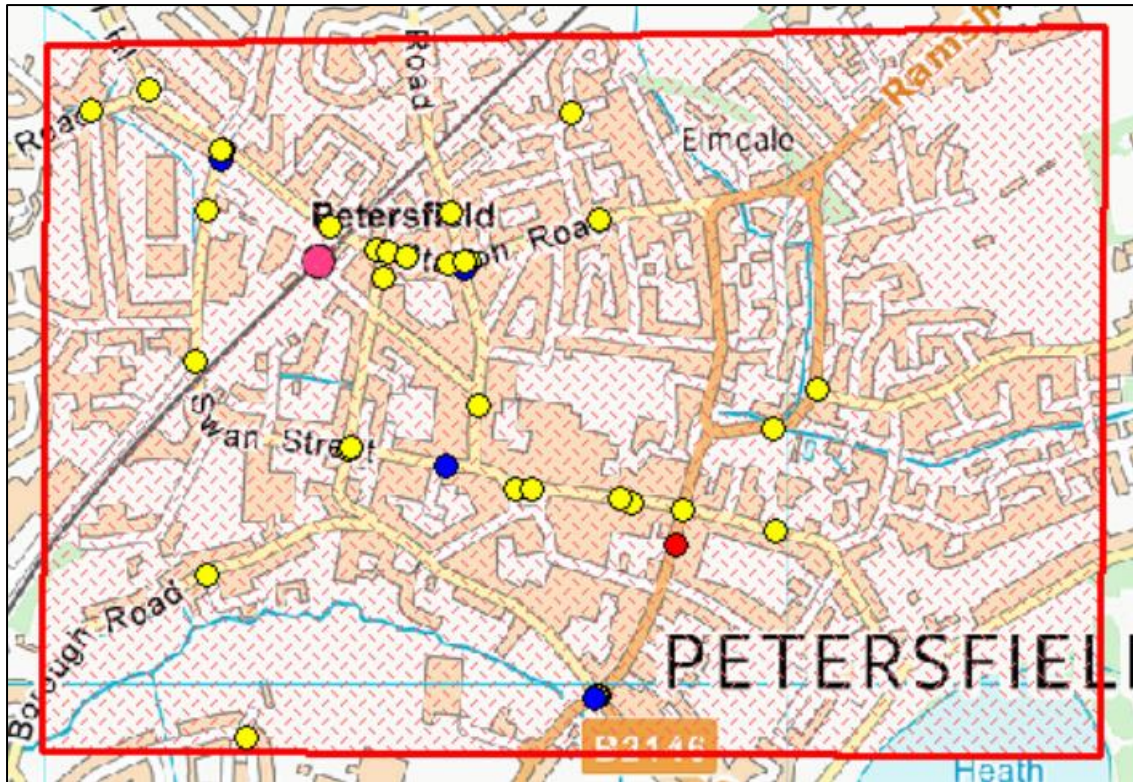


Figure 24 Zoomed plot of PIC Data

The data shows a total of 39 injury collisions, of which 33 were slight, 5 were serious, and 1 was fatal. The table below shows a breakdown of these collisions by year, no injury collisions were recorded in January 2018.

Severity of Injury	2013	2014	2015	2016	2017	Total
Fatal	0	0	0	1	0	1
Serious	1	1	1	0	2	5
Slight	5	3	5	8	12	33
Grand Total	6	4	6	9	14	39

Table 4 Severity of Incidents by year

Table 5 shows the breakdown of these casualties by mode. People travelling in cars represent the highest proportion of casualties, followed by cyclists, pedestrians and motorcycle users. Proportionately car occupant casualties had a lower level of severity of incident than the other modes, likely due to the low speed environment and the protection offered by the vehicle, compared to pedestrians and cyclists involved in collisions.

Mode of Transport	Fatal	Serious	Slight	Total	% of Total Casualties
Car	0	1	16	17	40%
Cycle	0	3	7	10	23%
Pedestrians	1	1	6	8	19%
Motorcycle	0	0	6	6	14%
Mobility Scooter	0	0	1	1	2%
Van	0	0	1	1	2%
Total	1	5	37	43	100%

Table 5 Casualties by Mode of Transport

The one fatal pedestrian incident occurred on Dragon Street in 2016 and involved a pedestrian hit by a lorry at a pedestrian crossing. Recorded contributory factors were “vehicle blind spot” (stated as very likely) and “pedestrian failed to judge the vehicle’s path or speed” (stated as possible). Following the collision safety improvements have been introduced including changing the crossing from a “pelican” to a “puffin” to improve sight lines, and raising crowns on trees in this location.

The one serious pedestrian casualty occurred in hours of darkness on Swan Street whereby a pedestrian was hit by a car. The full details are not included in the police record.

The three serious cycle casualties involved collisions between drivers and cyclists at three separate junctions outside of the Town Spine (Station Road/Chapel Street, Station Road/Frenchmans Road and Sussex Road/B2070) with no overriding pattern or contributory factor.

Hampshire County Council’s Safety Engineering Team was contacted for details of any planned safety schemes in Petersfield, and to provide comment on the safety record in general. They commented that they had previously reviewed the casualties around Station Road (where a cluster can be seen on the casualty plot) but had found no evidence of a pattern that would be remedied by engineering measures. They also added that Hampshire’s standard threshold for identification of casualty clusters was generally as follows:

“four or more injury accidents at a single location over a five year period, which is reduced to three where accidents with a similar pattern have occurred or serious injuries are involved. ‘Route studies’ are also considered where injury accident patterns exist over longer lengths of road.”

The Safety Engineering Team advised that there is one planned safety scheme for the financial year 2019/20 at B2070 Rams Hill/Hogarth Close Petersfield (opposite the garage), which is outside of this study area, and that no other schemes are currently planned in the town.

The casualty data did not suggest any patterns of casualties that could be easily remedied with engineering solutions.

8.2. Summary

A total of 39 injury collisions was recorded over the five year period. Casualties were highest amongst vehicles occupants, followed by cyclists, pedestrians and motorcyclists. There was no overriding pattern of casualties identified, and Hampshire's Safety Engineering team has not identified any locations within the Town Spine that would be prioritised for engineering solutions.

Overall it is expected that the "Town Spine" aims of reducing the volume of vehicles should have a positive impact on the level of collisions along the Spine. However, it should be noted that these aims could result in increased traffic flow along Station Road and College Street/Dragon Street, and that these roads, particularly the junctions with the Spine should be considered as part of any improvement works.

8.3. Recommendations

- Ensure that increased flows, arising from diverted traffic, on routes external to the Town Spine (particularly Station Road and College Street/Dragon Street) are monitored before and after delivery of any future scheme
- Review and monitor casualty levels on the Town Spine and external routes as part of evaluation of any future scheme

9. Parking

9.1. Car parks

In order to achieve the enhanced town centre environment set out in the Neighbourhood Plan, management of parking will be critical, particularly in relation to reducing the current level of on-street parking to increase space for pedestrian and cycle movements. Car parking, particularly parking management, provision and cost, is perceived as a problem in the town by the community and reported as such in the [Neighbourhood Plan](#) (Section 5.2, page 40).

The rest of this section sets out the local parking policy, and a review of the existing car parks and on-street parking, before assessing capacity and duration of stay at car parks in public use to determine if a reduction of on-street parking on the Town Spine could be catered for in these locations. Following this, car parks in ownership of the Town Council are reviewed to assess the current levels of capacity and suggest future uses at these locations. Finally, a review of cycle parking throughout the town is included.

Local parking policy

The current Town Centre Parking Strategy was established in 2017 by EHDC. A summary of the key points of the adopted strategy is set out below:

- Proposals for increased parking charges in town centre car parks which have now been implemented
- Parking charges were noted as helping to curb unnecessary car use where there is adequate public transport or walking or cycling are realistic alternatives, for example, in town centres.
- Charges and restrictions can reflect the value of parking spaces, encouraging all but short-term parking to take place in nearby off-street car parks where available. This implies a hierarchy of charges so that charges at a prime parking space in a busy town centre would normally be higher than those in more distant off-street car parks.
- The cost of a season ticket for town centre car parks is increased to be competitive with the train stations and to encourage use of the peripheral car parks and increase capacity in town centre car parks which are experiencing capacity pressure.
- The cost of the 6 and 12 month season tickets in EHDC peripheral car parks was reduced to encourage use of these car parks and increase capacity in town centre car parks which are experiencing capacity pressure.

- Residents who live in close proximity to one of the Council operated car parks and have no off-street parking are currently entitled to a 50% discount on the 6 and 12 month season ticket price. It is proposed that this discount be reduced by 10% annually resulting in no discount being provided as of 2021/2022. The residents discount is offered to those residents who have no off street parking and have proof of residency within the area in which they are applying for a permit.

Parking signage strategy

The Town Centre Vision seeks reduced vehicle flows on the Town Spine. One way of support this aim would be the use of appropriate directional signage pointing drivers towards car parks that do not require them to drive through the centre of town. To compare the town's existing signage strategy to this aim, a review was undertaken.

From the outskirts of the town towards the centre, parking signage is provided at the following three locations:

- Winchester Road,
- B2070 Ramshill and
- B2070 The Causeway

The large sign (as shown in Figure 25) indicates car parking locations and maximum capacity of each to drivers entering the town. The same sign is displayed in each location, the sign indicates parking provision in the 'Town Centre' (referring to Central Car park), Swan Street and Festival Hall. No other car parks are indicated. The current signage encourages all vehicles to enter the town centre which is incompatible with the aims of the Town Centre Vision.

Figure 25 Parking signage



It was noted that there is no signage from Winchester Road to direct vehicles to the Station car park (N). Smaller signage to direct vehicles to the car park on the south side is in place.

To meet the aims of the Town Centre Vision (reduced traffic flow on the Spine) it is recommended that the directional signs on the approaches to the town are changed to encourage drivers not travel through the Town Spine, unless this is their end destination. Drivers should be encouraged to use the Causeway car park when travelling from the south and when approaching from the east they should be encouraged to use Festival Hall. Access to Festival Hall is currently signed via Station Road, Tor Way and then right from College Street, arguably requiring drivers drive through the town; a new access could also be investigated (e.g. including land ownership searches) from Tor Way as an entry only point to facilitate an easy and legible route (as suggested in the Petersfield Neighbourhood Plan pg. 38). The same route could be signed when approaching from the west using Ramshill (B2070).

9.2. On-street parking

Regulations

In 2012 EHDC took responsibility for parking enforcement under Civil Parking Enforcement powers granted by the Department for Transport.

The introduction of the Traffic Management Agency in April 2016 ensures that the Traffic Regulation Orders (TROs) covering the town are managed by EHDC Traffic Management Team.

The TROs seek to regulate the ability for vehicles to stop and or park on the highway and introduce specific waiting restrictions, loading and the unloading of goods and weight restrictions. On-street parking in the town centre is limited to 30 minutes, no return within 1 hour along the following streets: High Street, The Square, Lavant Street, Swan Street, Chapel Street, Charles Street and Sheep Street. Parking is only permitted in marked bays. Bollards also seek to control parking on the footways of Lavant Street, Chapel Street, The Square, the High Street and Charles Street.

Other areas within the town have parking restricted to: 1 hour (Charles Street), 2 hours (Frenchmans Street) or up to 3 hours (College Street). Hylton Road and St Peter's Road have some unrestricted parking.

Parking is further controlled around residential streets within the town by the use of residents parking zones; residents with no provision for off street parking can apply for a permit to park in a street in the vicinity of their property. Permits are £30 for the first permit and £50 for a second permit (where applicable).

Consideration by EHDC was given to the introduction of payment for on street parking in parts of Petersfield but it was recommended that this is not introduced as any income that is generated from on street parking would be payable to Hampshire County Council as the Highway Authority.

Current on-street parking capacity on the Town Spine

To assess the current level of on-street parking on the Town Spine, parking beat surveys were undertaken on Wednesday 9th May (a market day, likely to be the busiest weekday) and Saturday 12th May. Counts were undertaken every half an hour. Full details are included as Appendix 11.

The maximum legal on-street parking capacity on the Spine was observed at 76 spaces included one disabled space.

During one site visit the number of Blue Badge holders parking along the Town Spine over one walk through of the whole route was noted and recorded. This was undertaken at midday on a Wednesday; in total 12 blue badges were recorded which far exceeds the number of disabled parking spaces. The most popular location was The Square. This high use, compared with the number of available bays, suggests that disabled parking provision should be reviewed in any new design. Results of the parking beat surveys are detailed below.

Wednesday

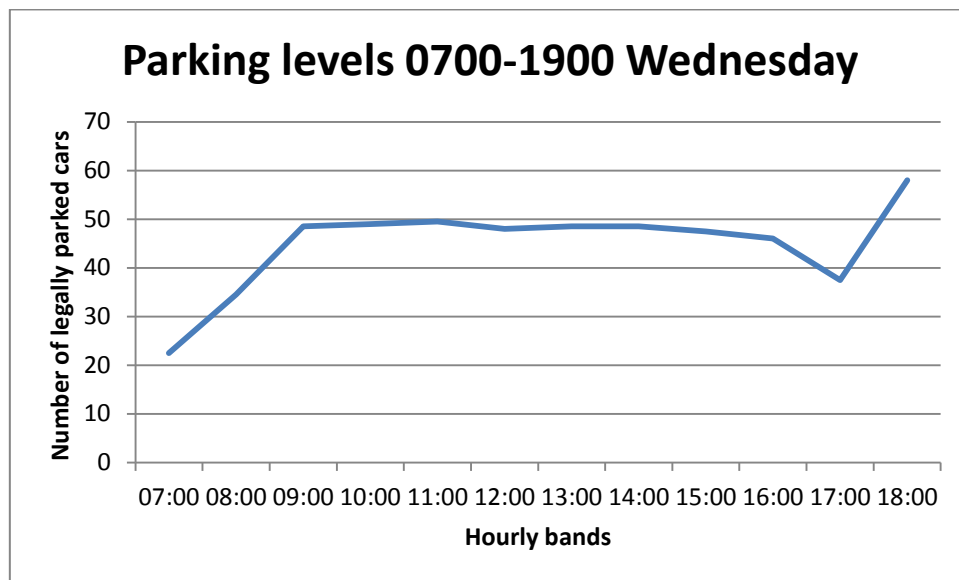


Figure 26 Wednesday on-street parking across the day

Results from the Wednesday showed that after an initial increase in on-street parking between 0700-0900, parking levels remain relatively constant until 1700 when they dip, before increasing to their maximum level in the band covering 1800-1900. It should be noted that the parking restrictions along High Street/The Square are enforceable from 0800-1800, therefore, higher parking levels after 1800 may

reflect that vehicles can stay longer after this time. The maximum number of legally parked vehicles in any one period on the Wednesday was 59. Illegal and inconsiderate parking was also observed. The maximum number of illegally parked cars in any one period was 18. The following parking behaviours were observed by street:

	Lavant St	Chapel St	The Square	High Street	Total
Double yellow lines				3	3
Single yellow line	36	46	1	1	84
Dropped curb	2	1	1	2	6
Bus stop			1		1
On verge		1	1		2
Disabled bay				1	1
Loading bay				11	11
Restricted parking zone High St/The Square			19	5	24
Totals	38	48	35	20	141

Table 6: Illegal and inconsiderate parking observed over 12 hour Wednesday survey

Chapel Street experienced the highest levels of illegal or inconsiderate parking, with 48 vehicles over the day. This is likely to reflect responses from business surveys showing that deliveries are made on-street in this location although there are no loading bays in this location. High Street experienced the lowest level of this type of parking with 20 occurrences.

The predominant types of illegal and inconsiderate parking across the Spine were “parking on single yellow lines” (84) and “parking in restricted areas on High St/The Square” (24). 11 vehicles were also recorded as illegally parked in loading bays along High Street.

Saturday

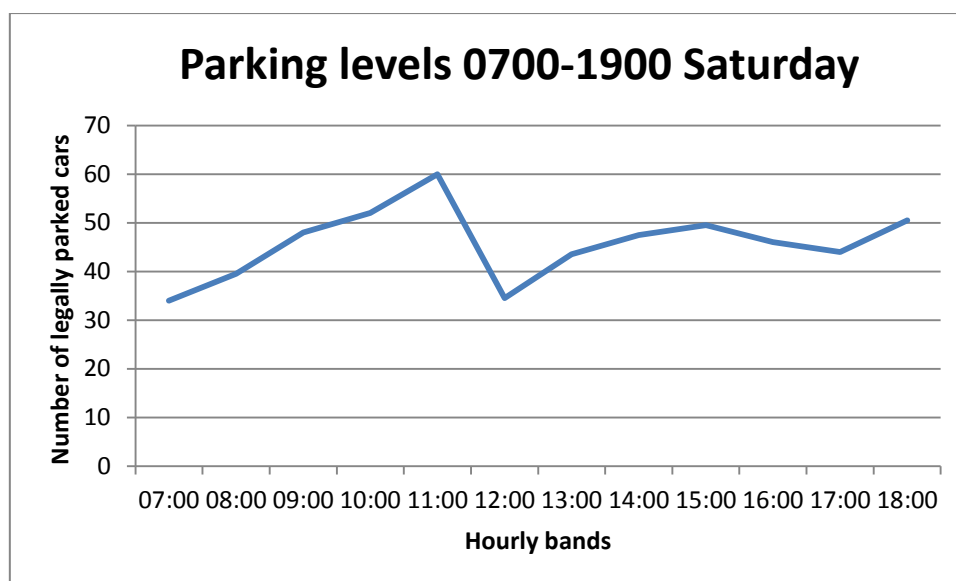


Figure 27 Saturday on street parking across the day

Results from the Saturday showed that parking increased steadily from 0700-1100 before dropping at 1200, then climbing again to 1500. Levels then experienced a slight dip to 1700 before climbing again to the band covering 1800-1900. Peak parking was experienced in the 1100-1200 band.

The maximum number of legally parked vehicles in any one period was 60.

Illegal and inconsiderate parking was also observed. The maximum number of illegally parked cars in any one period was 16. The following parking behaviours were observed by street:

	Lavant St	Chapel St	The Square	High Street	Total
Double yellow lines	1				1
Single yellow line	41	29	1		71
Dropped curb				1	1
Bus stop			2		2
On verge					0
Disabled bay				4	4
Loading Bay				12	12
Restricted High St/The Square			37	5	42
Taxi bay			4	1	5
Totals	42	29	44	23	138

Table 7 Illegal and inconsiderate parking observed over Saturday survey period

Lavant Street and The Square experienced the highest levels of illegal or inconsiderate parking, with 42, and 44 vehicles respectively over the day; High Street experienced the lowest with 23.

As with the Wednesday, the predominant types of illegal and inconsiderate parking along the Spine were “parking on single yellow lines” (71) and “parking in restricted areas on High St/The Square” (42). 12 vehicles were recorded as illegally parked in loading bays along High Street.

The two surveys showed that the peak level of parking on the Spine was around 77 if including both legally, and illegally parked vehicles. This figure is therefore used as the minimum number of spaces required from alternative car parks to maintain the current level of parking in Petersfield town centre.

9.3. Town Centre car parks

Review

Most of the car parks serving the town are readily accessible and within a five minute walk of the town centre. The location of these car parks is shown in Figure 28.

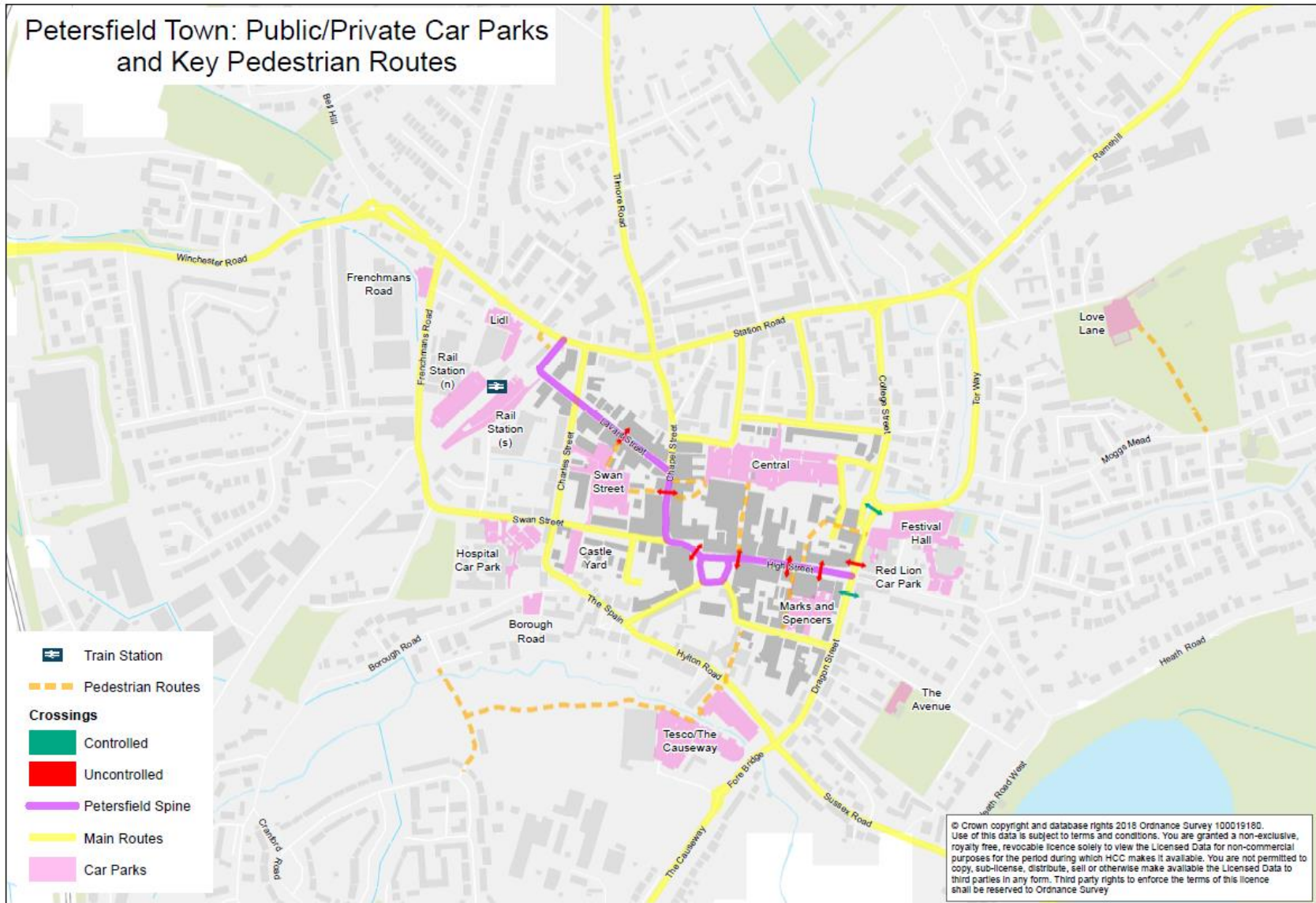


Figure 28 Car parks and pedestrian routes towards the town centre

Some of the car parks are owned by the Town Council, others by East Hampshire District Council (EHDC) and some are privately owned. Table 8 sets out ownership, charges and number of spaces for each of these car parks.

Car Park	Owned By/Managed by	Charges or Free	Number of Parking Spaces
Rail Station (n)	South Western Railway	Charges apply	154
Rail Station (s)	South Western Railway	Charges apply	150
Swan Street	EHDC	Charges apply	147 x3 disabled
Central	EHDC	Charges apply	320 x7 disabled
Festival Hall	EHDC	Charges apply	340 x3 disabled Permit holders and reserved spaces also.
Castle Yard	EHDC	Charges apply	50 x2 disabled
Hospital car park	Hospital Trust/NCP	Charges apply	40 x9 disabled
Tesco/The Causeway	Tesco/EHDC	Charges apply	360 x13 parent x16 disabled
Borough Road Car Park	NCM	Charges apply	30 No disabled
Red Lion Car Park	JD Wetherspoon/Euro car parks	Charges apply	33 x2 disabled
Love Lane	PTC/PTC	Free for users (nursery and recreational users) between 6am – 9.30 pm daily	76 x4 disabled
The Avenue	PTC/PTC	Free for users of the sports pavilion. Not in general public use.	28 x2 disabled
Lidl	Lidl and Majestic Wine/UKPC Ltd	2 hours free with store purchase	56 x4 disabled x3 parent
Frenchmans Rd	Henry Adams/NCP	£75/monthly. Permit holders only	43 (x3 spaces substandard size)
M&S car park	M&S, but not limited to M&S customers	Charges apply	33 x2 disabled x1 parent

Table 8 Car Parks in Petersfield

Car parks in private ownership, or used solely for commuters or reserved solely for patrons of a limited number of businesses have not been included in the scope of the study.

The existing car parks are well laid out, lined and organised so as to maximise parking availability. This is with the exception of the rail station car park, where it was observed that larger 4x4 type vehicles were prohibiting the full utilisation of spaces.

All EHDC managed car parks were re-marked during 2016/17 to maintain the quality of the car parks.

Pricing and permits

When comparing the price of car parking with other similar sized market towns in Hampshire, costs are comparable, making Petersfield competitive.

Parking permits and season tickets are currently available at some of the town's car parks including Festival Hall and the Rail Station, with Festival Hall permits reserved for residents, and Rail Station permits for rail users. Details of pricing at these two car parks are within Appendix 13.

South Western Railway advises that there are a total of 95 season tickets for the rail station car park (equating to 31% of the available capacity). The majority of season ticket holders (41%) originate from the district of Petersfield and are local residents. A further 30% of season tickets holders travel to Petersfield from Waterloo in the south and the furthest distance travelled to the station and parking using a season ticket is the area east of Eastleigh (Bishops Waltham area).

It is recognised that the Neighbourhood Plan seeks to deck one of the car parks at the Railway Station – it is suggested that a first step could be to encourage those who live very locally to arrive by means other than a private car, in order to alleviate parking constraint. For example, an organised taxi share, or demand responsive public transport for local residents commuting to the rail station could be investigated, or personalised journey planning with season ticket holders to understand why they drive, instead of walking or cycling to the station. Relevant improvements could then be investigated further.

Capacity and duration of stay

To assess the levels of parking in car parks in the town centre, and duration of stay, an assessment was carried out using both existing ticket data (obtained from East Hampshire District Council) and newly commissioned automated number plate recognition (ANPR) surveys. Wednesdays and Saturdays were chosen for comparison. As above, Wednesday is a market day, and therefore likely to represent the highest level of weekday parking in the town.

Existing ticket sales data from May 2017 (Weds 17th and Sat 20th) was available for EHDC managed car parks as follows:

- Castle Yard
- Central (close to Waitrose)
- Festival Hall
- Swan St

This data provided the time at which a parking ticket was purchased, and the length of stay that was paid for. This is considered to be a robust assessment given that the existing ticket data represents the time paid for, which could be longer than the time the vehicle actually remained in the car park. However, this data will not include permit holders (including those at Festival Hall), or disabled users, or people who enter and leave the car parks outside of paid hours (Mon-Sat 0800-1800).

New ANPR surveys of the following car parks were undertaken on 9th and 12th May 2018.

- Marks and Spencer
- Causeway
- Petersfield Community Hospital
- Rail Station (north and south sides combined)

This data provided entry and exit times for cars over the survey period (0700-1900) based on number plate matching.

The parking assessment used both of these datasets to estimate the number of vehicles parked for every half an hour period between 0700-1900 on a Wednesday and a Saturday, compared with the capacity of each of the car parks.

The full assessment including graphs is included as Appendix 12. The results of this assessment highlighted the following key points:

- All of the car parks are at least 50% full for most of the day (both days), and many are over 75% full for most of the day (both days)
- Many of the car parks have a high level of churn (i.e. many entries and exits in any half hour period) indicating popularity
- The Rail Station saw very little activity over the Wednesday survey period, suggesting that a high number of vehicles were already parked before the survey started (i.e. to access train services to London – this was confirmed from multiple site observations, and the total “exits” from the car park over the survey period). Therefore, the Rail Station car parks have been excluded from the assessment for Wednesday. Total exits were much lower on the Saturday, and significant spare capacity was identified (over 200 spaces all day). Therefore, the car parks have been included in the Saturday assessment.
- Central car park was the most popular on both days
- Most vehicles were parked for 2 hours or less. At Marks and Spencer, Hospital and Causeway the majority of vehicles were parked for 1 hour less
- On Wednesdays there would be sufficient space in existing car parks to accommodate cars currently parking on the Town Spine (77, see section 9.2). Swan Street and Causeway have the most capacity to accommodate more vehicles on Wednesdays. The lowest total recorded capacity offered by all car parks combined was 187 spaces from 1200-1230, the highest was 860 from 0700-0730.
- On Saturdays, there would be sufficient space in existing car parks to accommodate cars currently parked on the Town Spine. Causeway, the Rail Station, and Festival Hall have the most capacity to accommodate more vehicles on Saturdays. The lowest total recorded capacity over all car parks combined was 511 from 1200-1230, the highest was 2188 from 0700-0730.

Overall, the assessment suggested that there is sufficient parking within car parks to cater for a reduction in on-street parking along the Spine. The results show that the Causeway car park should be promoted for further use by visitors on weekdays and weekends, this may require negotiation with Tesco as the beneficiary of parking revenues at this location. Access to this car park does not require visitors to drive through the town centre and has a short, well provided pedestrian connection through to The Square. It is possible that current town centre visitors associate this car park with Tesco only, and worry that they may need to make a purchase from the store in order to park at this location. Signage could be used to address this e.g. adding Causeway to the main parking signs at entries to the town, and making it clear through advertising that this is a council managed car park.

Moreover, through discussions with South Western Railway, the Rail Station car park could be promoted for weekend use e.g. through advertising or replacing the existing town car parking signage with variable message signs so that this location can be advertised for weekend town centre use.

Decking of car parks, to provide more capacity, is discussed in the Neighbourhood Plan. To meet the aims of the Town Centre Vision, it is considered that Causeway car park would be the best location to investigate for this measure, particularly the area of the car park closest to the pedestrian connection to The Square.

Interceptor car parks

The Neighbourhood Plan establishes three “interceptor car parks” (namely, the Rail Station car park, both north and south of the line, the Causeway car park and the Festival Hall car park). These are, in the opinion of the Petersfield Town Council, car parks which have the potential to capture vehicles before they enter the town centre. The concept also realises that potentially these car parks need new access to maximise their effectiveness and attractiveness.

To assess the quality of these car parks and the walking routes between the ‘interceptor car parks’ and the town centre, an audit was undertaken. Full results are provided in Appendix 13.

Key findings of the audit include:

- All car parks used a “pay and display” payment method, with coin and card accepted. RingGo (cashless payment via mobile phone) was accepted at all car parks except The Causeway. Therefore it is considered that payment methods are suitable at all locations.
- Season tickets are available at the Rail Station (north and south)
- The Rail Station car parks are full on weekdays
- Discounted permits are available at Festival Hall for local residents
- Car parks generally have a good surface and are lit
- The rail station car parks have low natural surveillance
- There is no pedestrian signage from Rail Station North towards the town centre and there are gaps in signage from Causeway, and from Festival Hall
- Generally, the routes towards the town centre are accessible

Each of the car parks, and its route to the town centre, are detailed below.

Rail station car parks: The two car parks offer a total of 304 spaces. They were observed as being very close to capacity after 9am weekdays and without expansion in the form of deck, it is not considered that attracting additional weekday car parking here would be a feasible option, although weekend capacity is higher and could be further promoted. If there is an aspiration to provide decked car parking, this would need to be taken forward in cooperation with the train operating company. However, the route from these car parks to the town is easy to navigate, pleasant and in good repair, the route benefits from good natural surveillance and the walk takes c.5 minutes. The initial wayfinding is excellent; the junction of Lavant Street and Chapel Street has poor signage and signage to highlight the shortcut to The Square via Hobbs Lane and Rams Walk is missing.

Festival Hall: The car park offers a total of 206 spaces. The route from Festival Hall is equally easy to navigate, although there are more potential route options for pedestrians to use. The main signed route via the junction of College Street and Tor Way appears a less direct route for those entering the town. There is wayfinding within the car park to a ramped pedestrian access onto College Street. Crossing is facilitated by a signal controlled crossing, leading pedestrians towards Folly Market and towards the rear of Waitrose and Rams Walk. This route is under 10 minutes to walk and is again well surveilled and has a good surface. This route could be improved by reducing the gradient of the ramped access or potentially re-routing the path through the green space to the pedestrian crossing between the car park and B2070, subject to relevant land ownership. This would offer an enhanced sense of arrival.

An alternative, and more instinctive route is via Heath Road (to the south of the car park), however, this involves walking on narrow footpaths and either walking slightly past the High Street to use a signalised pedestrian crossing, or crossing slightly north of the junction using an informal crossing point. It is suggested that improvements could be made at the junction of Dragon Street/High Street to ease access and indicate that pedestrians are entering the town centre.

Causeway: The final route audited was that from the Causeway car park, adjacent to Tesco, south of the town centre. This car park had the shortest walk distance (2 minutes/c.200m) and therefore provided the quickest access for pedestrians into the town centre. The route was direct and easy to navigate. The route crosses Hylton Road and runs to St Peter's Road where The Square can be accessed. The route has no signage. The link between Hylton Road and St Peter's Road is lit and surfaced but has limited natural surveillance. The route is currently well used.

9.4. Town Council owned car parks

The Town Council own two of the car parks in the town centre. Love Lane (Football Club) and The Avenue (Pavillion). As part of this study, the Town Council was interested to find out if more use could be made of these car parks, potentially to alleviate levels of parking in other car parks.

These two car parks are not currently advertised for town centre parking. Early site visits indicated very low levels of car parking at these locations, and therefore potential for further future use.

Hourly surveys were carried out at these locations to give an indication of parking capacity. The results, included as Appendix 14 suggest that there is significant spare capacity at the Love Lane car park which could be better utilised. There was a maximum of 40 cars parked, out of 74 spaces at the end of the school day, noted to be associated with the school run of a local school. Outside of this small window, the maximum recorded level of parking was 21 cars. At a distance of 1km, or c.12 minute walk from The Square, it is considered too far to advertise as town centre parking for visitors but could potentially be used for permit based parking (similar to Festival Hall) to alleviate nearby on-street parking or to provide longer stay parking for staff who may currently park in the town centre (and thereby free up capacity for shoppers and visitors).

The Avenue also showed spare capacity throughout the day, but as the maximum capacity is lower (at 30 spaces) there is less opportunity at this location particularly as the adjacent local hall can be booked for occasions, meetings etc., which offers less reliability of parking.

9.5. Cycle parking

A cycle parking audit was undertaken on Wednesday 7th March 2018 which was a dry sunny day. The purpose of this audit was to identify locations of official secure cycle parking, and locations where cycles are being parked unofficially, e.g. to railings, as this can often provide an indication of an unmet requirement.

Full details of the audit are included as Appendix 15 including locations used for unofficial cycle parking e.g. railings around The Square. A summary of official cycle parking spaces is below in Table 9.

Number of cycle spaces	Type	Location
6	Sheffield	Central car park. West of Waitrose
4	Front wheel only, ground stands	Immediately outside the Church
4	Sheffield	Hobbs Lane
6	Front wheel attachments on the side elevation of the Red Lion	Tor Way
4 + 4	4 x Front wheel only 4 spaces on two barriers	Hospital, south of Swan Street
4	Front wheel only	Love Lane car park
5	Front wheel only	The Avenue car park
20	Sheffield	Swan Street car park
10	Sheffield	Lidl car park
14	Sheffield	Dragon Street south of junction with High Street
6	Sheffield	North side of the High Street
12	Sheffield	Outside Tesco, The Causeway
4	Sheffield	M&S, St Peter's Road
3	Front wheel only	Museum, Peter's Road
3	Front wheel only	Festival Hall, adjacent to side entrance
x122 in secure cage, x32 stands. 6 cycle lockers and 16 Sheffield stands on northern platform	Sheffield stands and double height bike cage	Rail Station

Table 9: Official cycle parking

There are a total of 329 cycle parking spaces in the town, 105 if excluding the Rail Station. Only 10 of these cycle parking spaces are on The Spine itself.

The audit findings suggest that much of the existing cycle parking is within car parks, and not on-street where cyclists would expect to find it, and where it is most useful. There is insufficient cycle storage within the town and that additional cycle storage should be provided. Locations to prioritise include:

- Waitrose
- The Square
- Chapel Street
- Lavant Street

Cycle parking should be easily located but visually in keeping with its location. It should enable cycles to be locked in two separate places (e.g. through the frame and a wheel) to reduce risk of theft, therefore, it is suggested that spaces classed as “front wheel only” are replaced.

Cycle parking should be well spaced, particularly given the reported popularity of Petersfield with touring cyclists who may be carrying wide panniers. Moreover, wider spaced parking will enable people with adapted bikes to park more easily – some spaces could be marked as reserved for adapted cycles in the same manner as disabled parking. Cycle parking should also be located to avoid causing obstructions to other uses of the town, particularly those with visual impairments. [This new guide](#)³ details how to provide parking for disabled cyclists.

The Neighbourhood Plan sets out the need for new cycle stands in Lavant Street and The Square. Findings of this study support and build on these.

9.6. Summary

In summary, the assessments within this review have found that up to around 77 vehicles park on the Town Spine and that these could be accommodated within car parks around the town centre. It is considered that Causeway car park, and the Rail Station (but only at the weekend) have the most capacity to cater for reallocation of parking, and that decking of the Causeway car park could be investigated if further parking is required.

On-street parking surveys found that there is a relatively high level of illegal/inconsiderate parking with many vehicles parking on single yellow lines and on the restricted areas of The Square and the High Street.

³ <https://wheelsforwellbeing.org.uk/wp-content/uploads/2017/11/v2-Nov-2017.pdf>

Further uses of the Town Council owned car parks, particularly Love Lane, could be investigated (e.g. paid permit parking) as there is plenty of capacity on weekdays and weekends. This would also support the aims of EHDC's parking strategy.

A review of cycle parking concluded that many of the locations, or types of parking were not in line with best practice, and that there is an unmet need for new parking in multiple locations.

9.7. Recommendations

- Amend town centre parking signage to direct vehicles towards interceptor car parks – highlighting that the Rail Station is only likely to have spare capacity at weekends
- Investigate new access onto Festival Hall car park from Tor Way
- Ensure adequate provision of disabled parking spaces in the new Town Spine design
- In cooperation with South Western Railway and all users, investigate travel planning for rail users encourage those who live within the town to walk and cycle to the station
- In cooperation with South Western Railway, investigate travel planning for all rail users who travel from popular locations e.g. Waterlooville, to encourage them to use alternatives to the private car, including buses and shared taxi services
- At Festival Hall car park, reduce the gradient of the ramped access or potentially re-route the path through the green space to the pedestrian crossing between the car park and B2070, subject to relevant land ownership to offer an enhanced sense of arrival.
- Consider improvements at the junction of Dragon Street/High Street to ease access and indicate that pedestrians are entering the town centre from Festival Hall car park
- Improve signage from all interceptor car parks towards the town centre
- Develop use of Love Lane car park, potentially for residents permits, or lower cost, longer stay parking for town centre employees
- Increase formal cycle parking at Waitrose, The Square, Chapel Street and Lavant Street, prioritise on-street cycle parking rather than locations within car parks
- Replace “front wheel only” cycle parking with racks that enable locking the bike at two points
- Consider spacing and signage of cycle parking to enable use by disabled cyclists and touring cyclists.

10. Traffic counts and audits

10.1. Motor vehicle traffic counts and link capacity analysis

As set out above, local policies set out proposals to reduce the dominance of motor vehicles on the Town Spine and improve the environment for walking and cycling. To reduce traffic on The Spine would likely mean that traffic originally intending to use this route would divert to alternative local routes. This section sets out work undertaken to assess the suitability of alternative routes in catering for this traffic.

Firstly, speeds and flows were surveyed on The Spine with High Street taken as a proxy for the route.

- The maximum average two-way flow in any hour was 0800-0900 with 407 vehicles, although for most of the day the flows are between 250-250.
- The mean average speed over a 24 hour period was 16.6mph with an 85th percentile of 23.00mph.

The assessment below focuses on a reduction from current flows towards the 100 vehicles per hour or fewer. It should be noted that there are examples of shared space where much higher vehicle flows operate well.

When compared with guidance on shared space speeds and flows it is considered that the speeds are in keeping with this type of scheme but the flows are far higher. The relevant guidance is within Manual for Streets and LTN 1/11 which set some generally accepted parameters under the definition as follows:

“there is a self limiting factor on pedestrians sharing space with motorists, of around 100 vph. Above this, pedestrians treat the general path taken by motor vehicles as a ‘road’ to be crossed rather than as a space to occupy” (Manual for Streets, 2007)

For shared space, a design speed of no more than 20 mph is desirable, and preferably less than 15 mph (LTN 1/11, 2011)

Two routes have been identified as likely diversions away from the ‘Town Spine’; the first is a route north of the Town Spine, using Station Road, Tor Way (eastbound), College Street/Dragon Street and B2070/College Street (for westbound trips); and the second, a route south of the Town Spine, using Charles Street, The Spain and Hylton Road. The two routes were selected using Google Maps and are both similar to the Town Spine in distance and time taken to traverse the route.

In order to test if these two routes could cater for an increase in traffic, their link capacities have been assessed in accordance with DfT guidance (DMRB TA 77/99) which defines link capacity as “the maximum sustainable flow of traffic passing in one hour, under favourable road and traffic conditions”. The link capacity analysis provides a high level assessment as to the capacity of these routes, junction

capacity assessments would be required as a next step as queues and delays are more likely to occur in these locations, than within the links.

Classifying the roads using the guidance in DMRB TA 77/79 indicates that of the links for assessment are closest to the description of 'Urban All-Purpose Road (UAP) - Category 4'. This is defined as; a busy high street, carrying predominantly local traffic with frontage activity, including loading and unloading. This category of road has unrestricted parking, access to properties and businesses, frequent at grade pedestrian crossings and bus stops at kerbside. Roads in Category UAP4 may carry high proportions of local traffic, resulting in an increase in turning movements at junctions and accesses. Urban roads normally have higher flows in the morning and evening peaks than at other times of day.

This capacity analysis made additional adjustments for lower speed limits (20mph), and for the percentage of HGVs recorded within the traffic counts to provide a robust assessment. College Street was excluded from the analysis as it was not a good fit with the DMRB categories – it is recommended that a junction assessment should be undertaken at this location to understand capacity.

The following assumptions were made therefore in the calculations:

- As a starting point, all roads within Petersfield surveyed or selected for additional traffic were classified as UAP4 category
- Where the average speed on a link was 20mph (either by limit or where speed data was collected) or lower, a further 20% reduction in capacity was applied, this represented the same percentage reduction as that which exists between categories UAP 3 and 4 in TA 77/99.
- Figures in the DMRB guidance are only provided for UAP1 and UAP2 categories in relation to one-way street. It was therefore assumed that the one-way system (Tor Way) in the town had UAP2 classification.

The following section sets out the methodology followed to complete the assessment of link capacity in the baseline year (2018), a future year (2028 – the end year of the Neighbourhood Plan), and the future year with diverted traffic.

1. Identify existing flows on the links through automated traffic count surveys
2. Identify what level of background growth would be anticipated to come from future housing developments to 2036 using TEMPro (the National Trip End Model Presentation Program). Parameters used are included in Appendix 16.
3. Add this background growth to existing flows on the relevant links
4. Using existing flows on High Street (taken as a proxy for the Spine), calculate how many trips would need to be diverted away from the Spine in order to reach the recognised Shared Space level of 100 vehicles per hour (see above)

5. Distribute these “diverted” trips onto the two alternative routes, north and south of the Spine. Several sites on the northern route were chosen to account for the one way system; for the southern section, the lowest capacity route was selected for a robust assessment. A 50:50 split was selected based on average travel times on each route from Google maps traffic analyses. This was felt to be appropriate given that both routes have features to discourage use; level crossing on Station Road, to the north of the Spine; and traffic calming on The Spain to the south.
6. Add these distributed trips to the grown figure to calculate total new traffic on each relevant link at AM, interpeak and PM peak periods.
7. Compare this figure to the capacity of each link (figures above 85% could result in queues and delays).

Results

Weekday and weekend surveys were compared, as the weekday surveys showed higher levels of traffic, these were incorporated into the link capacity assessment as the most robust case. The results of this assessment included as Appendix 16 show that background growth over the period 2018-2028 is expected to be up to 16.16%.

Weekday results for each of the links are summarised in Table 10:

Link	2018	2028 with background growth	2028 with background growth + diverted trips
Route North of Spine			
Station Road			
AM	58%	66%	72%
Interpeak	54%	63%	68%
PM	56%	63%	70%
Tor Way			
AM	55%	63%	66%
Interpeak	55%	64%	67%
PM	62%	70%	73%
College Street/Dragon Street			
AM	71%	80%	87%
Interpeak	62%	72%	78%
PM	77%	88%	94%
Route South of Spine			
The Spain			
AM	40%	45%	62%
Interpeak	29%	33%	40%
PM	37%	41%	57%

Table 10: Link capacity assessment

The results show that most of the links currently operate well within 85% of their capacity and would stay below this threshold in the future year of 2028 with traffic diverted from the High Street. College Street/Dragon Street would exceed 85% in the future year 2028 in the PM period, but remain within 100% capacity. This assessment would expect that some delays could occur at the junction of High Street/Dragon Street/Heath Road in the future year – a junction assessment should be undertaken to assess this further.

Many case studies of schemes⁴ aimed at improving the pedestrian and cycling environment have resulted in a phenomenon known as “traffic evaporation”, or “disappearing traffic”, that is, a reduction in overall traffic flows due to the improved environment for walking and cycling. To ensure a robust analysis of the data, no allowance for traffic evaporation has been included in this assessment.

In summary, it is considered that the links have the capacity to accommodate the projected increase in traffic flow to achieve a level of traffic suitable for shared space on The Spine. It is noted that College Street/Dragon Street is expected to exceed 85% of its capacity– a junction assessment should be undertaken at this location.

Junction capacity assessments should now be undertaken at the following locations to understand if any improvements would be needed to the junction designs to cater for any increase in flow:

- Charles Street and Station Road
- Charles Street and Lavant Street
- Charles Street and Swan Street
- The Spain (north-south)/The Spain (east-west)
- Hylton Road/Dragon Street/Sussex Road
- College Street/Tor Way
- College Street/Station Road
- High Street/Heath Road/Dragon Street

⁴ http://ec.europa.eu/environment/pubs/pdf/streets_people.pdf

10.2. Through traffic

Often, when reduced traffic flows are proposed, shop owners raise concerns over potential loss of custom as customers will no longer be able to park outside of their outlet. However, much of the traffic through a town may be through-traffic i.e. traffic that routes through the town but does not stop to use local services. An ANPR survey on the Town Spine (entering at Lavant St/Charles St junction, exiting High St/Dragon St junction) was undertaken to assess the current level of through traffic in this area. These surveys were carried out on Wednesday 9th May and Saturday 12th May, 0700-1900. The sample rate for these surveys was high at 86% or above. It was assumed that people stopping to use local facilities would require around 15 minutes per stop. Therefore any trip under <15 minutes in duration was considered as through traffic. The survey results suggest that on both days at least 73% (and often much a much higher percentage) of the traffic on The Spine was through traffic. Full results can be seen in Appendix 17.

10.3. Pedestrian traffic

This section analyses data collected from pedestrian counts and questionnaire intercept surveys carried out over a 12 hour period (0700-1900) carried out over a number of Wednesdays and Saturdays in May 2018, some of these dates coincided with car park surveys.

Both surveys were undertaken in the area between Rams Walk and The Square close to the site of an informal pedestrian crossing over High Street. The survey extent for the pedestrian survey is included as Appendix 18 – future surveys should use the same area for comparability. This location was chosen for its high concentration of pedestrian and position in the centre of the Town Spine.

The aim of the pedestrian count was to provide a baseline count against which to compare future numbers of pedestrians, and therefore, give one method of assessment of success of any future scheme. Moreover, the pedestrian surveys (undertaken by an enumerator) estimated the demographics of people in the town centre on those days, again, for future comparison.

The aim of the intercept survey was to understand from which location people are travelling to visit Petersfield, and gather suggestions towards improvements that could be made to improve the experience of the environment in this location. The counts included anyone who walked through the area shown in Figure 29, therefore, the individual pedestrians may have been counted multiple times.



Figure 29 Pedestrian survey area (Google map)

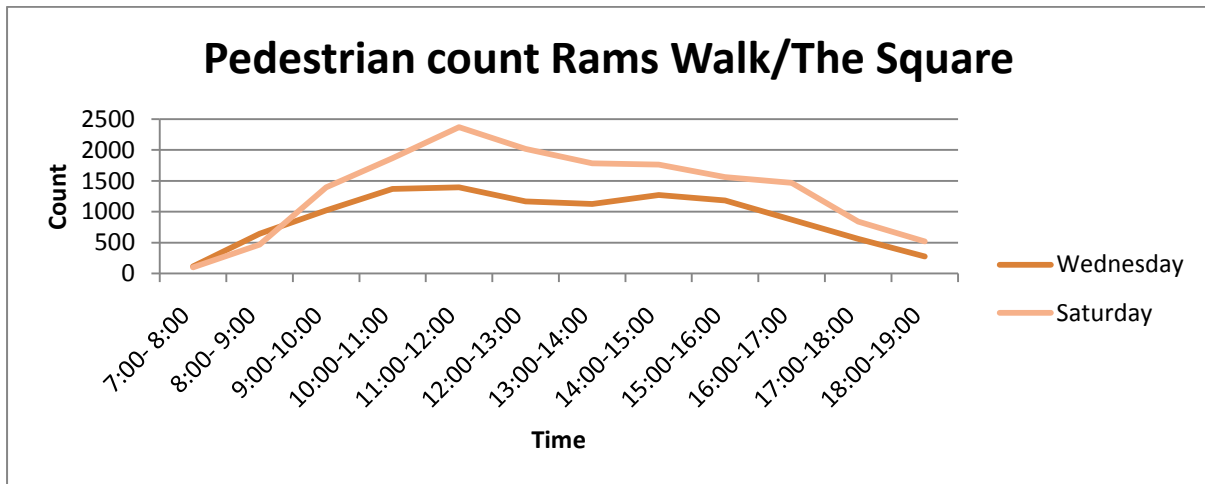


Figure 30 Pedestrian counts over the survey period

Highest flows on the Wednesday were recorded between 1000 and 1600. Flows peaked on the Saturday between 1100 and 1200. Total pedestrian counts on each of the days were as follows and suggested that Saturday was the more popular day to visit the town centre:

Wednesday 23rd May 10,993
 Saturday 26th May 16,149

The data also suggested the following demographic split (Table 11) which shows very little difference between the two days, with most of the visitors being adults under 65.

	Child	Adult <65	Adult 65>
Wednesday	12%	77%	11%
Saturday	13%	80%	7%

Table 11 Pedestrian demographics

The questionnaire intercept survey involved a survey team asking all pedestrians willing to participate to stop and complete a short questionnaire. The questionnaire template is included as Appendix 19. These questionnaires were undertaken on Wednesday 9th and Saturday 12th of May 2018.

A total of 75 members of the public took part over two days of collection (30 on Wednesday and 45 on Saturday).

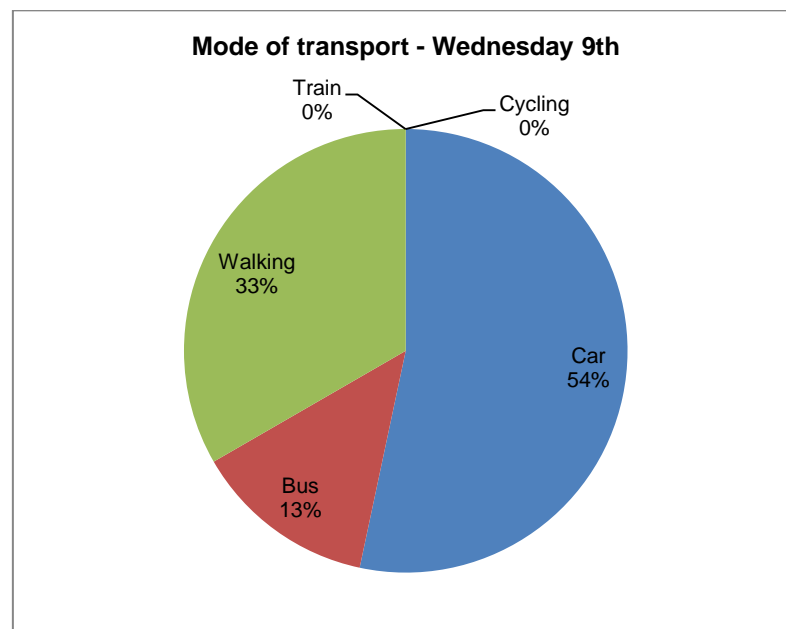


Figure 31 Mode of transport Wednesday

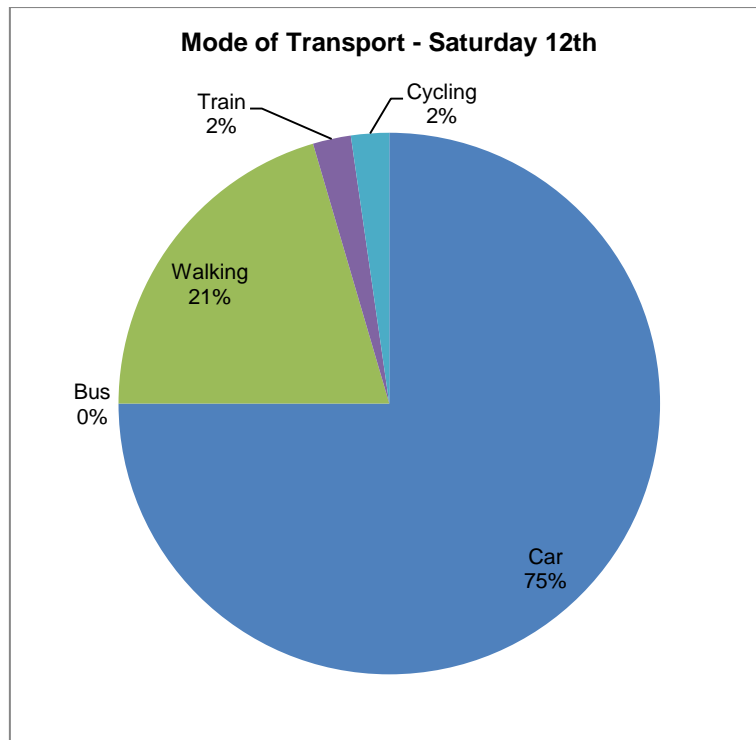


Figure 32 Mode of transport Saturday

When the pedestrians were asked how they travelled to the town that day the predominant mode of transport on both days was car with 54% and 75% respectively on Wednesday and Saturday.

The Central carpark was the most used by Petersfield’s visitors on both days which is likely to reflect the survey location; however, the Causeway car park is also in very close proximity to this location and had lower reported use.

Walking was the second highest used mode of transport, with 33% on Wednesday and 21% on Saturday, suggesting they were very local to the area.

Bus was used by 13% of the respondents on the Wednesday, but no respondents used the bus on the Saturday. Reported train use was very low, or not used, on both days.

The results (Figure 33 and Figure 34) also showed that visitors to the town travelled from a wider area on the Saturday compared to the Wednesday, which correlates with the higher car use on the Saturday.

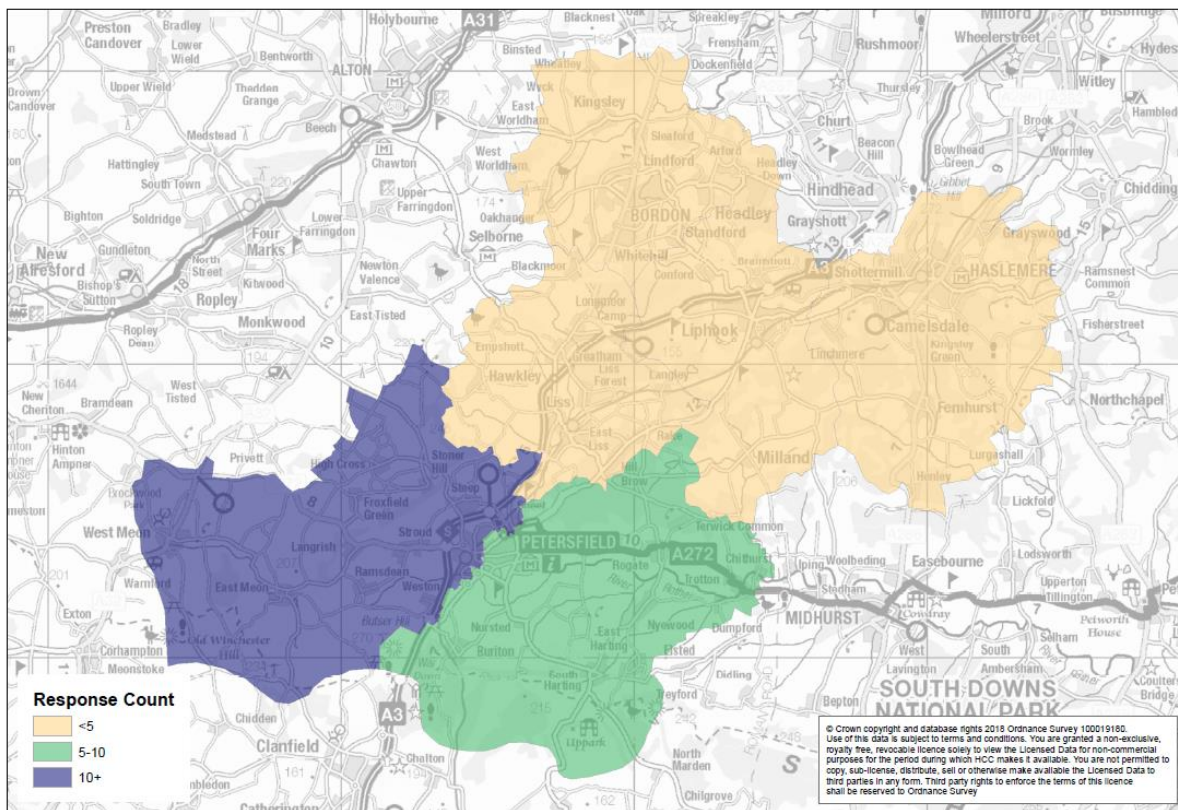


Figure 33: Origins of visitors on Wednesday

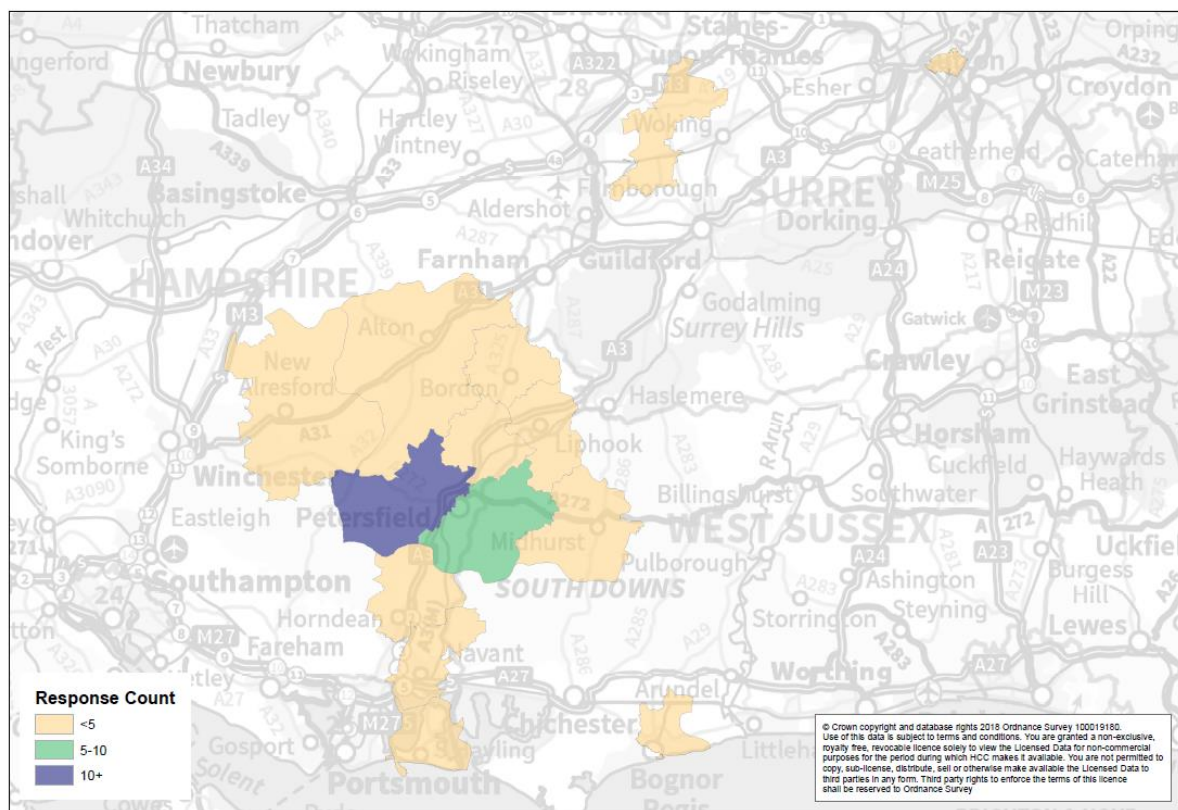


Figure 34: Origins of visitors on Saturday

Respondents stayed in Petersfield longer on the Saturday than the weekday, with 78% staying over one hour on the Saturday (Figure 4) and only 54% on the Wednesday (Figure 5).

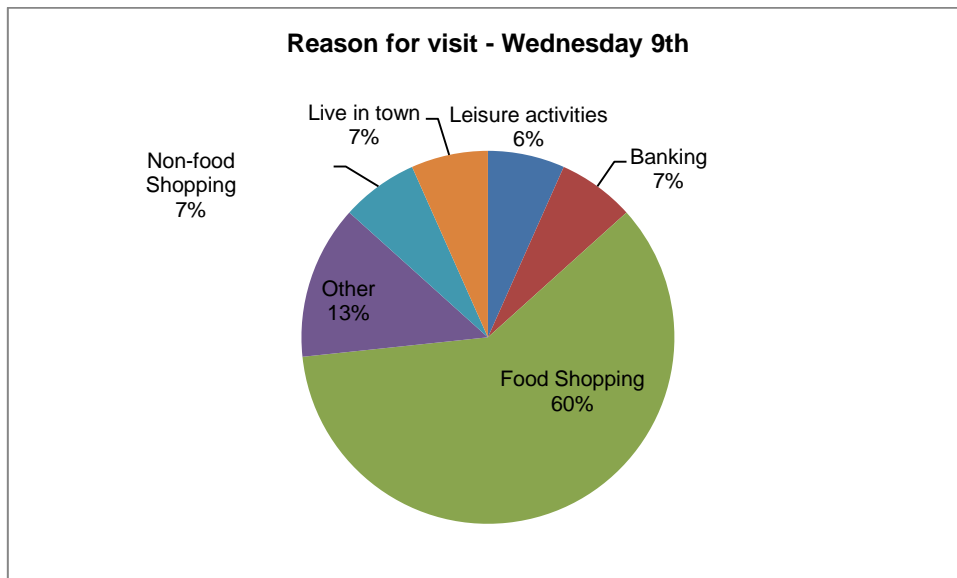


Figure 35 Reason for visit - Wednesday

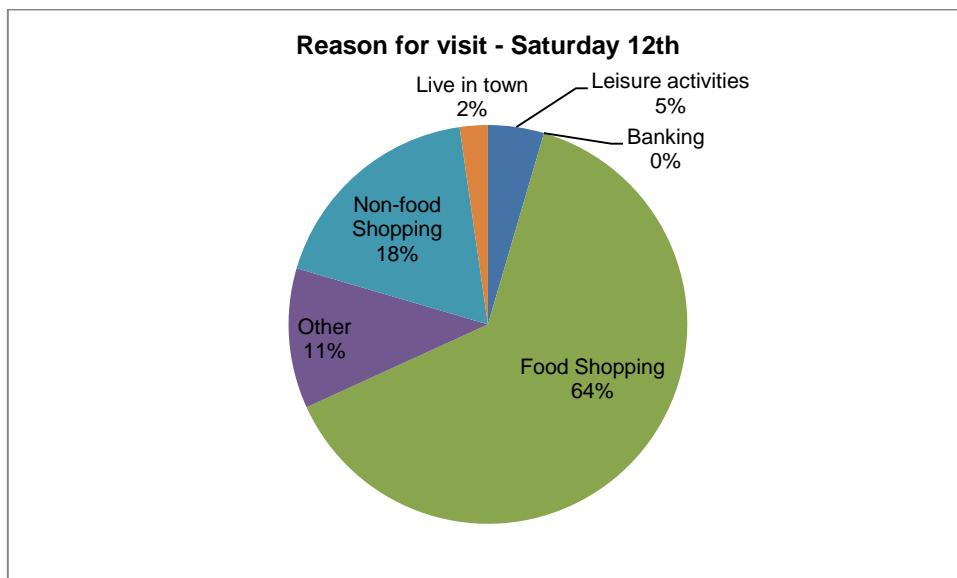


Figure 36 Reason for visit Saturday

Both days show that food shopping was the predominant trip purpose with 60% and 64% respectively, this could be an overrepresentation in the data given the survey's proximity to both the market and Waitrose. Although not the primary trip purpose for the majority of respondents, the market was visited by 27 of the total 75 questioned, whether they were shopping for food or not.

When asked if anything would improve their journey the following areas of feedback were given:

- Desire for increased areas of public seating
- Desire for increased levels of car parking
- Cheaper parking options
- Need to repair potholes along the Town Spine
- Need to improve pavement quality
- Recommendation to implement a crossing point at Rams Walk
- Increased pedestrianisation

10.4. Pedestrian audit

A pedestrian audit of the facilities and infrastructure of the Town Spine was undertaken by Hampshire Services on Wednesday 21st March 2018 when the weather was fine and dry. The results are included as Appendix 20.

The route was segregated into the following sections for ease of observations and collation:

- Junction of High Street with Dragon Street and Heath Road and the High Street
- Rams Walk junction with the High Street
- The Square
- Chapel Street
- Lavant Street.

The purpose of the audit was to evaluate the Town Spine using the same criteria to understand and score the pedestrian environments objectively. The pedestrian audit consisted of evaluating and scoring the 'links' – the footway adjacent to the street, the 'crossing opportunities', which include any formalised crossing points, either uncontrolled or controlled, the assess the provision for public transport, such as bus stops and or taxi ranks and finally a 'review' of the named route to include its directness and quality of place. Each of the named areas was then scored; the average score is 0, with -3 being poor and +3 being good, each of the criteria is scored on two factors, with the scores added together to provide an overall score – so the minimum score available is -6, and the maximum +6.

The audit would suggest that the pedestrian environment is generally supportive of the movement of pedestrians within the town, specifically the Town Spine. However, legibility for visitors trying to navigate around is an issue which could be significantly improved; more detail is discussed in section 10.7 below. A number of further points to consider within the future design are as follows:

- Ensuring crossing points are on pedestrian desire lines
- Consider appropriate locations for A-boards placed on the footpaths
- Increased seating
- Increased greening e.g. trees and planters

10.5. Cycle traffic

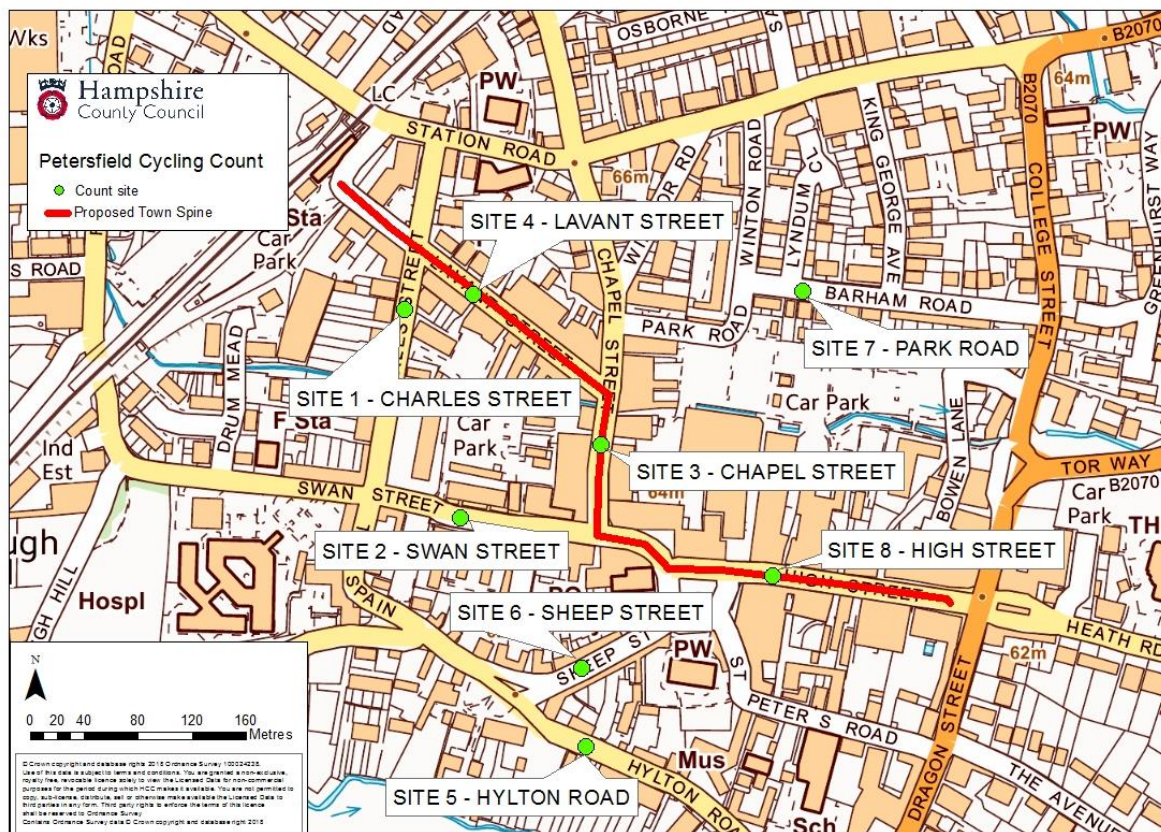


Figure 37 Cycle count locations

This section analyses 12 hour (0700-1900) cycle count data collected throughout May 2018 on weekdays (Wednesdays) and weekends (Saturdays) in order to understand the current distribution of cyclists within and the popularity of particular routes. Eight sites were chosen (Figure 1), three of which along the Town Spine and 5 on nearby routes; Charles Street, Swan Street, Hylton Road, Sheep Street and Park Road). As is standard in cycle count surveys, the count data will include a

number of cyclists who pass the count point more than once, it should be used for a comparison of cycle movements rather than absolute cycling numbers.

This data will be used as a baseline for future surveys to assess the impact of planned changes to Petersfield town centre e.g. to see if levels of cycling increase on the Spine and any displacement cycling from external routes to the Spine, or vice versa.

Figure 2 presents the total counts over the survey periods at all eight sites, on Wednesdays and Saturdays.

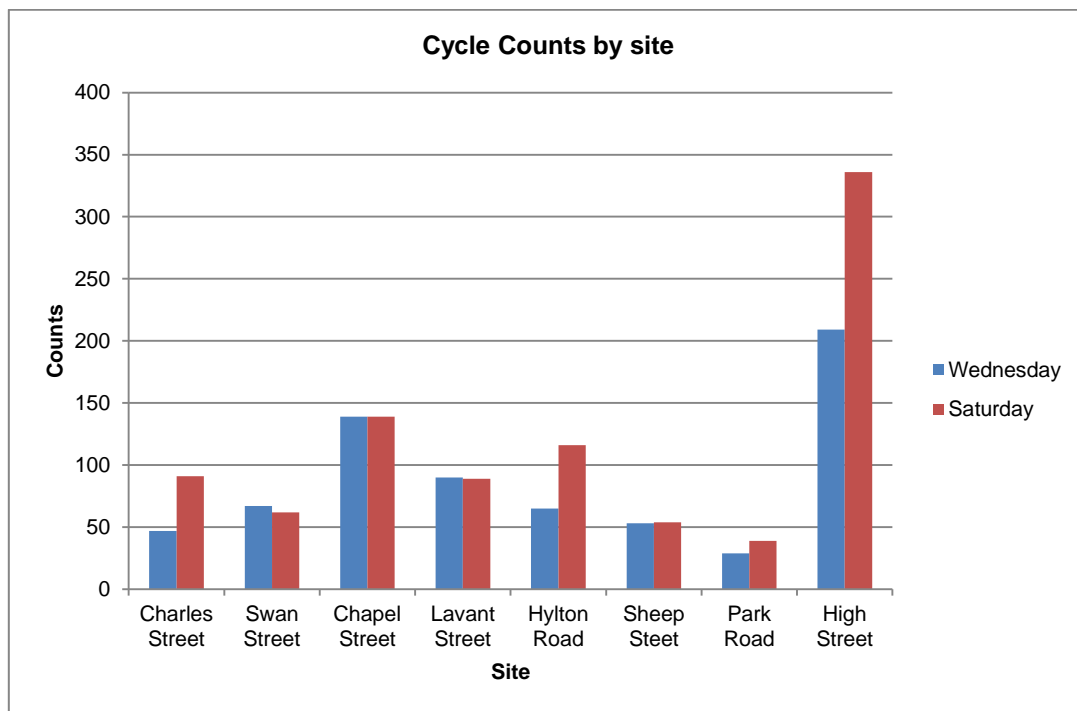


Figure 38 Cycle counts by site

On both days, the most popular site was High Street, followed by Chapel Street, highlighting the popularity of the Spine route to people cycling. Levels of cycling were generally higher on the Saturday, which is likely to reflect increased use of the retail outlets of a weekend.

At all of the cycle count sites the vast majority (c.76%) of those counted were classified as adults. This is to be expected as it is the largest class size in Petersfield, making up 57.5% of the total population⁵. The over 65s contributed least to cycling numbers at just 6%. This group constitutes 21.3% of the Petersfield population and highlights an under-representation of this group within the surveys.

⁵ ONS <https://www.nomisweb.co.uk/reports/localarea?compare=1119880597>

Children were slightly under-represented in the survey. 16% of the counts were classed as children, children make up 21.3% of total population of Petersfield⁶.

Counts were recorded in 15 minute bands over the day – full results are included as Appendix 21.

On the Wednesday, 699 cyclists were counted across all sites, with 438 recorded at the three sites on the Spine and 261 at the five sites off the Spine. Overall peak times were 7-8am, 11am to 12 noon, and 5-6pm. Figure 39 shows the level of cycling across the day. Sites on the Spine were more popular than other routes.

Of note, Lavant Street recorded peak uses at commuting hours, suggesting that cyclists were travelling to the train station.

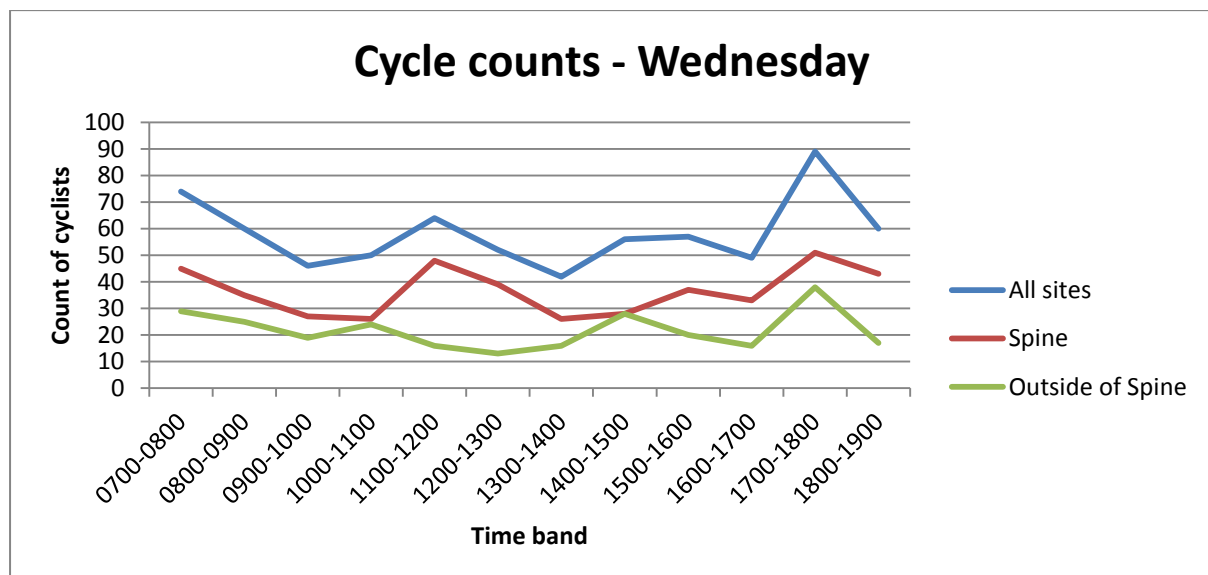


Figure 39 Cycle counts by time - Wednesday

On the Saturday 926 cyclists were counted across all sites, with 564 recorded at the three sites on the Spine and 362 at the five sites off the Spine. Overall the peak time was 11am – 12 noon. Figure 40 shows the levels of cycling across the day. The increased level of cycling on the weekend suggests that Petersfield has a good level of leisure cycling. As with the Wednesday counts, the Spine was more popular than other routes. Over all survey dates, 88% of cyclists counted were riding on the road, with the remainder on the pavement.

⁶ ONS <https://www.nomisweb.co.uk/reports/localarea?compare=1119880597>

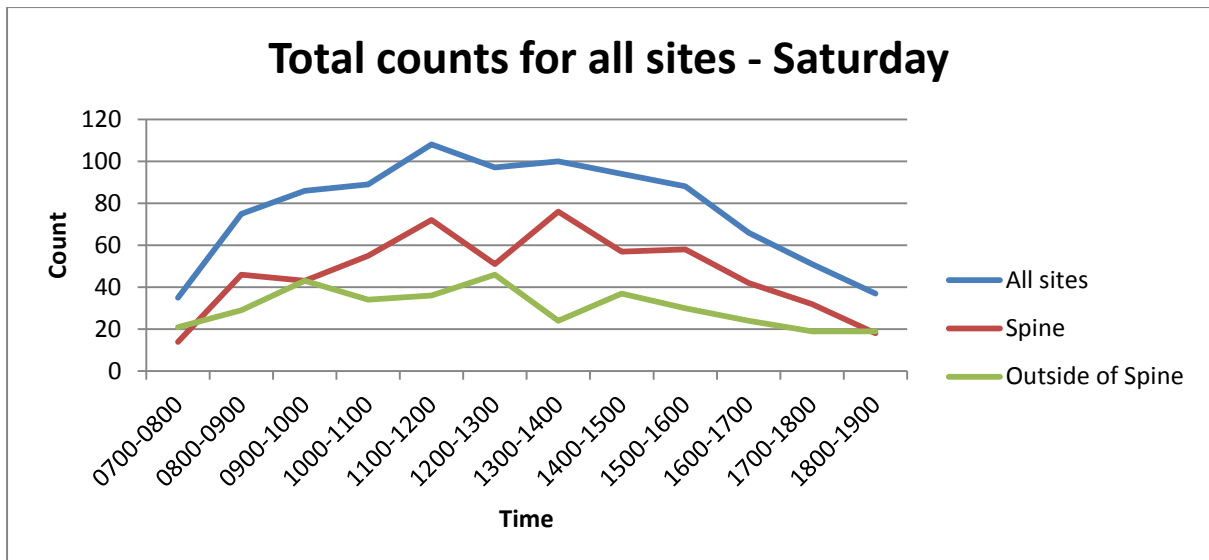


Figure 40 Cycle counts by time - Saturday

10.6. Cycle audit

A cycle audit of the Town Spine was undertaken on Wednesday 21st March 2018 when the weather was fine and dry.

The route was segregated into the following sections for ease of observations and collation:

1. Junction of High Street with Dragon Street and Heath Road and the High Street
2. High Street to junction with Rams Walk
3. The Square
4. Chapel Street
5. Lavant Street.

The purpose of the audit was to evaluate the Town Spine using the same criteria to understand and score the cycling environments objectively. The Cycling Level of Service includes assessments of the following areas:

- Safety
- Directness
- Coherence
- Comfort
- Attractiveness and
- Adaptability

The audit tool was adapted from the commonly used Cycling Level of Service tool in order to meet the scope of this study, consequently assessments of noise and pollution levels were not included, moreover assessment of “network mesh density” was not deemed appropriate for Petersfield as there is only one official cycling route in the vicinity of the spine. Lastly, an assessment of opportunity for growth was excluded as future levels of demand are not available at this stage. The maximum score available for each link was 92. A summary of results and key issues is presented below. Completed audits of each link are included as Appendix 22.

Table 12: Summary of Cycling Level of Service Assessment

Link number	Link name	Safety	Directness	Coherence	Comfort	Attractiveness	Adaptability	Combined score	Overall score
1	Junction of High Street with Dragon Street (both roads assessed in the vicinity of the junction)	Yellow	Yellow	Orange	Orange	Yellow	Yellow	32-46%	Orange
2	High Street east to junction with Rams Walk	Yellow	Yellow	Orange	Orange	Yellow	Yellow	40%	Orange
3	The Square	Yellow	Yellow	Orange	Orange	Yellow	Yellow	45%	Orange
4	Chapel Street to bus stops on High Street	Red	Yellow	Green	Orange	Yellow	Yellow	36%	Orange
5	Lavant Street	Yellow	Yellow	Green	Orange	Yellow	Yellow	53%	Yellow
Average								44%	

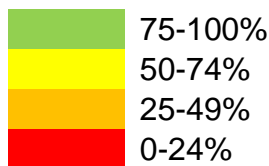


Table 12 provides a summary of scores from the assessment. Link 1 includes two roads at one junction (High St and Dragon St), the two roads have very different features and have therefore been assessed as a combined range representing the best and worst features on the two roads combined.

The average percentage score through this assessment was 44% (41/92).

Safety

In general, the lowest scoring criteria was “safety”. It should be noted that the tool awards highest safety scores to segregated cycle facilities. It is unlikely that this would be achievable in this location within the highway boundary whilst maintaining two way traffic flow for motor vehicles – alternatives to support a similar level of service to “segregated facilities” could include:

- Introduction of shared space
- one-way routing for motor vehicles with two way movements for cyclists

- time restrictions for access by motor vehicles (although this would only address the issue at times when the restriction was in place)
- Removal or further restrictions on HGV loading to discourage use of The Spine by large vehicles

The following key opportunities, identified from the audit, would offer potential enhancements over the current situation in terms of cycle safety:

- Review parking provision including reducing risk posed by reversing vehicles (e.g. from parking on The Square) and “dooring” (e.g. on High Street and Lavant Street). Wider plans for parking may address these issues.
- Amendments to reduce the carriageway width at specific locations on Dragon Street and Chapel/Swan Street (which scored the lowest in this criteria) to discourage close passes. It should be noted that Chapel Street parking surveys identified this road had a high level of illegal on-street parking, which would further reduce the effective width in this location
- Reduction in the width of the High Street/Dragon Street bell mouth, and rationalisation of the number of movements available to motor vehicles – as the entrance to The Spine, this junction is ambiguous and daunting for all but experienced cyclists
- Improved street lighting on Chapel/Swan St and Lavant St
- Any item considered for future development would need to be balanced against any other initiatives that might impact on the cycling environment e.g. removal of car parking, reduction in traffic flows

Directness

Directness generally scored relatively well, with cyclists able to achieve speeds similar to that of motor vehicles along the routes. This score could be improved in line with the criteria if cyclists could achieve higher speeds than motor vehicles, for example, through the introduction of segregated on road routes to enable them to avoid congestion. The assessment found that negotiation of the junction of High Street/Dragon Street could take a cyclist longer than a motor vehicle given the higher traffic volumes on Dragon Street, and the number of movements possible at the junction, making it difficult for a cyclist to pull out in a safe gap.

Coherence

Chapel Street and Lavant Street have the highest level of coherence, reflecting that it is easy to navigate between the station and the town centre. However, signage in other areas of the Spine was of a lower quality. Improved cycle signage, particularly in The Square, could improve this score. Again, improved coherence of the junction of Dragon Street/High Street could improve the cycling experience.

Comfort

Comfort scores could generally be improved by repairs to carriageway defects (loose sets and small potholes) and reducing the risk of close passes – particularly on Dragon Street and Chapel Street/Swan Street.

Attractiveness

Increased levels of cycle parking on all sections would have a marked increase on the score in this area. An increase in green infrastructure (e.g. trees) would also offer an enhancement in all areas except The Square.

Adaptability

This area scored well overall – there are a number of localised opportunities for improvements, as noted above that could be achieved within the highway boundary, and through implementation of the Town Spine aims.

10.7. Wayfinding

Signage or wayfinding in the town has gaps in its coverage, lacks coherence and in places is poorly maintained. Signage for the town is particularly important if the town has the objective of increasing visitor numbers and maintaining its significance as a hub serving the national park. Similar market towns in Hampshire have introduced wayfinding totems and fingerpost signage in recent years. It is recommended that Petersfield considers a similar approach for pedestrian signage to maintain consistency with other Hampshire locations, and investigates complimentary cycle signage to direct riders through the town and onwards to other destinations in the National Park . A full audit of the wayfinding within the town is also included as Appendix 23.

10.8. Summary

In summary, it is considered that the links on the identified alternative routes to the Town Spine could accommodate the projected increase in traffic flow to achieve a level of traffic suitable for shared space. Whilst Dragon Street is expected to exceed 85% of its capacity, reductions associated with traffic evaporation could alleviate this scenario – a junction assessment should be undertaken at this location.

ANPR survey results suggest that on both surveys days at least 73% (and often much a much higher percentage) of the traffic on The Spine was through traffic.

The pedestrian counts counted 10,993 people on the Wednesday and 16,149 on the Saturday, showing that Saturday was the more popular day. Highest flows on the Wednesday were recorded between 1000 and 1600. Flows peaked on the Saturday between 1100 and 1200. Duration of visit was longer on the Saturday. Food shopping was highlighted as the most popular trip purpose.

Most of the visitors were recorded as adults aged below 65. It should be noted that the percentage of adults over 65 is likely to increase in line with the ageing population of the town.

The pedestrian survey identified car as the most popular way to arrive at the town centre, this figure was higher on the Saturday, possibly reflecting the wider range of origins on that day compared to the Wednesday. Reported arrivals by cycle and train were very low.

The audit showed that the pedestrian environment is generally supportive of the movement of pedestrians within the town, specifically the Town Spine. However, legibility for visitors trying to navigate around is an issue which could be significantly improved upon.

Roads on the Spine generally experienced higher levels of cycling than other routes. There were more cyclists counted on the Saturday (926) compared to the Wednesday (669)

The cycle audit showed that aspects of safety scored the lowest, and aspects of coherence, directness and adaptability scored more highly. Attractiveness scores could easily be improved through provision of increased cycle parking and greening features

Signage or wayfinding in the town has gaps in its coverage, lacks coherence and in places is poorly maintained for both pedestrians and cyclists.

10.9. Recommendations

- It is recommended that junction assessments should now be undertaken at the following locations to be sure that no junction improvements would be required in support of the delivery of the Town Centre Brief aspirations.
 - Charles Street and Station Road
 - Charles Street and Lavant Street
 - Charles Street and Swan Street
 - The Spain (north-south)/The Spain (east-west Hylton Road/Dragon Street/Sussex Road
 - Dragon Street/Tor Way/College Street
 - College Street/Station Road
- Consider measures within the future Town Spine design to cater for ageing population e.g. comfortable surface treatments, seating, shade, dementia friendly environments
- Improve pavement quality in line with feedback from pedestrian surveys
- Review the pedestrian audit as part of the design of any future scheme

- Use the pedestrian counts, and demographics to evaluate success of the future design
- Use cycle counts as a baseline to evaluate future design and see if any displacement cycling occurs to or from alternative routes
- Review the cycle audit as part of the design of any future scheme – key points to address include:
 - Review parking provision including reducing risk posed by reversing vehicles (e.g. from parking on The Square) and “dooring” (e.g on High Street and Lavant Street). Wider plans for parking may address these issues.
 - Amendments to reduce the carriageway width at specific locations on Dragon Street and Chapel/Swan Street (which scored the lowest in this criteria) to discourage close passes.
 - Reduction in the width of the High Street/Dragon Street bell mouth, and rationalisation of the number of movements available to motor vehicles – as the entrance to The Spine, this junction is ambiguous and daunting for all but experienced cyclists
 - Improved street lighting on Chapel/Swan St and Lavant St
 - Any item considered for future development would need to be balanced against any other initiatives that might impact on the cycling environment e.g. removal of car parking, reduction in traffic flows
- Increase provision of cycle parking and green features
- Improve wayfinding – consider a “totem” and “fingerpost” pedestrian signage approach to maintain consistency with other Hampshire locations
- Investigate complimentary cycle signage to direct riders through the town and onwards to other destinations in the National Park.

11. Shared space

As described in Section 3.12, the term “shared space” has been criticised for implying a “one-size-fits-all” approach to street design. This is misleading as the concept of shared space, at its essence, describes an area where space is shared between modes, and does not prescribe the approach. The most important thing to consider for these types of schemes is the desired environment, and what is to happen in that space, this should be the first step, before any measures are decided on.

Most recent guidance from the CIHT has reviewed a large number of these types of schemes around the UK and defined three new categories to better describe how they may operate in practice. These are set out in Figure 41.

a) Pedestrian prioritised streets

Streets where pedestrians feel that they can move freely anywhere and where drivers should feel they are a guest (e.g., Leonard Circus). Under current legislation, this does not give formal priority to pedestrians.

b) Informal streets

Streets where formal traffic controls (signs, markings and signals) are absent or reduced. There is a footway and carriageway, but the differentiation between them is typically less than in a conventional street. (e.g., Poynton)

c) Enhanced streets

Streets where the public realm has been improved and restrictions on pedestrian movement (e.g., guardrail) have been removed but conventional traffic controls largely remain (e.g., Walworth Road).

Figure 41 CIHT categories to replace “shared space”

11.1. Summary

Following on from the analysis in this study, as presented above, it is considered that overall the Town Spine currently functions at category C; there is evidence of enhancements to public realm over a typical street design e.g. enhanced materials, informal crossings, narrow traffic lanes on the High Street and no guard railing, however, conventional traffic controls still remain e.g. standard kerbs, on-street parking, wide bell mouths, and formal crossing points at the entrances to the area from the east. The aims of the Town Centre Vision are considered to be best reflected by category A “Pedestrian Prioritised Street”, particularly aspirations for The Square. All three of these categories are supported by their individual features, characteristics and layout e.g. speed, volumes of traffic, public realm and surface treatments.

It is noted that there is ambition within the Neighbourhood Plan to achieve Shared Space. This study suggests that this ambition could be realised however, consideration should be given to access for delivery vehicles, disabled visitors arriving by car, and vehicles associated with the market and key destinations such as the Church on The Square. This could be achieved through traffic management, or for example, by changing features of the design to discourage through traffic e.g. removing parking.

11.2. Recommendations

Designers of a future scheme are strongly encouraged to review previous examples set out in the new best practice CIHT guidance. In any design, consideration must be given to the use of materials, their future maintenance, cost and liabilities.

12. Summary of findings

The final three sections of this report set out a summary of findings, the recommendations made based on these findings and a conclusion answering the main aims of the study.

The summary of findings from sections 7 to 11 is set out below:

12.1. Traffic regulations and deliveries

A review of parking regulations has found that there are a number of different parking restrictions in place around the Town Spine.

Results of the business survey suggested that a large number of deliveries are made on-street rather than via rear access to properties and that many businesses do not have rear access.

Furthermore, site visits observed that HGVs and smaller vans and lorries frequently park in areas other than designated bays e.g. at eastern end of High Street, and on-street, at The Square. For example, during one site visit on a Wednesday (market day) an HGV delivery blocked the carriageway at The Square for c. 20 minutes forcing other drivers to drive on the pedestrianised area to pass. It is therefore essential that deliveries and suitable on-street facilities are a key consideration of the future design.

Restricting deliveries to set time frames may not be suitable for the types of businesses in Petersfield, and it is recommended that further consultation would be required over future proposals to ensure that unsuitable HGV and smaller delivery vehicle parking does not continue in the future.

12.2. Personal injury collisions

A total of 39 injury collisions was recorded over the five year period. Casualties were highest amongst vehicles occupants, followed by cyclists, pedestrians and motorcyclists. There was no overriding pattern of casualties identified, and Hampshire's Safety Engineering team has not identified any locations within the Town Spine that would be prioritised for engineering solutions.

Overall it is expected that the "Town Spine" aims of reducing the volume of vehicles should have a positive impact on the level of collisions along the Spine. However, it should be noted that these aims could result in increased traffic flow along Station Road and Dragon Street, and that these roads, particularly the junctions with the Spine should be considered as part of any improvement works.

12.3. Parking

The assessments within this review have found that up to around 77 vehicles park on the Town Spine and that these could be accommodated within car parks around the town centre. It is considered that Causeway car park, and the Rail Station (but only at the weekend) have the most capacity to cater for reallocation of parking, and that decking of the Causeway car park could be investigated if further parking is required.

On-street parking surveys found that there is a relatively high level of illegal/inconsiderate parking with many vehicles parking on single yellow lines and on the restricted areas of The Square and the High Street.

Further uses of the Town Council owned car parks, particularly Love Lane, could be investigated (e.g. paid permit parking) as there is plenty of capacity on weekdays and weekends. This would also support the aims of EHDC's parking strategy.

A review of cycle parking concluded that many of the locations, or types of parking were not in line with best practice, and that there is an unmet need for new parking in multiple locations.

12.4. Traffic counts and audits

It is considered that the links on the identified alternative routes to the Town Spine could accommodate the projected increase in traffic flow to achieve a level of traffic suitable for shared space. It is noted that Dragon Street is expected to exceed 85% of its capacity - a junction assessment should be undertaken at this location.

ANPR survey results suggest that on both surveys days at least 73% (and often much a much higher percentage) of the traffic on The Spine was through traffic.

The pedestrian counts counted 10,993 people on the Wednesday and 16,149 on the Saturday, showing that Saturday was the more popular day. Highest flows on the

Wednesday were recorded between 10:00 and 16:00. Flows peaked on the Saturday between 11:00 and 12:00. Duration of visit was longer on the Saturday. Food shopping was highlighted as the most popular trip purpose.

Most of the visitors were recorded as adults aged below 65. It should be noted that the percentage of adults over 65 is likely to increase in line with the ageing population of the town.

The pedestrian survey identified car as the most popular way to arrive at the town centre, this figure was higher on the Saturday, possibly reflecting the wider range of origins on that day compared to the Wednesday. Reported arrivals by cycle and train were very low.

The audit showed that the pedestrian environment is generally supportive of the movement of pedestrians within the town, specifically the Town Spine. However, legibility for visitors trying to navigate around is an issue which could be significantly improved upon.

Roads on the Spine generally experienced higher levels of cycling than other routes. There were more cyclists counted on the Saturday (926) compared to the Wednesday (669)

The cycle audit showed that aspects of safety scored the lowest, and aspects of coherence, directness and adaptability scored more highly. Attractiveness scores could easily be improved through provision of increased cycle parking and greening features

Signage or wayfinding in the town has gaps in its coverage, lacks coherence and in places is poorly maintained for both pedestrians and cyclists.

12.5. Shared Space

Following on from the analysis in this study, as presented above, it is considered that overall the Town Spine currently functions at category C; there is evidence of enhancements to public realm over a typical street design e.g. enhanced materials, informal crossings, narrow traffic lanes on the High Street and no guard railing, however, conventional traffic controls still remain e.g. standard kerbs, on-street parking, wide bell mouths, and formal crossing points at the entrances to the area from the east. The aims of the Town Centre Vision are considered to be best reflected by category A "Pedestrian Prioritised Street", particularly The Square. All three of these categories are supported by their individual features, characteristics and layout e.g. speed, volumes of traffic, public realm and surface treatments.

It is noted that there is ambition within the Neighbourhood Plan to achieve Shared Space. This study suggests that this ambition could be realised however, consideration should be given to access for delivery vehicles, disabled visitors

arriving by car, and vehicles associated with the market and key destinations such as the Church on The Square. This could be achieved through traffic management, or for example, by changing features of the design to discourage through traffic e.g. removing parking.

13. Recommendations

Recommendations from each section of the study are summarised below. For ease of reference, each recommendation is allocated to a heading, however, some recommendations could feasibly sit under multiple headings so the table should be viewed as a whole when considering future design options.

Governance
Establish governance structure for taking forward delivery of the project outlined in the Town Spine Brief and stakeholder group to include disability groups, local businesses, residents, train operating company, public transport providers and users of the town representing all modes of transport and any other relevant officers e.g. community safety, civil enforcement officers and tourist information staff and/or visitors to the town
As any revisions to the highway network or to the management of traffic would either need to be delivered or approved by Hampshire County Council, it is strongly advised that Hampshire’s own consultancy service (Hampshire Services) is appointed to support future work on development and delivery of this scheme.
Public realm
Refer to best practice guidance including MfS2, relevant HCC guidance, and CIHT's Inclusive and Accessible Streets guide. In any design, consideration much be given to the use of materials, their future maintenance, cost and liabilities.
Any design should seek to reduce vehicle speeds and flows on the Town Spine through design
Review the pedestrian audit (Appendix 20) as part of the design of any future scheme
Reduction of on street parking along the Town Spine, with consideration given to needs of deliveries and disabled drivers and passengers.
Consider needs of disabled users in design options e.g. levels, contrasting materials, routes free from street clutter, tactile surfaces
Reduce maintenance liabilities through selection of resilient materials
Consider increasing lighting levels where street lighting is missing at certain locations on the Spine
Identify opportunities to introduce greening elements through the Spine e.g. trees and planters. This would need to take full account of localised conditions including services, and would need to have future maintenance arrangements identified
At Festival Hall car park, reduce the gradient of the ramped access or potentially re-route the path through the green space to the pedestrian crossing between the car park and B2070, subject to relevant land ownership to offer an enhanced sense of arrival.
Consider measures within the future Town Spine design to cater for ageing population e.g. comfortable surface treatments, seating, shade, dementia friendly environments
Improve pavement surface quality in line with feedback from pedestrian surveys

Junctions
It is recommended that junction assessments should now be undertaken to be sure that no junction improvements would be required in support of the delivery of the Town Centre Brief aspirations (see section 10.9 for full list)
Consider improvements at the junction of Dragon Street/High Street/Heath Road, at the entrance to The Spine, to improve journeys for pedestrians and cyclists, including visitors parked at the Festival Hall car park
Review cycle audit for further localised improvement suggestions to improve safety of cyclists
Public Transport
In cooperation with South Western Railway and all users, investigate travel planning for rail users encourage those who live within the town to walk and cycle to the station
In cooperation with South Western Railway, investigate travel planning for all rail users who travel from popular locations e.g. Waterlooville, to encourage them to use alternatives to the private car, including buses and shared taxi services
Bus stops should be an integral part of any future design and should be accessible to all users, and suitably located to support access to local services and facilities
Consider better management of taxi bays at station forecourt to improve arrival area for pedestrians
The station and surrounding area could be further developed and enhanced to attract more visitors to Petersfield. E.g improved signage to the town from the station, enhanced visitor facilities, development of walking and cycling routes (maps and leaflets) from the station (e.g. in cooperation with the local Community Rail Partnership), investigate carriage of bikes on local buses, and development of a bike hub at the station with rental bikes, pumps and tools for repair.
More could be done to advertise onward bus services from the station to key tourist destinations such as Queen Elizabeth Country park (buses run every hour from the station and the trip takes c.12 minutes). There are currently no bus services on Sundays, future provision of services could encourage more visitors to the town and the National Park. These opportunities would require future liaison with South Western Railway who manage the train station and local services.
Walking
Review outcomes of pedestrian audit for detailed improvement suggestions to support a better walking environment
Ensuring crossing points are on pedestrian desire lines
Consider appropriate locations for existing A-boards on the footpaths within any future design
Cycling
Review the cycle audit (Appendix 22) as part of the design of any future scheme
Increase secure formal cycle parking at Waitrose, The Square, Chapel Street and Lavant Street, prioritise on-street cycle parking rather than locations within car parks
Replace “front wheel only” cycle parking with cycle parking that enables locking the bike at two points
Consider spacing and signage of cycle parking to enable use by disabled cyclists and touring cyclists.

Car
Reduce vehicle flows on the Town Spine and further reduce (from average of 16mph) through design
Reduction of on street parking along the Town Spine, with consideration given to needs of deliveries and disabled drivers and passengers.
Encourage greater use of Causeway Car Park.
Consider a new vehicular car park entrance into Festival Hall from Tor Way to facilitate an easy and legible route. The same route could be signed when approaching from the west using Ramshill (B2070).
Develop use of Love Lane car park, potentially for residents permits, or lower cost, longer stay parking for town centre employees
TROs and loading
Deliveries, and suitable on-street facilities should be key considerations of the future design to reduce inappropriate parking and ensure businesses can receive deliveries
Ensure adequate provision of disabled parking spaces in the new Town Spine design
Materials
Engagement with HCC's asset management department with regard to use of materials and planting within new design
Signage
Develop and consult upon a parking strategy in support of the delivery of the Town Centre Vision
Amend town centre parking signage to direct vehicles towards interceptor car parks – highlighting that the Rail Station is only likely to have spare capacity at weekends
Investigate new access onto Festival Hall car park from Tor Way
Improve signage from all interceptor car parks towards the town centre
Improve wayfinding – consider a “totem” and “fingerpost” pedestrian signage approach to maintain consistency with other Hampshire locations
Investigate complimentary cycle signage to direct riders through the town and onwards to other destinations in the National Park
Monitoring
Ensure that projected increased traffic flows on routes external to the Town Spine (particularly Station Road and Dragon Street) are monitored before and after delivery of any future scheme
Review and monitor casualty levels on the Town Spine and external routes as part of evaluation of any future scheme
Use the pedestrian counts, and demographics to evaluate success of the future design
Use cycle counts as a baseline to evaluate future design and see if any displacement cycling occurs to or from alternative routes

Table 13 Recommendations of the study

14. Conclusion and next steps

To support the future development of the “Town Spine Brief” the following main aims were agreed for this Transport Study:

- Compile a traffic evidence base (including motor vehicle, pedestrian and cycle movements, and including public transport) to define the existing transport situation along the Town Spine in Petersfield
- Identify the impact on the surrounding highway network of a potential reduction of through-traffic and on-street car parking along the Town Spine
- Assess car parking capacity to understand if on-street parking could be reduced along the Town Spine

In addition, the study supports local ambitions to enhance the status of Petersfield as a gateway to the South Downs National Park by reviewing public transport links to the town, and walking and cycling routes starting in the town and heading onwards to other areas of the National Park.

To conclude, this study has:

- Provided the relevant evidence base to support the development of the Town Spine Brief.
- Shown that link capacities on routes alternative to the Town Spine are likely to be able to cater for traffic redistributed from the Town Spine, including background growth in traffic, and suggests that junction capacity assessments are now undertaken.
- Shown that car parks around the Town Spine are likely to be able to cater for a redistribution of traffic resulting from a reduction in parking on the Town Spine itself. Should further increases in capacity be required, the study findings suggest that Causeway car park would be the most suitable location
- Suggested a number of transport related measures to enhance the status of Petersfield as a gateway to the National Park

This study is the first step in delivering the aspirations set out in the Town Centre Vision within Petersfield’s Neighbourhood Plan. It is strongly recommended that further steps are taken in able to deliver this vision, these steps are set out as follows:

- Review this study, and use the evidence base to update the Town Spine Brief and compare with works previously undertaken at the northern end of Lavant Street (phase 1, delivered 2015), and planned works for the remainder of Lavant Street (phase 2, to the junction with Chapel Street)
- Establish governance structure for delivery Town Spine Brief and stakeholder group to include disability groups, local businesses, residents, train operating company, public transport providers and users of the town representing all modes of transport and any other relevant officers e.g. community safety, civil enforcement officers and tourist information staff and/or visitors to the town.

- Establish levels of funding available to be spent on future works, including that required for the design of the elements of the Town Spine e.g. including Section 106 contribution, Market Towns Initiatives, CIL and any external funding, and opportunities for funding. A total budget should be agreed so that estimates can be made as to the various elements involved in developing and delivering a scheme (e.g. detailed design, client management, risk)
- Develop and consult upon a parking strategy in support of delivery of the Town Centre Vision, taking account of needs of disabled users and deliveries
- Undertake further study work including junction assessments, and collection of the evidence base within LTN1/11 from other discipline leads e.g. urban and landscape designers.
- Issue the Town Spine Brief for quotation. As any revisions to the highway network or to the management of traffic would either need to be delivered or approved by Hampshire County Council, it is strongly advised that Hampshire's own consultancy service (Hampshire Services) which cover all relevant disciplines is appointed for this work.