

Getting Around Keynsham
Transport Strategy

Mott MacDonald

Getting Around Keynsham Transport Strategy

July 2015

Bath and North East Somerset Council

Civic Centre
Market Walk
Keynsham
BS31 1FS

Mott MacDonald, Stoneham Place, Stoneham Lane, Southampton, SO50 9NW, United Kingdom
T +44 (0)23 8062 8800 **F** +44 (0)23 8062 8801 **W** www.mottmac.com

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description	Standard
A	April 2014	C Brisley	S Finney	S Finney	Draft	
B	June 2014	S Finney	N Richardson	N Richardson	1st revision	
C	July 2014	S Finney	P Rapa	N Richardson	2nd revision	
D	October 2014	R Smith	R Smith	P Dawson	3rd revision	
E	December 2014	R Smith	R Smith	P Dawson	4th revision	
F	December 2014	R Smith	R Smith	P Dawson	5th revision	
G	January 2015	R Smith	R Smith	P Dawson	6th revision	
H	January 2015	R Smith	R Smith	P Dawson	7th revision	
I	February 2015	R Smith	R Smith	P Dawson	8th revision	
J	February 2015	R Smith	R Smith	P Dawson	9th revision	
K	July 2015	N Simons/ J Lovatt	P Dawson	P Dawson	Final	

Contents

1 Vision

1.1 Context

1.1 Transport is fundamental to the successful economy and wellbeing of Keynsham, its residents and employees. It provides access to the town centre and its retail and leisure facilities, as well as to employment for those living or working in Keynsham.

1.2 However, traffic congestion today is causing delays; both in the town and for traffic using the A4, affecting the quality of life for residents in some parts of the town and making the town centre a less attractive place to visit. Traffic travelling through the town to wider destinations exacerbates these problems. This situation will only worsen with increases in traffic demand from new developments proposed within the town.

1.3 A Transport Strategy is needed to provide the framework within which individual proposals to mitigate these negative impacts can be considered and assessed against the objectives. A number of initiatives have already been delivered including 20mph speed limits and improvements to bus services through the Greater Bristol Bus Network project.

1.4 Therefore, the strategy will look to reduce the existing problems caused by congestion and support delivery of the Core Strategy, enabling growth. It will also build on the policies and measures included in successive Joint Local Transport Plans.

1.5 This report outlines the proposed strategy. .

1.2 A Proposed Vision

1.6 There are some strong views that are shared by the key stakeholders in that they all recognise the importance of transport to the local economy and the wellbeing of the town, its residents and employees. It is also evident that traffic volumes and congestion are having a negative effect on the town.

1.7 In developing a vision, it is important to set it in the context of progress made to date through various initiatives promoted through successive Joint Local Transport Plans and other funding sources. In addition, the Council's Adopted Core Strategy reflects the changes in the planning system manifest through the National Planning Policy Framework that supports the principles of sustainable development.

1.8 A strategy needs a vision, in effect a statement that outlines the main aims. In this context, the proposed transport vision reflects the wider vision for Keynsham as an attractive place to live and work, with a thriving retail centre:

> **To minimise the negative effects of traffic congestion in and around Keynsham and ensuring it retains its independence and its separate identity within an attractive rural setting by becoming a more sustainable, desirable and well-connected place in which to live and work.**

1.9 This aligns with the Core Strategy Vision for Keynsham and what the spatial strategy seeks to achieve:

"Keynsham is a historic town that occupies a strategically important location between Bristol and Bath and is therefore well placed to improve and attract investment. It will continue to act as a market town and service centre for the surrounding area. In responding to the loss of a major employer, it will evolve as a more significant business location. Keynsham will expand to accommodate a growing population, ensuring it retains its independence and its separate identity within an attractive rural setting. It will become a more sustainable, desirable and well-connected place in which to live and work, with an enhanced town centre inspired by its heritage, cherished rivers, park and green spaces."

Respondents to the public consultation expressed a high level of support for the draft vision, with four out of five people endorsing the proposed approach.

1.3 Objectives

1.10 Based on the documentation available and discussions with Stakeholders, the following objectives are proposed:

- Minimising the future increase in traffic congestion;
- Supporting and enabling the local economy;
- Promoting sustainable mobility;
- Widening travel choice;
- Improving connections, particularly to improved rail services and the town centre;
- Widening access to opportunities: jobs, learning, training, leisure and other local facilities;
- Improving air quality and reducing vehicle carbon emissions;
- Improving the quality of life for residents;
- Ensuring that all traffic management and pedestrian schemes are designed to take mobility needs in to account.
- Maximising safety for all transport users

1.4 Coverage

1.11 The strategy covers the town of Keynsham and its immediate environs, including the A4 Keynsham Bypass, as shown below (see **Figure 1.1**). However, although not able to identify potential strategic road or junction improvements the development of detailed design proposals, for example the Hick's Gate junction, will form part of the implementation programme resulting from the strategy.

Figure 1.1: Keynsham Area

Source: http://www.openstreetmap.org

2 Adopting a Structured Approach

2.1 Key Issues

2.1 A number of key issues have been identified; these have complex inter-relationships but some common strands have been used for a transport strategy that will enhance the town and maintain its attractiveness as a local retail and employment centre. Each of the key strands is set out below together with an indication of the data sources. A large amount of data has been compiled as part of the process of developing the strategy and this has been used as supporting evidence.

2.2 Car use will continue to be the main option for transport, and in some cases the only option, but containing the number of journeys made by car will benefit everyone in terms of congestion, environment and local economic activity. Promoting sustainable transport options must play a part in seeking to manage traffic levels more effectively. This does not mean that the strategy is anti-car but instead looks to make non-car modes more attractive, so they can offer a realistic alternative to a proportion of Keynsham's residents and employees. A range of measures are proposed which, in combination, will address the objectives of the strategy.

2.3 The strategy needs to be durable in that delivering some measures will involve long term commitments and the strategy is required in order to support and secure the delivery of the future developments identified in the Council's Core Strategy up to 2029. A total of 2,150 new houses are expected to be built between 2011-2029, representing a 30% increase in number of houses in Keynsham.

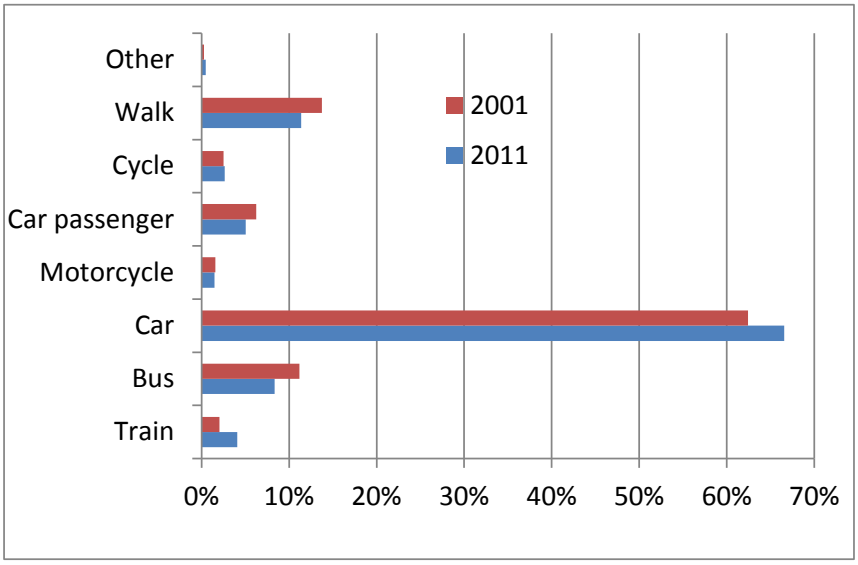
2.1.1 Reducing the Impact of Vehicles

2.4 Keynsham town centre has a highly constrained road network that it is not conducive to high volumes of through traffic. Nevertheless, for the majority of trips from Keynsham to the west, north and east, the natural route choice takes in at least part of the main east-west route through Keynsham (comprising Bath Road, Bath Hill, High Street and Bristol Road). This results in high volumes converging on the High Street and Ashton Way.

2.5 A good starting point in assessing travel patterns is the mode share – how many people move by which means. Data is available on this from Census travel to work figures for Keynsham residents as shown in **Figure 2.1**. Car is the dominant mode and its share of all trips has increased from 2001 to a level where two thirds of trips to work in 2011 were made by car.

2.6 The increase in car mode share is shown to be at the expense of walking and bus; the closure of Somerdale in early 2011 is likely to have contributed to this. One positive change is a doubling in rail use, albeit from a low starting point of 2.0% in 2001.

Figure 2.1: Travel to Work Mode by Keynsham Residents



Source: NOMIS data, Table QS701EW (2011) and Table T203 (2001)

2.7 Traffic demand will increase in the future as a result of new developments. The Adopted Core Strategy[1] gives details of the developments which are either committed or planned to go ahead up to 2029, and includes the following:

- K2A (266 residential units), K2B (285 residential units) and KE4 (200 residential units);
- Keynsham East (south of A4) (250 residential units);
- Somerdale (700 residential units and 11,125 sqm employment);
- The New Town Hall now complete;
- Employment area at Pixash Lane (30,000 sqm employment);
- The possible redevelopment of Riverside offices as dwellings or retirement flats

2.8 Other potential developments which may affect traffic demand are

- Fire Station converted to the new Headquarters for the Avon & Somerset Fire & Rescue Service
- The possibility of a new leisure centre in Ashton Way

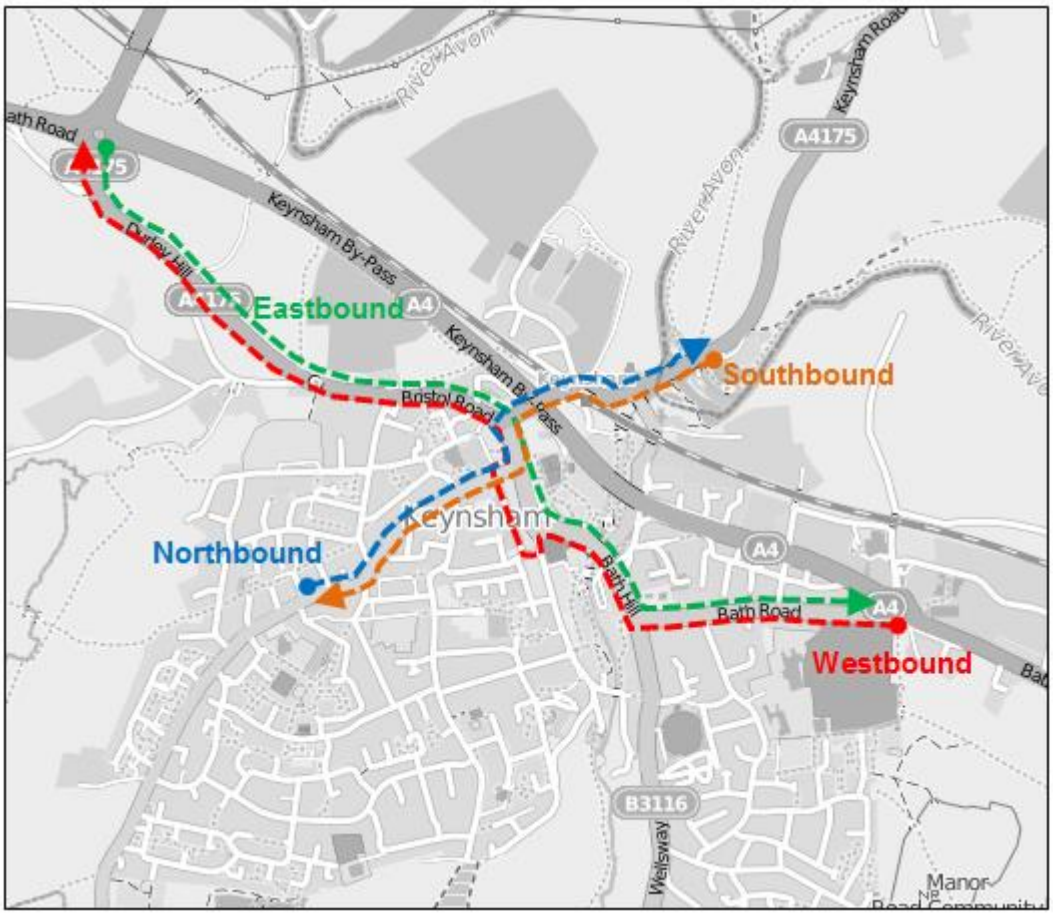
2.9 A PARAMICS Microsimulation traffic model has been developed for Keynsham and it has been used to assess the impact of increases in demand from these new developments between 2012 (model base year) and 2022, assuming all of the developments are in place by

[1] Core Strategy (July 2014), formally approved and adopted by the Council following the examination by the Planning Inspectorate

then. The road network in 2022 takes into account the proposed Somerdale access and new signalised junction on Keynsham Road, with the Avon Mill Lane junction also signalised and the Avon Mill Lane/ Bath Hill junction improved.

2.10 Not surprisingly, congestion is predicted to worsen, as demonstrated by increases in journey times through Keynsham on the main east-west and north-south routes (see **Figure 2.2**).

Figure 2.2: Journey Times routes for Through Traffic

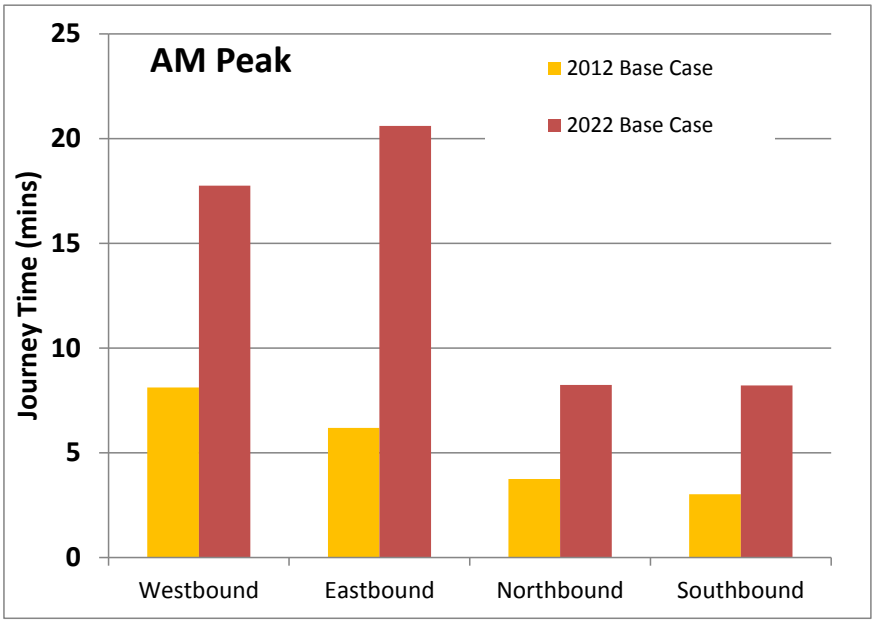


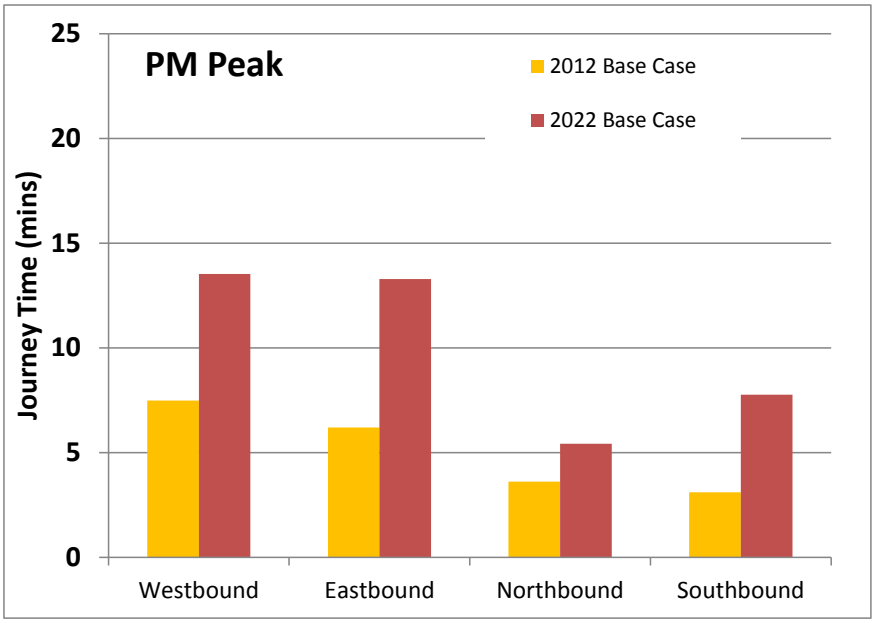
Source: http://www.openstreetmap.org

2.11 **Figure 2.3** shows large increases in journey times on all four through routes, particularly the eastbound and westbound routes, with increases of 10 minutes or more in the average time during the AM and PM peak hours. This will adversely affect journeys starting or finishing in Keynsham itself. In addition Keynsham is an important service centre for the surrounding rural

hinterland, and indeed parts of south Bristol, and therefore this through traffic may undermine the reliability of rural bus services on which many people rely.

Figure 2.3: Journey Times Through Keynsham - Base Case

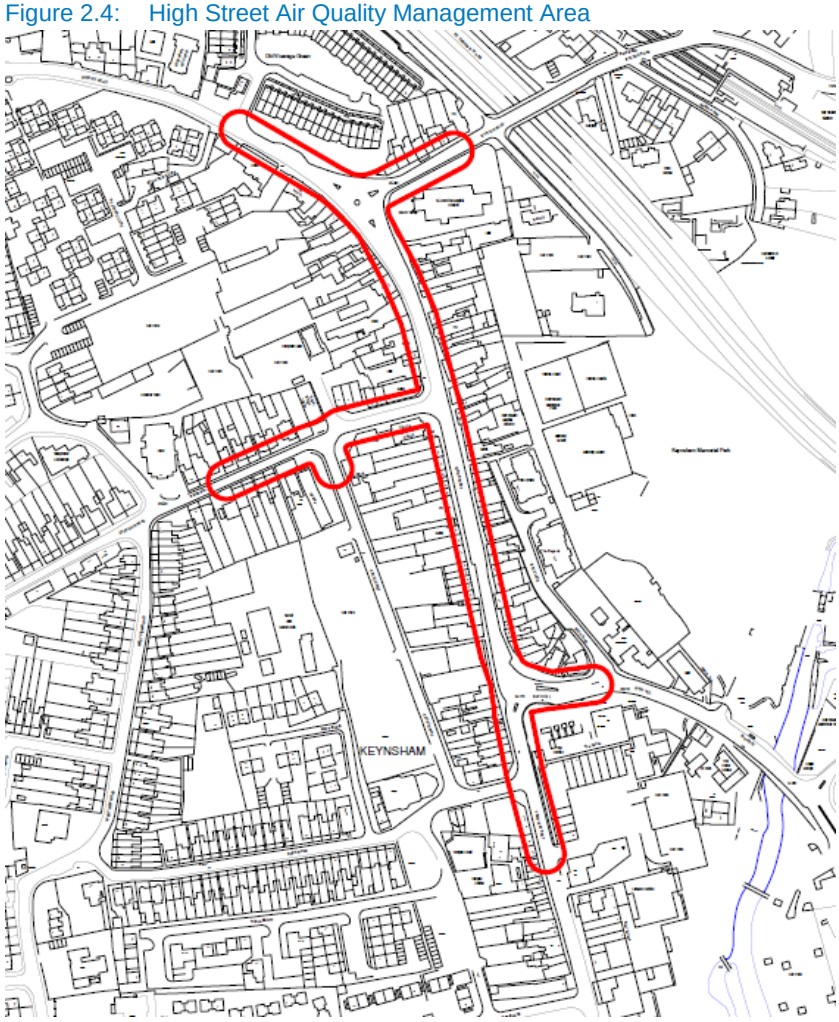




Source: Paramics model, average times 08:00-09:00 and 17:00-18:00

2.12 Good air quality is important for health, with poor air quality having particular impacts on respiration-related illnesses. It is well understood that most air quality problems are caused by vehicle emissions. An Air Quality Management Area (AQMA) was declared along the High Street and Charlton Road in July 2010, due to levels of nitrogen dioxide exceeding the National Air Quality Objectives (see **Figure 2.4**). The deterioration of air quality may be linked to the increased use of diesel engines in private cars.

Figure 2.4: High Street Air Quality Management Area



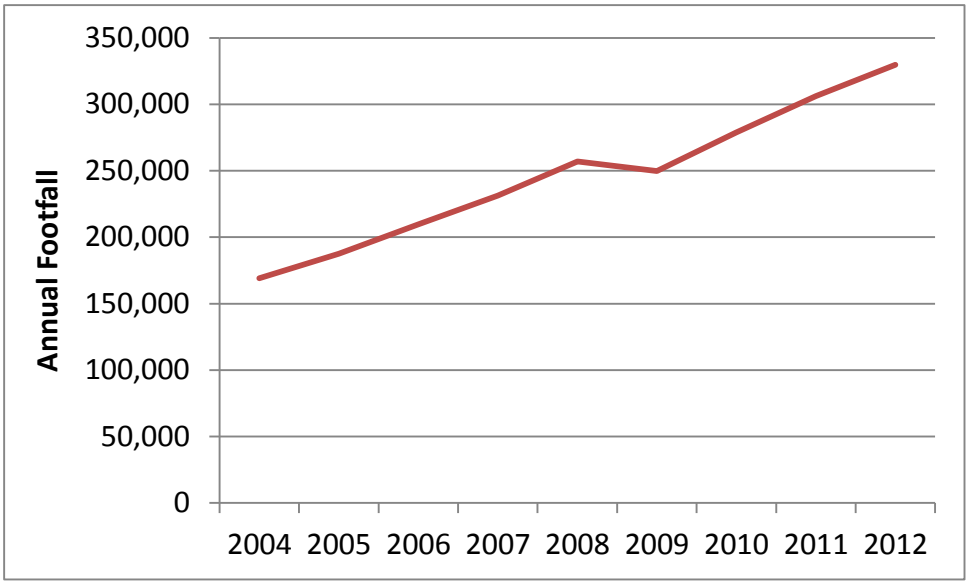
Source: http://www.bathnes.gov.uk/services/environment/pollution/air-quality/air-quality-management-area-keynsham

2.13 **Key Action: Place a strong emphasis on reducing the effect of vehicles by supporting trips that are made by means other than car, by more people using improved rail and bus networks, and by increasing levels of walking and cycling.**

2.1.2 Rail – New Services and Opportunities

2.14 The number of rail users is at an all-time high in the UK and this is mirrored at Keynsham according to the annual record of passengers boarding/alighting at the station. **Figure 2.5** shows that rail use has doubled since 2004, with around 330,000 passengers using the station in 2012. More people can be expected to use the local rail network as wider and better journey options become available.

Figure 2.5: Passengers Using Keynsham Rail Station



Source: Data from B&NES

2.15 The Bath & North East Somerset with other West of England authorities have prioritised plans through its MetroWest major scheme for improvements to rail infrastructure and services that will make them more attractive for journeys to Bristol, Bath, the Wiltshire towns and beyond. Improved access to the station will therefore become more important.

2.16 The MetroWest project proposes upgrading services across a wide area with more frequent trains between Bath Spa and the Bristol area. As part of Phase 1 of the project, regular half hourly train services would be introduced from Keynsham to Bristol and Bath by 2019. By effectively doubling the number of trains stopping at Keynsham, it is forecast that more people will travel by train for both work related and retail/leisure trips. So improved rail services will help in addressing peak hour traffic congestion, particularly if Keynsham residents walk, cycle or catch the bus to the station..

2.17 The electrification of the Great Western Mainline, due for completion in 2016, will increase the capacity available from Bath Spa to London Paddington via Chippenham, Swindon and Reading. The intercity services will have new rolling stock increasing the capacity of trains in

the Bristol/Bath area with the imminent cascade downwards of the Thames Turbo Class 165 units. MetroWest also includes the re-opening of the Portishead line, with a direct route between Bath, Keynsham and Severn Beach.

2.18 Co-operation between local authorities will help maximise the benefits of these substantial changes to the rail network.

2.19 To encourage the use of rail, local improvements are proposed for access to Keynsham station, including:

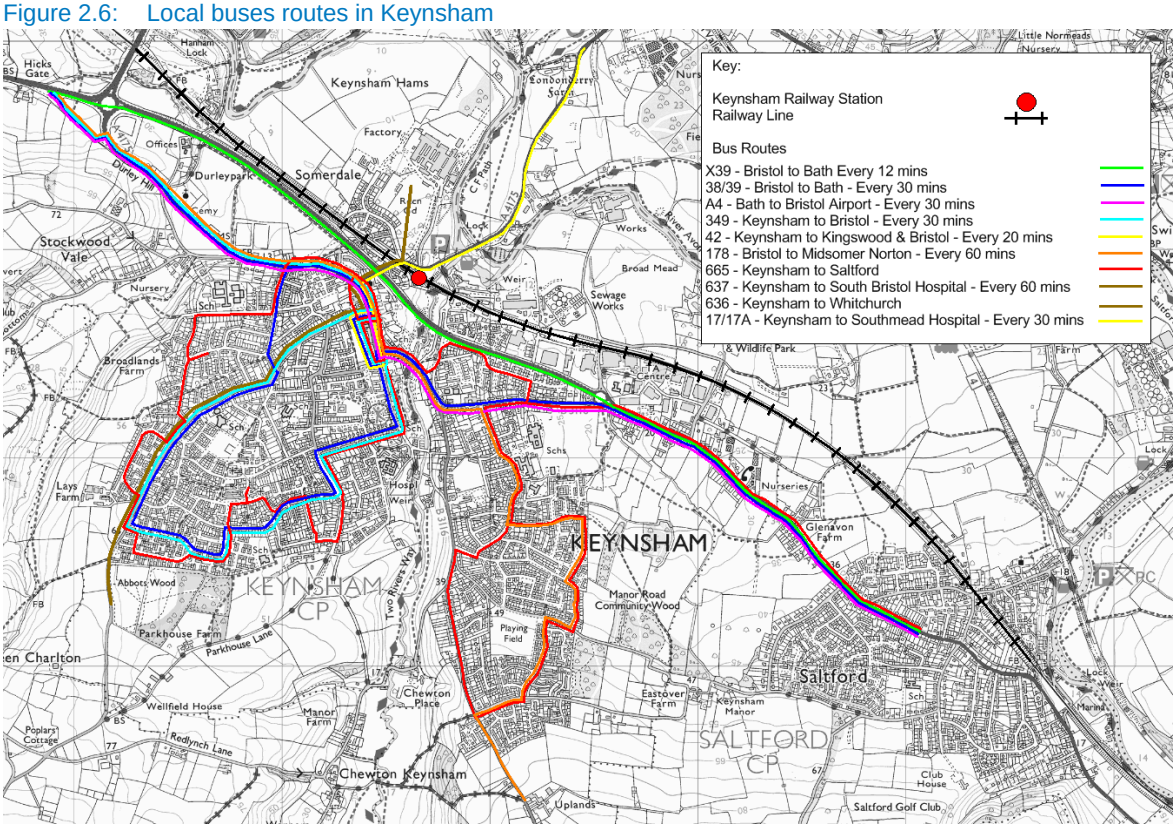
- An around Keynsham bus service with links especially from east Keynsham;
- Incorporating a new bus stop in the vicinity of the station;
- Links into a wider cycle route network;
- Improved and more secure cycle parking facilities;
- New pedestrian crossing on Keynsham Road for improved access from Somerdale site;
- Pedestrian routes assessed (and improved) as part of a non-motorised users audit;
- Improved waiting facilities for passengers;
- Provision of real time service information in the town centre, such as in the Town Hall to supplement that recently introduced on the station platforms;
- Provision of CCTV cameras for improved security;
- An increase in capacity in the over-flow car park which should be opened by July 2015
- Marketing to 'relaunch' Keynsham station once the main improvements are in place.

2.20 **Key Action: The growth in rail capacity and the range of services available as part of the MetroWest and other schemes will support significantly more rail journeys to/from Keynsham. Access provision to the station has to be improved if the take up of these enhanced services is to be maximised**.

2.1.3 Bus Services – Making Better Use of Services

2.21 Parts of Keynsham are well served by local buses, whilst others are not. Bus routes and their weekday frequency are shown below in **Figure 2.6**.

Figure 2.6: Local buses routes in Keynsham



Source: Bath and North East Somerset Council

2.22 The west part of Keynsham has a 15-minute service to Bristol (services 38 & 349) and 30-minute service to Bath (Services A4 and 338). In contrast, the east part of Keynsham only has an hourly service to Bristol and Midsomer Norton (178) and those wishing to get a bus to Bath have to walk to the stop on Bath Road (around one mile from the southern-most part of the built-up area).

2.23 The number of bus users within the B&NES area has remained relatively constant in recent years but the number of concessionary users has increased. This indicates that the number of regular fare-paying users has declined, despite the improvements to services and infrastructure introduced for routes to/from Bristol and Bath.

2.24 The declining core market for buses is a concern which will need to be addressed given that bus is the most realistic option for many journeys beyond reasonable walking or cycling distance, or for those people who are unable or unwilling to walk or cycle. A number of initiatives have aimed to improve the quality of bus services in terms of journey reliability and punctuality but problems of unpredictable traffic conditions, such as in the town centre,

alongside negative perceptions of the bus offer, will need to be overcome if demand is to be stimulated.

2.25 Keynsham Dial a Ride provides a successful weekday service for residents. Patronage has been showing significant growth rising from 14,737 in 2011/2012 to 24,465 in 2013/14. Figures for the first three quarters of 2014/15 indicate that the growth is continuing to be exceptional.

2.26 The Council will continue to work with bus operators to determine the most appropriate ways to build the market through better ticketing, new information provision and services that meet the needs of local people during the day and into the evenings. B&NES Council support the rationalisation of fares and improved ticketing, as recently implemented for the Greater Bristol area as part of First Group's 'Fairer Fares for All' initiative. This has resulted in reduced fares between Keynsham and Bristol, at £4 for a day ticket with unlimited use, as Keynsham is in the Bristol 'Inner Zone'. Coupled with the extensive bus priority measures on this route, bus is an attractive option for travel into Bristol.

2.27 First has also completed their review of the whole West of England area, giving a cost of £3.50 for a single ticket between Keynsham and Bath (or £7 per day for unlimited use in the West of England Zone). Such initiatives have to come from the operators as the majority of bus routes are not subsidised, so the Council cannot dictate terms but they should continue to work pro-actively with the operators and suggest best practice initiatives.

2.28 In terms of recent changes to services, the Somerdale development has provided a new hourly bus service through the Section 106 agreement. Service 636 has been in operation since the end of March 2015. All parts of the Somerdale development will be within a reasonable distance of the nearest on-site bus stop, and the new service provides a weekday/Saturday bus service from Keynsham along Charlton Road to Whitchurch and then onto South Bristol. Therefore, residents of the west side of Keynsham, including those at the K2A and KE4 housing development sites, will also benefit from the new service with a direct service to Keynsham station.

2.29 The new Airport Bus is been an important new service particularly improvement frequencies to and from Bath.

2.30 Considering the potential opportunities in relation to enhanced rail services, it is essential that bus services and bus stop locations are improved in order to maximise take up of rail journeys. The effective combination of bus and rail services is crucial if car usage is to decline, therefore it's imperative that the Somerdale service is marketed as providing a good link to the rail station (e.g. through travel packs in the new housing developments). Bus stops in the Somerdale site will be immediately opposite the rail station and a new toucan crossing will be provided.

2.31 The potential for linking other bus services to the station to take advantage of the doubled rail services has been investigated. An initial view suggests that it should be possible to extend the local 665 service to loop via Somerdale on route to the town centre. However, there is insufficient room for buses to turn around at the station, so diverting any of the Bristol/Bath services to the station would not be possible. They could loop around the Somerdale development but this would be a significant diversion that would make the service much less attractive for those heading to Bristol and Bath.

2.32 The other developments in Keynsham are unlikely to justify any other new routes or increased frequency to existing services. Therefore, it will be essential that a good pedestrian route is provided between the new developments and the nearby bus stops.

2.33 Specific measures will include:

- Better multi-media service information, including the *TravelWest.info* website giving service information for the whole sub-region (joint initiative between operators, the Council and users);
- Improved linkages between bus and rail services;
- Smart ticketing, as being introduced currently, and mobile phone ticketing;
- Revised fare structure, especially for inter-urban services; and
- Measures to reduce delays to buses e.g. as part of capacity improvements at key junctions.

2.34 **Key Action: Improve bus services, with ticketing and other measures, in order to improve reliability and create better linkages between bus and rail services. This will provide viable alternative travel options to car use, promoted through travel plans and comprehensive marketing. Continued support for Community Transport as not everyone can use conventional public transport.**

2.1.4 Car Parking – Managing Supply

2.35 Keynsham has a substantial parking stock, of which the majority is managed by the Council, as detailed in **Table 2.1**. The locations of the car parks are shown in **Figure 2.7**.

Table 2.1: Existing Off-Street Parking Provision update charging schedule to show bands

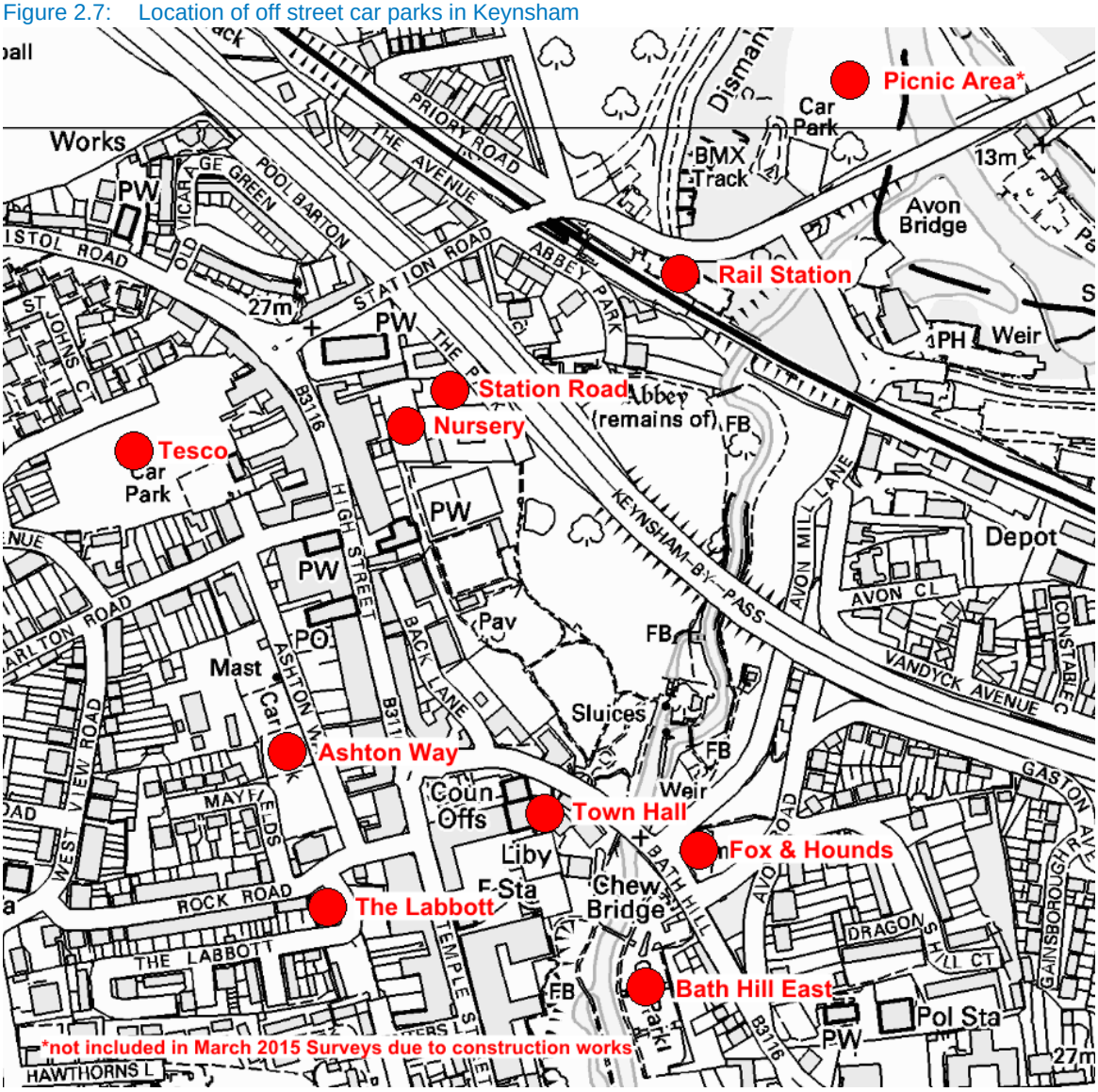
Car Park Type	Car Park	Capacity* (Vehicles)	Charge
Council Short Stay	Ashton Way	241	40p for 2 hours
	Ashton Way East	39	80p for 4 hours
	Town Hall Upper Levels*	120	
	The Labott North	30	Free for 2 hours
	All Short Stay	**410**	
Council Long Stay	Town Hall Lower Level*	currently closed	

Car Park Type	Car Park	Capacity* (Vehicles)	Charge
	The Labotts South	39	80p for 4 hours £1.30 for 8 hours £1.70 per day
	Fox and Hounds	27	
	Bath Hill East	154	
	Station Road	40	
	All Long Stay	**327**	
Other	Tesco	191	Free for shoppers 2 hours max
	Keynsham Railway Station	53	£2.30 per day
	Nursery	Informal	Free
	Picnic area	100	Free
	All Other	**244**	

*There is some variation with capacities observed during the 2015 surveys

Source: www.bathnes.gov.uk/services/parking-and-travel/car-parking/parking-keynsham; http://en.parkopedia.co.uk/parking/keynsham/

Figure 2.7: Location of off street car parks in Keynsham



Source: Contains Ordnance Survey data © Crown copyright and database right [2014]

Source: Keynsham Parking Survey Report, October 2009, B&NES

2.37 The Somerdale Planning Statement states that 'the existing station overspill car park, located in the picnic area, will be extended to provide an additional 100 parking spaces for users of the rail station. This will be laid out to the same standard as the existing car park.' Therefore, there is likely to be sufficient rail parking to meet future needs.

2.38 The new Civic Centre will re-provide the spaces that were temporarily lost during its construction. However the lower section of the car park is currently closed. There are no other committed changes to car parking provision as part of other developments.

2.39 With the construction of over 2,000 new houses in Keynsham, as identified in the Core Strategy, the demand for parking spaces in the town centre will increase. However, the increase in parking demand should be less than the 30% increase in number of households, as both existing and new parking demand should reduce with measures to encourage other modes. As detailed later the new Civic Centre has a Travel Plan for staff and visitors which, coupled with new working arrangements for staff, has reduced the demand for parking and has changed demand patterns. Allowing for the above changes, there could be an increase in parking demand of up to 20% for the Council-run car parks which is equivalent to 147 spaces.

2.40 As part of the Keynsham Transport Strategy, comprehensive new surveys of car parking supply and demand were carried out in March 2015. Survey details including dates, times and area coverage were agreed in advance with relevant stakeholders. Surveys were carried out as follows:

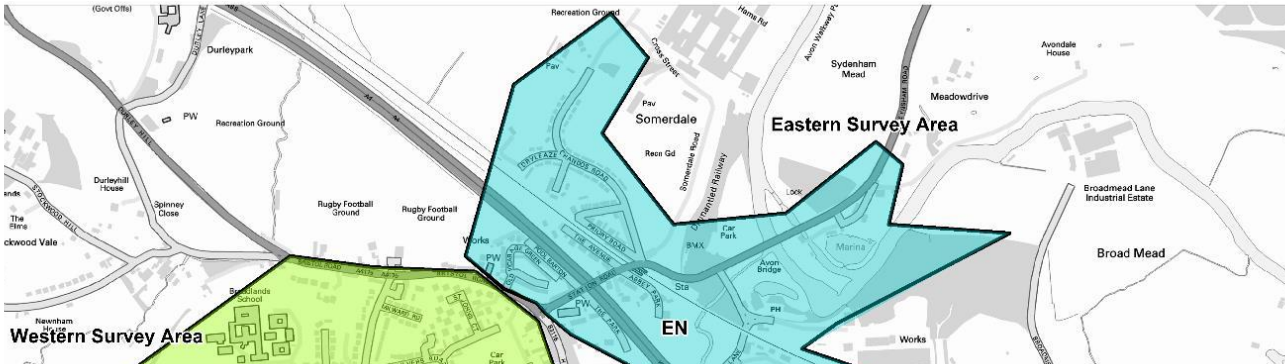
- Off street public car parking, Keynsham town centre.
- Private non-residential (PNR) car parking, Keynsham town centre.
- On street public parking, Keynsham town centre and areas adjoining town centre.

2.41 The off street surveys were undertaken in each of the public long and short stay car parks in Keynsham identified earlier in Figure 2.7. Both the off street and private non-residential parking surveys were undertaken on 12th and 14th March 2015 with registration plates being manually recorded periodically throughout the day.

2.42 Whilst primarily focussing on residential areas close to the town centre, the on street parking surveys included both the town centre itself and areas further afield.

2.43 The on street parking surveys in the town centre were undertaken manually on Thursday 12th March and Saturday 14th March 2015. The surveys were undertaken manually with registration plate details being recorded on a half hourly basis.

2.44 The on street parking surveys in the areas adjoining the town centre were undertaken on 12th and 19th March as well as the 14th and 21st March 2015. The surveys took place over consecutive weeks, with each road within a zone surveyed for one Thursday, and one Saturday. A map of the zones can be seen in Figure 2.8 below.



2.45 The survey was undertaken using a car fitted with Automatic Number Plate Recognition (ANPR) equipment. The car was driven around a set route, and noted the number plates, or Vehicle Registration Marks (VRMs) of each observed vehicle, providing a count of parked vehicles in every location.

2.46 The survey route was repeated four times each day. The observed VRMs have been compared between each survey run in order to identify parking patterns, and measure how long each vehicle was parked in that location on the survey day. The survey routes and beat timings were set following a trial run which established how long was required to survey different areas of the town.

2.47 In order to establish a comprehensive understanding of parking patterns in the town, the parking surveys were undertaken on both a weekday and a weekend in March. To ensure that the surveys captured the optimum number of vehicles potentially parking in Keynsham at the weekend the parking surveys were undertaken to coincide with the Farmers Market in Keynsham.

2.48 The results of the weekday off street car parking surveys are included in Table 2.3 below:

Table 2.3: Weekday Off-Street Parking Survey Results 2015

Car Park Type	Car Park	Capacity (Vehicles)	Maximum no. of Vehicles Counted	Maximum Utilisation %	Time
Short Stay	Ashton Way	224	174	78%	12:00
	Civic Centre Upper Levels	127	113	89%	13:30
	All Short Stay	**351**	**287**	**82%**	**-**
Long Stay	The Labott	69	58	84%	10:00
	Fox and Hounds	27	23	85%	10:00 and 13:00
	Bath Hill East	154	126	82%	11:00

Car Park Type	Car Park	Capacity (Vehicles)	Maximum no. of Vehicles Counted	Maximum Utilisation %	Time
	Station Road	40	41	103%	08:30
	Nursery	43	44	102%	08:30 – 11:00
	Keynsham Railway Station	53	49	92%	08:00 to 12:00
	All Long Stay	**386**	**341**	**88%**	**-**

2.49 Table 2.3 shows that short stay public off street car parking operates close to capacity at times on weekdays with just over 85% of parking spaces being utilised at the busiest period of the day. When combined the peak usage for short stay parking in Keynsham occurs at 12:30 in the afternoon. Peak occupancies for short stay parking were significantly lower on Saturdays with a maximum of 38% of the parking spaces utilised. This can be seen in Figure 2.9 below.

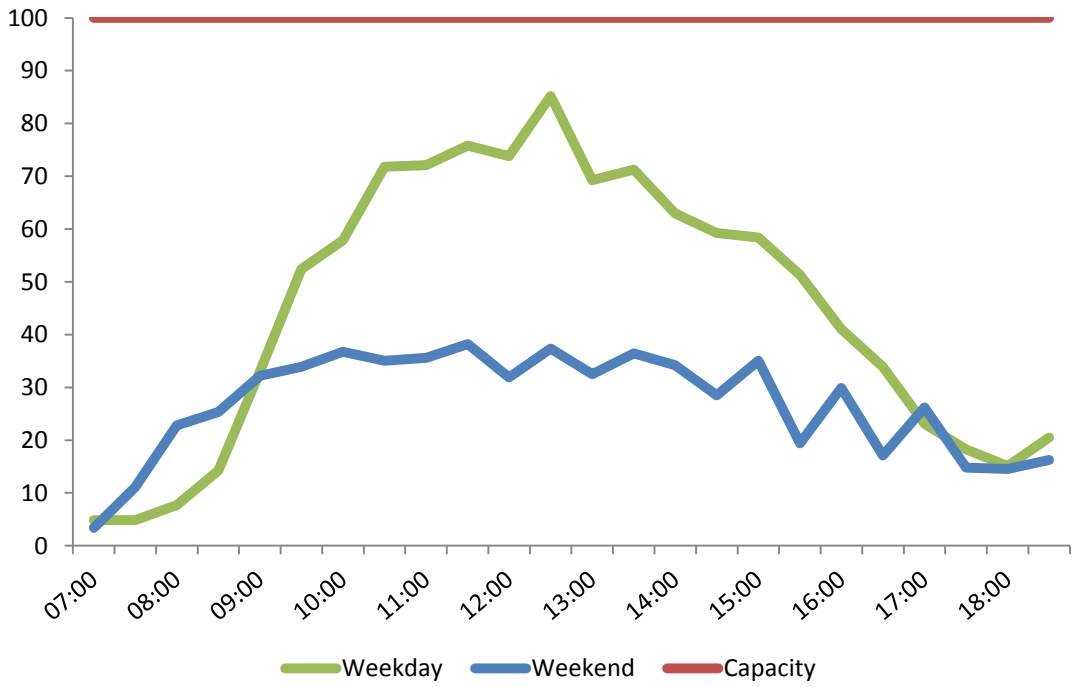


Figure 2.9 - Keynsham Short Stay Parking Accumulation, B&NES 2015 parking Surveys

2.50 The graphs on Figure 2.9 do not include those parking in Tesco's car park as this is privately owned. However when included the peak occupancy decreases both in the weekday and on Saturdays due to the number of parking spaces available.

2.51 Similarly to short stay parking, table 2.3 indicates that long stay public off street parking operates close to capacity during the weekday with both Station Road and the nursery car parks operating over capacity at peak times. When combined the peak usage for long stay parking occurs at 10:00 and 12:00 during a weekday with just under 85% of long stay parking spaces being utilised. Figure 2.10 below shows parking accumulations for public off street car parks both during the weekday and on Saturdays.

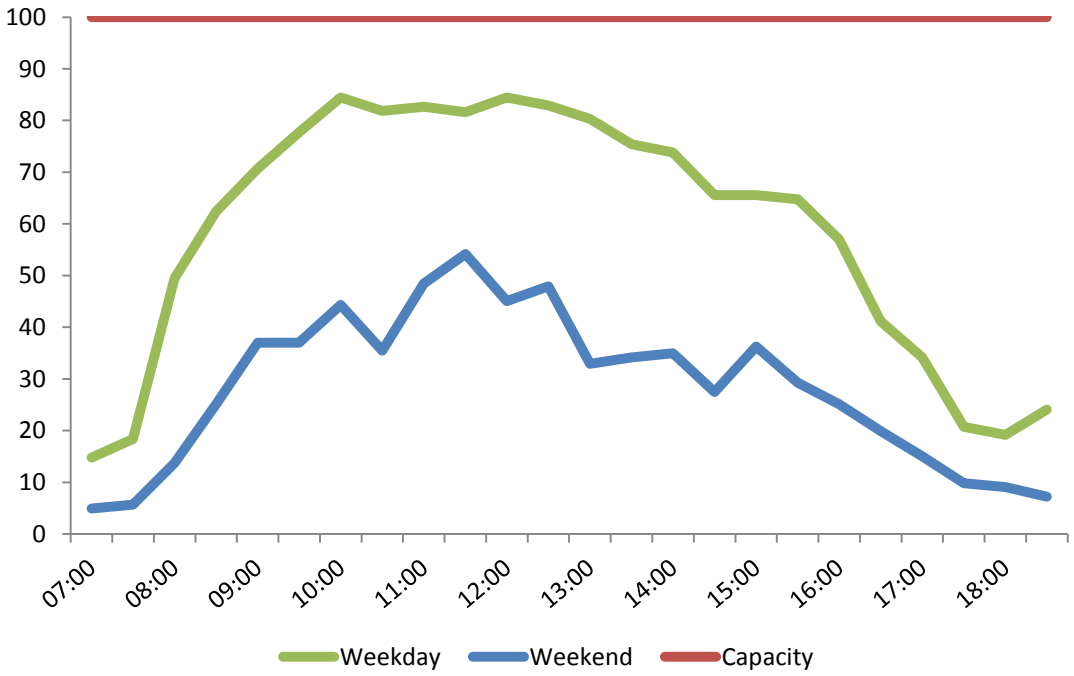


Figure 2.10 - Keynsham Long Stay Parking Accumulation, B&NES 2015 parking Surveys

2.52 As well as the utilisation of parking spaces in Keynsham the survey also set out to examine how long individuals were parking for in both the short stay and long stay car parks in Keynsham. Figures 2.11 and 2.12 below shows the aggregated duration of stay for those vehicles parking in both short stay and long stay car parks.

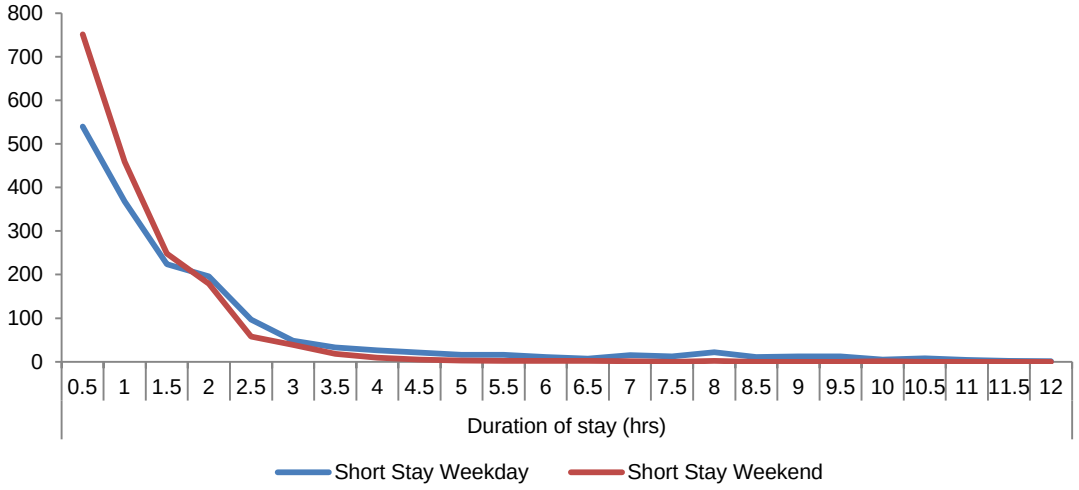


Figure 2.11 - Keynsham Short Stay Parking Duration, B&NES 2015 parking Surveys

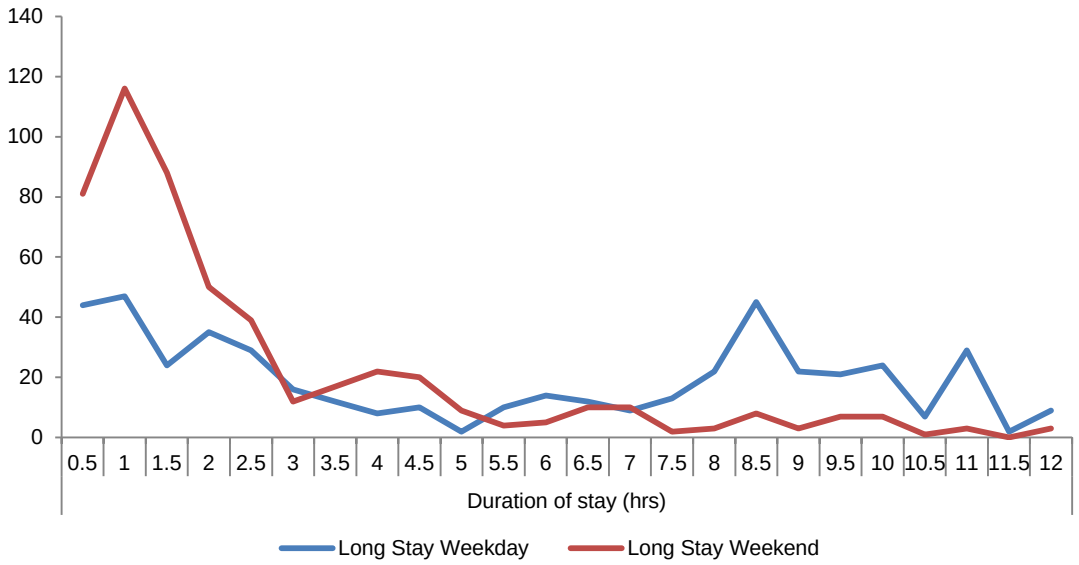


Figure 2.12 - Keynsham Long Stay Parking Duration, B&NES 2015 parking Surveys

2.53 Figure 2.11 shows that the majority of those parking in short stay car parks stay up to half an hour or one hour. When combining weekday and weekend data the survey shows that 37% of those individuals parking in short stay car parks in the town stayed for half an hour or less, whilst 61% stayed for an hour or less. This results in a high turnover of short stay parking spaces. Interestingly 1% of those parking in short stay car parks on a weekday have stayed up to eight hours, despite the maximum length of stay being limited to only 2 hours in short stay car parks. This could indicate that people are parking in short stay car parks unwittingly, believing them to be long stay or it could indicate that enforcement of car parks needs.

2.54 Interestingly, as per the short stay car parks, Figure 2.12 shows that the majority of those parking in long stay car parks at the weekend are staying for a short period of time. This is true to a lesser degree of weekdays where fewer people stay for such a short period. When looking at Saturdays 38% of drivers stay in long stay car parks for an hour or less whilst 64% stay for 2 hours or less. This is potentially due to some of the long stay car parks in Keynsham being free to users at the weekend, including Bath Hill East, resulting in them being used as short term car parks.

2.55 As expected there is a peak in the number of people parking for eight to eight and a half hours in the long stay car parks during the weekday which accounts for those who commute to Keynsham for work. However there also appears to be a lesser peak in the number of those staying up to 11 hours in long stay car parks. This may be due to a number of individuals

choosing to park in Keynsham and car share with a colleague into either Bristol or Bath due to the cheaper parking charges in Keynsham.

2.56 The results of the weekday private and non-residential (PNR) car parking surveys are included in Table 2.4 below:

Table 2.4: Weekday PNR Parking Survey Results 2015

Car Park Survey areas	Car Park	Capacity (Vehicles)	Maximum no. of Vehicles Counted	Maximum Utilisation %	Time
-	Tesco	191	158	83%	11:00
area 1	Ashton Way & east of Tesco	75	37	49%	11:00
area 2	Ashton Way, Back Lane	81	42	52%	12:00
area 3	East of the Labott	87	71	82%	14:00
	All PNR	**434**	**308**	**71%**	**-**

2.57 Table 2.4 shows that Private Non Residential parking provision amounts to some 434 spaces in Keynsham town centre, however this is not fully utilised. Saturday peak occupancies were lower than weekday use, as would be expected for employee parking. Peak observed occupancy at Tesco on Saturday was 123 spaces (64% of capacity).

2.58 The results of the on street car parking surveys are included in the following Tables 2.5 and 2.6, for the town centre and out of centre parking respectively:

Table 2.5: Weekday Town Centre On Street Parking Survey Results 2015

Area/Zone	Streets	Capacity (Vehicles)	Maximum no. of Vehicles Counted	Maximum Utilisation %	Time
Town Centre	High Street, Temple Street and Carpenters Lane	44	34	77	10:00

Table 2.6: Weekday Out of Centre On Street Parking Survey Results 2015

Area/Zone	Sub Area	Max Short Stay	Max Medium Stay	Max Long Stay	Minimum capacity available	Time Period
Keynsham East	East 1	18	9	26	47	PM1
	East 2	17	10	19	54	PM1
	East 3	22	5	11	62	PM1
	West 1	11	5	10	73	PM2

Area/Zone	Sub Area	Max Short Stay	Max Medium Stay	Max Long Stay	Minimum capacity available	Time Period
Keynsham West	West 2	18	11	19	52	PM1
	West 3	18	10	9	64	PM2

2.59 Table 2.5 shows that the small amount of town centre on street parking provision operates within capacity, including on Saturdays when the peak occupancy recorded by the survey was slightly higher than the weekday (37 spaces = 84%).

2.60 Table 2.6 shows that on street parking in areas outside the town centre on a weekday operates well within capacity, with a significant number of spaces remaining available. Generally similar results were evident from the surveyed Saturday. Some variation between zones was noted, with on street parking being more strongly utilised in areas east of the town centre compared to areas west. Certain individual roads were noted to be relatively heavily used for on street parking -Rock Road, Culvers Street/St John's Court, and Chandos Road for example- however significant capacity remains overall. Figure 2.13 below shows graphically the availability of on street parking in Keynsham.

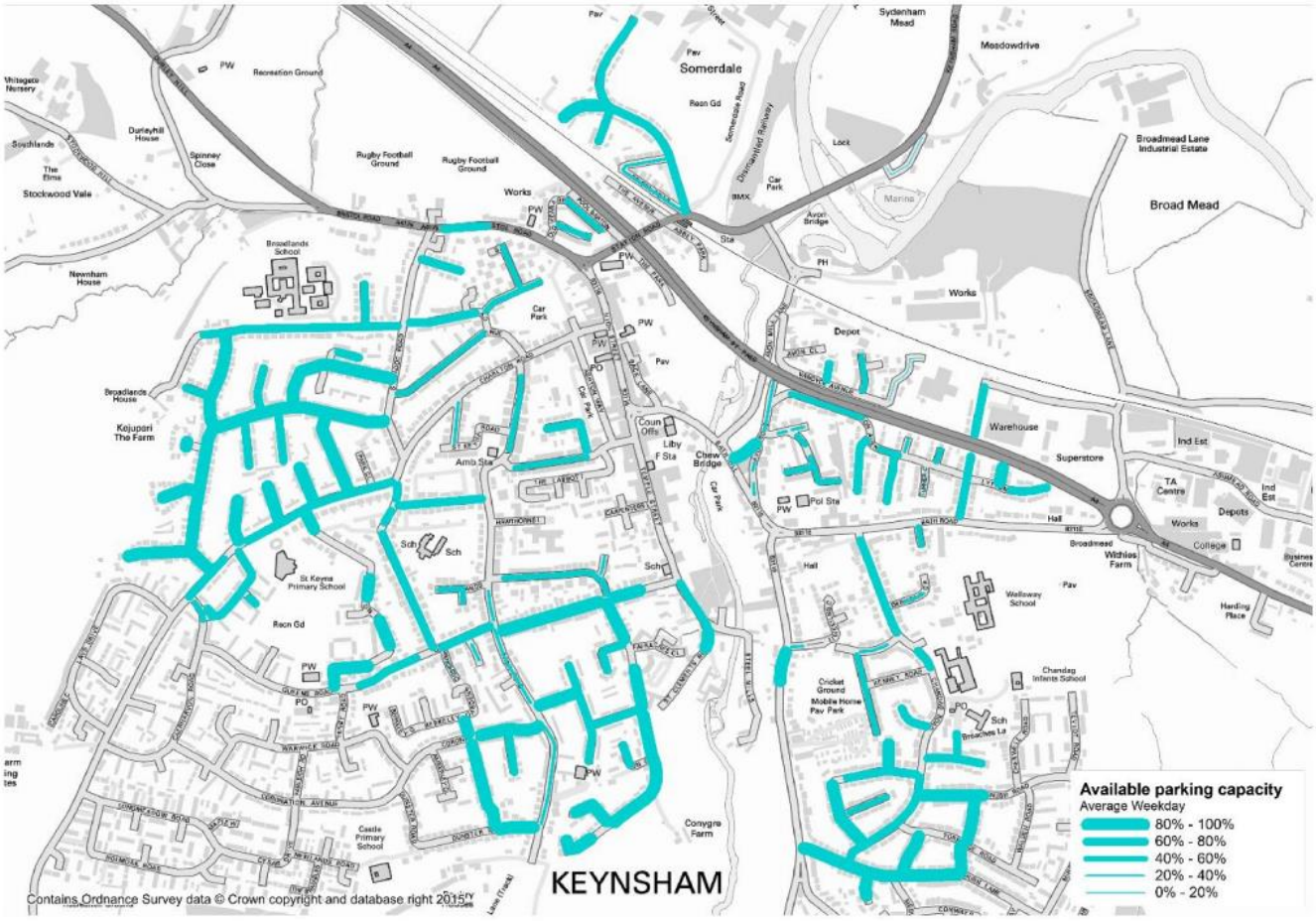


Figure 2.13 – Proportion of available parking spaces (unoccupied) in the survey area.

2.61 The results of the new parking surveys undertaken to inform the Keynsham Transport Strategy indicate that, while there is considerable variation between individual locations, overall supply is sufficient to meet current levels of demand. Equally however, the level of demand for Council-managed parking is strong enough to suggest that this should not be reduced further without re-providing more parking elsewhere or introducing other suitable measures.

2.62 One development that will have an effect on parking stock and demand is the possibility of relocation of the Leisure Centre from its present location at Temple Street to Ashton Way. It is proposed that it could be sited on the existing Ashton Way car park, and would require approximately half of the land currently utilised by the car park. The car parking spaces lost would then be relocated to a one storey deck on the remaining half of the car park. It is also recommended that the opportunity should be taken as part of this process to increase the

short stay capacity to match the overall predicted demand for the town centre created by the planned developments around the town.

2.63 Given the pressure on the short stay car parks, use of car parks further away from the centre, such as Bath Hill East which is only 200m away from the High Street, should be promoted. The 'Long Stay' car parks have the same charges as the short stay car parks for up to two or four hours. In addition consideration to managing commuter parking in residential streets is essential to manage parking demand.

Key Action: the Strategy recognises the importance of maintaining the supply of off-street parking within the Town. The current supply would appear to be sufficient to meet demands at the moment but this will be kept under review.

2.1.5 Walking and Access for All

2.64 Walking journeys is generally reliable, promote healthier living, reduce traffic levels (many car journeys are short enough for walking to substitute) and promote social interaction and vibrant communities.

2.65 Possible pedestrian and public realm improvements to the High Street have been raised, in relation to the potential for the High Street to be made one way, and this is discussed later. Even if the existing layout is maintained, it should be possible to improve the pedestrian environment on the High Street by widening the footway which will also help to keep traffic speeds down.

2.66 An improved walking network will support a shift towards walking and will help to encourage more active lifestyles. Already Keynsham has become part of the Walkers are Welcome national initiative. The Council has recently approved a 'Fit for Life Strategy' which has an overall vision of getting '***more people, more active, more often***'. Of particular relevance is the section on Active Travel which has the objective that in the future **'more people are walking or cycling as a means of getting around as part of everyday life'**. This will be achieved through improved walking and cycling conditions by:

- Safe, attractive walking and cycling networks linking every day destinations;
- Develop a coordinated pack of individualised travel marketing;
- Develop school and work travel plans;
- Provide high quality cycle training;
- Support the delivery of walking programmes.

2.67 To achieve a walking-friendly town, the strategy will:

- Encourage increased levels of walking to schools, the town centre and rail station;
- Define a walking network of utility and leisure routes;

- Contribute to the health agenda, by promoting the benefits of walking (and cycling);
- Engender a cultural shift to walk as the first choice for many journeys.

2.68 A significant proportion of people have some form of mobility impairment (walking difficulties, visual or hearing impediment) and others may encounter difficulties walking around the town, such as those with shopping or pre-school children. Access to the centre from the east is particularly difficult due to the topography of the Chew valley.

2.69 2011 Census data indicates that Keynsham has an older population (see **Table 2.2**), with 50% of residents aged over 44, compared to 43% for the whole of B&NES and 41% as the UK average. 23% are over the age of 65 in Keynsham, compared to only 16% as the UK average. Therefore, Keynsham is likely to have a higher proportion of residents with mobility problems, compared to the rest of the UK.

Table 2.2: Comparison of Age Ranges

Age Range	Keynsham	Whole of B&NES	UK
0-16	18%	17%	19%
16-24	10%	15%	12%
25-44	22%	24%	27%
45-64	27%	25%	25%
65+	23%	18%	16%

Source: http://www.nomisweb.co.uk/

2.70 Accessibility for people with mobility impairments should feature when walking routes are considered.

2.71 In order to identify deficiencies within the walking network in Keynsham a pedestrian audit was commissioned as part of the Keynsham Transport Strategy. The audit sought to identify issues that may be affecting the quality of footways and routes for pedestrians and therefore may be acting as a barrier preventing individuals from making more of their short trips on foot.

2.72 The audit was underpinned by the following principles that any pedestrian route should:

- not give rise to road safety or personal safety concerns;
- directly facilitate the desired journey without undue deviation or difficulty;
- link origins and destinations;
- be attractive and comfortable to use;
- be accessible to disabled users and people with children and pushchairs; and

- be continuous and not subject to severance or fragmentation.

2.73 Throughout, the emphasis of the pedestrian audit was on:

- Desire line, the ease and continuity of the route;
- Physical layout of route;
- Relative safety of route;
- Sensitivity to distance;
- Ease of crossing points;
- Ease of those with visual impairment; and
- Ease of those with physical impairment.

2.74 The pedestrian audit identified a programme of works to improve the pedestrian network. The audit identified the following key pedestrian routes to and from:

- The town centre;
- The rail station;
- Around primary and secondary schools;
- Keynsham health centre;
- Towards Willbridge (boundary with South Gloucestershire Council);
- Towards Stockwood; and
- The new Council offices at Market Walk

2.75 The audit confirmed that the main junctions in the town centre are critical interaction points between pedestrian and vehicle traffic as evidenced by the sample pedestrian counts. Improvements to crossing points at these junctions – in addition to another crossing point along High Street – have been ranked high as part of a potential future works programme. It is recognised that some of the outlined measures will require significant expenditure, for example, to the junction of Station Road, High Street and Bristol Road. In addition any works here would have to consider the need to include the Tesco junction onto Bristol Road. However, there are some more modest interventions, such as improving way finder signage

or buff surfacing treatment that could bring some important benefits to the pedestrian environment and make movement easier.

2.76 Outside the town centre, the audit has principally identified enhancements to crossing points along the principal roads and to local services such as schools as the priority. The majority of these are uncontrolled crossing points and would have beneficial effect of directing pedestrians to safer crossing points in the immediate location. A further advantage is that these measures could reinforce the speed limits and zones that exist in the town.

In conclusion, the audit confirms that there are good opportunities to enhance the level of walking within Keynsham. There is generally good permeability within residential areas but there are specific areas where traffic flows coupled with existing highway layouts create a poor sense of personal safety and to a certain degree, severance.

2.77 **Key Action: To review and take into consideration the results of the pedestrian audit, including the suggested programme of future improvement works, when considering future Capital expenditure**

2.1.6 Cycling – Building on Potential

2.78 Cycling is having a huge resurgence across the country but Keynsham is currently poorly served by cycle infrastructure, with no cycle paths or routes from the south of the town to the town centre, nor to the rail station. There are cycling parking facilities, including at the rail station (see **Figure 2.8**). However availability of these could be expanded

Figure 2.8: Cycling parking facilities at Keynsham rail station

Source: MM photo

2.79 SUSTRANS have completed a draft review of potential cycling. Also the Council is working with South Gloucestershire and Bristol Councils to develop a route alongside the River Avon, connecting into the National Cycle Network Route 4 (NCN4) between Bath and Bristol and the

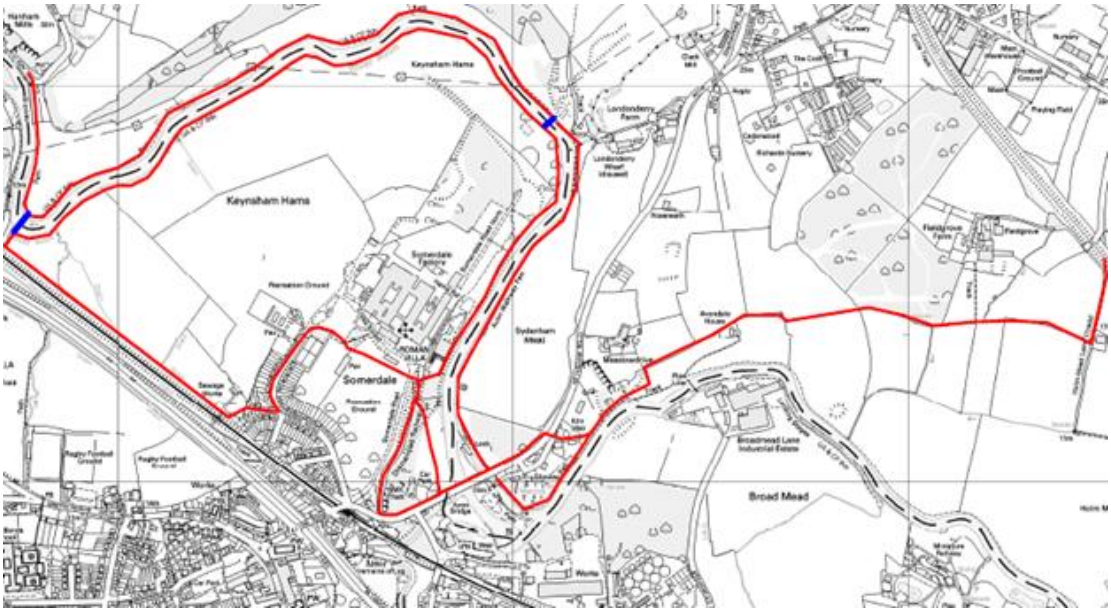
improved route to the Bristol Temple Quarter Enterprise Area (see **Figure 2.9**). The Somerdale development will provide key elements of this route with £1.1 million secured through a section 106 agreement for the provision of a bridge over the River Avon. Another potential scheme is the Keynsham Spine Route along the River Chew to give an off-road route linking the rail station and town centre (see **Figure 2.10**) and continuing along the Chew Valley to the south.

2.80 An extension of the existing Bath Road shared route linking to Saltford has recently been completed. Other possible improvements include:

- Access to the schools, through traffic calming and improvements on existing roads and footpaths;
- A 'quietway' along Chandag Road with shared space and traffic calming;
- Improved east-west routes linking into the Spine Route.

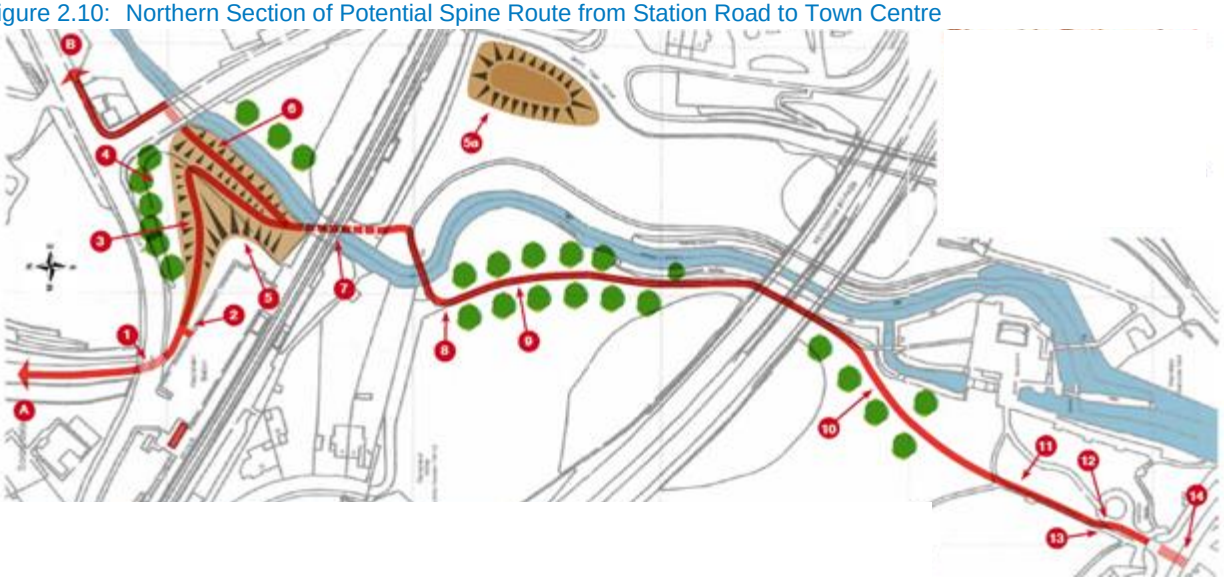
2.81 In relation to the proposed development at East Keynsham, the Adopted Core Strategy states that "key requirements include:….provision of cycle and pedestrian links through the site connecting to the existing network particularly towards Keynsham town centre, Clay Lane Bridge and NCN4."

Figure 2.9: Proposed Cycle Routes Alongside the River Avon and Through Somerdale (UPDATE TO SHOW CORRECT LOCATION OF BRIDGE)



Source: B&NES Council

Figure 2.10: Northern Section of Potential Spine Route from Station Road to Town Centre



Source: B&NES Council

2.82 Specific measures will include:

- Developing a basic network of high quality routes in the short term to further improve access to schools. These routes would be developed through consultation with local cycle groups and schools;
- Developing the network in the medium to long term, taking into account the recent review undertaken by Sustrans;
- Introducing traffic calming on certain routes to create an environment that is conducive to cycling;
- Improving and creating more secure cycle parking at the rail station, workplaces, residential developments, leisure facilities and town centre;
- Promotion of the new cycle routes through leaflets, route maps, school liaison etc.

2.83 **Key Action: In partnership with Bristol and South Gloucestershire, local cycle groups, the Town Council and Sustrans identify priority cycling routes to/from Bath, Bristol, east/ north Bristol and within Keynsham in order to build a cycling culture for people of all abilities. Target appropriate opportunities to fund these schemes**.

2.1.7 Development Requirements – Promoting Sustainable Development

2.84 A number of new developments are currently being built, with others planned as detailed in section **2.1.1** earlier. New developments give the opportunity to promote sustainable transport by design, and to provide high quality walking and cycling routes and bus links from the start.

As part of this, it is essential that developers consult the bus operators to plan bus access from an early stage, rather than trying to retro-fit bus links through a fixed development layout.

2.85 All new developments will be required to produce a Transport Assessment that details how the developer plans to promote non-car use at each site and how any additional traffic demand will be mitigated. A Travel Plan for each site will be required showing targets for sustainable travel, commitments to monitor the effectiveness of the plan and penalties if any agreed actions are not completed in the specified timeframe.

2.86 The Council must ensure that sufficient funding is provided by the developer to cover the costs of any off-site mitigation works required.

2.87 The implementation of these measures should reduce car use by these new developments by 10%, similar to that proposed by the Somerdale developments.

2.88 Specific measures will include:

- Ensuring that development sites have sustainable transport options through design and planning conditions, including on-site cycle parking, and that non-essential car use is discouraged;
- Integrating new sites within the town by incorporating pedestrian and cycle links to established routes and destinations;
- Requirements for Travel Plans, the effectiveness of which are monitored over time.
- Review routes between Keynsham and Whitchurch

2.89 **Key Action: Ensure that new developments have good accessibility by non-car modes, which is backed up by active and effective Travel Plans that are enforceable through a Section 106 agreement.**

2.1.8 Travel Plans

2.90 Travel plans should also be used for existing trip generators, as well as for new developments. They can contribute by giving people a better understanding of their travel options and encourage a move towards sustainable modes. For Keynsham, school travel plans should be fully implemented and regularly reviewed. Also workplace travel plans for major employers should be progressed. This can be in conjunction with improvements being made for walking and cycling which can act as a catalyst for a change in behaviour of travel patterns.

2.91 Commitments in such ‘voluntary’ travel plans by employers cannot be enforced by the Council except when subject to planning conditions; progressing measures, monitoring, etc. is reliant on the employer (who will hopefully recognise the benefits) but the Council can help by providing advice.

2.92 As B&NES Council is one of the main employers in Keynsham it will take the lead in implementing an effective Travel Plan, particularly when new working practices are being put in place for the new Civic Centre. It is estimated that B&NES Council staff undertake a total of 348 journeys per day between Bath and Keynsham by car. The Council are aiming to reduce unnecessary work trips through telephone and video-conferencing, whilst a 'hot desk' policy may also help to promote working at home by staff for part of the week. Real-time information of and train departures should also be provided in the Civic Centre for staff and visitors.

2.93 The effect of travel plans can be demonstrated by lasting changes in travel behaviour, supporting sustainable travel choices and reducing peak time car travel. Evidence is available from other parts of the country that indicates how travel plan initiatives can be successful in reducing car dependency. For example, the University of Bath's travel plans show a reduction of 7.5% in staff sole occupant car trips in two years.

2.94 **Key Action: Ensure that travel plans are promoted for all major trip generators in the town to support a move from car to other means of travel.**

2.1.9 Town Centre and Junction Improvements

2.95 The traffic model mentioned above shows that by 2022, the existing arrangement of a mini roundabout at the junction of B3116 Wellsway, Bath Hill and Bath Road is likely to be over-capacity, leading to queuing that blocks back and affects other parts of the network. Modelling has shown that converting this to a signal controlled junction will help to relieve the predicted congestion and will also be beneficial in maintaining journey time reliability for bus services. Converting the junction to signal control is therefore recommended.

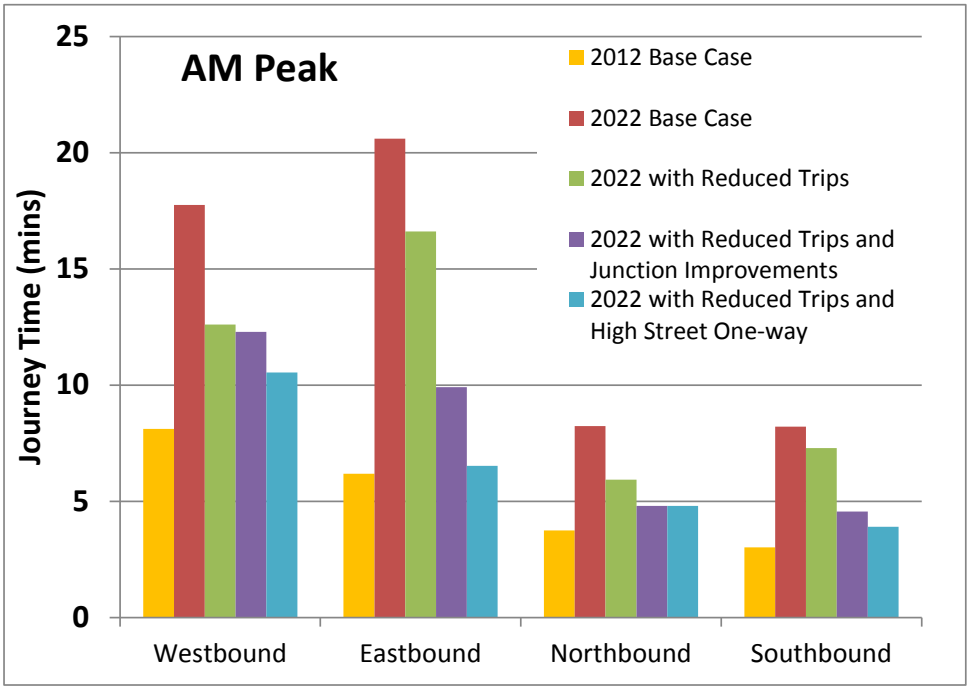
2.96 Long queues are also predicted at the proposed Avon Mill Lane / Keynsham Road signalised junction, particularly southbound in the PM peak. It is understood that there is a potential scheme to provide two southbound lanes at the signals (one lane for the left turn, one lane straight ahead). Such a scheme will help to relieve the congestion here so should be pursued.

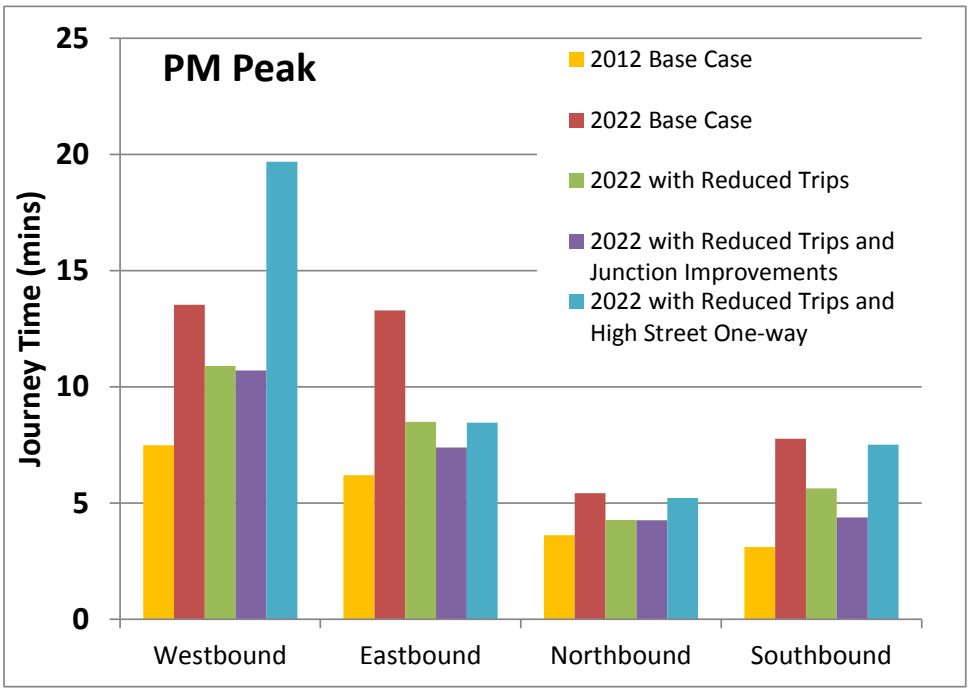
2.97 Many stakeholders and initial public consultation wished to see improvements to the public realm the town centre, to make it a more attractive place to shop. If the High Street were to be made one-way, it would reduce the impact of traffic and allow footways to be widened improving the pedestrian environment. Two potential layouts were considered with the High Street as one-way:

- High Street as one-way in the southbound direction but with Ashton Way retained as two-way.
- High Street as one-way in the southbound direction and Ashton Way one-way northbound to create a new gyratory system.

2.98 Traffic modelling showed that although traffic was generally kept moving around the gyratory, it caused very long delays for traffic on northbound Charlton Road due to the constraint of the junction with Ashton Way. Keeping Ashton Way as two-way was shown to work better overall. **Figure 2.11** shows the effect of changes to the road layout on journey times through the town centre.

Figure 2.11: Journey Times Through Keynsham – With one way working in the High Street





Source: Paramics model, average times 08:00-09:00 and 17:00-18:00

2.99 The 2022 Base Case has been re-run allowing for some switch from car trips to other modes. With improved rail services and access to the station, the on-going growth in rail use is expected to continue which could reduce existing trips from Keynsham to Bristol and Bath by around 280 in the AM peak period of 07:00-10:00 (and a similar level returning in the PM peak period). Investment in walking and cycling improvements, together with Travel Plans, should encourage a switch from car for existing short trips within Keynsham. This was assumed to be 9% of 'internal' trips in line with research from successful travel plans elsewhere in the UK (equivalent to a 1% reduction in the total trips in the model). With these allowances for reduced car trips in place, reduced journey times are shown compared to the 2022 Base Case. However, some large increases from the 2012 results are still evident.

2.100 With the two junction improvements at Wellsway and Avon Mill Lane, journey times are reduced further, particularly for the eastbound route in the AM peak.

2.101 In the AM peak, the introduction of the High Street as one-way is shown to be beneficial. However, in the PM peak, westbound trips are predicted to see an increase in journey time of 10 minutes as a result of this scheme, with smaller increase on the other three routes. The conclusion of this testing is that the predicted volumes of through traffic in the 2022 PM peak are too high to allow the High Street to be made one-way.

2.102 Given the outcome of the initial modelling of the High Street and the concerns regarding the operation of a one way, especially in the PM peak, additional traffic modelling was commissioned. The purpose of the additional modelling was is was to:

a) Find the best solution for a possible experimental test of a one-way system on-street in the current situation, i.e. 2015, and

b) Find a possible workable solution for making the High Street one-way in the forecast year of 2022.

The different options were tested using traffic flows for 2015 and 2022 which includes additional traffic flows associated with committed development in Keynsham. The best performing option was converting the High Street one-way in a southbound direction with Ashton Way two way as per figure 2.12 below:

Figure 2.12: One-way High Street southbound

2.103 The modelling results for the High Street indicate that in 2015 the one-way High Street southbound layout (with Ashton Way two-way) would result in journey times that are lower than the 2015 reference case in the AM peak hour, and comparable with the 2015 base case in the PM peak hour, with the highest increase in the PM (just over two minutes) shown on the westbound route via Ashton Way northbound. The introduction of a controlled crossing on Ashton Way to the car park may be needed to if the existing Zebra restricts the flow of traffic.

2.104 The modelling results for the High Street indicate that in 2022 the one-way High Street southbound layout (with Ashton Way two way) would provide a satisfactory network performance with journey times that are comparable (and sometimes lower) than the corresponding 2022 base case ones. However in the PM peak hour, the High Street one-way southbound scheme would increase westbound journey times (via Ashton Way northbound) by more than 7 minutes due to the operation of the Rock Road/Temple Street mini roundabout.

2.105 In order to operate satisfactorily, both the Wellsway/Bath Road and Bath Road/Chandag Road junctions would need to be signalised and coordinated, with pedestrian crossings via central islands. This applies to the base case, as well as with the one-way options

2.106 Other, more strategic, schemes could reduce the volume of through traffic in the town centre. One such scheme is for a new link road to connect the A4 east of Broadmead (either via Pixash Lane or Broadmead Lane) to Avon Mill Lane. This would mean that traffic between the A4 in the east, including the proposed new development in this area, and the A4175 to the north would not have to pass through the town centre as at present.

2.107 The results of the traffic modelling of the wider area show that the A4 Hick's Gate junction will be significantly over-capacity in the future, leading to much longer queues and delays than at present, even with the reduced trips due to a switch to rail for some trips. This junction is already over capacity during peak periods. A major improvement scheme is likely to be required to mitigate these problems. However the difficulties occurring at Hick's Gate are caused by problems elsewhere on the road network most notably at the A4/ Callington Road junction within Bristol. This problem is recognised within the current Joint Local Transport Plan 2011 to 2026 in which Callington Road is included in the major scheme list. Bristol's Core Strategy Review due in 2016 has presented the opportunity to further assess the strategic transport needs of the sub region (Bristol, South Gloucestershire and North Somerset Councils) and a joint transport study to undertake this review is currently being commissioned. Strategic links in the Keynsham area will form part of this study. This would include routes used currently to circumnavigate the south east of Bristol including via Charlton Road/ Woollard Lane to the A37 and also Stockwood Lane/ Staunton Lane to the A37.

2.108 However, it should to be noted that such strategic schemes will be very costly and are likely to take a long time to deliver, due to planning processes and possibly the need for external funding and to demonstrate a valid business case. The need for continued joint working with Bristol City Council is essential to deliver these solutions.

2.109 During the consultation process the potential of Park & Ride to alleviate traffic problems in the centre of Keynsham was raised. Therefore it is recommended an assessment of the potential for Park & Ride be undertaken.

2.110 Similarly during the consultation process comments were received about the consistency and appropriateness of 20 mph speed limits e.g. Wellsway. In addition comments were received about Wellsway being subject to three different speed (20mph, 30mph and 40mph) limits over its length. A review of the speed limits on those distributor roads over which 20mph limits have been introduced is recommended covering their length to the town boundary.

2.111 **Key Action: Pursue specific junction improvements and investigate other measures further:**

- **The existing Wellsway, Bath Road, Bath Hill mini-roundabout is converted to a signalised junction to increase its capacity;**
- **Two southbound lanes are provided at the proposed Keynsham Road / Avon Mill Lane signalised junction;**
- **Work to continue on the options for an junction improvement at Hick's Gate junction to increase its capacity in the short to medium term;**
- **Trial the introduction of a one-way operation on the High Street in the short term.**
- **Investigate Broadmead junction to establish whether any improvements are possible particularly for vulnerable road users**
- **Investigate other strategic improvements that could reduce the volume of through traffic in the town centre, allowing one-way operation of the High Street to cater for the predicted increases in future traffic demand.**
- **Assessment of potential for Park & Ride to alleviate traffic problems in Keynsham town centre**
- **Review of distributor road speed limits**
- **Consider the introduction of a loading bay 'off-line' west of the junction of Charlton Road and High Street**
- **Investigate the feasibility of creating a loading bay off of the highway at the northern end of the High Street.**

3 Delivering the Strategy

3.1 Community Engagement

3.1 The strategy will be successful only if local people are engaged in its development. This emerging strategy has involved dialogue with Keynsham Town Council; Connecting Communities; the Keynsham Development Advisory Group and Chamber of Commerce and also a public consultation through public events and a web based questionnaire. This involved a wide range of stakeholders from transport operators and users, the business community, local residents and interest groups. A separate report regarding the consultation process and responses received has been produced.

3.2 deally all the proposed measures should be progressed together, however, it is recognised that this will not be possible due to funding constraints and reliance on other schemes coming forward, such as MetroWest and cycle links into Bristol. Other proposals may have long lead times requiring extensive planning procedures.

3.3 It is recognised that Keynsham already experiences traffic and transport problems and that certain schemes could provide immediate benefits if implemented in the short term. Therefore, the following measures are put forward as having the highest priority in the short term:

- An improvement at Wellsway, Bath Hill, Bath Road junction
- Further assessment of the potential to introduce a one way scheme on the High Street in the short term to identify an option suitable for introduction as a trial scheme during 2015.
- Improved cycle routes to the main schools;
- Audit of pedestrian facilities in the town centre and to/from the centre and rail station, with identification of improvements required;
- Continue to work with the bus operators on improved ticketing and simplified fare structure;
- The Council to actively progress and monitor their Corporate Travel Plan at the new Town Hall;
- A study of Hick's Gate is commissioned.

3.3 Monitoring and Key Performance Indicators

3.4 A set of base data are available from the traffic model that will allow detailed before and after studies to be undertaken. The effects of the strategy will need to be measured on a regular basis and assessed for their contribution towards the objectives. Key issues will include traffic volumes and congestion on the main roads in Keynsham and car park occupancy levels (for which a new set of base data need to be collected). More specific assessments may be needed in response to particular measures.

Specific Key Performance Indicators could include:

- Traffic volumes;
- Average peak hour journey times;
- Parking demand and distribution;
- Cycle counts;
- Footfall on Keynsham High Street;
- Number of road traffic accidents;
- User satisfaction;
- Air quality;
- Successful delivery of development sites.

3.5 **Key Action: Produce a Delivery Plan with a five year profile against which continuous improvement can be demonstrated through an annual review.**

3.4 Outcomes

3.6 Delivering this strategy will address the defined objectives through improved travel choice to reduce the number of car journeys, hence reducing the impact of traffic and improving air quality. In particular the strategy will focus on alleviating the existing traffic problems affecting the town. The local economy will be enhanced through easier access on foot and cycle to the town centre. Quality of life will be improved with a more attractive town to live in and to visit, supporting a culture of sustainable travel enabled by a comprehensive programme of community engagement. This will enable investment and development to take place, building on sustainable travel throughout the town.

3.7 All of the measures outlined above need to be delivered in combination to address the strategy objectives – there are no individual or simple solutions.

3.8 If delivered effectively, the strategy will achieve the following:

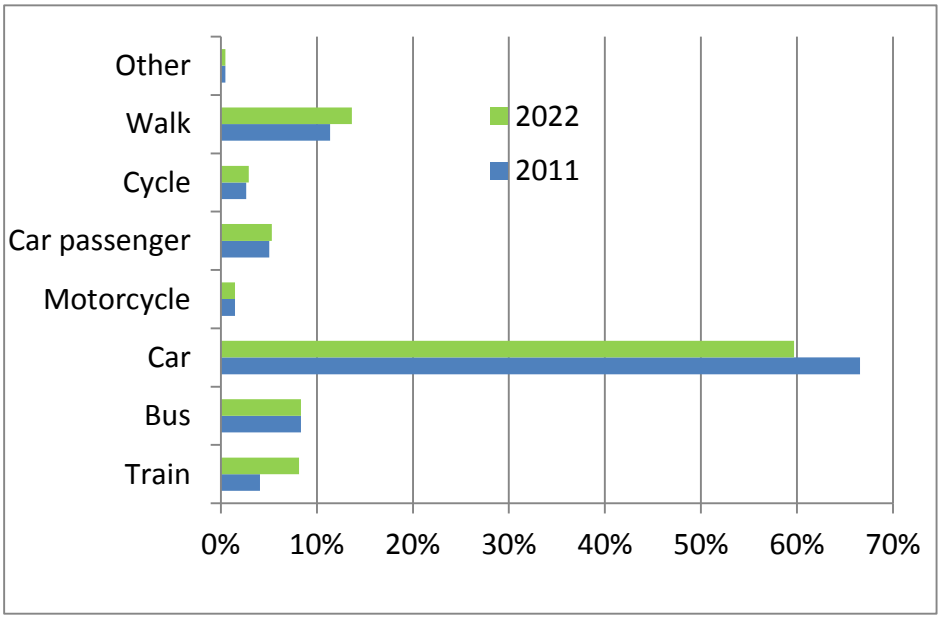
- Better management of existing traffic problems, particularly in the town centre;
- Minimise the future increase in traffic congestion;
- Support the local economy;
- Promote sustainable mobility;
- Widen travel choice;
- Widen access to opportunities: jobs, learning, training, leisure and other local facilities;
- Improve air quality and reducing vehicle carbon emissions;
- Improve the quality of life for residents.

3.5 Targets

3.9 Based on realistic ambitions to increase rail use, walking and cycling, the headline target is to reduce the proportion of Keynsham residents driving to work to below 60% by 2021 (when the next Census will be held).

3.10 To achieve this, the proportion of rail users would need to increase by 100%, walking by 20%, cycling by 10% and car sharing by 5%, for example, as shown in **Figure 3.1**.

Figure 3.1: Target Mode Share for 2022



Source: 2011 Census Data

3.6 Next Steps

3.11 The development of a Five Year Delivery Programme for delivery of the key actions identified within the strategy.

3.12 For the measures adopted in the strategy, refinement will be necessary both to define the technical requirements and to programme the necessary processes and approvals. Individual measures will be subject to appropriate detailed consultation as they are progressed.