

Technical Note

Portsmouth BSIP Baseline Evidence

Appendix A

1. Background and Demographic Profile

Portsmouth City Council is a unitary authority within Hampshire which is mainly situated on Portsea Island. The authority has three main highway links connecting Portsea Island to the mainland which can provide a challenge to bus services during peak times. One of these routes the M275 provides a direct connection to the M27 and A3 (M) which in turn connect the city to the south-west and Greater London; however, this route is not used by most bus services. Additionally, Portsmouth has direct rail services to London, Southampton, Brighton and Crawley. As at mid-2020 the local authority's population stood at 214,692¹.

Figure 1-1 outlines the population breakdown of those living within Portsmouth as per the Office for National Statistics (ONS) 2020 mid-year population estimates. The area in general has a youthful population, with over 70% of residents under the age of 50. This said there are a relatively large number of those over the age of 70 - 10% of the population. As such, despite the youthful demographics of the city, there will be a wide variety of transport needs which the Bus Service Improvement Plan needs to consider in order to ensure the needs of all are sufficiently met.



Figure 1-1 - Population breakdown by age¹

¹ ONS (2021), Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland

2. Spatial demographics

2.1. Economically inactive

Economically inactive people are defined as those who are retired, students, those who are unable to work and those unemployed. 2011 Census data has been collected to understand the profile of economic inactivity within Portsmouth². These data are displayed by Census Lower Layer Super Output Areas (LSOAs) in Figure 2.1 below. Within Portsmouth the average economic inactivity is 30%, which is equal to the average level of 30% observed in England and Wales. Economic inactivity is however not equally distributed across space, with lower levels of economic inactivity seen in the north of the authority, particularly around Anchorage Park and Hilsea. Conversely, the highest levels of economic inactivity are seen clustered in the south-west of Portsmouth around the city centre. This however excludes the LSOA containing the Royal Navy base, which is to be expected due the number of service personnel based within the LSOA.

Interestingly, high levels of economic inactivity are seen in areas with greater levels of residential land use whereas lower levels of inactivity correspond with those areas with greater employment opportunities.

When considering connectivity to the bus network, all LSOAs are served by at least one bus per hour, with those areas with the highest levels of economic inactivity also served by frequent bus services (>5 buses per hour (bph)). The east side of Portsea Island has the lowest level of access to more frequent bus services particularly the Anchorage Park and Milton areas. Economic activity is high within Anchorage Park; however, this is lower around Milton, perhaps highlighting an area where the bus service could be improved to support economic activity.







2.2. No access to a car or van

According to 2011 Census data³ the percentage of households without access to a car within Portsmouth is 33%, which is considerably higher than the England and Wales average of 26%. High levels of car ownership are mostly seen in the north and east of the authority, such as around Farlington and Anchorage Park. The area with the lowest levels of car ownership can be found within the LSOAs located in the south-west of Portsmouth, near the centre of the city and the naval base. This proximity to the city centre may contribute to the low levels of car ownership, due to better connectivity and more opportunities within the city centre. Paulsgrove to the north-east has lower levels of car ownership which correlates with higher levels of deprivation within this area.

² ONS (2013), Economic Activity (QS601EW)



When considering car ownership against the present bus network, where there are less frequent bus services to the east of the authority, such as to the west of Cosham abeam the A27 and to the east side of Milton, there appears to be higher levels of car ownership. Although this is simply a correlation and many other variables will influence the need to own a car, this does highlight a potential scope for improved bus services to capture some car journeys within this area. Conversely, to the west of the authority area, which is generally well served by frequent bus services, car ownership is lower highlighting the need to retain and strengthen such bus services to ensure access to opportunity is retained and strengthened.





³ ONS (2013), Car or van availability (QS416EW)



2.3. Population density

Figure 2-3 outlines the population density of Lower Layer Super Output Areas (LSOAs) within the Portsmouth area based on 2011 Census data⁴. The average population density within the authority is 90 people per hectare. This is substantially higher than the England and Wales average of 43 people per hectare and the city is the most densely populated in England outside London. The highest population densities are seen within the south of the authority in and around the city centre, whereas population density is much lower in the north in areas such as Paulsgrove and Cosham. The areas with the highest population density are generally characterised by terraced houses, flats and student accommodation around Portsmouth University.

Regarding the present bus network and population density, all of the LSOAs with a population density greater than 128 people per hectare are served by at least 5 buses per hour, with most LSOAs with greater than 46 people per hectare also in proximity to a bus stop with frequent services. The exception to this is the highest density LSOA in the Baffins area, the higher density LSOA to the east of Milton and the LSOA covering Highbury College.



Figure 2-3 - Population density at the LSOA level⁴

⁴ ONS (2013), Population density (QS102EW)



2.4. Index of Multiple Deprivation (IMD)

The IMD income deprivation domain⁵ has been used to investigate deprivation within Portsmouth. Table 2-1 outlines the breakdown of quintiles within the local authority. Within Portsmouth, 63% of LSOAs are categorised within the least 60% of income deprived LSOAs in the country; however, 18% of the LSOAs in the local authority are within the most income deprived domain. When considering the spatial distribution of income deprivation within the area, (Figure 2-4) it is evident that there are higher levels of income deprivation seen within the Paulsgrove and Port Solent area, Gunwharf and central Portsmouth; higher levels of income deprivation appear most apparent to the west of the authority. The lowest levels of income deprivation are seen to the north-east of the authority in the Cosham and Farlington areas, although there are some anomalies with IMD quintile 5 areas also seen in the Port Solent and Gunwharf areas.

When reviewing IMD against the present bus network, all of the LSOAs classified as income quintile 1 currently have access to a bus stop with frequent services, with this also true for the majority of LSOAs in income quintile 2 and 3. The less frequent bus services tend to be in areas which are classified as income quintile 4 or 5 to the east of the authority. Exceptions to this trend are the LSOAs in the Eastney area which are classified as IMD income quintile 2 and 3.

IMD Income Quintile	Number of LSOAs	Percentage of LSOAs (%)
1 (most deprived)	22	18
2	24	19
3	43	34
4	25	20
5 (least deprived)	11	9

Table 2-1 - IMD income quintile distribution in Portsmouth





Figure 2-4 - IMD income domain classification in Portsmouth at the LSOA level⁵

⁵ Ministry of Housing, Communities and Local Government (2021), Indices of Multiple Deprivation (IMD) 2019



2.5. Summary of Socio-Demographic Indicators

The previous sections have highlighted the diversity of the socio-demographics of Portsmouth. The area has levels of deprivation broadly in-line with national values although car ownership is significantly lower than the average car ownership seen in England and Wales. Levels of economic inactivity within Portsmouth are broadly in line with the England and Wales average.

It is evident that central parts of Portsmouth have some of the highest levels of income deprivation within the authority, and this correlates with levels of economic inactivity and low car ownership levels. Contrastingly, there are LSOAs within the Paulsgrove area which are within IMD income quintile 1, despite having relatively low levels of economic inactivity and broadly average levels of car ownership. This highlights the complexities of socio-demographics and their inter relations - perhaps suggesting that there are a higher number of working people but with lesser incomes in the Paulsgrove area.

As previously stated, Portsmouth has levels of car ownership which are lower than the average for England and Wales. It is likely that the high degree of urbanisation within the local authority can partially explain this, however it should be noted that car ownership is a complicated metric to utilise when reviewing socio-demographics^{6 7}. This is a result of the many variables which influence an individual's need to own a motor vehicle, including but not limited to, proximity to employment and leisure, journey times and direct public transport services. The latter may help to explain why car ownership is higher within the parts of the Paulsgrove area despite being within IMD income quintile 1.

When considering access to frequent bus services, it is evident that these bus services are concentrated to the central and western side of the authority along the main A-road corridors. This means that some areas such as Anchorage Park, around Milton and to the east of Corsham have less frequent bus services. The areas with less frequent bus services tend to correlate well with high car ownership and lower levels of income deprivation, perhaps highlighting areas where more frequent bus services could encourage modal shift. Conversely, in areas where there are more frequent bus services, car ownership tends to be lower, alongside the associated higher levels of income deprivation, thus highlighting the importance of retaining and strengthening services in these areas to prevent transport related social exclusion.

Overall, Portsmouth has a diverse range of socio-demographics which vary across space as a result of factors such as housing and transport. This initial insight has highlighted that differing part of the local authority have differing needs and drivers of the metrics outlined in the previous section.

⁶ Mattioli, G. (2014), Where Sustainable Transport and Social Exclusion Meet: Households Without Cars and Car Dependence in Great. Journal of Environmental Policy & Planning, 16(3), pp. 379-400

⁷ Mattioli, G. & Colleoni, M. (2016), Transport Disadvantage, Car Dependence. In: P. Pucci & M. Colleoni. (eds.) Understanding mobilities for designing contemporary cities. New York: Springer, pp. 171-190.



2.6. Railway stations and annual demand

Within Portsmouth there are currently five railway stations, all of which are managed by the train operator South Western Railway. The stations of Fratton, Hilsea, Portsmouth & Southsea and Portsmouth Harbour all lie on the Portsmouth Direct Line which runs between London via Woking and Portsmouth. Cosham Station is located on the West Coastway Line which runs between Brighton and Southampton along the south coast of England.

According to data from the Office for Road and Rail (ORR)⁸ Portsmouth Harbour Station is the most used of the five in terms of passenger numbers and currently offers 3 services to London Waterloo per hour, 2 direct services and 1 via Fareham and Eastleigh. On top of this, Portsmouth Harbour also provides 1 train per hour to Southampton, 1 train per hour to Brighton and 1 train per hour to Cardiff, via Bristol. This station is an important transport hub in Portsmouth, containing the Hard Interchange bus and coach station and ferry services to Gosport and the Isle of Wight.

Table 2-2 displays the change in patronage at stations in Portsmouth since 2014-15. Passenger numbers at two stations, Fratton and Hilsea, have increased since 2014-15 with around an extra 90,000 passengers using Fratton and around 12,500 more passengers using Hilsea in 2018-19. In contrast the remaining 3 stations have seen roughly a 5% decrease in passenger numbers in the same time frame.

Railway	Year						Growth
Station	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	2014-15 and 2018-19 (%)
Cosham	976,770	967,946	881,818	887,178	925,066	938,210	-5.3
Fratton	1,643,624	1,715,878	1,595,694	1,601,020	1,735,300	1,778,362	5.6
Hilsea	325,524	324,842	305,126	313,256	338,306	339,318	4.0
Portsmouth & Southsea	2,156,486	2,113,681	2,012,283	1,989,569	2,053,183	1,990,044	-4.8
Portsmouth Harbour	2,206,210	2,162,417	2,058,981	2,035,445	2,100,528	2,035,930	-4.8

Table 2-2 - Railway stations within the Portsmouth⁸

*Data impacted by the beginning of the COVID-19 Pandemic

⁸ ORR (2020), Estimates of Station Usage (Table 1415)

3. Sources of demand

3.1. Education establishments

Data for educational establishments has been collected from the Department of Education (DoE) for active establishments in June 2021⁹. From this data, there are tha46 primary schools, 10 secondary schools, 2 post-16 and 1 school which provides all-though education within Portsmouth. The geographical distribution of these establishments is shown in the map in Figure 3-1.

Within Portsmouth, there are slightly more schools located to the south of the authority which coincides with areas of higher population density (see Figure 2-3). There appears to be an even spread of primary schools within the authority, although the majority of secondary school are situated in the south. DoE data also highlights that the two provider of post-16 education, Highbury College in the north and Portsmouth College in the south, are likely to attract students from a wide area across the local authority and adjacent areas.

When considering proximity to a frequent commercial bus route (defined as 5 buses per hour), Table 3-1 shows that most educational establishments within Portsmouth can be accessed using the commercial network. There are however some exceptions, such as Admiral Lord Nelson School, Lyndhurst Junior School and College Park Infant School, with the former impacted by the withdrawal of the number 17 service. Generally speaking, bus access to educational establishments is better in the west of the authority than the east.

Type of Educational Establishment	Percentage within 400m of a frequent commercial bus route (5bph) (%)
All-through	100
16 plus	0
Secondary	90
Primary	85
Not applicable	88

Table 3-1 - Educational establishments with access to frequent bus services





Figure 3-1 - Location of educational establishments in Portsmouth⁹

⁹ Department of Education (2021), Get information about schools [Sourced June 2021]



3.2. Health facilities

According to NHS Choices data¹⁰ Portsmouth currently has three hospitals. St Mary's Hospital located centrally is the primary hospital. This hospital opened in 2009 and offers most of the health care services provided in the local authority such as planned and emergency care.

Within the local authority, there are 12 GP surgeries¹¹. The geographical distribution of these hospitals and GP surgeries is shown in the map in Figure 3-2.

All GP surgeries within Portsmouth have access to a frequent bus route, alongside most of the other health facilities, with the only exception to this being St James' Hospital and the naval health facility on Whale Island.

Figure 3-2 - Location of health facilities in Portsmouth¹⁰



¹⁰ NHS Choices (2015), Hospital Locations

¹¹ NHS Digital (2021), GP Surgeries (epraccur)[Sourced June 2021]



3.3. Trip generation by student location

To highlight areas where it would be expected that a large number of trips for educational purposes would be generated, 2019 mid-year population estimates have been used to display LSOAs with the highest proportion of young people (ages 4-16 years old)¹². Figure 3-3 displays that the highest proportions of young people are found in the north of the region in Paulsgrove, with high proportions of young people also observed in the south-west near central Portsmouth. When considering low proportions of young people, the majority of these LSOAs are located on the south coast.

When considering the high proportions of young people and the current bus network, the areas with the highest distribution are relatively well served by the bus network. For example, within the Paulsgrove area the number 18 and 3 services provide 7 buses per hour between the areas of high concentrations and central Portsmouth. Towards the east of the authority, particularly in the Anchorage Park area where 14-17% of the population are 4 -16 years old, the bus service is more limited, especially with the withdrawal of the 17 service. One other area of note are the LSOAs to the east of Cosham bordering the A27 – here there are high proportions of young people and a lack of frequent bus services meaning there are long walks to access bus services on Cosham High Street or Havant Road.



Figure 3-3 - Proportion of young people within LSOAs in Portsmouth¹²

¹² ONS (2020), Lower layer Super Output Area population estimates



3.4. Major employment centres

As a proxy for major employment centres, employment density within LSOAs has been utilised to highlight areas of high concentrations of employment. This has been derived from the Business Register and Employment Survey 2019¹³ divided by the area of the respective LSOA.

Within Portsmouth there are relatively low levels of employment seen to the east of Cosham and north of Milton, which is expected due to the high levels of residential properties in these areas. Conversely, the highest levels of employment density are seen within central Portsmouth, likely to be due to the presence of retail and hospitality opportunities within this area alongside the presence of the University of Portsmouth. Additionally, higher employment density is seen in the north of the authority, near Cosham, which is possibly a result of Queen Alexandra Hospital located in this area as well as other employment opportunities such as the Lakeside North Harbour Business Park.

Most areas of high employment density are served by at least one bus per hour; however, the notable exceptions are the North Harbour area and Port Solent. When considering frequent bus services (5 bph or greater), this lack of access to a bus service extends to include all of the Anchorage Park area and the Railway Triangle Industrial Estate to the west of Cosham.





Figure 3-4 - Employment density within Portsmouth at the LSOA scale¹³

¹³ ONS (2020), Employees in the UK: 2019



3.5. Strategic sites

Figure 3-5 outlines the strategically allocated sites within Portsmouth City Council as detailed in Portsmouth City Council's Local Plan. Of these sites, most currently have access to at least an hourly bus service, although there is one exception, the Lakeside North Harbour site, which currently does not have access to a public bus route. As these sites will be significant trip generators their needs and demand for transport must be considered as part of future bus network planning.







3.6. Origin destination for journeys to work

Census data has been used to gain an insight into the origins and destinations of workers working in Portsmouth and those leaving or entering the city for work at the Middle Layer Super Output Area (MSOA) level¹⁴. Additional insight into the destination of workers who arrive within Portsmouth for work has been conducted in section 3.6.2.

It is important to note that this data is based on the 2011 census and does not reflect the disruptions to commuting patterns caused by the COVID-19 Pandemic. There is currently some uncertainty as to how, and to what extent, these patterns will re-emerge.

3.6.1. Journeys to and from Portsmouth

Figure 3-6 displays travel to work census data for those workers leaving Portsmouth for employment using all modes of transport. There are 25,704 people who leave Portsmouth for work. It is clear that the greatest number of workers travel to MSOAs adjacent to Portsmouth, with the greatest proportion of people travelling to the MSOA covering the Havant area (3,271). There are also 727 workers travelling to central Southampton, 637 workers travelling to Petersfield and 420 travelling to Winchester. Overall workers leaving Portsmouth can be seen to be travelling over a wide area, with many of these destinations on the South Coast.



Figure 3-6 - Workers leaving Portsmouth (all modes)

¹⁴ ONS (2014), Location of usual residence and place of work by method of travel to work (MSOA level) (Table WU03EW)



Figure 3-7 displays those workers arriving in Portsmouth using all modes of transport; there are 37,165 people arriving within the city from outside the local authority area. Of these, 5,162 arrive from the MSOAs which border the authority to the north. There are also 3,798 people travelling into Portsmouth from Gosport, 2,827 from Waterlooville and 764 from Havant and some longer distance journeys such as 166 workers travelling from Winchester.







Figure 3-8 and Figure 3-9 show commuting behaviours for workers who use bus and coach services to and from Portsmouth. The maps also include bus routes which operated at least hourly during the January 2020 morning peak which originated or passed through Portsmouth City Council administrative boundary. It is immediately evident from both figures that the physical extent of journeys is much more limited with the exclusion of rail and private vehicles, which is to be expected due to the more limited and local geography of the bus network.

Figure 3-8 outlines those leaving Portsmouth using the bus and coach network. There are 1,081 workers leaving Portsmouth with a similar distribution to the overall picture of workers leaving. There are 201 workers travelling to Havant, 162 to Waterlooville and 126 to Petersfield.







There are a greater number of individuals travelling into Portsmouth on the bus than those leaving, with 1,840 people identified as using the bus to travel to work. This includes 395 people travelling on the bus from Gosport into the city as well as 221 workers from Waterlooville (Figure 3-9). The greatest concentration of workers travelling into Portsmouth are from the Widley area to the west of Havant, where 113 workers use the bus to travel for work in Portsmouth. Again, the geographical distribution of those who use the bus to travel to work in Portsmouth is significantly smaller than that observed when considering all modes of transport.



Figure 3-9 - Workers arriving in Portsmouth (bus and coach only)



3.6.2. Destination of workers within Portsmouth

This section outlines the destination MSOA of workers who work in Portsmouth; this includes both those workers travelling within the authority boundary and those who enter the authority for work.

Figure 3-10 outlines the destination of workers travelling into Portsmouth using all modes of transport. There are 22,777 workers travelling into Portsmouth with the largest number of these travelling to the MSOA covering Portsea and north of the city centre. This is likely to be a result of the naval base and the retail opportunities within this area of the city. Furthermore, there are 11,151 workers travelling to the Anchorage Park area which correlates with the industrial estate within this area. There are also 10,336 workers travelling into the MSOA to the west of Cosham, again this correlates well with the business parks such as at North Harbour as well as Queen Alexandra Hospital this area.



Figure 3-10 - Number of workers arriving in MSOAs in Portsmouth (All modes)



When considering workers who utilise bus and coaches to travel to work within Portsmouth (Figure 3-11), there were 7,456 workers travelling into Portsmouth. The distribution of the trips is similar to that seen when reviewing all modes. The greatest number of workers, 2,350, are seen to travel to the Portsea area, with 454 travelling to Anchorage Park and 1,170 to the west of Cosham. Such distributions suggests that the current bus network does capture demand to areas with high levels of employment; however, further investigation is required into capturing other workers travelling to these employment sites.







3.6.3. Summary of origin destination for journeys to work

The previous section has outlined the distribution of workers travelling into and out of Portsmouth and the destination of workers within the authority. There are currently more workers travelling into Portsmouth than those who leave. The analysis has outlined that there are significant hinterlands from Portsmouth and that there are potential opportunities to capture patronage growth to the north of the authority for example towards Petersfield, Southampton and Chichester.

Within Portsmouth, the analysis has highlighted that the greatest number of workers travel to the MSOAs within the city centre, including the naval base, as well as to MSOAs covering Anchorage Park and to the west of Cosham. Within these MSOAs there are a number of employment opportunities which are significant trip generators such as Airbus in Anchorage Park and Queen Alexandra Hospital near Cosham. Currently, the bus network elicits a similar proportion of demand going to these MSOAs; however, it only captures a small proportion of the overall workers, therefore highlighting a scope to improve services to increase patronage.

For the most part, the majority of the MSOAs within Portsmouth with the highest number of workers travelling to them, such as the city centre and central Cosham, have regular bus services which provide access to the employment sites in the given areas. There is however limited connectivity to the Anchorage Park and Lakeside North Harbour areas, thus limiting potential to travel by bus.

3.7. Work shift and end times requirements

As part of improving bus services in Portsmouth, a possibility exists to work collaboratively with employers to cater the bus services to meet the needs of their workers' start and end times. There is great potential to connect public transport provisions with working times, and to advertise this, as a way of improving patronage. This is particularly true for shift workers, such as at hospitals or industrial estates where working times may not match the typical peak periods where bus services are often at their most frequent. Within Portsmouth, the following shift patterns have been identified in given employment areas:

- Queen Alexandra Hospital, where shifts start at 07.30am and finish at 9.20 pm;
- Northern industrial estates generally operate 7am 4pm Monday to Thursday, and may finish around 12pm on Fridays;
- Gunwharf Quays and retail areas generally operate between 8.30am 6 pm;
- Within Ocean Park and Fratton Park areas, generally 9am 7pm; and
- Lakeside, North Harbour, generally 8am 6pm.



4. Air quality

At present there are five Air Quality Management Areas (AQMAs)¹⁵ covering the authority, the extent of which can be seen below in Figure 4-1. All of these AQMAs cover sections of A road where air quality issues have been identified such as on the A2030 to the east and along the A3 approaching the M275.

All buses within Portsmouth are now equipped with engines with exhaust emissions compliant with Euro 6 standards, as such they are unlikely to be major contributors to the air quality issues seen in Portsmouth.

Figure 4-1 - Air Quality Management Areas in Portsmouth



¹⁵ DEFRA (2021), AQMA Boundaries

5. Current bus network

5.1. Bus routes and frequencies

5.1.1. Pre COVID (January 2020)

Figure 5-1 below outlines the bus network in Portsmouth as of January 2020, including all bus services which operated during the AM peak. This timetable has been displayed to allow for comparison between the bus network before and during the COVID-19 pandemic.

When considering the network within Portsmouth, there is a dense network of bus routes as outlined in Figure 5-1. There are limited services which are less than one bus per hour during the morning peak with most of these serving Port Solent. Within the authority there were 21 different bus routes, this includes some longer distance routes to Southampton (route X4) to the west and Bognor Regis to the east (route 700).

Most of the aforementioned bus routes are operated commercially by First Hampshire and Dorset, and Stagecoach South. Services are frequent on the main north-south routes across the Island and on the east-west routes between the city centre and Southsea. Departures are around every 10 minutes enabling passengers to "turn-up and go", without consulting a timetable.

A small number of non-commercial but socially necessary routes are also operated under contract to the City Council.



Figure 5-1 - January 2020 bus network¹⁶



¹⁶ Basemap (2021), Datacutter bus routes for January 2020



Figure 5-2 displays the spatial distribution of bus operators within Portsmouth¹⁷. There are currently five bus operators within Portsmouth, with First Group and Stagecoach South providing the majority of the services within the local area. Additionally, there are a small number of routes provided by smaller operators such as Bluestar (Go South Coast) who provide a link between Eastleigh and Port Solent.



Figure 5-2 - Bus operators within Portsmouth (January 2020)¹⁷

¹⁷ Basemap (2021), Datacutter bus routes for January 2020



5.2. Present Bus Network (August 2021)

Figure 5-3 outlines the bus network within Portsmouth as of July 2021. There have been limited changes to the bus network within Portsmouth including:

- Services 7/8 Diverted to serve Queen Alexandra Hospital;
- Service 25 New service supported by Portsmouth City Council as a result of the withdrawal of service 15;
- Whiteley Connect Shuttle Bus Withdrawn; and
- Service 17 Withdrawn.



Figure 5-3 - August 2021 bus network





5.3. Location of bus stops

As of May 2021, there are currently 558 bus stops in Portsmouth¹⁸: of these bus stops, 343 have shelters. Bus stops in Portsmouth generally appear to be evenly distributed across the local authority area. There is, however, a distinct lack of bus stops in the Portsea Island area. This is a result of bus services running adjacent to the residential areas along the A2047 and A288.

The Council provides displays of bus route maps and wayfinding information at bus stops. All stops have timetable display units, and the bus operators are responsible for providing and updating the paper timetable displays.

A total of 230 stops are equipped with real time passenger information displays, showing passengers the number, destination and estimated times of the next three departing services. All stops have Q.R. codes enabling live departure information to be accessed by smartphone apps.

The stops are also covered by traffic regulation orders which prevent obstruction by parked vehicles enabling buses to reach the kerb safely.

Portsmouth also has two bus interchanges, the Hard Interchange and Cosham Bus Station. The Hard Interchange is the main gateway for visitors to Portsmouth arriving by public transport. It is a bus and coach station situated adjacent to Portsmouth Harbour rail station, the Gosport ferry terminal and taxi rank. This £9.2m facility opened in 2017 provides fully enclosed waiting accommodation, toilets, a refreshment kiosk, as well as tourist and travel information centres and a high standard passenger environment. It has 10 bus departure bays which are used by 90 buses arriving and departing each hour on weekdays. A further departure bay is provided for coaches.

Figure 5-4 displays the distribution of bus stops within Portsmouth.

¹⁸ DfT (2021), NaPTAN and NPTG download options [Sourced May 2021]



Figure 5-4 - Bus stops in Portsmouth





5.4. Bus fares

This section outlines the fares charged by the principal operators in Portsmouth as of 21 September 2021. The data outlined in Table 5-1 and 5-2 show the fares for the primary operators within Portsmouth and has been collected from public sources, thus they are limited to the data published by each operator.

Table 5-1 – First Bus Prices¹⁹

Passenger Type	Ticket Type	Purchasing Method		
	Ticket Type	Online	On Bus	
	Adult Day Portsmouth	£4.30	£4.50	
	Adult Week Portsmouth	£17.00	£18.00	
	Adult Month Portsmouth	£65.00	£70.00	
	Adult 5 Day Tickets Portsmouth	£20.00		
	Adult 10 Single Trips	£20.00		
	Adult Unlimited Portsmouth*	£58		
	Adult 3 Months Portsmouth	£170.00		
	Adult Annual Portsmouth	£500.00		
Adult	Night Ticket (after 1900) Hampshire		£4.00	
	Adult Day Hampshire	£7.00	£7.50	
	Adult Week Hampshire	£23.50	£25.00	
	Adult Month Portsmouth	£85.00	£90.00	
	Adult 5 Day Tickets Hampshire	£28.00		
	Adult Unlimited Hampshire *	£77.00		
	Adult 3 Months Hampshire	£220.00		
	Adult Annual Hampshire	£640.00		
	Single – Southsea to Portsmouth City Centre		£2.50	
	Single – Southsea to Cosham		£3.50	
	Single – Portsmouth City Centre to Hilsea		£2.15	
	Single – Portsmouth City Centre to Cosham		£2.50	
Group^	Group – Portsmouth First Day		£8.00	
	Group – Hampshire First Day	£12.00	£13.00	
	Group – Hampshire First Week	£36.00	£45.00	
Child (15 and	Child Day Portsmouth		£3.50	
younger)	Child Week Portsmouth	£14.00	£15.00	

*Unlimited ticket provides unlimited journeys every month, payments are taken by Direct Debit.

^Group Tickets are available for any 5 people travelling together at the same time, there is no restriction on the number of adults and children.

¹⁹ First Bus (2021), Portsmouth Ticket Prices [Sources 21/09/2021]



Table 5-2 - Stagecoach Buses Fare Prices²⁰

Passenger Type	Tielet Type	Purchasing Method	
	Пскет Туре	Online	On Bus
	Adult Portsmouth DayRider	£4.20	£4.30
	Adult South Hants DayRider	£7.10	£7.50
	Adult Gold DayRider	£8.40	£9.10
	Adult Solent Connect		£25.50
	Adult Gold NightRider		£2.50
	Portsmouth 7 Day MegaRider	£15.80	£16.90
	South Hants 7 Day MegaRider	£21.60	£22.50
	Gold 7 Day MegaRider	£23.70	£25.30
	Portsmouth 28 Day MegaRider/ MegaRider Xtra	£57.40	
	South Hants 28 Day MegaRider/ MegaRider Xtra	£68.50	
Adult	Gold 28 Day MegaRider/ MegaRider Xtra	£88.70	
	Portsmouth 3 Week MegaRider	£161.40	
	South Hants 3 Week MegaRider	£234.20	
	Gold 3 Week MegaRider	£256.30	
	Portsmouth Annual MegaRider	£591.00	
	South Hants Annual MegaRider	£820.00	
	Portsmouth Annual MegaRider	£930.00	
	Single – Southsea to Portsmouth City Centre		£1.95
	Single – Southsea to Cosham		£2.55
	Single – Portsmouth City Centre to Hilsea		£2.15
	Single – Portsmouth City Centre to Cosham		£2.15
	Group – Portsmouth DayRider	£8.70	£9.30
Crows	Group – South Hants DayRider	£13.20	£14.30
Group^	Group – Gold DayRider	£16.00	£17.40
	Group – Family Day Discovery		£17.50
	Child Portsmouth DayRider	£3.50	£3.60
	Child South Hants DayRider	£5.70	£5.90
	Child Gold DayRider	£6.60	£7.10
Child* (15 – 5 years	Child Solent Connect		£14.00
old)	Portsmouth 7 Day MegaRider	£13.20	£14.00
	South Hants 7 Day MegaRider	£18.00	£18.90
	Gold 7 Day MegaRider	£18.00	£19.30
	Gold 28 Day MegaRider/ MegaRider Xtra	68.50	

*Solent go - travel within Portsmouth City Zone

²⁰ <u>Stagecoach (2021), Portsmouth Ticket Prices [Source 21/09/2021]</u>



*South Hants Day Rider - Travel in South Hampshire

*Gold Day Rider/Night Rider – Travel in Hampshire, Surrey, West Sussex and Brighton

*Solent Connect – Travel to and from Isle of Wight

*Discovery - day of travel on the services of all the main bus operators in West Sussex, East Sussex, Brighton & Hove, East Hampshire, Surrey, Kent & Medway.

^Group – group day ticker for up to 4 people travelling together – some area may be up to 6 people. Group tickets are for a maximum for 2 adults.

^Family is up to 5 people with a minimum of one adult and a maximum of two adults.

The above tables highlight the range of fares available within Portsmouth.

Child fares beyond the Stagecoach fare zone covering Portsmouth are expensive, costing up to £7.10 for a day ticket covering Hampshire. Although this ticket covers a wide geographical area compared to both the Portsmouth and South Hants ticket, both the Hampshire and South Hants could be seen as expensive and unaffordable for younger people, particularly when travelling just beyond the Portsmouth boundary. Although single tickets are likely to be cheaper for such journeys, there may be a proportion of passengers who are unaware of this and pay for the more expensive day ticket. Likewise, neither of the main operators operate an intermediate fare for younger people, thus there is a significant increase in ticket cost at the age of 16, this may be of significant financial burden for some younger people and therefore discourage bus patronage.

Furthermore, First Buses have begun to offer flexible tickets in the form of the 10 single trip product and the 5day ticket product, such tickets and flexibility are not currently afforded on Stagecoach services.

Within Portsmouth, the Council also provides concessionary travel for the following groups:

- Portsmouth Concessionary Travel Plan which is part of the English National Concessionary Travel Scheme for elderly and disabled passengers (statutory minimum scheme); and
- Companion bus pass for those concessionary passholders who are unable to travel alone on public transport and need support during their journey.

Both Stagecoach and First Bus provide single fare journeys for passengers looking to make occasional journeys. These single tickets are only available to buy on the bus. On average Stagecoach single tickets are cheaper in comparison to First Bus. The journey from Southsea to Cosham, which spans the length of the Portsmouth, is £2.55 on Stagecoach, whereas this same journey is £3.50 on First Bus. This trend is also seen on single journeys from Southsea to Portsmouth City Centre, as well as Portsmouth City Centre to both Cosham and Hilsea.

First Bus and Stagecoach both offer group tickets to incentivise group travel and make this more competitive against using private modes. For a group day ticket First Bus charges £8.00 whereas Stagecoach charges £9.30. These tickets however have varying conditions, for example Stagecoach allow for only 2 adults and up to 4 children depending on the area, whereas First Groups ticket allows any combination of adults and children. For journeys which do not begin or end in Portsmouth, First Group offer the Hampshire Group Ticket, whereas Stagecoach offers a range of tickets such as the South Hants Group DayRider and the Gold DayRider, which have slightly differing zone boundaries. For larger groups these tickets may not be competitive against taxi journeys, particularly when crossing just over the Portsmouth zone boundary. For example, a group journey from Paulsgrove to Cosham (~1.5 miles) would cost £12.00 on a First bus whereas an Uber would cost around £5 each way (£10.00 in total)²¹, when considering this alongside the faster and more convenient point-to-point journey, this makes the bus less attractive for such groups.

Overall, due to the limited number of operators of frequent services within Portsmouth, there is a rather simple fare structure; however, a lack of clarity on the best value tickets for travel, eligibility criteria and their prices before a passenger boards the bus could act as a barrier to use of the services. This is particularly true for Stagecoach services with multiple fare zones.

5.4.1. Multi-operator ticketing

A multi-operator product, Solent Go, is available within the South Hampshire area. This ticket is valid on services provided by the following bus operators:

• Bluestar* (Go South Coast)

²¹ Uber (2021), Uber App [Sourced September 2021]



- First Hampshire
- Stagecoach South
- Unilink
- Wheelers*
- Xelabus*

*Some services require a top up ticket to be purchased on the bus

The Solent Go ticket is split into three travel zones which are outlined in Figure 5-5²². Within these ticketing zones passengers can purchase a range of differing tickets from day tickets through to tickets covering a 13-week period. The scheme has recently introduced a new flexible multi-ticket product offering travel on 5 days with no ticket expiry date. The fares for Solent Go are outlined in Table 5-3. There is no clear information available regarding child fares or eligibility.

Figure 5-5 - Solent Go Zone Map



Table 5-3 - Solent Go Ticket Prices²³

Zone	Ticket	Price (£)
Solent Region Zone	1 day	8.00
	7 days	30.00
	28 days	100.00

²² Solent Go (2021), Travel Maps [Sourced September 2021]

²³ Solent Go (2021), Fares [Sourced September 2021]


	13 weeks	280.00
	Flexible 5-day ticket	39.00
Portsmouth City Zone	1 day	5.00
	7 days	20.00
	28 days	65.00
	13 weeks	185.00
	Flexible 5-day ticket	22.50
Southampton City Zone	1 day	5.00
	7 days	20.00
	28 days	65.00
	13 weeks	185.00
	Flexible 5-day ticket	22.50

5.5. Bus service reliability

Reliability of bus services in Portsmouth has been reviewed using DfT bus statistics²⁴ for the percentage of nonfrequent bus services running on time between 2009-2017. Between 2009/10 and 2012/13 bus punctuality within Portsmouth increased 74% to 94%, this was followed by a reduction in punctuality to 90% in 2013/14 and slight increase to 91% in 2014/15. There is a data gap in 2015/16; however, in 2016/17 reliability is back to 90%. There is no further data available for Portsmouth for 2017-2019. Between 2009-2017, Portsmouth illustrated a significant improvement in punctuality, with the authority having the highest consistent punctuality compared to other authorities.

When considering comparable local authority areas, bus punctuality in all these authorities tended to be slightly less than that seen within Portsmouth other than Plymouth who increased their reliability of bus services to 92%. Most of the authorities do elicit volatility within the level of punctuality, with the values varying slightly year on year, but remaining broadly consistent for all of the authorities over the longer-term. The relatively good performance of bus service reliability within Portsmouth has been supported in part by the currently comparatively high level of bus priority measures provided within the authority.

Reviewing the regional and national picture, the South-East bus networks performance has been relatively consistent between 2008/09 and 2018/19 with an overall increase of 5%. There is a similar trend within England where punctuality over this period is also consistent with around about a 4% increase in punctuality within this period. As such, the trend of increasing punctuality within Portsmouth seen between 2009 and 2016/17 was not in line with either the regional or national average.

A concern with punctuality is that local transport authorities may use different sampling and measurement methodologies leading to inconsistencies with the results.

²⁴ DfT (2019), Bus Statistics (Bus0902)



Figure 5-6 - Bus service reliability²⁴



6. Bus network performance

6.1. Bus passenger journeys

This section outlines the number of bus passenger journeys indexed to 2009/10 values in Portsmouth alongside comparable local authorities and the South-East region²⁵. This is intended to show the trend in patronage. It is evident that since 2009/10 the number of bus passengers within Portsmouth has decreased slightly. Between 2009/10 and 2011/12 Portsmouth experienced an increase of 4%; however, this reduced by 7% in 2012/13. Portsmouth experienced an increase in patronage between the year 2013/14 and 2015/16 resulting in bus passenger journeys being 6% above the indexed value in 2009/10. There was another slight reduction in 2016/17 and an increase in 2017/18 at which point Portsmouth is 11% above the indexed value. However, from 2017/18 the number of bus passenger.

When comparing the trend in bus passengers in Portsmouth with other local authorities, a similar trend emerges within some of the comparative authorities on the south-west coast such as Torbay, Bournemouth and Plymouth, whereby there is a general incline in bus passenger journeys between 2009/10 and 2018/19 and a decrease in 2019/20. Plymouth experienced the largest reduction in bus passenger journeys having 89% of bus patronage compared to the indexed value at 2009/10. Brighton, Southampton and Poole all experienced increases in bus passenger journeys over the time period. Poole experienced the largest increase having the highest value of 143% bus patronage increase in 2017/18. However, the most recent data show that Brighton has the current highest bus patronage at 109%.

Comparing the number of bus passengers in Portsmouth against both the regional and national average indicates that Portsmouth has performed worse than the regional average but better than the national average. Patronage in England remained steady until 2014/15 but started to steadily decline from 2015/16 to 2019/20 whereas, the regional average was generally increasing between 2009/10 and 2016/17 and then declined between 2017/18 and 2019/20. The national average sits at 88% whereas the South-East average is 100%. This shows that Portsmouth is performing typically compared to the national and regional average.

²⁵ DfT (2020), Local bus passenger journeys (Bus0109)





Figure 6-1 - Passenger journeys on local bus services by local authority indexed to 2009/10 values²¹

When considering the trend in passenger journeys per head by local authorities (Figure 6-2), Portsmouth performs similarly to all other equivalent local authorities considered. Within Portsmouth, the growth of the population has masked a decreased propensity for the population to use the bus.

Comparing passenger journeys per head in Portsmouth to the regional and national level (Figure 6-2), the South-East and England as a whole demonstrate a similar overall trend to Portsmouth in that population growth over the reporting period has masked the extent to which the propensity to travel by bus has reduced. However, as with the number of passengers, the South-East as a region has performed better at retaining bus passengers than Portsmouth, which follows a similar reduced propensity to travel by bus as the English national average.

Overall, when considering passenger numbers, the general picture from 2009/10 indicates a decline in bus patronage across most of the local authorities considered in this analysis, suggesting that the attractiveness of bus services is decreasing. When considering the present, indexed bus passenger numbers within Portsmouth are very similar to all comparative local authorities, excluding Poole, alongside the regional and national values. It should be noted that the values for 2019/20 will have been affected by the beginning of the COVID-19 pandemic in early 2020. When considering passenger journeys per head of population, it is evident that the decreases seen across the time period are to some extent masked by population growth within the respective areas. Again, Portsmouth performs similarly in terms of retaining bus patronage than the comparative authorities and the regional and national scale.





Figure 6-2 - Passenger journeys on local bus services per head by local authority indexed to 2009/10 values²⁶

²⁶ DfT (2020), Local bus passenger journeys (Bus0109)



The correlation between bus ridership²⁷ and a household's lack of access to a car²⁸ is displayed in Figure 6-3. It is evident that out of the comparitive local authorities, Plymouth has one of the lowest levels of car ownership, with only Brighton and Hove eliciting a lower level of ownership. The authority also has the lowest level of bus ridership per head of the population. Within Portsmouth the level of demand for bus services that would be predicted by lack of car ownership is not realised. A bus passenger trip rate of around 65 would be consistent with the proportion of zero-car households rather than the observed trip rate of around 46.





²⁷ DfT (2020), Local bus passenger journeys (Bus0110)

²⁸ ONS (2013), Car or van availability (QS416EW)

6.2. Bus Kilometres operated

6.2.1. Overall bus Kilometres

Figure 6-4 displays the bus service kilometres (KM)²⁹ per year indexed to 2013/14 for Portsmouth, adjacent local authorities, alongside the South-East and England as a whole. Portsmouth remained consistent in bus KM operated from 2013/14 to 2015/16 before this decreased by 3% in 2016/17, after this point there was a significant decrease in the number of bus KM operated, decreasing by 17% in 2017/18, and further decreasing in bus operated KM to 67% of the index value in 2019/20.

When considering the comparable authorities alongside Portsmouth, Plymouth showed a similar trend; however, Plymouth demonstrated an increase from 2013/14 to 2014/15 unlike Portsmouth. After this point there was a significant decrease in the number of bus KM operated resulting in 75% of the index value in 2019/20. Torbay and Bournemouth were also similar in they both generally showed a decline in bus KM operated between 2013/14 and 2019/20.

Brighton and Southampton were least similar to the bus KM operated pattern demonstrated in Portsmouth. Southampton showed an initial reduction by 11% between 2013/14 and 2015/16: by 2016/17 the bus KM operated had increased to 20%. This remained consistent until 2018/19 it then decreased to 98% of the index value in 2019/20. Brighton was an anomaly as it was the only authority to experience an overall increase of 14% from 2013/14 with only a slight decrease in 2015/16.

In comparison to regional and national data Portsmouth is generally below the South-East average, with the exception of 2015/16 when bus KM operated was 2% higher. Portsmouth is generally higher than the National average between 2013/14 and 2016/17; however, Portsmouth experiences a significant decline whilst the national average experiences a steadier decline. Overall Portsmouth bus operated KM reduced to 67% of the index value in 2019/20 whilst the South-East average was 96% and the national average was 88% illustrating that Portsmouth's bus operated KM is below averaged.

Figure 6-4 - Bus service KM per year indexed to 2013/14

²⁹ DfT (2020), Local bus vehicle distance travelled (Bus0208)





6.2.2. Supported Bus Service Kilometres

When considering supported kilometres (KM) operated in the local authority areas³⁰ (Figure 6-5), the proportion of supported bus services within Portsmouth appears to have decreased slightly between 2013/14 through to 2016/17 from 6% to 3% of services before increasing to 4% in 2017/18. Beyond this point, the proportion of supported KM has remained static at 4% of the total number of bus KM running within the authority. The initial fall in the proportion of supported bus KM was a result of a decrease in local authority supported services KM, which decreased from 0.4 million to 0.3 million in 2015/16. However, in 2016/17 this decrease was a consequence of a reduction of both commercial and supported bus KM. The increase in the proportion of supported services beyond 2017/18 reflect a decrease in the number of commercially supported KM from 5.6 million to 4.7 million by 2019/20, whilst locally authority supported services remained fairly static.

Considering the comparative local authorities, the proportion of supported bus KM has generally decreased or remained broadly similar for most of the authorities. The greatest decrease in supported services was seen in Poole where the proportion of supported bus services reduced from 25% in 2013/14 to only 18% in 2019/20. This was a result of a decrease in both commercially supported services and local authority supported services. Similarly, Plymouth experienced a significant decrease of 10% from 2015/16 to 2019/20. In contrast, Torbay was the only local authority to see an increase of 10% in supported KM. Overall, Portsmouth is in line with other authorities in terms of bus KM being supported by the local authority and similarly to other authorities have seen a reduction in supported services over the time period.

Portsmouth follows a similar trend to that of the national or regional trend for supported bus services. When considering the national trend, it is clear that the number of commercially operated vehicle KM has decreased slightly, and the local authority operated vehicle KM has reduced significantly. The South-East region shows a similar trend, where there has been a large decrease in both commercial and local authority supported bus KM over the time period.

³⁰ <u>DfT (2020), Local bus vehicle distance travelled (Bus0208)</u>





Figure 6-5 - Supported bus service KM as a proportion of total bus service KM



6.3. Concessionary passenger journeys

Figure 6-6 displays the percentage of passenger journeys within each area which were concessionary journeys³¹. The percentage of concessionary passengers gives an indication of the extent to which the bus network is used by fare-paying passengers. There is a gap in the data available for the number of concessionary journeys in Portsmouth in 2018/19; however, the previous year 2017/18 illustarted that 36% of passenger journeys were concessionary journeys. This was the second highest proprtion of journeys within a local authority area completed using the concessionary travel scheme, second only to Torbay where 43% of journeys were concessionary.

This suggests that of around a thirds of bus passengers in Portsmouth are using a concessionary pass, with two thirds of the passengers paying the relevant fare.



Figure 6-6 - Concessionary passenger journeys as a percentage of all passenger journeys (2018/19)

³¹ DfT (2020), Bus Statistics (Bus0823)



6.4. Bus service density

TRACC accessibility software has been used to calculate the average number of buses per hour calling at bus stops during the AM peak for the January 2020 and April 2021 bus timetables as per the data recorded in the National Public Transport Data Repository³².

6.4.1. Pre-COVID (January 2020)

Figure 6-7 displays the average number of buses calling at bus stops within Portsmouth during the January 2020 timetable. The highest frequency buses are seen around the Hard Interchange and Cosham Interchange, with bus stops on Queen Street, London Road and Commercial Road South having between 25-41 buses per hour. The greatest number of buses, 41 per hour were seen on Queen Street.

From Figure 6-7 it is clear that the main bus corridors into Portsmouth route are along the A3, the A288 and A2047 towards central Portsmouth, where there are several different bus services summating to provide between 10-16 and 16-25 bus services per hour. There are also 10-16 services per hour to the north-west of Cosham in Wymering, which are served by the number 23 and 3 bus services.

The highest number of calls at bus stops are clearly seen along the aforementioned routes into central Portsmouth, with lower frequency services seen to the east of Portsea Island, Paulsgrove and the east of Cosham. These routes had on average 1-3 services per hour during the January 2020 timetable.

There is a distinct lack of bus stops which are regularly served by regular buses within the Anchorage Park area, with the service 21 bus providing some connectivity with 3-7 buses per hour to the north and the service 17 (now withdrawn) providing a similar frequency to the south.

³² Basemap (2021), National Public Transport Data Repository





Figure 6-7 - Average bus stop frequency (AM Peak - January 2020)



6.4.2. Current bus service density (April 2021)

April 2021 has been chosen to represent a period whereby the COVID-19 pandemic disrupted the normal provision of bus services across the country. Figure 6-8 outlines the bus network within Portsmouth at this time. Overall, the number of buses running in Portsmouth had decreased by 5% when compared to January 2020.

There are some notable reductions in connectivity, for example the service 17 to Anchorage Park was withdrawn, removing some connectivity to the businesses within this area. Furthermore, the service 15 to Eastney Landing was withdrawn, replaced with the less frequent service 25.

Additionally, services 7 and 8 were diverted to serve Queen Alexandra Hospital in Cosham, accounting for the improved frequency observed near the hospital.

Beyond the highlighted changes, Figure 6-8 outlines that the frequencies along the main bus corridors did not have a major change in bus frequencies, with the corridors remaining within the frequency brackets seen during the January 2020 timetable.





Figure 6-8 - Average bus stop frequency (AM Peak - April 2021)

6.5. Bus service support

Portsmouth City Council currently support four bus services within the authority, alongside an additional park and ride service. The service 25 is a new service which began operation on the 30th August 2020. These services and the cost of supporting these is summarised in Table 6-1. Overall, the authority will spend £161,064 in 2020/21 on supporting these services (excluding the park and ride service).

Table 6-1 - Supported bus services in Portsmouth

Service	Route	Days of Operation	Frequency (minutes)	Cost in 2020/21 (£)
12	Tipner - North End - Chichester Road - Fratton Way	Monday - Saturday	60 (off peak)	43,601
13/14	City Centre - Fratton - Milton - Baffins	Sunday/ Bank Holidays	120	9,480
22	Highbury - Cosham - Drayton - Farlington	All days of the week	70	42,650
25	The Hard - Old Portsmouth - Southsea Shops - Devonshire Avenue - Eastney - Hayling Ferry	All days of the week	45 / 90	65,333

6.6. Bus priority measures

Portsmouth has 53 bus priority lanes providing a combined total of 9.7 km of dedicated right of way (Figure 6-9), enabling buses to avoid queues of traffic and other sources of delays. Currently only buses, Hackney Carriages (taxis) and cyclists are permitted to use the bus lanes, as well as rental e-scooters through the DfT e-scooter trial operating in Portsmouth until November 2021.



Figure 6-9 - Bus priority measures within Portsmouth





6.7. Car journey times and speeds

Within Portsmouth the average km travelled on locally managed roads has been broadly steady since 2016³³. There was however a significant reduction in vehicle KM on locally managed A roads in 2020 as a result of changing travel behaviours during the COVID-19 pandemic: during this period, the number of vehicle KM fell by 21% from 1.323 billion km to 1.041 billion km.

When reviewing the relationship between average vehicle speed³⁴ and delay³⁵ on locally managed A roads, Figure 6-10 below shows the average delay within Portsmouth was 78 spvpm in 2016 increasing by 3 sections to reach 81 spvpm in 2018. This was followed by a significant reduction in delay to 75 spvpm in 2019 before a more significant fall to 56 spvm in 2020.

Average speed in km/h on the locally managed A roads has been broadly constant over the study period, with a value of around 18km/h displayed across the period of 2016-19. This value is relatively low and indicates that congestion within the authority is impacting journey times.

Overall, the average delay on locally managed A roads is high and average speeds low. Although there are recent signs of improvements in both metrics, there is great uncertainty in how this will change after the anomalous result in 2020 as a result of the COVID-19 pandemic. Regardless, the current levels of delays and slow speeds will impact the reliability and journey times offered by bus services in Portsmouth.



Figure 6-10 - Speed and delay on locally managed 'A' roads

³³ DfT (2021), Road traffic statistics (Table TRA8905)

³⁴ DfT (2021), Average speed, delay and reliability of travel times (Table CGN0501)

³⁵ DfT (2021), Average speed, delay and reliability of travel times (Table CGN0502)



6.8. Highway congestion

Delay on local A Road links (spvpm) has been collected from the DfT³⁶ for 2019 and is illustrated in Figure 6-11. The highest levels of delays on the locally managed A road network are seen on the A3 both entering Portsmouth to the north of Cosham and the A3 at Rudmore Roundabout. Further to this, there are average delays of 24 spvpm on the A2030 through Anchorage Park. The lowest levels of delays are seen in central Portsmouth. The data suggests that congestion regularly impacts journey time reliability on the A3 and the A2030 which will consequently impact bus services operating along or on the local road network connecting to these routes.



Figure 6-11 - Delay on local 'A' roads in Portsmouth³⁶

³⁶ DfT 2021, Delay Local A Roads England 2019



6.9. Car journeys

Data collected from the DfT highlights the trend in vehicle miles within Portsmouth since 2014³⁷ (Figure 6-12). Overall, the number of vehicle miles within the local authority area has increased by 5% between 2014 and 2019, with this being driven mostly by vehicles which are not classified as cars and taxis. Since 2014 there has been a general trend of increasing vehicles miles within the local authority, with the steepest increase seen between 2014 and 2016 when the number of miles increased by 11%. After this period growth slowed between 2016-17 before there was a slight decrease (-2%) in vehicle miles between 2017 and 2018 before a recovery in 2019. This was followed by a 22% reduction in vehicle miles caused by the COVID-19 pandemic, which caused a significant reduction in vehicle mileage, especially for cars and taxis where the mileage reduced by 24%.





³⁷ DfT (2021), Local authority Portsmouth



6.10. Mode share

Census data for the method of travel to work data has been utilised to understand mode share within Portsmouth (Figure 6-13)³⁸. From this data it is evident that the majority of trips to work are taken by driving a private car (52%), followed by 17% of workers travelling on foot. 7% of commuters travel to work by bus or using a bicycle respectively. These figures suggest that public transport currently has a relatively high share of journeys within Portsmouth, however it is clear there is still a significant number of workers who utilise private methods of travel to work.





'What Scope for Increasing Bus Use? (Urban Transport Group, October 2019) considers the relationship between the percentage of work trips by bus and overall bus usage. Figure 1 of the report, reproduced as Figure 6-14 below, shows this correlation.

³⁸ ONS (2013), Method of travel to work (QS701EW)



Figure 6-14 – Mode Share for Journeys by Bus and Bus Trip Rate



Figure 1: Relationship between overall bus use and bus commuting

Data sources: Bus passenger journeys per person from DfT Annual Bus Statistics BUS0110a (bus operator data); percentage of those travelling to work doing so by bus from 2011 Census (table QS701). Sample: 82 transport authorities. The DfT statistics contain information for 89 areas, of which six are the Integrated Transport Authorities of Greater Manchester, West Midlands, South Yorkshire, West Yorkshire, Merseyside and Tyne & Wear, and the seventh is London. Census data could not be readily matched to these seven areas and has been excluded from this plot.

The graph suggests that the trip-rate for bus passenger journeys in Portsmouth predicted by the percentage of work trips is around 60, with turn-out seen at around 55. This suggests that the bus network within Portsmouth currently stimulates a trip-rate close to what would be expected. This said, there is still scope to stimulate demand for bus travel for those travelling to work.



6.11. Transport network investments

Portsmouth Local Transport Plan 4 sets out that the intention is to introduce a transformational South-East Hampshire Rapid Transit (SEHRT) network that will build upon existing services in Gosport. This will provide passengers with faster and more reliable journeys. Mobility hubs will also be introduced to help integrate transport such as cycling and scooters to deliver a seamless travel experience.

There are several transport network investments that are proposed for Portsmouth, set out below:

- A2047 corridor bus lanes on A2047 London Road/ Kingston Road;
- Terraces and Kings Road Roundabout SEHRT bus priority bus lanes on A288 Hampshire Terrace, Landport Terrace and King's Terrace;
- St Georges Road bus lane or 2 general traffic lanes on St Georges Road on the approach to Park Road;
- Bus stop layby infill layby infills and boarders at stop to speed up bus departures;
- Mile End Road northbound bus lane contraflow bus lane northbound on Mile End Road;
- Burrfields Road bus lane;
- Cosham Interchange improvements to Cosham bus station;
- Eastern Road/Walton Road Bus gate
- Anchorage Road corridor bus priority measures; and
- P&R site access to/from M275 northbound new direct bus-only link from Tipner to M275 northbound.

Portsmouth City Council was successful with its Transforming Cities Fund bid which will fund the following bus measures by 2023:

- Spur Road Roundabout Option A New bus gate at western approach to roundabout, new westbound bus lane at the eastern arm;
- Portsbridge area junctions partial signalisation of roundabout with bus gates to the north and south of roundabout;
- Lake Road replace existing roundabout with 4-arm signal junction, bus lanes to be included in each direction;
- City Centre North Link new bus gate to allow separation of buses from general traffic;
- City Centre South replace mini-roundabout with signalised junction and pedestrian facilities to remove delay to buses from Zebra crossing; and
- Rudmore Road bus gate on northbound slip road to mirror southbound.

These measures form Tranche 2 of the South East Hampshire Rapid Transit programme.



6.12. Customer satisfaction

6.12.1. Transport Focus Bus Passenger Survey

Transport Focus Bus Passenger Surveys have been conducted within Portsmouth with a relatively small sample size of 534 passengers³⁹. The data collected between September and December 2019 indicates that:

- 92% of passengers are satisfied with their bus journey;
- 58% believe the bus service is good value for money;
- 84% of people are satisfied with bus punctuality; and
- 86% of people believe the journey times are the right length.

The survey suggests that passengers are least satisfied with the information provided at bus stops alongside their level of maintenance or appearance. Satisfaction with the onboard bus experience is relatively high, however an outlier is the provision of information, of which only 74% of the passengers were satisfied.

6.12.2. BSIP Consultation

Portsmouth City Council has conducted its own research⁴⁰ into the views of members of the public and businesses regarding the bus network within Portsmouth, specifically:

- To understand the strengths and weaknesses of local bus travel;
- Identify the key areas to prioritise in the long and short-term; and
- To measure satisfaction levels of bus users.

Two predominantly quantitative online surveys were released, one for business and one for members of the public. These were launched on Friday 23rd July and remained open until Sunday 22nd August. These were promoted through various marketing and communications to maximise consultation engagement.

Additionally, 13 stakeholders were invited to take part in the in-depth qualitative interviews, but only four took part in the research.

In total 1,133 people interacted with the main survey, 32 businesses with the business survey and four in-depth interviews.

6.12.2.1. Headline Findings

As a result of the BSIP consultation survey, Portsmouth City Council found that:

- Satisfaction with local bus services in Portsmouth is divided; 29% of respondents are satisfied and 39% are dissatisfied;
- Users are far more satisfied than non-users (37% compared to 7%) who are more likely to give a neutral rating of 'neither satisfied or dissatisfied'; and
- Respondents with a disability (who are using the bus more frequently) are more satisfied than those with no disability.

Figure 6-15 outlines the results of the question regarding satisfaction with local bus services in Portsmouth, with the key reasons for being satisfied outlined in Table 2-1.

Curiously, there are great differences in the results of the Passenger Focus Survey and that conducted by Portsmouth City Council. These may be explained by the research design, as Passenger Focus surveys are randomly sampled whereas Portsmouth City Councils research was based on self-selection of participants. Further research is required to establish the reasons for this difference.

³⁹ Passenger Focus (2020), Bus Passenger Survey Autumn 2019

⁴⁰ Portsmouth City Council (2021) BSIP Consultation Survey



Figure 6-15 - Satisfaction results from BSIP survey



Table 6-2 - Reasons for level of satisfaction from BSIP survey

Key Reasons for being satisfied (304)		Key Reasons for being Dissatisfied (330)		
Reason	Percentage (%)	Reason	Percentage (%)	
Good frequency / regular service / convenient	46	Do not use the bus regularly	25	
Good route coverage	30	Cots / tickets	21	
On time / reliable	12	Routes not comprehensive enough	15	
Clean / comfortable	10	Generally good service /routes	11	
Friendly / helpful bus drivers	7	Unreliable	11	



7. Transport strategy and policy

7.1. Government strategies

Table 7-1 summarises relevant government strategies.

Table 7-1 – Key Government Strategies

Key policy documents	Key themes
National policies	
Transport De- carbonisation Strategy (2021)	 Future local transport funding will transition to a state where it is conditional on local areas being able to demonstrate how they will reduce emissions over a portfolio of transport investments through LTPs Government will provide a toolkit to help authorities deliver measures to reduce greenhouse gas emissions from transport Re-iterates National Planning Policy Framework presumption on planning for sustainable transport modes in new developments Commitment to reform Bus Service Operators Grant and re-states aspirations and commitments set out in National Bus Strategy Recognises the need to contain traffic volumes in towns and cities but the focus appears to be on achieving mode shift through increasing cycling, walking and ride-sharing. Recognises the need to re-allocated roadspace but offers no insight into how mode shift will be achieved from car, particularly to rail or bus
National Bus Strategy (2021)	 Investment of £3 billion over the course of the next UK parliament in England Reverse the cycle of decline in the usage and provision of bus services Roadspace re-allocation in favour of bus priority Five Bus Rapid Transit towns Improved uptake of Zero Emission Buses with 4,000 vehicles delivered Simpler, multi-operator ticketing with flat and capped fares
Williams-Shapps Rail Review (2021)	 Great British Railways to plan, specify and oversee the delivery of rail services Existing franchising system of passenger rail operations to move a system of managed contracts with the revenue risk borne by Great British Railways More opportunities for local authorities to work in partnership with Great British Railways to deliver improved rail services
Future of Mobility: Urban Strategy (2019)	 Mass transit must remain fundamental to an efficient transport system Mobility innovation must help to reduce congestion through more efficient use of limited road space, for example through sharing rides, increasing occupancy or consolidating freight The marketplace for mobility must be open to stimulate innovation and give the best deal to consumers New mobility services must be designed to operate as part of an integrated transport system combining public, private and multiple modes for transport users Data from new mobility services must be shared where appropriate to improve choice and the operation of the transport system.
Clean Growth Strategy: Leading the way to a low carbon future (2017)	 Increase uptake of zero-emission buses Reduce the number of shorter journeys made by car
<u>The Ten Point Plan</u> for a Green	 Green public transport, cycling and walking – including the National Bus Strategy (see above) and 4,000 Zero Emission Buses



Industrial Revolution (2020)	£500m to re-open Beeching era rail line closures
Walking and Cycling Investment Strategy (2017)	 Increase walking to 300 stages per person per year (a single public transport trip typically includes at least two walk stages)
DfT Single Department Plan (2019)	 Deliver the Future of Mobility Urban Strategy, to consider new types of vehicle, sharing data to improve services, and making journey planning and payment simpler. Support cities to develop transport and promote local growth through the £2.5 billion Transforming Cities Fund. Delivering schemes to tackle congestion and drive up productivity, such as measures to speed up bus journeys. Continue joint working with the Ministry of Housing, Communities and Local Government to integrate decision-making on housing and transport investments and policies and promote better integration of sustainable transport with new housing. Commence a large-scale regulatory review, looking in to how our regulatory framework will need to adapt due to technological changes in buses and taxis, data, mobility as a service and micromobility.
Decarbonising transport: setting the challenge (2020)	 Help make public transport and active travel the natural first choice for daily activities Support fewer car trips through a coherent, convenient and cost-effective public network; and explore how we might use cars differently in future Encourage cycling and walking for short journeys Explore how to best support the behaviour change required Address emissions at a local level through local management of transport solutions Target support for local areas, considering regional diversity and different solutions
Connecting people: a strategic vision for rail (2017)	 Improving the standard and consistency of train service delivery Expanding commuter capacity in line with expected demand New routes which can provide strategic transport links or unlock significant housing or economic development regionally Schemes to meet the biggest capacity challenges Deliver Smart ticketing and fares reform to introduce single-leg pricing and tailor ticketing products to needs of part-time commuters
National AQ Plan: UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations (2017)	 Good local bus services encourage people to leave the car at home and use public transport to get to work, school, and to access local services. The latest Euro VI diesel buses can emit less NOx per vehicle than the latest diesel cars.
Clean Air Strategy (2019)	Funding to improve bus services
National Planning Policy Framework (NPPF) (2018)	 Applications for development should facilitate access to high quality public transport serviceslayouts that maximise the catchments for busappropriate facilities to that encourage public transport use Local parking standards should take account of the availability and opportunities for public transport
A connected society - A strategy for tackling loneliness (2018)	 The Department for Transport will build partnerships with transport providers and community groups to develop how transport can be used as a means to help tackle loneliness, and use industry-wide forums to promote these Requirement to reflect in departmental Single Department Plans from 2019/20



Inclusive Transport Strategy (2018)	 Support the establishment of a Rail Ombudsman to investigate unresolved customer complaints. Identify a framework to ensure bus operators are implementing mandatory bus driver training. Ensure that disabled travellers are fully aware of their rights and the obligations of transport operators. Promote the assistance and financial savings available to disabled travellers. Require a minimum target for the successful completion of booked assistance through the Passenger Assist scheme. Support regulators to promote information about the rights of disabled travellers. Release an online tool to assist disabled people in reporting issues they encounter when travelling by bus. Ensuring that all public transport bodies understand their obligations under the Public Sector Equality Duty in relation to planning and delivering transport. Legislation to ensure the provision of on-board audible and visible upcoming stop and route information is installed on local bus services across Great Britain. Increase the availability of data on accessibility. Ensure transport providers improve the availability of information particularly in relation to accessibility services such as toilets. Work with Train Operating Companies to help ensure that all disabled passengers are aware of the Passenger Assist service. Provide improved information about the accessibility of stations, including the development of an accessibility map by the RDG. Make up to £300 million available for rail accessibility improvements during the Devide the Department's Inclusive Mobility and Tactile Paving guidance. Announce how to prioritise access to the on-board wheelchair space for wheelchair users and other passengers for whom there is no other suitable accommodation on buses.
Sub-national policie	Strategic goals of improved productivity, improved health and wellbeing and
for the South East (TfSE, 2020)	 A network that promotes active travel and active lifestyles to improve our health and well-being. A reduction in the need to travel by car South East is less dependent on London and develops its own economic hubs Mode shift from car to bus and rail through increasing price of travel by car and lowering the price of bus and rail travel Support initiatives that maintain the viability of inter-urban bus services Develop high quality Rapid Transit services in urban corridors Scenario forecasting summary report (2019) contains a number of scenarios. 'Sustainable Route to Growth' sees an increase in bus and coach trips of 120% and rail trips of 108% against an increase in journeys by all modes of 4%. This is compared to 'business as usual' and is against a 13% increase in employment and 15% increase in Gross Value Added by 2050.
Local policies, strat	egies, and plans
Portsmouth City Local Plan (2006)	 Transport policies were deleted in 2009 when the Portsmouth Plan was adopted.
The Portsmouth Plan: Portsmouth Core Strategy (2012)	 Policy PCS17 – Transport Encouraging development in areas around public transport hubs and along corridors where there is good access not only to public transport but also to goods and services. Locating development where there is the potential to improve accessibility for all through walking, cycling and public transport.



	 Continue partnership working with sub-region as part of Transport for South Hampshire to enable the challenges affecting the sub-region to be addressed effectively. Safeguard land for, new interchange at Portsmouth & Southsea station, improved interchange facilities and The Hard, land for future stations Farlington and Paulsgrove and land for Park and Ride facilities at Tipner. Creation of Bus Rapid Transit routes and sub-regional BRT linking Gosport, Fareham, North Fareham and Portsmouth.
Portsmouth Local Plan 2038 (Draft for consultation 2021)	 Sustainable Transport (Policy C3) The strategy aims to reduce the need to travel and deliver a people centred travel network that priorities walking, cycling and public transport through the following measures: Development of future phases of South East Hampshire Rapid Transit Links between Tipner and Horsea Island allowing buses, cyclists and pedestrians access between Tipner and Horsea Island, the Horsea Island country park, Port Solent and beyond Park and Ride extension to create additional capacity and routes Improved rail services, including improved journey times to Southampton and London Improved transport interchanges and mobility hubs Exploration of a new bus depot in the city Electric vehicle charge point installation Freight consolidation Prioritising access to local and district city centres Interventions to improve poor air quality from transport sources including introduction of a charging Clean Air Zone Exploration of cycle hub at Portsmouth and Southsea station Bike Hangars in key locations.
Seafront Masterplan (2021)	 The seafront is serviced by buses at multiple points including Clarence Pier, South Parade Pier and St Georges Road. These will form part of the South East Hampshire Rapid Transit Network. Visitor attractions such as D-Day Museum and Southsea Castle are not well served by bus. A bus route running west-east from The Hard to Eastney Point via Old Portsmouth, Southsea shops, and Bransbury Park, is also being trialled (commenced 30 August 2020). However, accessing the seafront from a number of other areas within the city requires taking two/three bus transfer. Portsmouth park & ride service runs from Tipner to the city centre and the Hard Interchange, but it does not currently serve the seafront (although this has been trialled previously). Future improvements to bus services to the seafront area, and particularly the visitor attractions and during events, are likely to be needed in order to bring the expected additional visitors to the seafront without substantially increasing traffic flows.
Emerging Local Transport Strategy	• Policies are designed to ensure that public transport in the city is attractive, reliable and accessible to the whole community, whilst also being environmentally sustainable. Public transport can move well over ten times as many people as cars in the same amount of space, while creating much less pollution per person. With significant growth in travel demand anticipated over the coming years it is essential that a much larger proportion of trips are made by public transport. The immediate impact of the COVID-19 crisis has been to dramatically reduce the capacity of public transport to allow for social distancing. The remaining capacity should be used by those unable to use other modes, particularly key workers. Over the lifetime of this plan, as social



distancing measures are relaxed, we anticipate that public transport will remain a central component of delivering a more sustainable city.

7.2. Parking Provision

There are 9,421 parking spaces currently available within Portsmouth City Centre, with a full breakdown of the provisions available in 10. Appendix A Table A-1. Parking within Portsmouth for the day generally costs \pounds 12, with visits for around 4 hours costing in the \pounds 4-5 range.

Table 7-1 outlines the costs for season tickets in some of the city centre car parks, with season tickets costing between $\pounds 900 - \pounds 1,176$ per year – this is significantly more expensive than equivalent bus season tickets both for travelling from within Portsmouth or across the local authority boundary.

Name of car park and ownership	Grouping location	1 x monthly season ticket	3 x monthly season ticket	6 x monthly season ticket	12 x monthly season ticket
Clarence Pier - PCC	Seafront	£95	£262	£513	£1,005
Clarence Street - PCC	City Centre	£80	£225	£450	£900
Guildhall Walk - PCC	City Centre	£102	£294	£588	£1,176
The Harbour - PCC	Portsmouth Docks	£102	£294	£588	£1,176
Isambard Brunel MSCP - PCC	City Centre	£102	£294	£588	£1,176
Pyramids Car Park - PCC	Seafront	£95	£262	£513	£1,105
Seafront Canoe Lake - PCC	Seafront	£95	£262	£513	£1,105
Seafront D-Day Car Park - PCC	Seafront	£95	£262	£513	£1,105
Seafront The Esplanade -PCC	Seafront	£95	£262	£513	£1,105
Crasswell MSCP - Private	City Centre	Season ticket pr	ices start from £1.8	34 per day	
Market Way - Private	City Centre	Season ticket pr	ices start from £2.	98 per day	

Table 7-1 - Information on season ticket prices for some of the city's car parks



8. Local authority capabilities

Public transport resource at Portsmouth City Council is outlined in Table 8-1 with the organisational structure displayed in Figure 8-1.

T I I A 4	D (014	o	1.11		
I able 8-1 -	Portsmouth	City	Council	public	transport	roles

Role title	Role description
Assistant Director Transport	Leading a diverse, multi-disciplinary, professional workforce in the areas of transport and air quality, in order to deliver improved connectivity and reduce our collective impact on the environment.
	Senior Responsible Owner (SRO) for South East Hampshire Rapid Transit, an ambitious partnership between Portsmouth, Hampshire and the Isle of Wight, to deliver a £100m programme enabling a transformational rapid transit network across the Portsmouth city region, addressing the considerable connectivity challenges which have a significant negative impact on productivity, air quality and social inclusion.
Transport Planning Manager	This post leads on the development of all strategy and policy for Portsmouth City Council transport directorate and air quality, ensuring that the future planning and operation of the network and transport provision enables the city can realise its aspirations for growth and development.
	Working closely with other Solent Transport partners, including Hampshire County Council, Southampton City Council, and Isle of Wight Council. As well as liaising and developing constructive relationships with key stakeholders to strengthen the work and bids for Portsmouth for transport, and in particular public transport.
Transport Development Manager	This post is responsible for managing all stakeholder engagement and material on the South East Hampshire Rapid Transit project. The role engages and consults with members, public transport operators, and neighbouring local authorities, ensuring partnership working and cohesion throughout the project.
	This post has a lead role in the development, management and reporting of the Portsmouth Enhanced Partnership and BSIP.
Strategic Transport Lead	To create complex and varied transport plans, policies and strategies which balance the needs of Portsmouth residents, the local economy, the environment and national transport priorities.
	To prepare, develop and implement elements of the Local Transport Plan (Portsmouth Transport Strategy) and report against progress.
	To be responsible for the development of other strategies including the Portsmouth Parking Strategy, Public Transport Strategy, Behaviour Change Strategy, Walking and Cycling Strategy and Air Quality Strategy.
SEHRT Strategic Transport Lead	To prepare, develop and implement elements of the Portsmouth Transport Strategy, including the strategic overview of the South East Hampshire Rapid Transit project.



	This comprises the development and integration of complementary policies and development of future phases working in close partnership with partners.
Principal Public Transport Officer	Creating a high quality public transport network, that supports the Council's aspirations for promoting and delivering sustainable transport and encouraging modal shift.
	This post will create manage the operation of the public transport network. Working closely with bus operators and stakeholders to ensure a connected public transport network for Portsmouth residents.
	This post is responsible for the operation of Public Transport Interchanges, such as the Portsmouth Park & Ride and Hard Public Transport Interchange. As well as delivering clear public transport information at bus stops, and managing Portsmouth's bus shelter contract.
Principal Transport Planner	Creating a high quality public transport network, that supports the Council's aspirations for promoting and delivering sustainable transport and encouraging modal shift.
	This post will create complex and varied transport plans, policies and strategies which balance the needs of Portsmouth residents, public health, the local economy, the environment and national transport priorities.
Technical Public Transport Officer x2 posts	This post takes a key role in the delivery of aspects concerning the practical operation of public transport in Portsmouth.
	This includes the delivery of a high quality public transport network that works to achieve the Council's aspirations for promoting sustainable transport and encouraging modal shift to sustainable modes.
	Taking the lead on service disruption (roadworks, stop works (RTI & infrastructure), interchange works/maintenance
	Concessionary fare scheme enquiries and bus pass rollouts - working closely with the Cashier's Office team, and instructing our scheme contractor
	Local Transport Plan project management, including statutory schemes such as Access for People With Disabilities (including installation of dropped kerbs and other highways infrastructure to assist those less abled, to use public transport) and Traveline - used for online passenger journey planning
Technical Transport Planner	This role is responsible for supporting the provision of advice on the Park & Ride and Hard Interchange operation. Including the monitoring of passenger numbers on the P&R, ticketing enquiries, arranging P&R services for special events in the city.
Programme & Portfolio Manager	To ensure the successful delivery of two transport programmes: Air Quality Improvement and South East Hampshire Rapid Transit. As Portfolio Manager to ensure the effective monitoring and reporting of the portfolio of PCC's transport programmes and projects.
Principal Transport Analyst	This post is responsible for developing, maintaining and delivering the Business Intelligence strategy for the Transport department.



	They will make a significant contribution to the development of Transport policies and strategies by leading the department on their field of expertise (analytics). Furthermore, they will lead on and be responsible for data management, data analytics and reporting across the Transport department and 2 multi-million pound programmes within the department. They will be responsible for programme delivery of Monitoring and Benefits realisation to the Department for Transport (DfT) and Department for Environment Food and Rural Affairs (DEFRA).
	monitoring and reporting, which will include the BSIP targets.
Traffic & Network Manager	Management of the road network to facilitate movement of buses along their routes to provide reliable journey-times. To investigate and implement technologies to deliver bus priority at signalised junctions.
Principal Transport Technology Engineer	To investigate and implement technologies to deliver bus priority at signalised junctions.
Assistant Director Infrastructure	Senior Supplier SEHRT Portsmouth and Portsmouth Transport Hub, including the Park & Ride
Principal Engineer	Delivery lead for the South East Hampshire Rapid Transit TCF programme for Portsmouth.
Senior Project Manager	Project Manager for the Transport Hub, including Portsmouth Park & Ride. Linking in existing and future bus service considerations.
Senior Marketing Communications Officer (Transport)	Responsible for traffic and transportation marketing, communications and engagement. This includes overseeing marketing of the Portsmouth park and ride, engaging the local community in surveys, and encouraging the use of public transport during the pandemic.
Marketing and Communications	Manages public transport marketing, communications and engagement.
Officer (Transport)	This includes overseeing marketing of the Portsmouth park and ride, engaging the local community in surveys, and encouraging the use of public transport during the pandemic.
Marketing officer (Transport)	Supporting the Marketing and Communications Officer to deliver public transport communications and marketing.
	This includes creating accessible content for those that have concessionary bus passes and need to renew, promoting safe use of public transport during the pandemic and creating engaging content for e-bulletins that go to those wanting to be kept up to date with the Park and Ride.
Accounting Technician	Monitoring of costs against budget / grants received and ensuring grants are adhered to. This includes the monitoring of concessionary fares, tendered bus service, CBSSG funding.
Transport	Responsible for the Home to School Transport and Elect Operations
Manager -	Responsible for the finite to ochoor transport and fleet operations.

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Fleet Coordinator x2	Delivery of Home to School services and supporting the Transport Operations Manager in fleet operations.
Air Quality Improvement Behaviour Change Project Manager	Overseeing the delivery of the bus retrofit project, including monitoring of ongoing movement of retrofitted vehicles and impact the measure has had on reducing air pollution in Portsmouth.
Air Quality Improvement	Keeping bus and coach companies updated with the plans for the charging CAZ in Portsmouth.
Engagement Officer (Bus and Coach)	Assisting bus and coach companies to apply for funding for replacement and retrofit of vehicles so that become Euro 6 compliant.
Parking Enforcement Manager	Managing on/off street parking enforcement team, including bus lane enforcement.

Figure 8-1 - Portsmouth City Council transport organisation structure





9. Business planning

This section considers the impact of population change and a change in car ownership as two key drivers of the demand for bus travel in future years.

9.1. Population projections

Population projections⁴¹ produced by the ONS have been used to develop an insight into the future age structure of the population within Portsmouth. The data suggests that the total population living within Portsmouth will increase by 5.1% between 2018 and 2040, with the population increasing by around 10,901 people. The ONS data suggests that there will be limited change in the age structure of the population within the area, but the proportion of over 60s is projected to increase by 15% and 36% by 2025 and 2032 respectively. Conversely the proportion of under 15s will reduce by 14% and 40% by 2025 and 2032 respectively. These changing demographics at each end of the population structure will impact the demand for differing types of bus services, with the network needing to adjust to meet the demands of the changing demographics of the population.



Figure 9-1 - Population projection⁴¹

⁴¹ ONS (2020), Population projections for local authorities: Table 2



10. Concluding remarks

This technical note has been compiled to develop an understanding of the baseline conditions within Portsmouth to inform the Bus Service Improvement Plan. The note has aimed to outline the current social demographic composition of Portsmouth and how differing demand points may influence the need for public transport services, alongside outlining the current bus provision within the local authority.

Analysis of census data has highlighted that the highest population densities are seen within the south of the authority, with the northern areas such as Cosham having lower densities. When considering sociodemographics, there is lower than average levels of car ownership within the authority, which is to be expected due to its urban nature. Regarding IMD, Portsmouth is slightly above average in terms of lower levels of income deprivation, but there are still 18% of LSOAs ranked in IMD quintile 1: these include a large part of the Paulsgrove area and to the north-west of the city centre. Economic activity within Portsmouth is in line with the England and Wales average; however, the report has highlighted areas such as those around the city centre where economic inactivity is as high at 58%. As such, there are areas of Portsmouth where improvements to bus services may be able to facilitate improved social outcomes.

Regarding bus patronage, Portsmouth has retained most of its bus passengers, even seeing growth above the baseline during the early part of the 2010s, although by 2017/18 this figure had dropped to 95% of the baseline value in 2009/10. This is despite a decrease in bus KM operated within the local authority to below 70% of the value in 2013/14. As such, the data suggests that the bus network in Portsmouth has retained its attractiveness to passengers despite an apparent reduction in routes or frequency and therefore there is a strong baseline for the BSIP to build upon.

The bus mode share for commuting is 7% whereas those travelling by car account for 58% of commuters.

Overall, Portsmouth has a number of challenges and opportunities facing the bus network going forward, with this document aiming to inform the aims of the Bus Service Improvement Plan.

Appendices

1 | 1.0 | 22/09/2021 Atkins | Appendix A - Portsmouth BSIP Baseline Evidence
Appendix A. Parking Provisions

PCC/privately Grouping Number of Name of car park Daily cost of parking location owned spaces **Clarence** Pier Seafront PCC 154 Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12 PCC **Clarence Street** City Centre 154 7am - 8pm: Up to 1 hour £1.10 Up to 2 hours £2.10 Up to 3 hours £3.10 Up to 4 hours £4.10 Up to 6 hours £6.10 Up to 8 hours £8.10 All day £10.00 Guildhall Walk **City Centre** PCC 58 24 hour period: Up to 1 hour £1.60 Up to 2 hours £2.60 Up to 3 hours £3.50 Up to 4 hours £4.50 Up to 5 hours £8.00 Over 5 hours £12.00 Portsmouth PCC 62 24 hour period: The Harbour Up to 1 hour £1.60 Docks Up to 2 hours £2.60 Up to 3 hours £3.50 Up to 4 hours £4.50 Up to 5 hours £8.00 Over 5 hours £12.00 Isambard Brunel MSCP **City Centre** PCC 468 24 hour period: Up to 1 hour £1.60 Up to 2 hours £2.60 Up to 3 hours £3.50 Up to 4 hours £4.50 Up to 5 hours £8.00 Over 5 hours £12.00 Isambard Brunel SLCP PCC 83 24 hour period: City Centre Up to 1 hour £1.60 Up to 2 hours £2.60 Up to 3 hours £3.50 Up to 4 hours £4.50 Up to 5 hours £8.00 Over 5 hours £12.00 The Podium PCC 24 hour period: **City Centre** 69 Up to 1 hour £1.60 Up to 2 hours £2.60 Up to 3 hours £3.50

Table A-1 - Overview of city centre daily car parking cost and availability for Portsmouth



				Up to 4 hours £4.50 Up to 5 hours £8.00 Over 5 hours £12.00
Pyramids Car Park	Seafront	PCC	148	Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12
Seafront Canoe Lake	Seafront	PCC	146	Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12
Seafront D-Day Car Park	Seafront	PCC	125	Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12
Seafront The Esplanade	Seafront	PCC	373	Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12
Seafront Common	Seafront	PCC	68	Up to: 1 hour £1.80 2 hours £3.10 3 hours £4.10 4 hours £5 6 hours £6.50 8 hours £8.50 All day £12
Portsmouth P&R	Tipner P&R	PCC	668	1 day £4 Flexipass 10 £30 Flexipass 20 £50 Flexipass 50 £100 1 week £14 4 week £55 1 year £600
Portsmouth Historic Docs	Portsmouth Docks	Private	295	Mon-Sun - All day 2 Hours £2.60 4 Hours £5.00



				6 Hours £7.00 8 Hours £9.00 24 Hours £12.00
Gunwharf Quays	Portsmouth Docks	Private	1,532	Mon-Sun - All day 2 Hours £2.90 3 Hours £3.90 4 Hours £6.00 5 Hours £6.90 7 Hours £8.00 9 Hours £10.00 10 Hours £12.00 11 Hours £20.00 24 Hours £20.00
Gunwharf Road	Portsmouth Docks	Private	120	Mon-Sun - All day 3 Hours £3.70 5 Hours £7.50 8 Hours £9.00 24 Hours £11.00 Overnight £6.50 (In after 16:00 Out by 05:00)
Waitrose	Seafront	Private	320	Mon-Sat 08:00 - 20:00 Sun 10:00 - 16:00 30 Mins Free 2 Hours £2.50 4 Hours £5.00 6 Hours £7.50 8 Hours £10.00 9 Hours £20.00 Max £20.00 *Customer car parking Customer - Mon-Sat 08:00 - 20:00 Customer - Sun 10:00 - 16:00 2 Hours Free 4 Hours £2.50 6 Hours £5.00 8 Hours £7.50 9 Hours £20.00 Max £20.00
University of Portsmouth	City Centre	Private	58	Permit holders only Mon- Fri 17:00 - 08:00
	I	I. Contraction of the second se	I.	l de la constante de



				Sat-Sun - All day Flat Rate £2.00
Matalan	City Centre	Private	150	Maximum stay 2 hours free customers only 1 Hour £1.50 2 Hours £3.00
Crasswell MSCP	City Centre	Private	919	1 Hour £1.20 2 Hours £2.70 3 Hours £5.20 12 Hours £6.20 24 Hours £8.20 Early Bird £4.20 (in 06:00-09:00)
Crasswell SLCP	City Centre	Private	70	1 Hour £1.20 2 Hours £2.70 3 Hours £5.20 12 Hours £6.20 24 Hours £8.20
The Bridge Shopping Centre	Out of City	Private	371	Mon-Fri 07:00 - 23:00 Sat 07:00 - 22:00 Sun 10:00 - 16:00 Maximum stay 3 hours Free
Cascades	City Centre	Private	610	1 Hour £1.70 2 Hours £2.70 3 Hours £3.70 4 Hours £4.70 5 Hours £5.70 10 Hours £13.00 24 Hours £25.00
Market Way	City Centre	Private	500	1 Hour £1.20 2 Hours £2.70 3 Hours £5.20 12 Hours £6.20 24 Hours £8.20
Morrisons	City Centre	Private	240	Customers only Mon-Sat 07:00 - 17:00 Sun 10:00 - 16:00 Maximum stay 2 hours free Mon-Sat 17:00 - 23:00 free
Portsmouth International Port Multi-storey	City Centre	Private	520	Mon-Sun - All day 10 Mins Free



				1 Hour £4.00
				3 Hours £6.00
				5 Hours £8.00
				24 Hours £13.00
				Additional Day £13.00
The Pompey Centre	Out of City	Private	540	Mon-Fri 07:00 - 20:00
				Sat 07:00 - 19:00
				Sun 10:00 - 16:00
				Maximum stay 2 hours free (customers only)
				1 hour maximum stay on match days.
Total parking capacity of off-street parking (over 50 spaces)		9,241		