Appendix A

DEVON COUNTY COUNCIL - BASELINE TRAFFIC REPORT
Baseline Traffic Report

Prepared to inform the Plymouth & South West Devon Joint Local Plan

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Enquiries

For enquiries, please contact:

Planning, Transport and Environment

Devon County Council
AB2 Lucombe House
County Hall
Topsham Road
Exeter
Devon
EX2 4QD
1. Introduction

1.1 Plymouth City Council, South Hams District Council and West Devon Borough Council are preparing a Joint Local Plan; the plan period will cover 2014-2034. This report sets out the baseline traffic and transport conditions in the key towns of: Ivybridge, Tavistock, Totnes and Okehampton specifically. It also refers to further work that needs to be done to help understand the Infrastructure requirements for the Thriving Towns and Villages Policy Area over the next few months. The work compliments the Plymouth and South West Devon Joint Local Plan Baseline Transport Conditions Report.

1.2 Kingsbridge and Dartmouth are the two other towns that make up the six Thriving Towns and Villages referred to in the Joint Local Plan. However these have not been included within this report as the levels of development proposed in the two towns beyond what has already been committed falls below the threshold (500 dwellings) included in this transport report.

1.3 The A385, A386, A379 corridors are discussed in the following chapters and are also detailed in the Plymouth and South West Devon Joint Local Plan Baseline Transport Conditions Report.

1.4 The Devon Transport Infrastructure Plan sets out planned investment in transport infrastructure across Devon covering the period 2014 to 2030. It complements the Local Transport Plan 2011-2026 which sets out the transport strategy for the county and the detailed infrastructure delivery plans relating to district council Local Plan development.
2. Ivybridge

2.1. Background

2.1.1 The town of Ivybridge is situated in the western part of South Hams District Council, approximately 20 km east of Plymouth city centre. The accessibility of Ivybridge to Plymouth by road is very high as it is located in close proximity to the A38 Devon Expressway. Exeter is also accessible from Ivybridge via the A38 and by rail and is situated approximately 50km to the east.

2.1.2 Figure 1 below shows the geographic location of Ivybridge.

![Figure 1 - Map of Ivybridge](image)

2.1.3 The 2011 Census revealed that Ivybridge is the largest town in the South Hams District Council area with a population of approximately 12,000. It has experienced major expansion since the 1960s, particularly throughout the 1980s and 1990s.

2.1.4 The emerging plan allocates 1079 new dwellings at Ivybridge; of which 637 already have consent. The largest development is at East of Ivybridge where 540 dwellings allocated already have part consent. There are 200 dwellings allocated at Filham which is also in the eastern part of the town. In the western part of Ivybridge, 100 dwellings are proposed for land at Stibb; 74 dwellings are allocated at Woodland Road and 38 are proposed for Cornwood Road. The potential sites for allocation in Ivybridge are shown below (Plymouth & South West Devon Joint Local Plan 2017).
Commuting Trends

2.1.5 Only 28.8% of the Ivybridge population work in the town which is a relatively small number. The main flow for work is towards Plymouth with 31.1% of the Ivybridge population working there, 85.6% commute by car which is very high due to the proximity of the town to the A38. This evidences the fact that Ivybridge currently serves predominantly as a commuter town for the city of Plymouth. By comparison, 2.3% of people commute to Exeter for work.

2.2 Current Transport Context

2.2.1 The town has access constraints which limits the opportunity for growth. Its proximity to Dartmoor National Park to the north also acts as a natural barrier to growth. However the town is served well by transport, in respect of its access to the A38 rail services and National Cycle Network (NCN) 2.

Road Network

2.2.2 Ivybridge is well connected to Plymouth to the west and Exeter to the east via the A38 trunk road. Table 1 below summarises the 24 hour and 12 hour annual average daily traffic flows (eastbound and westbound) in the vicinity of Ivybridge for the years 2013, 2014 and 2015:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Year</th>
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<th>12 hour AADT</th>
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<td></td>
<td>2015</td>
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<td>21480</td>
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Table 1 - A38 Flows
2.2.3 The average 24 hour flows have grown by approximately 1,000 vehicles in the period from 2013 to 2015 equating to an increase of approximately 4%.

2.2.4 The B3213 runs through the centre of the town from east to west. Marjorie Kelly Way and Leonards Road are two sections of the B3213 that act as a bypass of the town centre, while Western Road and Exeter Road approach the town centre from the west and the east respectively. The map below shows the road layout in Ivybridge.

![Figure 3: Ivybridge Road Network](image)

2.2.5 There are perceived congestion problems along the B3213, particularly on Western Road approaching the junction with the roundabout that serves the A38. A traffic study has been commissioned to understand some of the traffic issues along the B3213 and what possible mitigation can be achieved to improve traffic flow. The study will undertake vehicle count movements and queue length analysis at each of the junctions to assess the suitability of improvements identified. The results of this study will be provided at a later date.

2.2.6 Other roads in the area are the A379 which runs approximately 4 km to the south of the town on its route between Plymouth and the South Devon coast. The A38 and the A379 are connected by the A3121.

**Rail**

2.2.7 With regard to rail, Ivybridge sits on the South Devon Main Line which connects Exeter and Plymouth. The services from Ivybridge to Plymouth are non-stop with a journey time of approximately 15 minutes.

2.2.8 The station was opened approximately 1km to the east of the town centre in 1994 however it could be argued that it has not fulfilled its undoubted potential which can partly be attributed to the limited local service and the very few High Speed Trains to and from London Paddington that call at Ivybridge. The
platform is also not long enough for Cross Country Trains to stop at the station.

![Ivybridge Station Patronage](image)

**Figure 4: Ivybridge Station Patronage**

2.2.9 The patronage peaked at 86,000 in 2011/12 however it had dropped to below 60,000 in 2014/15 providing evidence that the station is not being used as much as first anticipated. The graph also illustrates that there has been a drop in patronage in recent years which could perhaps be attributed to there no longer being any bus services serving Ivybridge railway station.

2.2.10 It is anticipated that if there were more trains each day it is expected that considerably more people would use the station, however this would need to be balanced with the need to provide fast rail times in and out of Plymouth Central station. There are proposals for development in the vicinity of the station which may encourage the use of rail as a means of transport into Plymouth.

2.2.11 Almost two thirds of passengers walk to the station from within half a mile away. The train service at the station may not attract many passengers from the wider area away due to the existing rail heads at Totnes and Plymouth having more frequent services and good long distance connections while Ivybridge station is no longer served by buses.

2.2.12 Better integration between bus and rail, as well as an increased number of trains calling at Ivybridge, may help boost the patronage in the future particularly as development is planned in the area around the railway station.

**Bus**

2.2.13 There is a half hourly Stagecoach Gold service for the majority of the day between Plymouth and Totnes that serves Ivybridge. The journey time for this service is 25 minutes. The X38 service is another service connecting Ivybridge and Plymouth with a journey time of 25 minutes however this bus is infrequent running only once every two hours. In addition, the Plymouth
Citybus 20A service runs buses between Ivybridge and Plymouth hourly throughout the day however the journey time for this is approximately one hour as it takes a slower route via Plympton.

**Cycling**

2.2.14 Route NCN 2 of the National Cycle Network connects Ivybridge to Plymouth. The Devon strategic cycle map can be viewed in Appendix 1. The connection between Sherford and Deep Lane will, subject to funding, provide a link to NCN 2 and a crossing of the A38.

**2.3 Further work**

2.3.1 Overall Ivybridge has good connectivity, particularly with Plymouth. There are thought to be issues in Ivybridge associated with accessing the A38 and congestion within the town which is having a detrimental impact on air quality. These issues are being investigated in the aforementioned Ivybridge traffic study that Devon County Council has commissioned.
3. **Tavistock**

3.1 **Background**

3.1.1 Tavistock is a market town situated within the West Devon District Council area, approximately 25 km north of Plymouth city centre. The town is connected to Plymouth by road via the A386. It is the only direct travel link between Tavistock and Plymouth therefore this section of the A386 is critical not only to the economy and prosperity of Tavistock, but to all passenger and freight transport between Plymouth and the north and west of Devon.

3.1.2 Tavistock benefits from being a ‘gateway town’ for international, cultural and national recreational assets including Dartmoor and the Cornwall and West Devon Mining Landscape World Heritage Site. Tourism is therefore a very important element of the town’s economy.

3.1.3 Figure 5 below shows the geographic location of Tavistock.

![Figure 5: Map of Tavistock](image)

Population and Future Development

3.1.4 The 2011 census showed that the population of Tavistock is now 12,280 which is an increase of 11.5% since 2001. This is approximately double the county average population growth in the same period.

3.1.5 Some new housing developments have come forward in Tavistock in recent years and 1,143 dwellings are set to be built in this plan period; of which 893 already have consent. The adopted West Devon Core Strategy, which is being superseded by the Joint Local Plan, has identified areas of land in the south and south-west of Tavistock. There are 600 dwellings allocated at
Callington Road, which already have consent, while there are 250 dwellings allocated to the west of Plymouth Road. Other allocated sites include 148 dwellings at New Launceston Road and 110 dwellings at Butchers Park Hill. The potential sites for allocation in Tavistock are shown below (Plymouth & South West Devon Joint Local Plan 2017).

![Figure 6: Joint Local Plan - Tavistock - Potential sites for allocation](image)

**Commuting Trends**

3.1.6 The 2011 Census revealed that approximately 50% of the working population in Tavistock travel to destinations outside the town for work suggesting that the town is very self-contained. The census data also indicates that 18% of employed people in Tavistock travel to Plymouth for work which is a significant percentage and shows that the town has a strong relationship with Plymouth in terms of employment provision. Of those that commute to Plymouth, 84% drive. There are only 1.5% commuting to Exeter from Tavistock which is a low number though this is expected due to the long journey time and lack of direct trunk road between the two.

3.2 **Current Transport Context**

**Road Network**

3.2.1 The A386 passes through the centre of Tavistock on its route from Plymouth and south Devon to west and north Devon. This means that there is a considerable volume of traffic passing through the town in addition to the trips to and from Tavistock itself.

3.2.2 Due to the housing growth coming forward in the south of the town, three junctions are being widened on the route towards Plymouth by the developers for the Callington Road development through a section 278 agreement. These junctions are listed below:
- Callington Road/Ford Street and Plymouth Road mini-roundabout.
- Plymouth Road (Drakes Statue) roundabout.
- Plymouth Road/Pixon Lane mini-roundabout.
It is anticipated that these improvement schemes will increase the capacity of the junctions and mitigate the impact of the housing growth.

3.2.3 The section of the A386 from Tavistock to Plymouth is a particularly strategic transport corridor as it is critical to the economy and prosperity of Tavistock. The road is a two-lane single carriageway of varying and sometimes narrow width. The journey time by road along the A386 is approximately 40 minutes.

3.2.4 To the north of Tavistock, the A386 heads across the western fringe of Dartmoor past the village of Lydford to the A30 west of Okehampton at Sourton. The A30 from here provides connections to Exeter and the M5 in the east and destinations in Cornwall to the west.

3.2.5 Otherwise from Tavistock, connections to Cornwall can be made via the A390 which joins the A38 trunk road at Liskeard or the B3362 which meets the A30 trunk road at Launceston.

**Rail**

3.2.6 There is no rail link to Tavistock. The railway line that used to serve Tavistock was closed in the 1960s as a result of the Beeching Act. There is currently work being undertaken looking at the feasibility of extending the railway from Bere Alston to Tavistock which would reconnect the town to the national rail network and provide a rail link to nearby Plymouth.

**Bus**

3.2.7 There is a half hourly Stagecoach service, the X1, for the majority of the day between Plymouth and Tavistock. The journey time for this service is approximately 45 minutes. The Plymouth Citybus service 45 also links Plymouth and Tavistock with a journey time of 45 minutes however this only runs a few times a day in each direction.

**Cycling**

3.2.8 Tavistock benefits from a range of routes linked to the National Cycle Network. It is linked by the Drake’s Trail walking and cycling route however this is largely a recreational route running through attractive scenery on the western edge of Dartmoor. The A386 provides the more direct route although there are no on or off road facilities.

3.2.9 Cycle numbers on the Drakes Trail have been obtained for the years 2013-15 from a counter at Grenofen, a few miles south of Tavistock. The 12 hour workday and weekend averages for each year has been summarised in the table below:

<table>
<thead>
<tr>
<th>Year</th>
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<tbody>
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<td>2014</td>
<td>66</td>
<td>125</td>
</tr>
<tr>
<td>2013</td>
<td>64</td>
<td>123</td>
</tr>
</tbody>
</table>

**Table 2 – Drakes Trail Cycle Counts at Grenofen**

3.2.10 The table above shows that the average number of annual cycle trips along the Drakes Trail in the last three years have been very consistent. The average workday 12 hour flow in 2015 was 68 compared to 64 in 2013. The
numbers of cyclists using the trail at a weekend are significantly greater than the numbers using it on a workday – 12 hour weekend flow of 126 in 2015 compared to 68 for weekday – suggesting it is used more as a leisure route than as a way of commuting from Tavistock to Plymouth.

Air Quality

3.2.11 West Devon Borough Council monitors air quality at a number of locations in Tavistock. The air quality thresholds in the Borough have not yet been exceeded at any of the locations therefore there have not been any AQMAs established.
4. Totnes

4.1 Background

4.1.1 Totnes is a market town situated within the South Hams District Council area, approximately 35 km east of Plymouth city centre and 40km south of Exeter. The town is located at the head of the estuary of the River Dart and lies within the South Devon Area of Outstanding Natural Beauty.

4.1.2 Figure 7 below shows the geographic location of Totnes.

![Figure 7 – Map of Totnes](image)

4.1.3 The population of Totnes at the 2011 census was 8,076. The town has not experienced significant growth between 2001 and 2011, with its population having only increased by 0.4% in that period. This is significantly lower than the growth seen across the whole of Devon and in similar towns in the South Hams and West Devon region such as Okehampton and Tavistock.

4.1.4 The emerging Joint Local Plan has proposed a total of 841 dwellings in Totnes and Dartington; of which 295 already have consent. The main development allocations in Totnes are 190 dwellings already with consent at Baltic Wharf in the south of the town and 130 dwellings at the King Edwards VI Lower School site. In Dartington, the main site allocations are 130 dwellings at Foxhole and 80 dwellings at Broom Park. The potential sites for allocation in Totnes and Dartington are shown below (Plymouth & South West Devon Joint Local Plan 2017).
4.1.5 Totnes is another relatively self-contained market town with the 2011 census revealing that approximately 50% of the working population in Totnes travel to destinations outside of the town for work.

4.1.6 The Census data indicates that 4.4% of employed people living in Totnes travel to Plymouth for work which is a relatively small percentage and shows that the town does not have significant dependence on Plymouth for
employment. 9.4% of the Totnes working population commute to Torbay and 4% commute to Newton Abbot while only 2.9% travel to Exeter for work which shows the town is less dependent on Exeter for employment than it is with Plymouth.

4.1.7 10.7% of the population of Totnes have no fixed work place which is reasonably high and reflective of the job market in the South Hams area. The remainder of the working population commute to a variety of other towns in Teignbridge and South Hams such as Stoke Gabriel, Ashburton, Dartmouth and Kingsbridge but none of these flows represent significant numbers.

4.1.8 The commuting patterns in Totnes put significant pressure on the highway network as 89% of trips into and out of Totnes for work are made by the private car.

4.2 Current Transport Context

4.2.1 Totnes has a key strategic location with a number of arterial routes converging in the town and it is the main rail head for the South Hams area. The town does however have a number of constraints which limits opportunities for growth.

Road Network

4.2.2 The A38 passes about 11 km to the west of Totnes, connected to the town by the A384 from Buckfastleigh and the A385 from South Brent which continues to Paignton. This therefore means that the town is on the main route between Torbay and Plymouth, two of the largest urban areas in the South West. Journey times to Plymouth by road are approximately 35 minutes. Totnes also lies on the A381 linking the town with Newton Abbot to the north and Kingsbridge and Salcombe to the south.

4.2.3 Totnes suffers from congestion which largely stems from the town being situated at the confluence of a number of ‘A’ routes with traffic approaching and leaving the town from a range of different directions. Commuter trips are spread across a variety of locations. The town also struggles from congestion problems due to the limited number of bridging points across the River Dart. During peak periods on weekdays and weekends the main routes in and around Totnes experience significant traffic demand, as the A385 in the town is a through route for longer-distance trips made between Plymouth and Torbay.

4.2.4 The map below shows the location of automatic traffic count sites in the vicinity of Totnes and the table provides a summary of the 24 hour, 12 hour, AM peak and PM peak annual averages for each of these sites.
4.2.5 These flows are substantial for a rural market town of Totnes' size. Station Road and Brutus Bridge, the two most central locations, have particularly high flows with an annual average flow of 21,630 and 17,620 vehicles respectively.

4.2.6 The busiest approach road into Totnes is the A385 from the eastern direction through Bridgetown with the annual average traffic flow being 16,330. A high proportion of these trips will be travelling to and from Torbay. The annual traffic flow approaching along the A385 from the west is 13,380 vehicles suggesting that Dartington may be a viable location on highway grounds for development in the area. Finally there are 9,910 vehicles on the A381 south of Totnes which is relatively low in comparison to other key roads in the area. The cross town movements associated with multiple commuter destinations presents a challenge.

Rail

4.2.7 The rail station in Totnes is located on the Exeter to Plymouth main line and benefits from long distance services – it is therefore the rail head for a large number of settlements within the South Hams district that do not have access to a railway station. The journey time from Totnes to Plymouth by rail is
approximately 25 minutes. 4% travel to Plymouth, 4% to Newton Abbot and 3% travel to Exeter.

4.2.8 About half of the services are operated by Great Western Railway, including main line services from London Paddington station to Plymouth and Penzance. The rest are run by CrossCountry, who also operate trains from Plymouth or Penzance through Exeter, Bristol Temple Meads and Birmingham New Street to Manchester, the north east of England (Leeds & Newcastle Central) and Scotland (Glasgow Central & Dundee/Aberdeen).

4.2.9 The patronage at Totnes station has grown by approximately 35% since 2007/08 which is impressive, particularly given the decline in patronage seen at Ivybridge station. Despite the growth of 35% since 2007/08, the number of passengers using the station has remained relatively consistent over the last four years and the patronage in 2014/15 was 657,754. The graph below shows how the patronage has grown since 2007/08.

![Figure 11 – Totnes Station Patronage](image)

4.2.10 Although the station benefits from a wide range of long distance services, it has a variable service and there is limited provision for regular local stopping services. This results in gaps in the timetable at certain times of the day and is perhaps limiting the numbers using Totnes station.

**Bus**

4.2.11 Stagecoach operate a relatively frequent ‘Gold’ service to Plymouth via Ivybridge with a journey time of under an hour while a service is also provided to Torquay via Paignton in the opposite direction. These buses offer a comfortable journey experience with Wi-Fi on board which can provide an attractive and productive alternative to the car. The service operates at a frequency of either half hourly or hourly depending on the time of the day. The journey time to Plymouth is approximately one hour while the journey time to Torquay is about 40 minutes.

**Pedestrian/Cycling**

4.2.12 There is an almost entirely traffic free cycle path between Totnes and Dartington which provides a very good sustainable link between the two
settlements. However the pedestrian and cycle routes within Totnes itself are not continuous and the A385 forms a physical barrier between the north and south of the town particularly due to the high traffic flows on this road throughout the day. A specific example of poor pedestrian and cycle accessibility is the route from the railway station to the town centre.

Air Quality

4.2.13 There is an Air Quality Management Area (AQMA) within the town – largely a result of emissions from congestion on the A385. The AQMA extends along the whole corridor from the west of Totnes to the east of Bridgetown. Impacts on air quality resulting from traffic would be concentrated on key pinch points and sections of Bridgetown Hill where the topography and the built environment combine to increase and trap emissions.
5. Okehampton

5.1. Background

5.1.1. Okehampton is a town within the West Devon Borough Council area on the northern edge of Dartmoor. It is located approximately 48km north of Plymouth and 35km west of Exeter.

5.1.2. Figure 12, below, shows the location of Okehampton in relation to Plymouth.

![Map of Okehampton](image)

5.1.3. The population of the town at the 2011 census was 7,160 which was an increase of approximately 25% on the population recorded at the 2001 census of 5,700. There has already been considerable residential development in the town, the majority of which has taken place towards the eastern end of the town and this is set to continue.

5.1.4. In total, 775 dwellings have been allocated in Okehampton. These dwellings have all been proposed to be at the East of Okehampton development, located either side of Crediton Road, and they already have consent. There is also significant employment land proposed adjacent to Exeter Road. The potential sites for allocation in Okehampton are shown below (Plymouth & South West Devon Joint Local Plan 2017).
5.1.5. Okehampton is another self-contained market town in Devon with the 2011 census data showing that 51% of the working population in Okehampton travel to destinations outside the town for work. The census data indicates that 12% of employed people living in Okehampton travel to Exeter for work while less than 1% of workers in the town travel to Plymouth. The journey by car between Exeter and Okehampton via the A30 trunk road is relatively reliable and can take around 30 minutes while the journey to Plymouth via Tavistock and the A386 has a much greater journey time of approximately one hour.

5.2. Current Transport Context

Road Network

Trunk Roads

5.2.1. Okehampton is well served by the A30, a dual carriageway constructed in the 1980s, providing links to Exeter and onward destinations via the M5 to the east and Cornwall to the west. The relationship between Okehampton and Exeter for employment is relatively strong with the previous section highlighting that 12% of work trips from Okehampton are made to Exeter.

5.2.2. The map below shows Okehampton and the junction on the A30 which is used to access the town for trips to and from Exeter. It also shows the location of two separate traffic counters on the A30 – count 1 is situated east of the junction and count 2 is situated to the west of the junction.
5.2.3. Table 4 and 5 below summarise the annual average daily and weekday traffic flows at the two traffic count sites on the A30 – one either side of the junction that serves Okehampton for trips to and from Exeter. The tables show 24 hour and 12 hour flows for eastbound and westbound traffic for the years 2013, 2014 and 2015.

**Count 1 – East of Junction**

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**Table 4 - Traffic Counts on A30 East of Okehampton Junction**

**Count 2 – West of Junction**

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**Table 5 - Traffic Counts on A30 West of Okehampton Junction**
5.2.4. The tables above show that the flows at the count to the east of the junction are considerably greater than the flows to the west of the junction. The 24 hour counts are roughly 1700 vehicles greater and the 12 hour counts are approximately 1500 vehicles greater at the counter to the east of the junction. This indicates that there is a larger flow of vehicles on the A30 east of Okehampton suggesting a stronger link with Exeter.

Local Roads

5.2.5. The town is also located a short distance to the east of the A386, the main road connecting Plymouth and South Devon with North Devon. This provides a link to Tavistock.

5.2.6. The map below shows the town centre road network in more detail. A key destination within the town is the area accessed from Market Street as it includes three supermarkets and a significant proportion of the off-street car parking in the town centre. Good access to this area is therefore vital to bringing in people to the town, and supporting the local economy.

5.2.7. This area is mainly accessed through the Market Street - Fore Street - George Street - West Street junction, and this is therefore the key junction in the town. It also provides access to the primary school, rugby / football club and residential areas. The map below shows this main junction.

5.2.8. The flow of traffic at this junction is high and it operates very close to capacity. This is particularly the case for flows between Fore Street and Market Street throughout the day and is not necessarily confined to peak periods. The issues at the junction are exacerbated by the historical pattern of development surrounding the junction limiting the amount of highway capacity for two way traffic.
5.2.9. The other key junction in the town is the junction between Exeter Road and Crediton Road where motorists currently suffer from delays and queues. This will be addressed by the delivery of the Exeter Road to Crediton Link Road as future development comes forward.

**Rail**

5.2.10. There is a railway station at Okehampton which operates heritage train services on certain weekdays, weekends and bank holidays while a service from Exeter operates on Summer Sundays as part of the Dartmoor Sunday Rover network. This service is operated by Great Western Railway and is subsidised by Devon County Council.

**Bus**

5.2.11. Okehampton is served by various bus services from Exeter, Bude, Newquay and Tavistock. Stagecoach service 6 runs to Okehampton from Exeter Bus station via Exeter St Davids and then onwards to Bude. The journey time to Okehampton on this service is approximately 55 minutes. Other services from Exeter Bus station include the 6A service via Exeter St Davids, which continues to Launceston after Okehampton. This service has a slower journey time to Okehampton of 1 hour and 10 minutes.

**Pedestrians and Cyclists**

5.2.12. Pedestrian and cyclist safety may also be negatively affected by large volumes of traffic, which, when considered in the context of the growing air quality issues, may also reduce the attractiveness of walking and cycling.

**Air quality**

5.2.13. Although there are no designated Air Quality Management Areas in Okehampton, air quality is perceived as a growing issue in the town centre, particularly around Charter Hall. Because the Market Street – Fore Street – George Street – West Street junction is the focal point for many journeys in the town, traffic continues to be concentrated here. The historic, narrow nature of the street pattern creates narrow streets which can contain emissions in confined areas.

**5.3 Future Work**

5.3.1. As previously mentioned, a study has been commissioned looking into the viability of the new town centre access road proposed in the West Devon Local Development Framework. This study will be referenced in the Transport Infrastructure statement.
6. Corridor Studies

6.1 Background

6.1.1 This section investigates the various key corridors in the South Hams and West Devon area that link the main market towns with Plymouth and the trunk roads. The traffic flows and accident records will be discussed for each of the corridors.

6.1.2 The highway corridors that will be discussed are outlined below and shown on the map alongside the A38 and A30 trunk roads.

**A379** – indirectly links Exeter and Plymouth via the South Devon coast. West of Dartmouth, the road continues along the coast to Slapton before heading inland to Kingsbridge, Modbury, Yealmpton and Plymouth.

**A385** – the A385 runs from Paignton to A38 at South Brent via Totnes.

**A386** – this is the primary route linking Plymouth and South Devon with North Devon in the western part of Devon. Northwards from Plymouth, the road passes through Tavistock, Okehampton, Hatherleigh, Great Torrington and Bideford before reaching Appledore in northern Devon.

![Figure 17 – Key highway corridors in the Joint Local Plan area, outside Plymouth](image_url)
6.2 A379

Background

6.2.1 The A379 provides the connection from Kingsbridge and other towns on the south western coast of Devon into Plymouth. It has a number of constraints throughout.

6.2.2 The towns and villages that the A379 serves between Kingsbridge and Plymouth include Modbury, an attractive and historic small market town with a population of approximately 2,000 situated half way between Plymouth and Kingsbridge. Another settlement is Yealmpton which is a large village about four miles to the south east of Plymouth.

Development along route

6.2.3 There is a large amount of development along the A379 as the new development of Sherford will be largely located to the north of the A379. This is anticipated to generate an increase in traffic on the western section of the road.

Traffic flows

6.2.4 The table below shows the two-way Average Annual Daily Traffic (AADT) on a number of the sections of the A379 between Kingsbridge and Plymouth.

<table>
<thead>
<tr>
<th>Section of A379</th>
<th>AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingsbridge to Churchstow</td>
<td>9000</td>
</tr>
<tr>
<td>Churchstow to Modbury X via Aveton Clifford</td>
<td>8200</td>
</tr>
<tr>
<td>Modbury X to Yealmpton</td>
<td>6500</td>
</tr>
<tr>
<td>Yealmpton to Plymouth boundary</td>
<td>9500</td>
</tr>
</tbody>
</table>

Table 6 – AADTs along A379

6.2.5 The AADT for the first section out of Kingsbridge is 9000 before dropping to 6500 between Modbury and Yealmpton. The AADT then rises again as it approaches Plymouth with the section between Yealmpton and the City Council boundaries reaching 9500 vehicles.

Accident Record

6.2.6 Accident data has been collected on the A379 from the Plymouth City Council boundary to the Torbay boundary so extends considerably further east from Kingsbridge.

6.2.7 Over the last five years, there have been 108 collisions which equates to an annual average of 0.4 collisions per kilometre. Of these collisions, there were 18 accidents that led to fatalities or serious injuries (KSIs). This equates to a proportion of 16.7% which is slightly below the Devon and national rural ‘A’ road averages (Devon 21%, national 20%). The table below summarises the number of accidents that have occurred on this stretch of the A379 on each of the last five years.
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>21</td>
</tr>
<tr>
<td>2012</td>
<td>28</td>
</tr>
<tr>
<td>2013</td>
<td>16</td>
</tr>
<tr>
<td>2014</td>
<td>22</td>
</tr>
<tr>
<td>2015</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
</tr>
</tbody>
</table>

Table 7 – Accident record on A379

6.2.8 The worst performing stretch of the A379 is the section between Plymouth and Yealmpton where there is an annual average of 0.9 collisions per kilometre.

6.2.9 The Roads Package funding pot announced by government in January 2017 included investment in road safety in a few locations across the south west. The 9.5km section of the A3121 between the A379 at Ermington and the A38 at Wrangaton was included within this. The geographic location of this stretch of road is shown in the figure below.

![Map of A3121](image)

Figure 17 – Map of A3121

6.3 A385

Background

6.3.1 The A385 is a primary route that connects Torbay and the A38 at the South Brent junction. This therefore means that it is the main route used for trips between Torbay and Plymouth and destinations in Cornwall.

6.3.2 Totnes sits half way between Torbay and the A38 therefore all trips have to pass through the town generating significant issues. The *A385 Corridor Strategy Report* published by Devon County Council in 2012 indicated that...
approximately 70% of the trips on the A385 (Station Road) during peak periods were through trips.

6.3.3 Traffic congestion is a significant issue on the A385 in the Totnes area, particularly during the summer due to it being the primary route between Plymouth and Torbay and at peak times throughout the year.

6.3.4 Air quality is an issue along the A385 corridor in Totnes and Bridgetown Hill, where air pollutants exceed the recommended levels. Detailed assessment of Nitrogen Dioxide levels has resulted in the declaration of an Air Quality Management Area at this location.

Future Development

6.3.5 It is expected that all development in the Totnes area and to the western part of Torbay should make financial contributions towards the A385 corridor and help alleviate some of the traffic concerns related to it.

Traffic flows

6.3.6 The table below shows the two way AADT’s on a number of the sections of the A385 between Torbay and the A38 at South Brent via Totnes.

<table>
<thead>
<tr>
<th>Section of A385</th>
<th>AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torbay to Totnes</td>
<td>13400</td>
</tr>
<tr>
<td>Station Road in Totnes</td>
<td>20200</td>
</tr>
<tr>
<td>Totnes to Dartington</td>
<td>14100</td>
</tr>
<tr>
<td>Dartington to A38 at South Brent</td>
<td>6300</td>
</tr>
</tbody>
</table>

| Table 8 – AADTs along A385 |

6.3.7 This table shows that the section of the A385 from Torbay to Totnes, as well as the stretch through Totnes itself, have very high flows. The section heading west from Totnes to Dartington has a lower flow but is still substantial for a road of its standard. The stretch of the A385 from Dartington to the A38 at South Brent has a significantly lower traffic volume of approximately 6300 vehicles and does not present a capacity issue.

Accident Record

6.3.8 Accident data has been collected on the A385 from the Torbay boundary to the A38 junction at South Brent.

6.3.9 Over the last five years, there have been 82 collisions which equates to an annual average of 1.2 collisions per kilometre. Of these collisions, there were 15 accidents that led to fatalities or serious injuries (KSIs). This equates to a proportion of 18.3% which is slightly below the Devon and national rural ‘A’ road averages (Devon 21%, national 20%). The table below summarises the number of accidents that have occurred on this stretch of the A385 on each of the last five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>24</td>
</tr>
<tr>
<td>2012</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
</tr>
<tr>
<td>2014</td>
<td>16</td>
</tr>
<tr>
<td>2015</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
</tr>
</tbody>
</table>

| Table 9 – Accident record on A385 |
6.4 A386

Background

6.4.1 The A386 is the primary route linking Plymouth and South Devon with North Devon in the western part of Devon. Northwards from Plymouth, the road passes through Tavistock, Okehampton, Hatherleigh, Great Torrington and Bideford before reaching Appledore in northern Devon.

6.4.2 As traffic has grown on this road, conditions on the road have become increasingly congested. This is an issue because given the close functional relationship between Tavistock and Plymouth, development in the town is anticipated to generate additional vehicular trips on the A386.

6.4.3 Due to the constraints on the network, design capacities are already being exceeded resulting in variable and unreliable journey times on the A386. ANPR survey data for 2012 showed AM peak journey times between Tavistock and Plymouth city centre varying between 29 minutes and 40 minutes and between 28 minutes and 47 minutes in the reverse direction in the PM peak.

Development

6.4.4 There is significant development planned in Tavistock with 750 dwellings allocated at Callington Road and 115 dwellings allocated at Plymouth Road. These developments will both impact upon the number of trips along the A386 corridor. Additionally there is development planned along the A386 corridor itself, most notably closer to the Plymouth urban area at Wollwell and Derriford.

Traffic flows

6.4.5 The table below shows the two way AADT’s on a number of the sections of the A386 between Tavistock and Plymouth. The A386 northwards from Tavistock towards Okehampton and North Devon carries significantly lower levels of traffic and does not have any capacity issues so has not been included in the table.

<table>
<thead>
<tr>
<th>Section of A386</th>
<th>AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plymouth to Yelverton</td>
<td>18100</td>
</tr>
<tr>
<td>Yelverton to Tavistock</td>
<td>13500</td>
</tr>
</tbody>
</table>

Table 10 – AADTs along A386

6.4.6 The A386 between Tavistock and Plymouth is relatively heavily trafficked in the context of its poor standard, with the table showing that the two-way AADT peaks at 18,100 vehicles on the stretch of road north of Plymouth to Yelverton. The AADT between Yelverton and Tavistock is 13,500 vehicles which is still a relatively high flow given the standard of the route.

Accident Record

6.4.7 Accident data has been collected on the A386 from the Plymouth City Council boundary to Yelverton.

6.4.8 Over the last five years, there have been 41 collisions which equates to an annual average of 1.4 collisions per kilometre. Of these collisions, there were
7 accidents that led to fatalities or serious injuries (KSIs). This equates to a proportion of 17.1% which is slightly below the Devon and national rural ‘A’ road averages (Devon 21%, national 20%). The table below summarises the number of accidents that have occurred on this stretch of the A386 on each of the last five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>7</td>
</tr>
<tr>
<td>2012</td>
<td>7</td>
</tr>
<tr>
<td>2013</td>
<td>7</td>
</tr>
<tr>
<td>2014</td>
<td>7</td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
</tr>
</tbody>
</table>

Table 11 – Accident record on A386

6.5 Corridor collision summaries can be found in appendix 2.
Appendix 1 – Devon Cycling and Multi-use trail map
The collision data used is Stats19 data; it includes collisions recorded by the Police that occurred on a highway, involved one or more vehicles and human death or personal injury. It only includes collisions that were notified to the Police within 30 days of occurrence. The Chi Squared test can be used to determine whether the number of collisions of a particular type is ‘significantly’ higher than at similar sites. Typically used where a percentage can be compared between site and control data.

Appendix 2 - Collision Performance Summary

A379, A385 & A386 Routes

Legend:
- A379 From Plymouth to Torbay Boundaries
- A385 From Torbay Boundary to A38 Marley Head
- A386 From Plymouth Boundary to Yelverton

Five Year Collision History Of the Routes:
- A379 From Plymouth to Torbay Boundaries
- A385 From Torbay Boundary to A38 Marley Head Junction nr South Brent
- A386 From Plymouth Boundary to Yelverton

Collision data excludes main junctions in between route sections (route sections shown on following pages)
The collision data used is Stats19 data; it includes collisions recorded by the Police that occurred on a highway, involved one or more vehicles and human death or personal injury. It only includes collisions that were notified to the Police within 30 days of occurrence. The Chi Squared test can be used to determine whether the number of collisions of a particular type is ‘significantly’ higher than at similar sites. Typically used where a percentage can be compared between site and control data.
The collision data used is Stats19 data; it includes collisions recorded by the Police that occurred on a highway, involved one or more vehicles and human death or personal injury. It only includes collisions that were notified to the Police within 30 days of occurrence. The Chi Squared test can be used to determine whether the number of collisions of a particular type is ‘significantly’ higher than at similar sites. Typically used where a percentage can be compared between site and control data.

### Collision Performance: Route Analysis Results

<table>
<thead>
<tr>
<th>Rank out of 138</th>
<th>Route Length Description</th>
<th>KM Length</th>
<th>AADT (2015)</th>
<th>Collisions last 5 Years</th>
<th>Ave annual collisions per km</th>
<th>Collision rate Per Bn Veh KM</th>
<th>KSIs last 5 years</th>
<th>KSIs KSI collisions per KM</th>
<th>Collision Rate Per Bn Veh KM</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>A385 Totnes (Blackpost X) to True St to Torbay b'y</td>
<td>3.3</td>
<td>13,436</td>
<td>25</td>
<td>1.5</td>
<td>310</td>
<td>7</td>
<td>0.4</td>
<td>87</td>
</tr>
<tr>
<td>25</td>
<td>A385 Totnes Ctr to Rail stn to Blackpost X Redlands</td>
<td>18</td>
<td>20,194</td>
<td>30</td>
<td>3.4</td>
<td>458</td>
<td>2</td>
<td>0.2</td>
<td>31</td>
</tr>
<tr>
<td>40</td>
<td>A385 A38 Marley Head to Totnes Shinners Bridge</td>
<td>7.1</td>
<td>6,305</td>
<td>19</td>
<td>0.5</td>
<td>234</td>
<td>6</td>
<td>0.2</td>
<td>74</td>
</tr>
<tr>
<td>124</td>
<td>A385 Dartington (Shinners Brdg) to Totnes (rail stn)</td>
<td>19</td>
<td>14,120</td>
<td>8</td>
<td>0.8</td>
<td>163</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>

The collision data used is Stats19 data; it includes collisions recorded by the Police that occurred on a highway, involved one or more vehicles and human death or personal injury. It only includes collisions that were notified to the Police within 30 days of occurrence. The Chi Squared test can be used to determine whether the number of collisions of a particular type is ‘significantly’ higher than at similar sites. Typically used where a percentage can be compared between site and control data.
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### A386 Route Sections
From Plymouth Boundary to Yelverton

The collision data used is Stats19 data; it includes collisions recorded by the Police that occurred on a highway, involved one or more vehicles and human death or personal injury. It only includes collisions that were notified to the Police within 30 days of occurrence. The Chi Squared test can be used to determine whether the number of collisions of a particular type is ‘significantly’ higher than at similar sites. Typically used where a percentage can be compared between site and control data.

### Collision Performance: Route Analysis Results

<table>
<thead>
<tr>
<th>Rank out of 138</th>
<th>Route Length Description</th>
<th>KM Length</th>
<th>AADT (2015)</th>
<th>Collisions last 5 Years</th>
<th>Ave annual collisions per km</th>
<th>Collision rate Per Bn Veh KM</th>
<th>KSIs last 5 years</th>
<th>annual KSI collisions per KM</th>
<th>Collision Rate Per Bn Veh KM</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>A386 Yelverton to Plymouth Boundary (Bickleigh)</td>
<td>5.8</td>
<td>18,097</td>
<td>41</td>
<td>1.4</td>
<td>213</td>
<td>7</td>
<td>0.2</td>
<td>36</td>
</tr>
</tbody>
</table>