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New or improved rail lines – Evaluation case studies of local economic impacts

Department for Transport Rail Group

Falmouth Case Study
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Executive Summary

Background

The purpose of this project is to generate evidence to increase understanding of the economic impacts of rail infrastructure investments, including the relationship between the provision of improved rail services and economic growth. This project, commissioned by the Department for Transport (DfT), is an ex-post evaluation study which tests the insights that can be gained by using a case study approach to build a detailed and rich narrative of the particular context in which the new or improved rail lines are being delivered, and how this relates to any observed behavioural and economic impacts.

We investigate first the evidence for behavioural change across case studies (e.g. demand response) before considering the potential economic impacts. This case study investigates the impacts of the investment on the Maritime Line, between Truro and Falmouth in Cornwall, on the town of Falmouth.

Within each of the six case studies undertaken as part of this ex-post evaluation study, three central hypotheses are being tested:

1. That improved rail services will, by making rail travel more convenient for local people, encourage additional rail trips including some generated trips and some captured from other modes.

2. That improvements to the station and services will make the affected area a more attractive place to:

   i. live;
   ii. work; and / or
   iii. locate a business.
   (investment and employment effects).

3. That businesses located within the station catchment area with improved services will benefit from improved access to potential employees, customers, and suppliers, resulting in greater productivity (productivity effects).

This case study considers the investment in the Maritime Line in Cornwall, which benefitted from a new passing loop at Penryn in 2009, enabling the service frequency to be increased to two trains per hour, all-day, for the first time. Since more than eight years has elapsed since the investment, there is potential for identifying a range of transport and local economic impacts of the investment, which can take several years to materialise.

Within this report we:

- provide a brief overview of the pre-intervention socio-economic characteristics and market for rail travel in Falmouth (Chapter 2);
- introduce the chosen comparison area of Gunnislake (Chapter 3);
- explore the impacts of the rail improvements on local rail patronage (Chapter 4);
- evaluate the impacts of the scheme on the local economy of Falmouth, including local residential and business investment, local employment and firm productivity (Chapter 5), and;

- draw out conclusions from this case study (Chapter 6).

Economic, socio-demographic and transport context (Chapter 2)

Falmouth is a small town located in Cornwall, approximately 40 miles west of Plymouth, with a population of approximately 40,000 people in 2004. Prior to the intervention, it has experienced population growth broadly in line with the national and regional average.

Falmouth's economy is largely focused within the Food Services, Accommodation, Tourism and Manufacturing sectors, which account for a greater proportion of employment than the national average. Notably, the town's labour market is relatively self-contained, with the majority of employees travelling relatively short distances to work by car.

Prior to 2009, the town was served by an hourly service from three local stations (Penmere, Falmouth Town and Falmouth Docks) to Truro, where connections are available to London Paddington, Plymouth, Exeter and Birmingham. The trend in rail usage prior to 2009 was broadly in line with the national average. Local road connectivity is limited to single carriageway roads, which provide access to the trunk road network (A30).

Comparison area (Chapter 3)

The comparison area of Gunnislake was selected in order to attempt to isolate the impacts of rail investment at Falmouth from wider trends in the regional economy. Gunnislake was selected as it represents a broadly comparable settlement to Falmouth pre-intervention, with a limited branch line railway service, although it is recognised that the settlement is significantly smaller than Falmouth with comparatively little local employment.

Gunnislake is located north of Plymouth, near the Cornwall / Devon border, and had a population of approximately 6,000 in 2004, compared to 21,000 in Falmouth. Local employment is focused in similar sectors to Falmouth, with a similar reliance on tourism, although manufacturing accounts for a smaller share. Total employment of approximately 600 is significantly less than Falmouth, with significant outward commuting by car. Rail usage followed a similar trend to Falmouth, and the national average, pre-intervention.

Impacts of the transport intervention (Chapter 4)

Office of Rail and Road (ORR) station usage data shows that the investment at Falmouth was associated with a significant increase in local rail patronage, which more than doubled following the frequency improvement in 2009. Rail trips appear to be locally focused, with the majority of trips either to Truro or elsewhere along the Maritime Line.

Station survey evidence highlights that a significant proportion of users report increasing their use of rail following the investment, reflecting the ORR data. These additional journeys appear to be a mixture of additional rail trips by existing users and trips undertaken by new users of the station such as those who have moved to the area recently, with a further small proportion captured from bus and car. Leisure trips account for a relatively large share of rail usage, reflecting the importance of leisure and tourism within the area. This limits the impacts of the investment on commuting which in turn limits the impact on some of the commonly used indicators of economic activity; however, commuting effects cannot be ruled out entirely.

Economic impacts of the transport intervention (Chapter 5)

The eight year period following the rail investment at Falmouth has granted sufficient time to identify possible impacts of the investment on the Falmouth economy, notably within the tourism sector. However, it has been difficult to prove that these effects are due to the investment, in part due to the Great Recession.

Investment (residential)

Just under a third of all Falmouth residents (30%), and two-fifths (39%) of those moving house since the rail investment view rail connectivity as an important consideration when choosing where to live, indicating that the improvements may have impacted on increasing the attractiveness of the town as a place to live. This is supported by the increase in population post investment relative to the comparison area (Gunnislake). However, the population trends for Falmouth are largely consistent with those of Cornwall.

Investment (business)

It is possible, albeit difficult to prove, that the investment has led to the town becoming a more attractive place for business investment, specifically in the tourist sector. Satisfaction with rail services amongst local businesses is high and 40% of businesses view rail as important for customer access, which is likely to be largely in relation to the tourism and day visits markets. This contrasts with lower levels of stated levels of the importance of rail connectivity in relation to client and supplier access, or distributing goods. This may indicate that businesses within the tourist sector have disproportionately benefitted from improved rail connectivity to Falmouth.

It is also worth acknowledging that any additional investment in Falmouth may be displaced from other locations in Cornwall, thus benefitting Falmouth at the expense of other towns.

Tourism

The station user surveys show that approximately a fifth of users are visitors or tourists, highlighting the importance of this sector. The surveys also provide some evidence that the rail investment may have improved the attractiveness of the area to tourists, with 38% of tourists intercepted at one of the stations in Falmouth saying that the rail services were a very or fairly important influence on where they chose to stay.

This may be more of a factor in their decision to visit Falmouth over a non-rail connected destination in the same area (e.g. Mevagissey), than a determinant of the region in which they decide to stay.

Employment

The evidence for a direct impact on local employment is mixed. While the number of total employees in Falmouth, as measured through the BRES data, appears to have increased despite the coincident recession, in contrast to Gunnislake, this is only partly reflected within the comparative analysis. However, tourism in Falmouth (as measured through the percentage of employees working in the retail, accommodation, and food sectors) appears to have grown since the recession in comparison to Gunnislake, and hence it is possible that the improved rail connectivity has supported the tourist industry in the town. However, it is difficult to disaggregate any impact from that of the late 2000s recession, which dampened growth across

the country and which appears to have been much more severe in Gunnislake than in Falmouth.

Productivity

There is no evidence to suggest that the improvements at Falmouth have resulted in a productivity uplift for the local economy. The local business unit employment data and the enterprise turnover data appear to correlate poorly, indicating a decline in all enterprise turnover after 2010, although it is worth noting that this decline was more significant in Gunnislake than in Falmouth, and may also suggest that the economy in Falmouth has been more resilient to the economic downturn than in Gunnislake.

Conclusions and Future Work (Chapter 6)

While there is likely to be further investment in the Cornish railway network, including resignalling, journey time improvements and the introduction of new Intercity Express Trains between London, Plymouth and Penzance, the local focus of journeys in Falmouth is likely to mean that these further improvements have a limited effect on rail patronage in Falmouth, and negligible further economic impacts. Therefore, there is likely to be little value in further evaluation work on this particular case study.

1 Introduction

1.1 This report sets out the findings of the Falmouth case study into the economic impacts of rail investments, forming part of a wider study into the economic impacts of investment in new and improved rail lines. In total, six case study reports have been produced and are supplemented by an Executive Summary document and a Technical Report. Falmouth was selected as a retrospective study, where investment and rail service improvements to the Maritime Line were delivered in 2009. A Technical Report supplements this case study report and provides additional background information.

1.2 The case study used evidence to establish the initial impacts that rail frequency improvements have had on rail usage, local economic growth and wider economic benefits. This introductory chapter provides some brief background to the wider project and to this particular case study. This chapter is followed by chapters which:

- provide a brief overview of the pre-intervention socio-economic characteristics and market for rail travel in Falmouth (Chapter 2);
- introduce the chosen comparison area of Gunnislake (Chapter 3);
- explore the impacts of the rail improvements on local rail patronage (Chapter 4);
- evaluate the impacts of the scheme on the local economy of Falmouth, including local residential and business investment, local employment and firm productivity (Chapter 5), and;
- draw out conclusions from this case study (Chapter 6).

Overall aims of the project

1.3 The purpose of this project is to generate evidence to increase understanding of the economic impacts of rail infrastructure investments, including the relationship between the provision of improved rail services and economic growth. DfT commissioned the project to start to build an evidence base in this area, for which there is currently limited ex-post evaluation evidence available. This project tests the insights that can be gained by using a case study approach to build a detailed and rich narrative of the particular context in which the new or improved rail lines are being delivered, and how this relates to any observed behavioural and economic impacts. The relative strengths and limitations of a case study approach are discussed further in the Technical Report.

1.4 We investigate first the evidence for behavioural change (e.g. demand response) as a precursor to economic impacts, before considering potential economic impacts. Given that this is an innovative and methodologically challenging area, we aim to first build an evidence base across a small number of case studies on any potential economic effects, without going so far as to then explicitly address questions of additionality and displacement within this

study (i.e. questions around whether any increased economic activity is newly generated or displaces from elsewhere).

1.5 Within each of the project case studies, three central hypotheses are being tested:

1. That improved rail services will, by making rail travel more convenient for local people, encourage additional rail trips including some generated trips and some captured from other modes.

2. That the new service, and enhanced connectivity it offers, will make the local area a more attractive place to:

   i. live;
   ii. work; and / or
   iii. locate a business.
   (investment and employment effects).

3. Businesses located within the local area of the new services will benefit from improved access to potential employees, customers, and suppliers, resulting in greater productivity (productivity effects).

1.6 While these are generic hypotheses, each case study has been purposely selected to include transport interventions that will deliver different outputs under different circumstances and lead to a diversity in the scale, nature and distribution of economic outcomes that may be realised. The remainder of this report considers the specific features of the Falmouth case study.

The Falmouth case study

Why was Falmouth chosen as a case study?

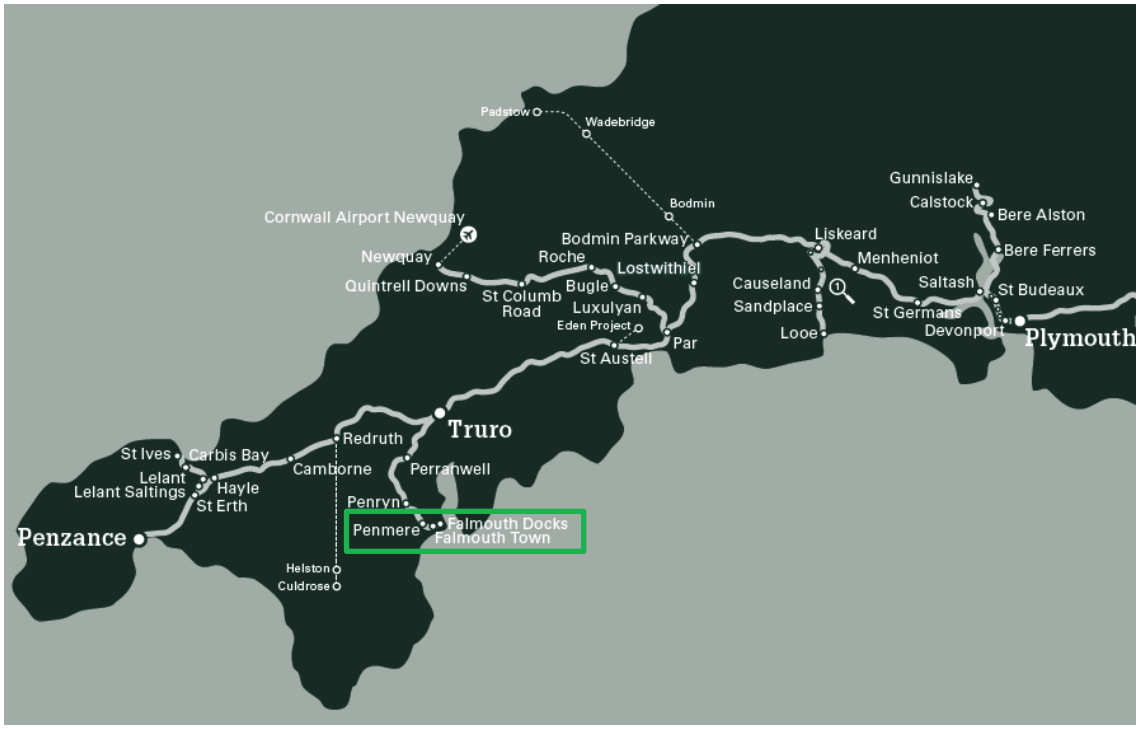
1.7 Falmouth was selected as a retrospective case study for several reasons:

- prior to 2009, the Falmouth Branch line was served by 1tph to Truro and onwards. Rail improvements at Penryn station introduced a standard pattern and a doubling of frequency on the line to 2tph all day, significantly improving connectivity on the line. This was expected to have a positive impact on the accessibility of Falmouth, which may increase its attractiveness as a place to live, work, locate a business and/or visit;
- Falmouth is a tourist and day trip destination, and therefore could see benefits in terms of visitor volumes resulting from improvements to its rail services, as well as increased commuting and business travel patronage; and
- the timing of the rail improvements in 2009 grants a sufficient timespan to retrospectively identify any economic impacts that have arisen following the investment, and to allow comment on any potential future impacts.

What was the nature of the improvements at Falmouth?

1.8 The Falmouth Branch line runs from Truro (the interchange for the Cornish mainline) to Falmouth Docks in Cornwall, with stops at Perranwell, Penryn, Penmere, Falmouth Town and Falmouth Docks (the last three of these stations are within the town of Falmouth). Figure 1.1 below indicates where these stations are located relative to others in Cornwall and western Devon.

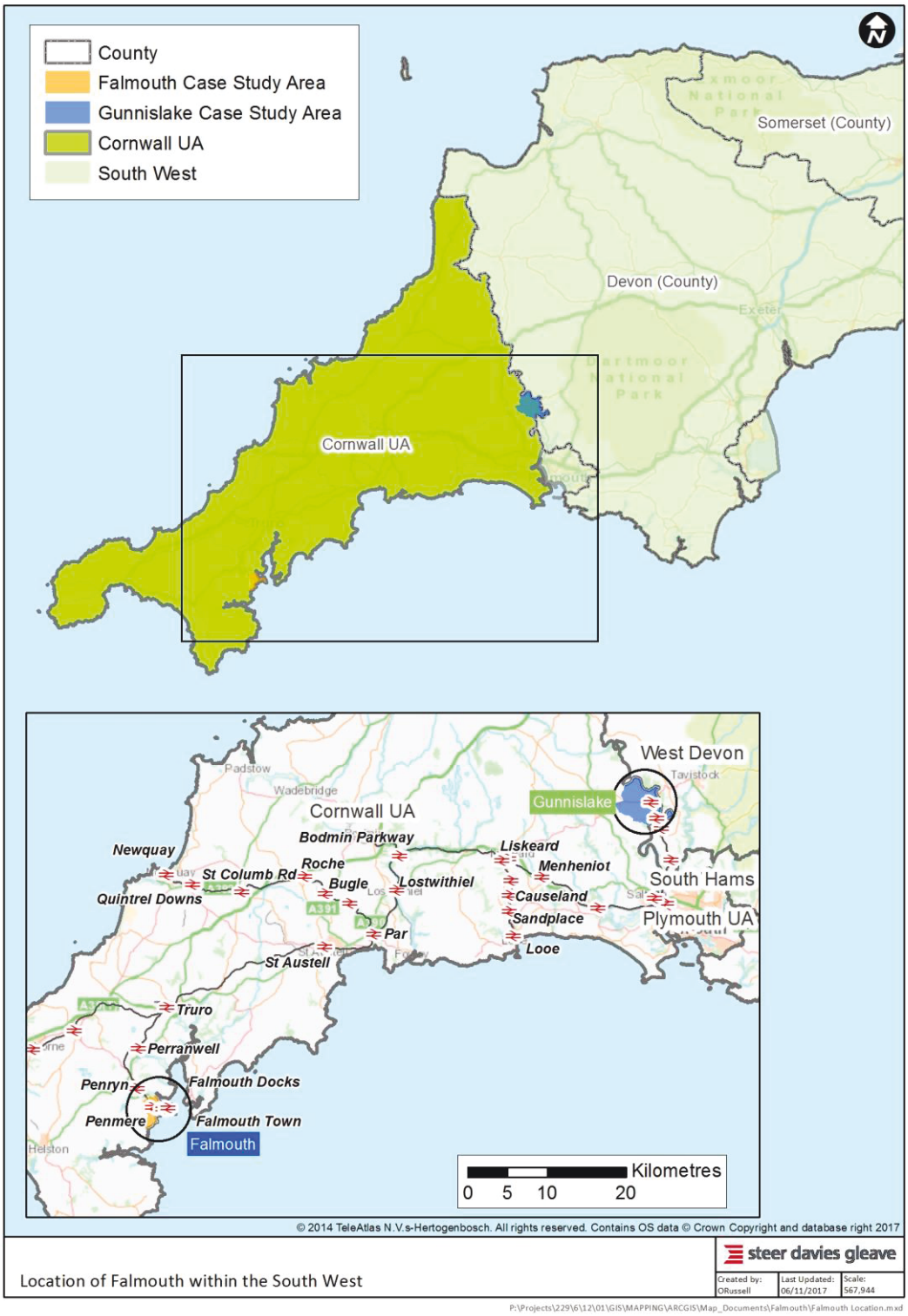
Figure 1.1: Railways in Cornwall and West Devon



Source: https://www.gwr.com/~/media/gwr/pdfs/maps/gwr-network-map.pdf?la=en

1.9 The location of the Falmouth case study area within Cornwall is shown below, in Figure 1.2. This figure also indicates the location of the Gunnislake comparison area.

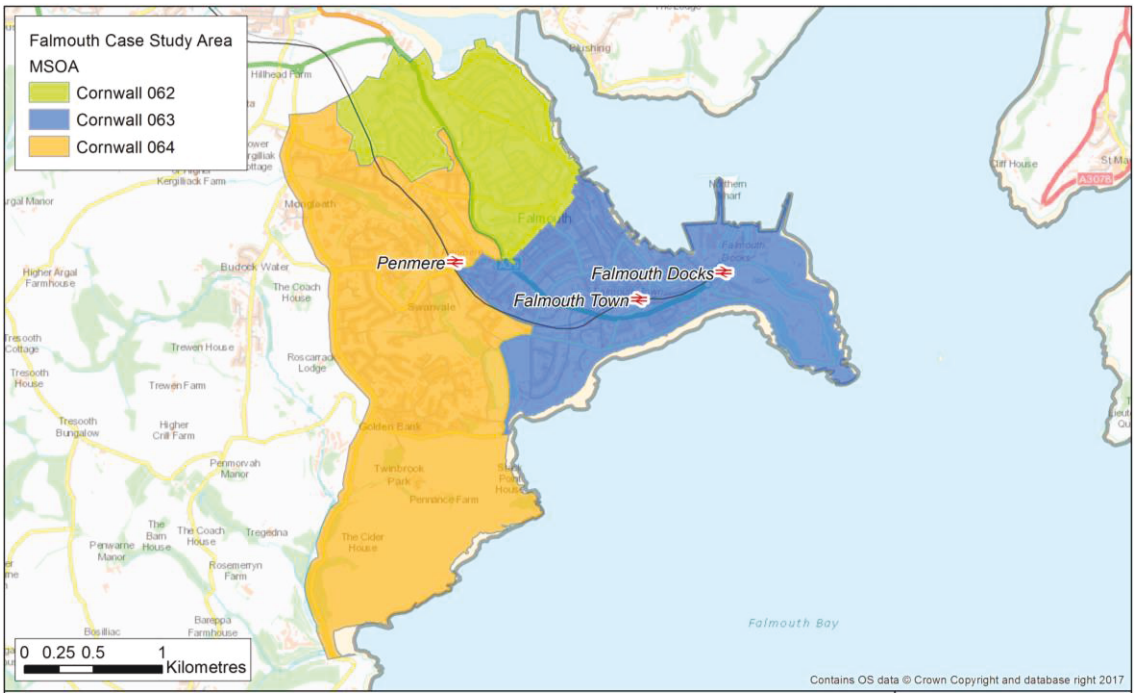
Figure 1.2: Falmouth within the South West



1.10 Falmouth is served by three railway stations: Penmere (serving the residential areas to the west of the town centre), Falmouth Town (serving the town centre) and Falmouth Docks (serving the industrial docks area to the west). These are shown in Figure 1.3 below.

1.11 The Falmouth case study area has been defined using the Medium Super Output Area (MSOA) geography that is used by the Office of National Statistics (ONS) for analysis and presentation of Census data. Cornwall 062, Cornwall 063 and Cornwall 064 were used to define the study area (Figure 1.3). These MSOAs form a contiguous combined case study area encompassing Falmouth town centre, the three stations and the area between them.

Figure 1.3: Falmouth case study area



1.12 In May 2009, improvements to the Falmouth Branch line infrastructure were completed to facilitate an increase in the train service frequency on the line to two trains per hour (tph), at evenly spaced intervals throughout the day, to Truro. Prior to these improvements, the line was served by 1tph at irregular intervals to Truro.

1.13 The improvements consisted of a new 400m passing loop and signalling at Penryn station (which is approximately half way along the 19km route), a platform extension at Penryn beyond the passing loop, a new car park and waiting shelter at Penryn and introduction of a standard operating pattern, doubling the frequency on the line to 2tph throughout the day. The scheme also facilitated an increase in weekend services from 13 to 28, greatly improving connectivity between Truro and Falmouth, and to London via interchange at Truro.

2 Economic, socio-demographic and transport context

Introduction

2.1 This chapter outlines the socio-economic and transport context of the case study prior to the introduction of the enhanced service in 2009, providing an overview of the geography and economic profile of Falmouth and how this compares to the wider South West region during the baseline period. The case study area encompasses the three Falmouth stations and the area between them (see Figure 1.2).

Overview of Falmouth

Where is Falmouth, and what is the geography of the area?

2.2 Falmouth, located in the South West within Cornwall, is a popular visitor destination located approximately 60 miles west of Plymouth, approximately 1 hour 45 minutes travel time by road or rail.

2.3 Falmouth is accessible by road via the A39 and A393, which provide single carriageway access to Truro and Redruth, connecting with the A30 dual carriageway to Penzance, Plymouth, the M5 and the wider motorway network. Local road links, other than the A30, tend to be slow, reflecting the hilly relief, and pass through numerous small villages and settlements. National Express coaches also serve Falmouth from destinations throughout the UK, with connecting services to Cornwall from Bristol, Birmingham and London.

2.4 Great Western Rail operate high speed services from London Paddington to Plymouth, Truro and Penzance, via Reading and Exeter. Passengers are required to change at Truro for services to Falmouth using the Falmouth Branch line. Journey times are approximately 20 minutes from Truro to Falmouth, and just over four hours from Truro to London Paddington. Great Western Rail also operates a daily sleeper service from London, and Cross Country also operate services into Cornwall from the Midlands, the North and Scotland.

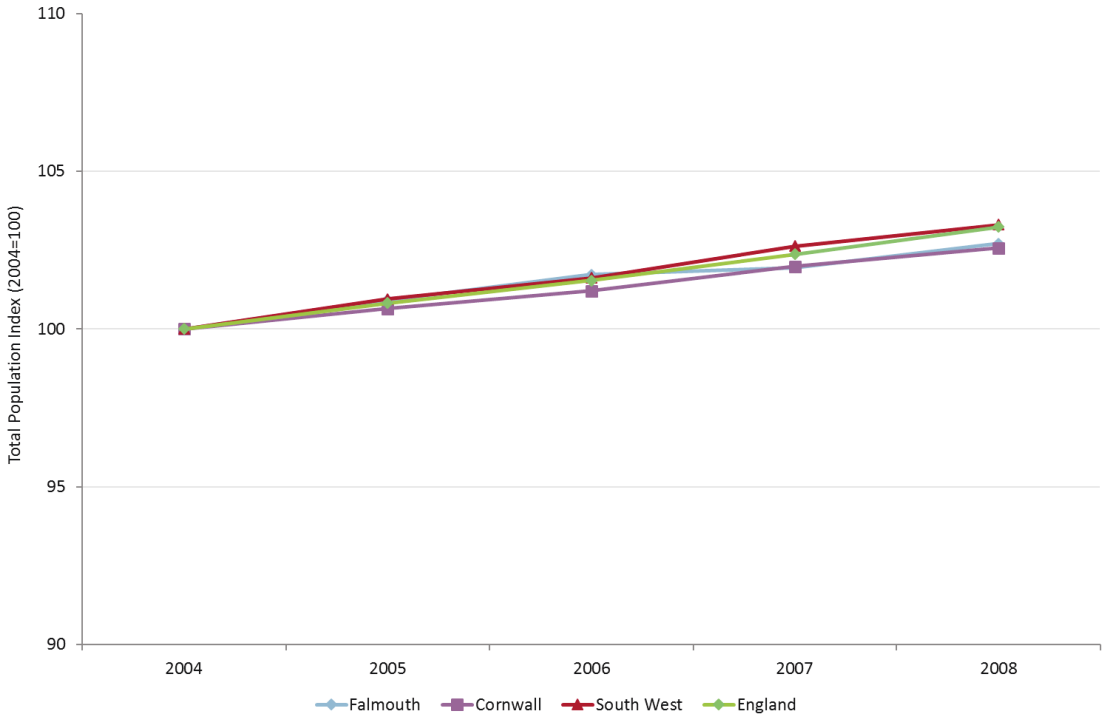
2.5 Ferry services provide connections from Falmouth, with regular ferry services linking Falmouth, Truro (at high tide), St Mawes, St Anthony Headland, Flushing and Trelissick Garden (Fal River links). The King Harry ferry for example, connects St Mawes and the Roseland with Feock, Truro and Falmouth (avoiding a 27 mile route through Truro and Tresillian) and the St Mawes Ferry provides access between Falmouth and St Mawes 7 days a week all year round.

What are the demographic trends within the town?

2.6 Falmouth's population grew at a steady rate between 2004 and 2008, in line with both the regional and national averages. Figure 2.1 presents the change in population for Falmouth, Cornwall, the South West and England in this period, based on Office for National Statistics mid-year population estimates.

2.7 Cornwall's population in 2004 was approximately 512,000, with the population of Falmouth approximately 21,000 people. Annual population growth in Falmouth from 2004 to 2008 was approximately 0.7%, similar to the Cornwall average and marginally less than that in England.

Figure 2.1: Population Index, 2004-2008



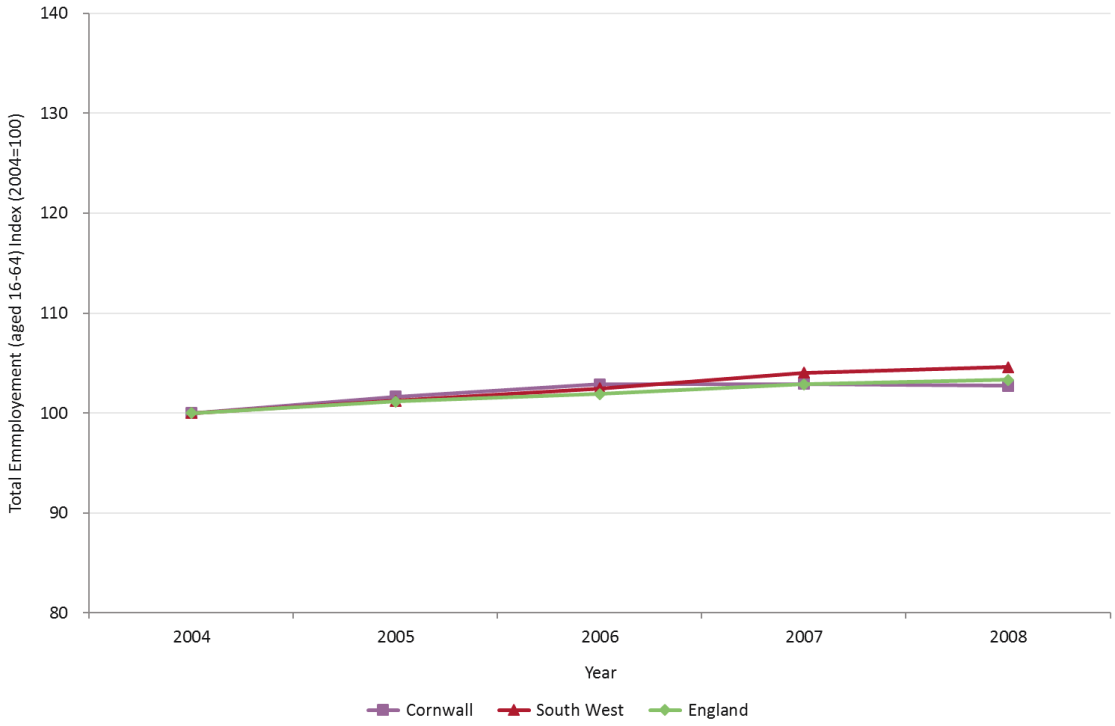
Source: ONS mid-year population estimates (accessed 2017)

How does Falmouth's economy compare to the wider region?

2.8 Figure 2.2 outlines the change in total employment (aged 16-64) within Cornwall, the South West and England between 2004 and 2008, indicating the trends prior to the transport intervention. Detailed historic employment data is only available at a local authority level, and hence is not available for only the town of Falmouth itself.

2.9 Employment in the South West followed a similar pattern to the national (England) trend in this period. In Cornwall (where Falmouth is located), total employment grew after 2004, largely in line with the national average. This trend is illustrated by the data represented in Figure 2.3 and Table 2.1 below.

Figure 2.2: Total Employment Index (aged 16-64) in Cornwall, 2004-2008



Source: Annual Population Survey, Office for National Statistics (accessed 2017)

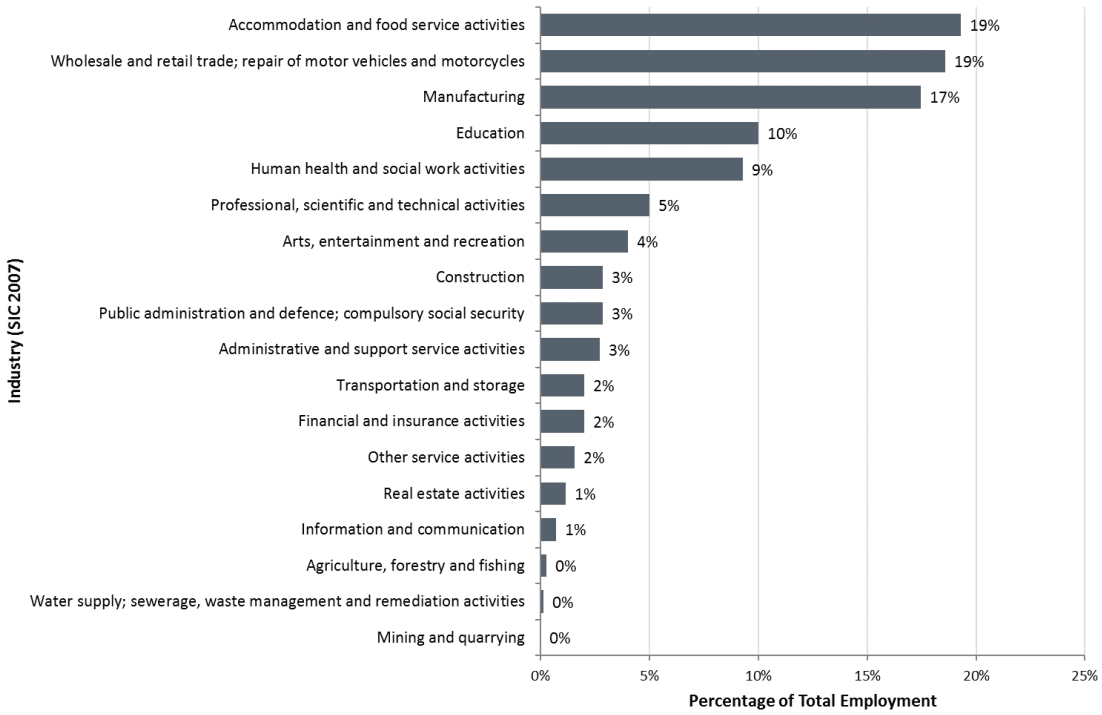
Table 2.1: Employment rate (aged 16-64) in Cornwall, 2004-08

Area	2004	2005	2006	2007	2008
Cornwall	71.8	72.1	72.4	71.0	71.1
South West	75.8	75.7	75.9	76.1	76.2
England	72.8	72.9	72.6	72.6	72.3

Source: Annual Population Survey, Office for National Statistics (accessed 2017)

2.10 Figure 2.3 outlines the broad industrial composition of local employment in Falmouth prior to the intervention. The analysis indicates that employment is typified by secondary services such as Accommodation and Food Services (19%) and Wholesale and Retail (19%), likely reflecting Falmouth's status as a popular visitor destination, as well as the location for Falmouth University's Woodlane Campus. The Manufacturing sector (17%) is linked to the maritime sector, with firms operating in the building and repair of pleasure and sporting boats (such as A&P Falmouth) and other activities.

Figure 2.3: Employment by industry in Falmouth, 2008

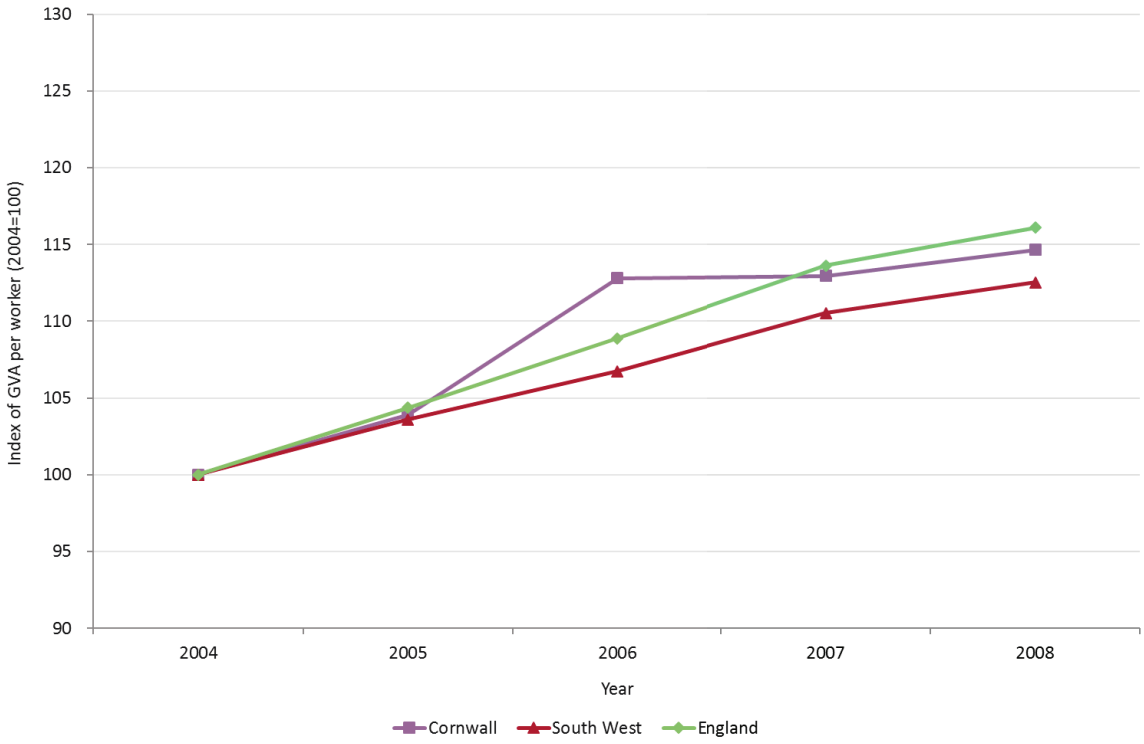


Source: Annual Business Inquiry, Office for National Statistics (accessed 2017)

2.11 Gross Value Added (GVA) is an economic measure of the value of outputs from the businesses in an area. In simple terms, it is the difference between the value of goods and services provided and the cost of providing them.

2.12 Figure 2.4 shows GVA per worker (a measure of productivity) in Cornwall (GVA is not available at a more local level) between 2004 and 2008. Since the dominant industrial sectors (such as tourism) within Cornwall are typically less productive and lower paid than many higher-skilled, knowledge-based sectors located in larger urban areas, it is unsurprising that output per worker in Cornwall was consistently lower than the national average in this period. GVA per worker in Cornwall was significantly less than the national average in 2008, at £35,326 per head compared to £49,355 per worker nationally.

Figure 2.4: GVA per worker in Cornwall, 2004-2008



Source: Regional GVA by Local Authority and Annual Population Survey, Office for National Statistics (accessed 2017)

What are the commuting patterns of Falmouth residents?

2.13 Table 2.2 highlights how Falmouth residents commuted to work according to the 2001 Census. It indicates that only a very small minority of Falmouth residents used the train as their means of commuting at that time; the majority (60.7%) of Falmouth's employed residents used a car or a van.

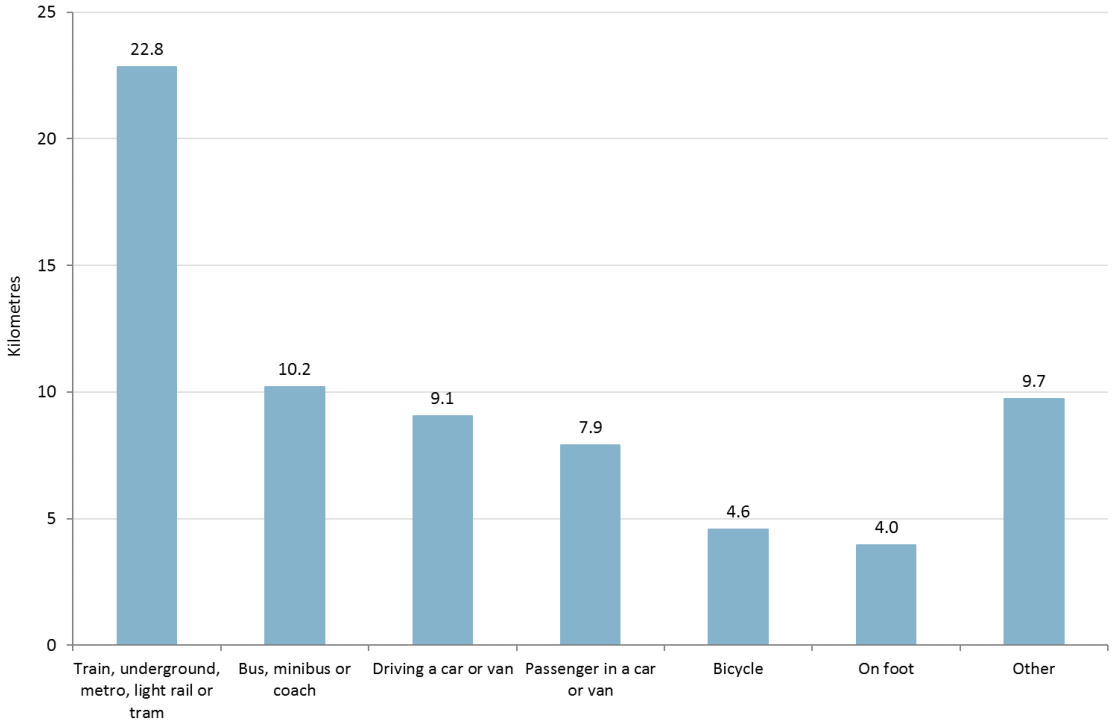
Table 2.2: Falmouth residents' mode of commuting, 2001

Mode	Falmouth	Percentage
All people aged 16 to 74 in employment	8,189	100.0%
Work mainly at or from home	850	10.4%
Underground, metro, light rail, tram	13	0.2%
Train	140	1.7%
Bus, minibus, or coach	252	3.1%
Motorcycle, scooter or moped	112	1.4%
Driving a car or a van	4,344	53.0%
Passenger in a car or van	627	7.7%
Taxi	65	0.8%
Bicycle	153	1.9%
On foot	1,520	18.6%
Other	113	1.4%

Source: ONS Census 2001, Travel to Work data (accessed 2017)

2.14 Figure 2.5, however, illustrates how the average distance commuted by those using the train was more than double that of the next mode's average distance, indicating the disproportionate importance of rail for longer-distance commuters. Figure 2.5 combines the data for train commuters with that for "underground, metro, light rail or tram", to allow comparison with 2011 Census data in later chapters.

Figure 2.5: Average distance travelled to work by Falmouth residents (by mode), 2001



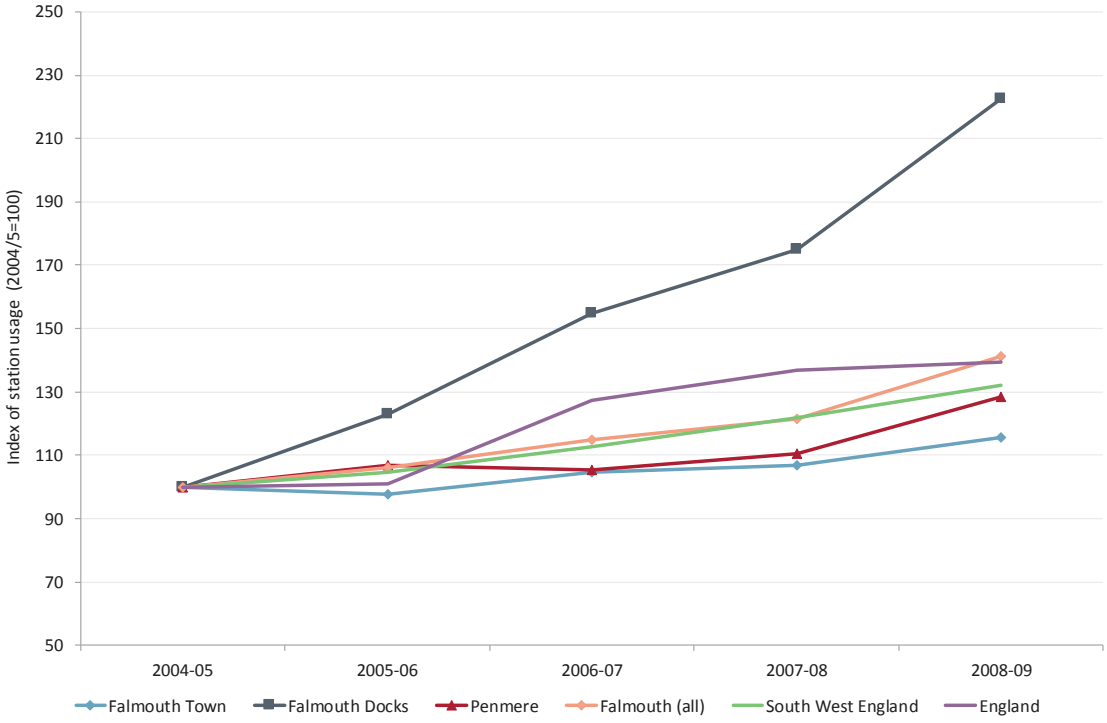
Source: ONS Census 2001, Travel to Work data (accessed 2017)

Rail usage at Falmouth

What have been the recent trends in usage of rail services at Falmouth?

2.15 In 2005/06, there were approximately 196,100 journeys to or from the three Falmouth railway stations combined, of which 85,900 were from Falmouth Town, 38,500 from Falmouth Docks, and 71,700 from Penmere. By 2008/09, the Compound Annual Growth Rate in the entry and exits was 5.7% across the three stations, the same as the national average. Figure 2.6 illustrates the trend in railway patronage at the three Falmouth stations in this period, particularly highlighting the significant growth above the national average at Falmouth Docks station. However, it should be noted that this growth is based on a small base (approximately 130 entries and exits per day).

Figure 2.6: Index of station usage, 2004-5 to 2008-09



Source: Estimates of Station Usage, ORR (accessed 2017)

2.16 In terms of the destinations of trips starting at the Falmouth stations, in 2008/09 over half (56%) were on the Falmouth branch line with Truro being by far the single most popular destination (49%). Further afield, 7% of destinations were to Plymouth and 5% to London.

2.17 Table 2.3 indicates the most popular destinations for journeys from each of the three Falmouth stations in 2008/09, immediately prior to the rail intervention. This data suggests that destinations on the Falmouth Branch line were popular from all three stations, although there was also substantial variation between these stations. Significantly more trips from Penmere (75%) were made within the Falmouth Branch Line than from Falmouth Town (56%) and Falmouth Docks (40%).

Table 2.3: Popular destinations for journeys

Falmouth Branch line stations	Penmere	Falmouth Town	Falmouth Docks
Truro	65%	47%	35%
Perranwell	2%	2%	0%
Penryn	7%	7%	5%
Penmere	-	0%	0%
Falmouth Town	0%	-	0%
Falmouth Docks	1%	0%	-
Total Falmouth Branch Line	**75%**	**56%**	**40%**
London Paddington	2%	6%	8%
Plymouth	7%	7%	8%
Penzance	2%	3%	5%
St Austell	3%	2%	7%
Par	0%	3%	3%
Exeter St. David's	0%	1%	0%
All other stations	11%	22%	29%

Source: Origin-Destination Matrix, ORR (accessed 2017)

Summary

2.18 Prior to the investment in the Falmouth Branch line, Falmouth was experiencing population growth broadly in line with the Cornwall average.

2.19 Census data indicates a clear majority of local Falmouth residents commute to work by car, with only a small proportion (<2%) travelling to work by rail. Most people appear to work locally (except for those commuting by rail).

2.20 Employment in Falmouth appears to be overly concentrated within the Accommodation, Food Services and Retail sector, accounting for approximately 40% of local employment. This is likely to reflect the strong reliance on the tourist sector.

2.21 The growth of rail patronage prior to the investment was in line with the national average, and somewhat ahead of the regional average.

3 The comparison area

Introduction

3.1 Comparison areas are used to disaggregate the effects of the rail investment from more general transport and economic trends, such as increasing rail use nationally. This chapter introduces the Gunnislake comparison area, used within the Falmouth case study, including the rationale for its selection, and identifies any relevant differences between it and the town of Falmouth.

Selection of the comparison area

How (and why) was the comparison area selected?

3.2 Selection of a Falmouth comparison area was challenging, since it was difficult to identify a town of similar population and economic status within Cornwall served by a branch line, which had not benefitted from a rail service improvement during the same time period. The Gunnislake comparison area, located within the local authority of Cornwall to the north west of Plymouth (Figure 3.1), was selected since it represented the closest comparator to Falmouth: broadly economically similar, but located on a different branch line unaffected by the increased frequency of rail services.

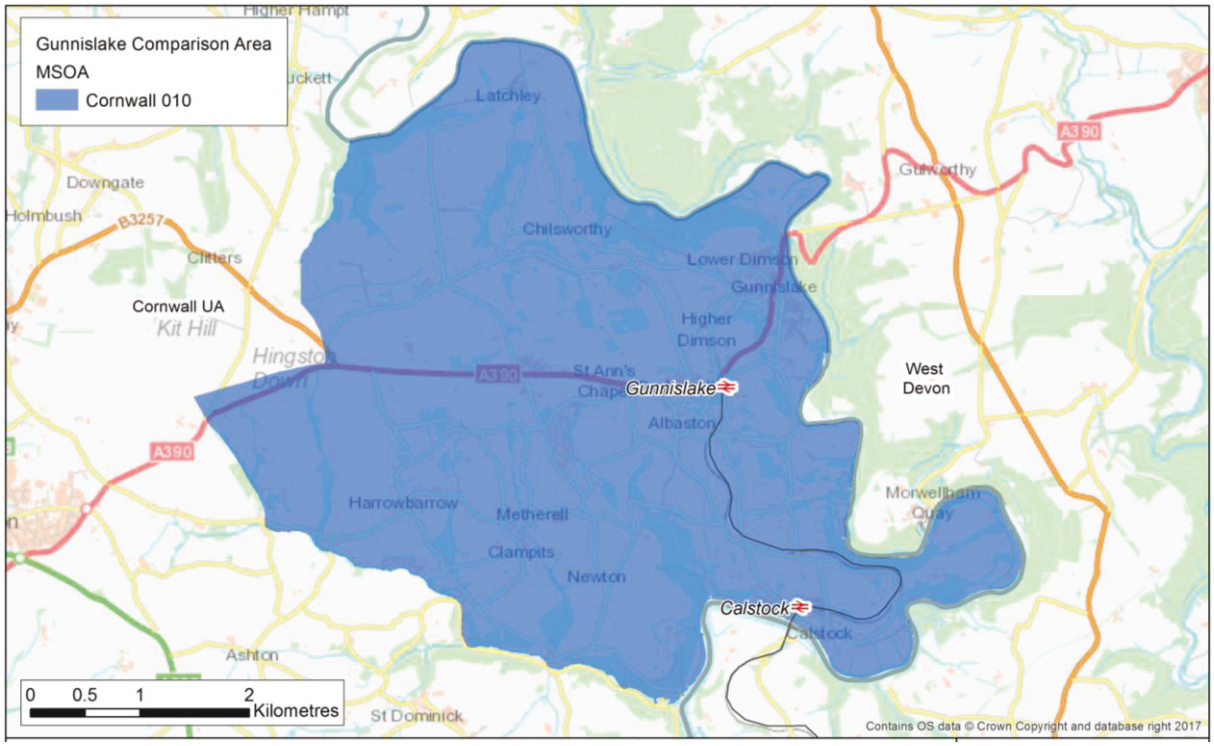
3.3 Gunnislake is served by Gunnislake station, the northern terminus of the Tamar Valley line from Plymouth. Nine train services operate each way to Plymouth on weekdays, eight on Saturdays and five on Sundays taking approximately 45 minutes[1], broadly comparable to the service frequency on the Falmouth Branch line prior to rail improvements in 2009.

3.4 There are also connecting buses from Gunnislake to the town of Tavistock. The nearby towns of Callington and Tavistock (both five miles from Gunnislake) do not have railway stations, and residents of these areas must access rail services at Gunnislake or Calstock station, which is located two miles south on the Tamar Valley line. The station is designed to attract users from a wider area, many of whom will access rail services by car (and park at the station, where there is provision for 30 cars).

[1] Realtime trains; http://www.realtimetrains.co.uk/

Figure 3.1: Location of Falmouth case study area and Gunnislake comparison area

Figure 3.2: Location of Gunnislake comparison area

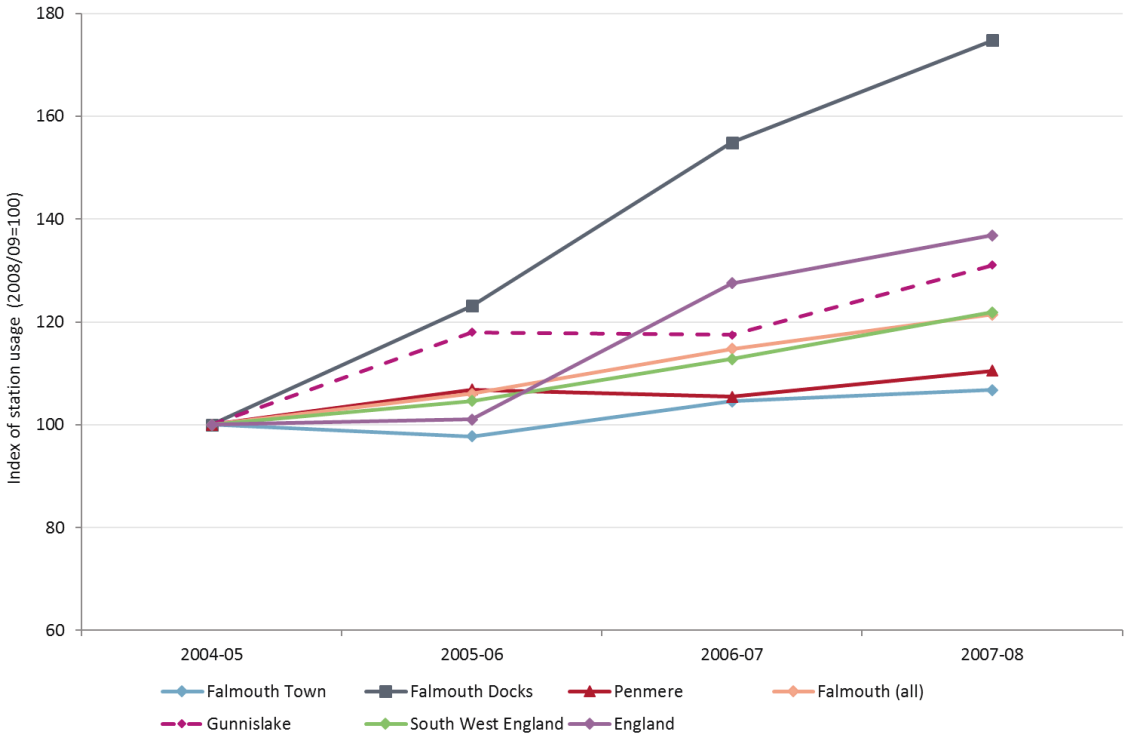


Comparison of rail usage

Trends in rail usage at Falmouth and Gunnislake pre-intervention

3.5 Figure 3.3 below illustrates the trends in rail usage between the Falmouth rail stations and Gunnislake, including the regional and national averages for comparison, and taking 2004-05 as the index year. This evidence suggests that, prior to the transport intervention, patronage at Gunnislake station was increasing at a comparable rate to that of the Falmouth stations, albeit with a slightly lower growth in 2008/09. This pre-intervention trend indicates that, in terms of rail usage, Gunnislake offers a reasonable comparator case for assessing whether the rail intervention had a direct impact on station entries and exits in Falmouth.

Figure 3.3: Index of station entries and exits in Falmouth and Gunnislake, 2004-05 to 2008-09



Source: Estimates of Station Usage, ORR (accessed 2017)

3.6 Table 3.1 outlines the top ten destinations for train journeys from the Falmouth stations and from Gunnislake respectively, prior to the rail intervention on the Falmouth branch line. The key finding from this data is that the profile of destinations from the Falmouth stations is very similar across all three, and there are significant differences between all three and Gunnislake, in terms of the specific destinations. It is also apparent that almost all rail trips are to destinations in the local area, rather than further afield. This characteristic is shared by the Falmouth stations and Gunnislake.

Table 3.1: Top 10 destinations from Falmouth and Gunnislake stations, 2008-09

Rank	Penmere		Falmouth Town		Falmouth Docks		Gunnislake	
1	Truro	65%	Truro	35%	Truro	47%	Plymouth	77%
2	Penryn	7%	Paddington	8%	Penryn	7%	Bere Alston	3%
3	Plymouth	7%	Plymouth	8%	Plymouth	7%	St.Budeaux Victoria Road	2%
4	St.Austell	3%	St.Austell	7%	Paddington	6%	Devonport	2%
5	Paddington	2%	Penzance	5%	Penzance	3%	Bere Ferrers	2%
6	Perranwell	2%	Penryn	5%	Par	3%	Paddington	2%
7	Penzance	2%	Par	3%	Perranwell	2%	Calstock	1%
8	Falmouth Docks	1%	Exeter St. David's	2%	St.Ives	2%	Keyham	1%
9	Liskeard	1%	Bodmin Parkway	2%	St.Austell	2%	Totnes	1%
10	Exeter St. David's	1%	Liskeard	2%	Exeter St. David's	2%	Exeter St. David's	1%

Source: Origin-Destination Matrix, ORR (accessed 2017)

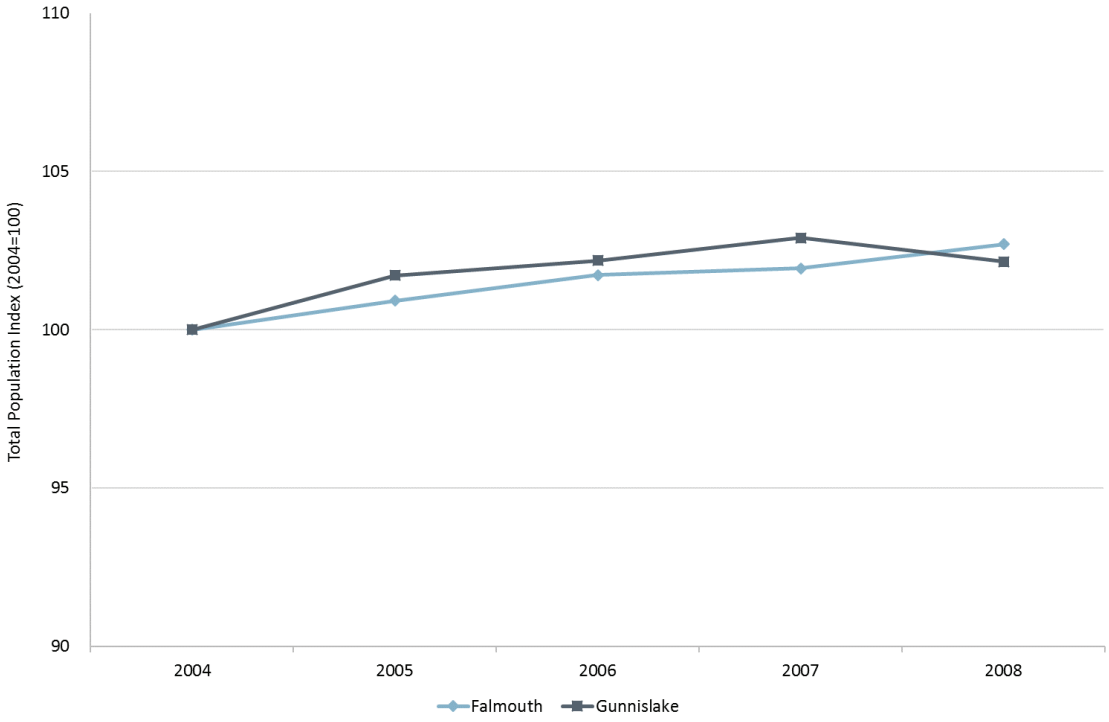
Comparison of socio-economic characteristics

Population

3.7 The population of Falmouth is significantly greater than Gunnislake: Falmouth's population in 2004 was approximately 21,000, compared to 6,000 in Gunnislake,[2] although the Gunnislake comparison area (MSOA Cornwall 010, encompassing Gunnislake and the nearby villages of Drakewalls and Albaston) is larger in size (23.5 km^2) than Falmouth (7.8 km^2).

3.8 Gunnislake experienced slightly lower population growth compared to Falmouth between 2004 and 2008, with a compound annual growth rate of 0.5%; broadly, however, the two experienced similar growth patterns, with Gunnislake outperforming Falmouth until 2008 in terms of population growth. This data is illustrated in Figure 3.4.

Figure 3.4: Population index for Falmouth and Gunnislake, 2004-08



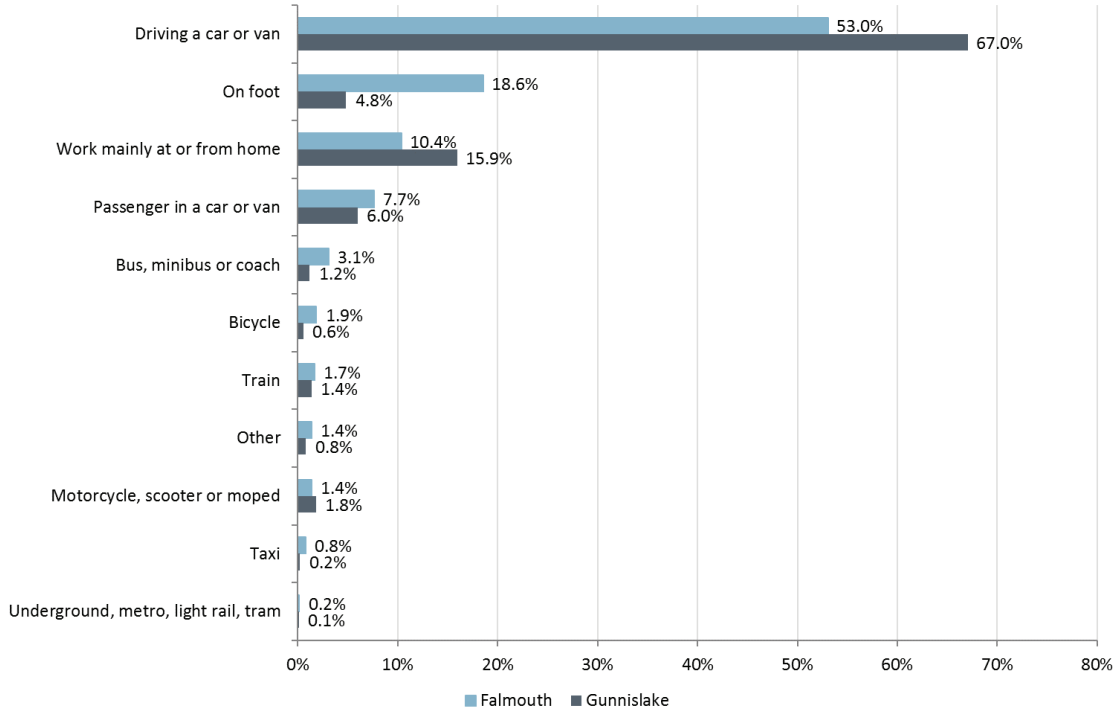
Source: ONS mid-year population estimates (accessed 2017)

[2] ONS mid year population estimates 2004

Travelling to Work

3.9 The profile of modal use by commuters in Falmouth is similar to that shown for Gunnislake in 2001; the majority used cars or vans, and only a very small minority reported using rail, although more commuters in Falmouth travel to work on foot compared to Gunnislake. This data is represented in Figure 3.5 below. 2001 Census evidence also suggests that Gunnislake residents commute further to work than Falmouth (47% further by car and 45% further by train), likely reflecting a significantly higher level of out commuting (such as to Plymouth). Meanwhile, the low proportion of residents travelling to work on foot or by bike indicates that fewer residents in Gunnislake than in Falmouth work within the town.

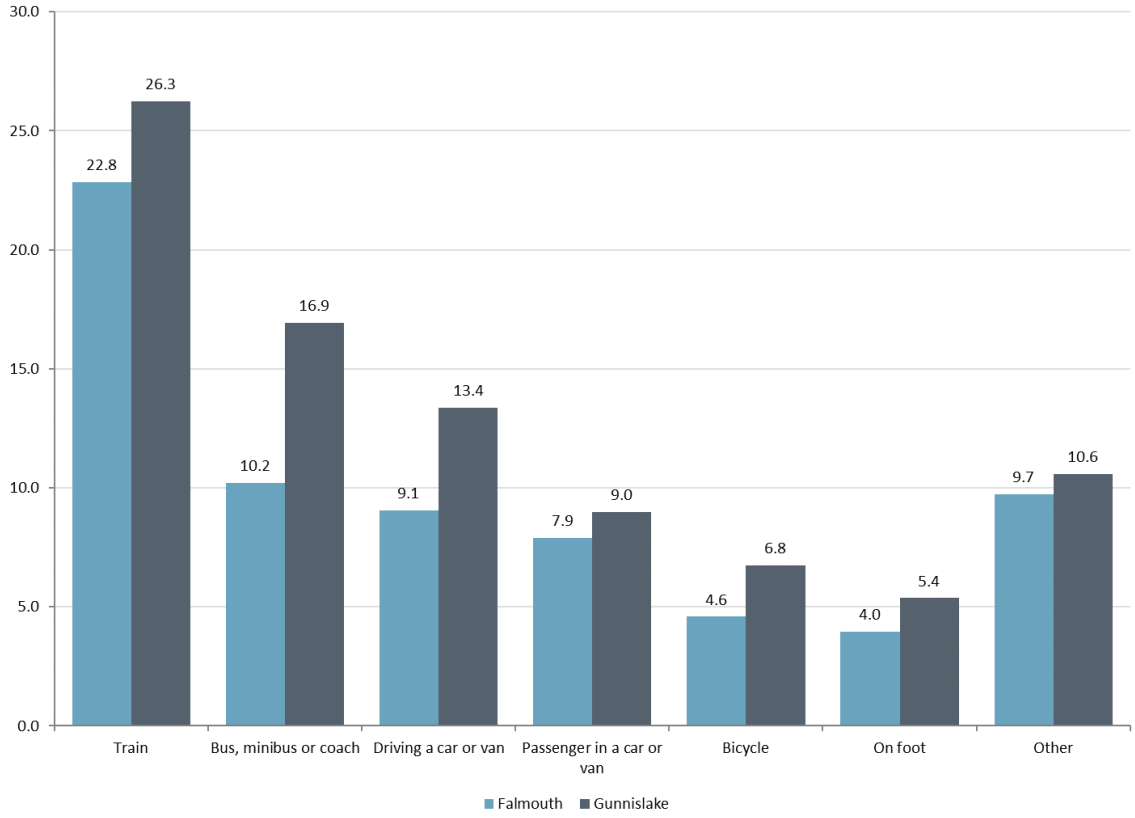
Figure 3.5: Primary mode of travel to work in Falmouth and Gunnislake, 2001



Source: ONS Census 2001, Travel to Work data (accessed 2017)

3.10 Figure 3.6 indicates the distance travelled to work by mode in Falmouth and Gunnislake, illustrating that commuters in the comparison area, across all modes, travel further for work than residents of the case study area of Falmouth. The pattern in each area, however, is similar; those travelling by rail on average commute considerably further than those using other modes.

Figure 3.6: Average distance travelled to work by Falmouth and Gunnislake residents (by mode), 2001



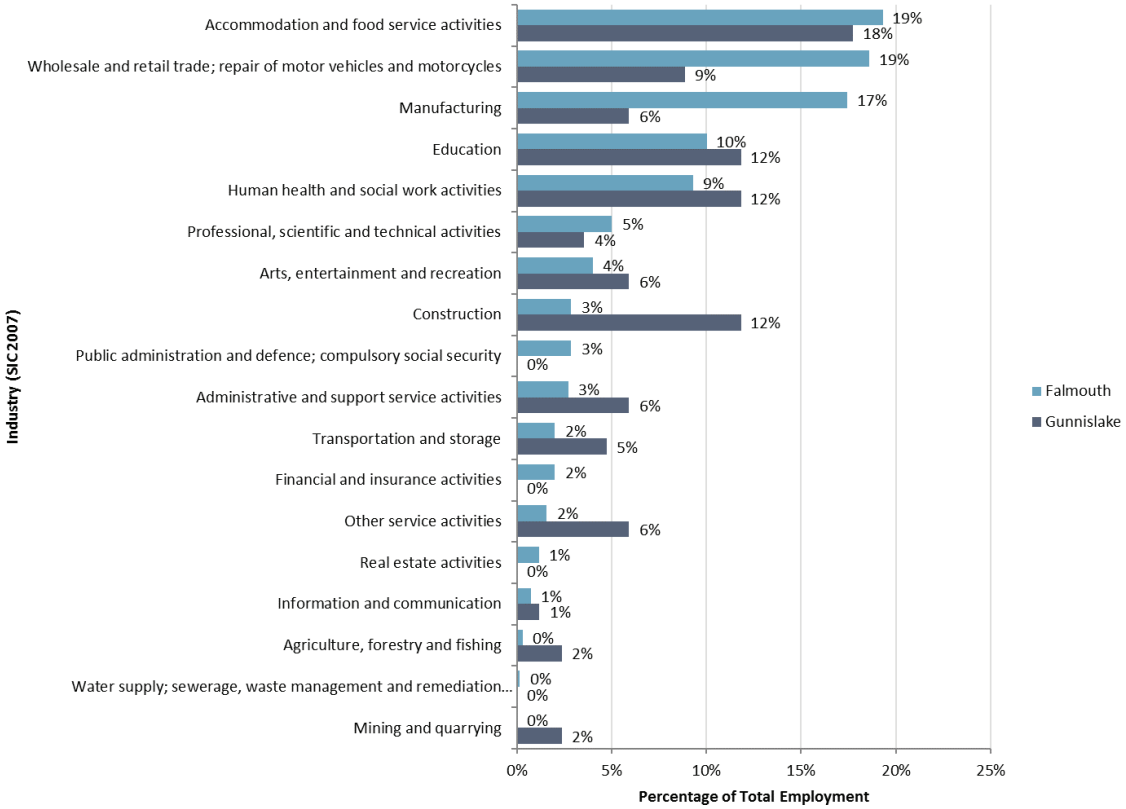
Source: ONS Census 2001, Travel to Work data (accessed 2017)

3.11 Following the service improvements at Falmouth in 2009, we would hypothesise that the proportion of Falmouth-based commuters using rail may increase relative to Gunnislake. However, this growth may be less pronounced than the growth in leisure trips, considering Falmouth's status as a tourist destination.

Employment and Industry

3.12 Figure 3.7 illustrates employment by sector, within both Falmouth and Gunnislake. Employment in Gunnislake in 2008 is concentrated within the Accommodation and Food Services sector as in Falmouth, although is less reliant on retail than Falmouth. Manufacturing also accounts for a far smaller proportion of local employment than is the case in Falmouth. Conversely, a greater proportion of local employment in Gunnislake is within Construction (12%), Administration and Support Activities, and Other Service Activities. The similarities between the two in terms of employment sectors thus seem to be limited to the tourist industry, with employment varying between Falmouth and Gunnislake in other sectors.

Figure 3.7: Employment by industry in Falmouth and Gunnislake, 2008



Source: Annual Business Inquiry, Office for National Statistics (accessed 2017)

3.13 Overall employment within Gunnislake, however, is significantly less than Falmouth, reflecting the town's nature as a large village with significant out commuting, compared to the more self-contained labour market within Falmouth. In 2008, according to the Annual Business Inquiry dataset, approximately 845 jobs were located within Gunnislake, compared to 6,990 in Falmouth. When accounting for the difference in population sizes between the two areas, the gap is even more pronounced; the data suggests one local job exists for every three residents in Falmouth, but one for every seven residents in Gunnislake.

Summary

3.14 Gunnislake appears similar to Falmouth with respect to recent population growth, and in the methods of travel to work. Thus, the population trends in each town appeared to track each other closely between 2004 and 2008. In population terms, Gunnislake is significantly smaller than Falmouth, with roughly 6,000 residents in Gunnislake compared to 21,000 in Falmouth

3.15 The trends in station usage between the three Falmouth stations and Gunnislake appear to be broadly comparable, indicating that any change as a result of the intervention in Falmouth would likely be evident as a diverging trend.

3.16 Individuals tended to commute further to work across all modes in Gunnislake than was the case in Falmouth, prior to the rail service improvements. This likely reflects the relative absence of local employment compared to Falmouth, and also significant out-commuting to larger settlements nearby such as Plymouth.

3.17 Local labour market and productivity data is not available separately for Falmouth and Gunnislake, but local sectoral data shows that local employment in Gunnislake was, like Falmouth, reliant on the Accommodation and Food Services sector; this was likely a result of tourism. On the other hand, employment within Retail and Manufacturing was significantly less than Falmouth in 2008.

4 Behavioural Impacts of the Transport Intervention

Introduction

4.1 This chapter builds on the evidence presented in the previous two chapters to discuss the post-intervention situation regarding travel patterns for residents of Falmouth, and the comparator location of Gunnislake. It uses evidence gathered from station user surveys, resident and business surveys, and qualitative stakeholder evidence to explore the impacts of service enhancements on rail patronage in Falmouth.

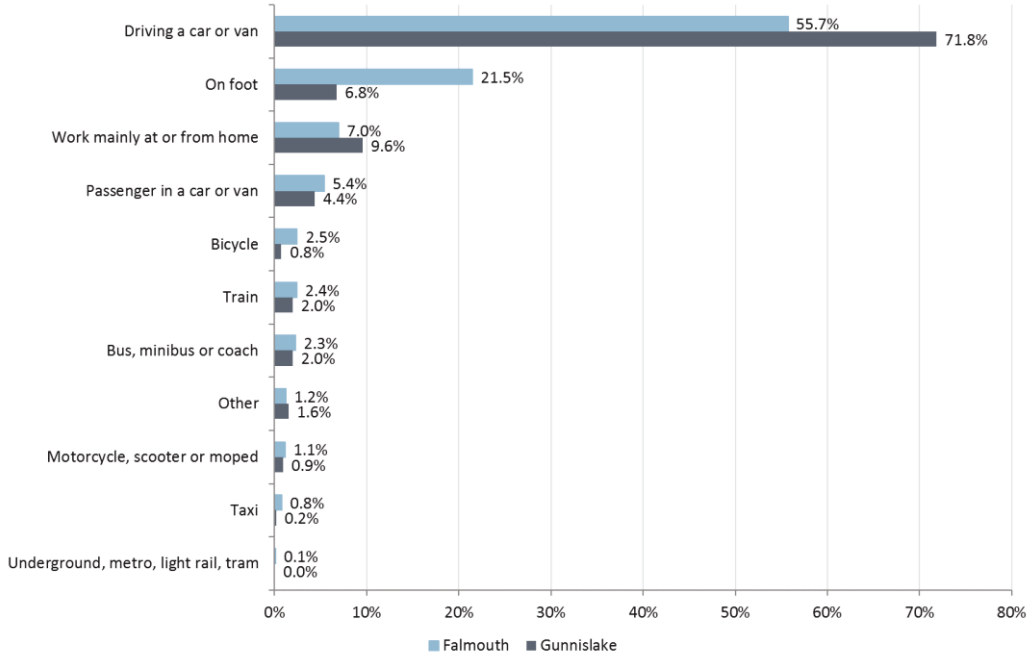
4.2 In the station user surveys, interviews took place on the main platform at Falmouth Town, Falmouth Docks and Penmere in October 2016 on weekdays (07:00 – 13:00) and Saturdays (10:00 – 14:00) to capture a mix of peak and off-peak station users. Samples by station were 83 at Falmouth Docks, 239 at Falmouth Town, and 104 at Penmere. Further information regarding the surveys is available in the Technical Report.

Trends in travel patterns

Commuting by Falmouth and Gunnislake residents

4.3 Figure 4.1 illustrates the primary mode of travel to work for residents of the Falmouth and Gunnislake study areas post-intervention in 2011, in contrast to the data presented pre-intervention in 2001 as seen in Figure 3.5.

Figure 4.1: Primary mode of travel to work (Study Area), 2011



Source: 2011 Census Travel to Work (accessed 2017)

4.4 While there was a slight increase in rail usage for Falmouth commuters from 2001 to 2011 (from 1.7% to 2.4%), this was equivalent to that found in Gunnislake where the frequency of rail services was unchanged. It is therefore difficult to conclude that this increase in rail commuting was a result of the 2009 rail improvements. However, since Census data was collected only two years after the service enhancement at Falmouth, it is unlikely to fully capture changes in passenger behaviour following the timetable change, which can typically take up to five years to materialise. As such, we cannot discount the possibility that the prevalence of commuting in Falmouth by comparison with Gunnislake changed after 2011. The station user surveys later in the chapter provide insights based on a more recent time period.

Rail usage amongst Falmouth and Gunnislake station users since the investment

4.5 Evidence from the station user surveys provides an indication of who uses the Falmouth stations and for what purposes. Of particular interest is the mix of users who are local residents compared with visitors and tourists who are staying overnight in the area. Across the three Falmouth stations, almost a fifth (19%) of passengers surveyed were tourists or day visitors. This proportion was somewhat higher at Falmouth Docks (26%), and lower at Penmere (12%), though given the greater footfall through Falmouth Town, the largest absolute number of tourists were surveyed at that station (19% proportion). In comparison, tourists and day visitors made up 28% of Gunnislake users (though this only includes 9% who were overnight tourists).

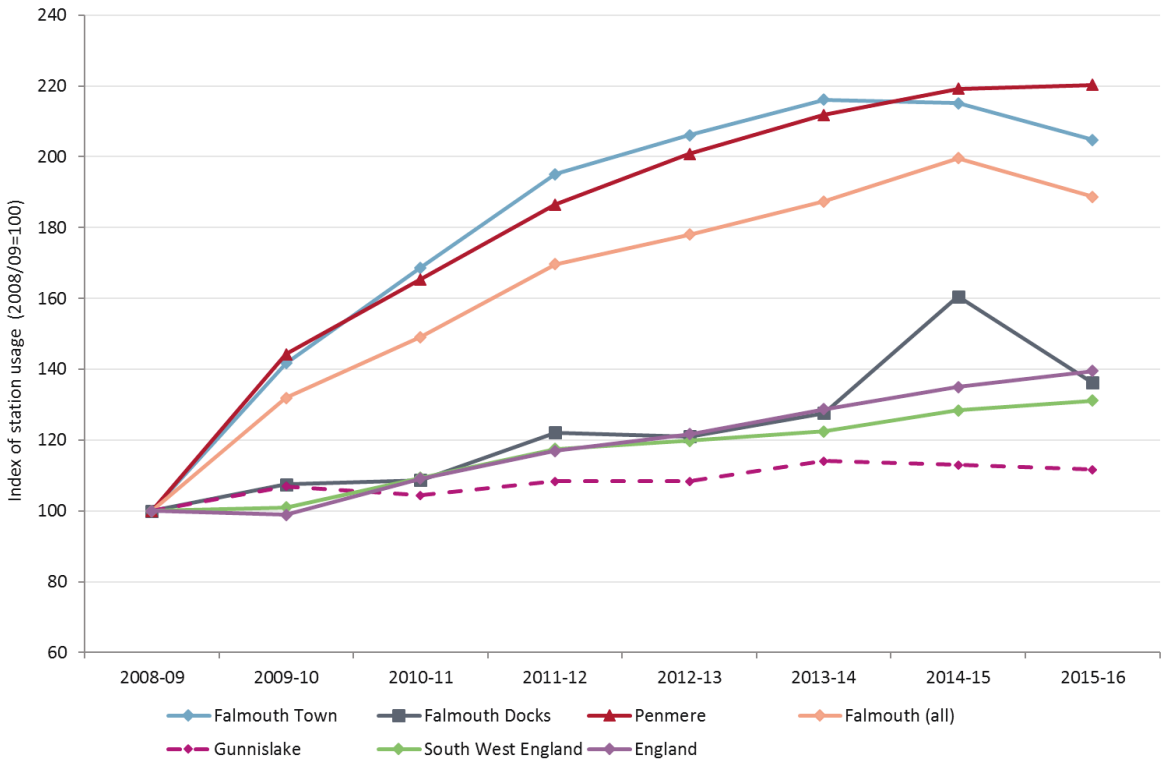
4.6 Also of interest is the relatively high proportion of students using the Falmouth stations: 33% of users at Falmouth Docks, and 35% of users at Falmouth Town, in our surveys were full time students. The proportion was substantially lower, at 23%, for Penmere users. At the comparator of Gunnislake, the proportion of students was also 23%.

4.7 Recent trends in station usage at Falmouth Town, Falmouth Docks, Penmere and Gunnislake, sourced from the ORR (Office for Rail and Road), highlight how the improved rail service in Falmouth has coincided with an increase in rail trips. Figure 4.2 illustrates changes in rail patronage for the three rail stations in the Falmouth area, for Gunnislake, and for the wider comparison with the South West and English averages. Rail usage increased from 91,900 trips at Penmere, 99,390 at Falmouth Town and 85,540 at Falmouth Docks in 2008/9 to 202,660, 203,470 and 116,480 at each station respectively in 2015/16.

4.8 For the Falmouth stations overall, usage increased by an annual rate of 8% between 2008/09 and 2015/16, considerably above both Gunnislake (1%), the regional (3%), and national averages (4%). Counter to the national trend though, usage at the Falmouth stations declined between 2014/15 and 2015/16 which may indicate that the benefits of the investment have now been fully felt, though a further year's data would be helpful to confirm this trend.

4.9 At Falmouth Docks, in 2014/15 there was a spike in demand, which may be the result of the Falmouth to Royal Greenwich Tall Ships Regatta 2014 which took place in Falmouth Docks, attracting over 100,000 visitors and generating over £12 million for the local economy.[3]

Figure 4.2: Station entries and exits in Falmouth and Gunnislake, 2008-09 to 2015-16



Source: Estimates of Station Usage, ORR (accessed 2017)

[3] http://www.sailtraininginternational.org/news/article/read_tall-ships-regatta-2014-now-open-for-entries_item_100797.htm

Destinations of journeys originating at Falmouth

4.10 In overall terms, and using the latest data available (2014/15)[4], nearly two-thirds (64%) of rail journeys from the three Falmouth stations are within the Falmouth branch line, with 4% to London, 5% to Plymouth and the remainder spread across destinations in the region.

4.11 Table 4.1 identifies the destinations of journeys from each of the three Falmouth railway stations in both 2008/09 and 2014/15, allowing for comparison between rail destination patterns before and after the transport intervention. The data is broken down by destinations on the Falmouth Branch Line, and those further afield. Additionally, the percentage change in journey numbers between 2008/09 and 2014/15 is given in the table for each station. The data shows that travel to destinations on the Falmouth Branch Line from each station has either grown faster than the overall passenger volume (Falmouth Town and Falmouth Docks), or grown roughly in line with it (Penmere).

Table 4.1: Number of journeys from Penmere, Falmouth Town, and Falmouth Docks to destinations on the Falmouth Branch line and further afield in 2008/09 and 2014/15

Falmouth Branch line stations	Penmere			Falmouth Town			Falmouth Docks		
	2008/09	2014/15	Change	2008/09	2014/15	Change	2008/09	2014/15	Change
Truro	30,041	58,910	**+96%**	23,098	42,780	**+85%**	14,907	26,289	**+76%**
Perranwell	851	1,972	**+132%**	1,206	3,338	**+177%**	541	2,215	**+309%**
Penryn	3,104	11,103	**+258%**	3,471	25,884	**+646%**	1,981	8,951	**+352%**
Penmere	-	-	**-**	366	1,180	**+222%**	618	1,541	**+149%**
Falmouth Town	366	1,180	**+222%**	-	-	**-**	17	162	**+853%**
Falmouth Docks	618	1,541	**+149%**	17	162	**+853%**	-	-	**-**
Total Falmouth Branch Line	**34,980**	**74,706**	**+114%**	**28,158**	**73,344**	**+160%**	**18,064**	**39,158**	**+117%**
London Paddington	949	2,052	**+116%**	2,878	5,199	**+81%**	3,618	3,767	**+4%**
Plymouth	3,024	5,355	**+77%**	3,272	4,818	**47%**	3,262	3,629	**+11%**
Penzance	714	2,479	**+247%**	1,345	2,508	**+86%**	2,115	2,976	**+41%**
St Austell	1,353	3,590	**+165%**	885	1,722	**+95%**	2,876	3,998	**+39%**
Par	212	777	**+267%**	1,322	983	**-26%**	1,221	1,598	**+31%**
Exeter St. David's	493	816	**+66%**	879	1,310	**+49%**	983	707	**-28%**
All other stations	4,270	11,065	**+159%**	10,954	17,047	**+56%**	10,632	12,824	**+21%**
Total	**45,995**	**100,840**	**+119%**	**49,693**	**106,931**	**+115%**	**42,771**	**68,657**	**+61%**

Source: Origin-Destination Matrix, ORR (accessed 2017)

4.12 The most noticeable change in trip patterns since 2008/09 is an increase in the proportion of trips between the three Falmouth stations and Penryn, up from 6% in 2008/09 to 17% in 2014/15. This increase has mainly been at the expense of a reduced proportion of trips to

[4] Source: Origin Destination Matrix (ODM), ORR

Truro, Plymouth and 'Other' destinations. Note that because of the substantial increase in patronage over this period, a reduced proportion of trips does not equate to a reduction in the number of trips, but represents a less robust increase in usage.

4.13 It is evident that, between 2008/09 and 2014/15, the proportion of journeys originating from Penmere to other destinations on the Falmouth Branch Line has remained consistently high (75% to 74%), with the number of journeys from Penmere to these destinations rising in line with the overall number of trips. The majority of these trips end at Truro, a local employment centre. This pattern of trips, coupled with Penmere's residential location, indicates a considerable commuting base among Penmere station users.

4.14 At Falmouth Town and Falmouth Docks, however, the proportion of journeys to other destinations on the Falmouth Branch Line has increased considerably (56% to 67% and 40% to 57% respectively). This has largely been driven by the increased popularity of Penryn as a destination as Table 4.1 indicates.

4.15 While it is impossible to conclusively state based on the data available, it seems likely that Penryn has been attracting trips due to the growth of the Penryn Campus in the area, hosting departments of the University of Exeter and the University of Falmouth. This facility opened in 2004, but has seen major inward relocations of departments in the period since the rail intervention. While much of the growth in trips would be expected to be made up of the student population, it is also worth noting that the universities are likely to generate trips for employment as well.

Frequency of rail travel amongst Falmouth residents

4.16 Residents' surveys[5] undertaken in 2016 provide details on the frequency of rail use of residents within Falmouth, as shown in Table 4.2 below (this data is not available for Gunnislake). This shows that around two-thirds of residents make at least some use of the local rail services, with just under one in ten (9%) making regular (at least once a week) use of the services.

Table 4.2: Frequency of rail travel amongst Falmouth residents

Frequency	% of respondents
At least once a week	9%
Less than once a week but at least once a month	22%
Less than once a month but at least once a year	33%
Less than once a year or never	32%
Don't know / not applicable	3%

Source: Resident survey (n=508)

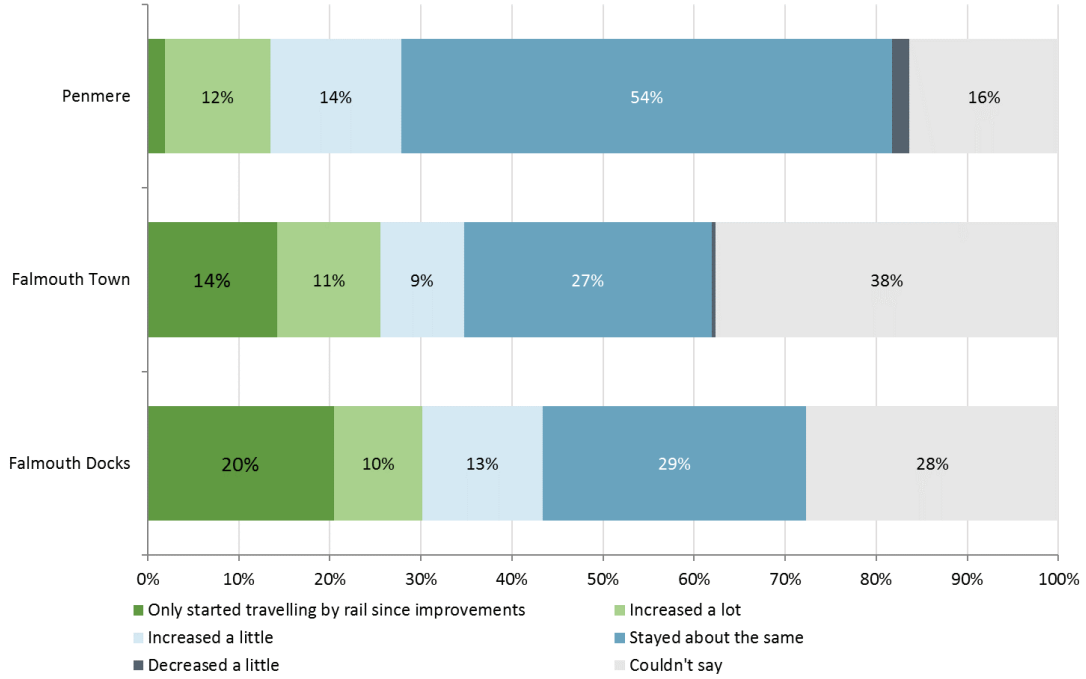
[5] Interviews were undertaken by telephone with residents living within 3km of the stations using a sample provided by UK Changes. Interviewing took place between 12:00 and 20:00 on weekdays and 11:00 – 16:00 on Saturday. The profile of respondents was monitored by Output Area Classification to maintain representativeness.

Changes in use of rail since the investment

4.17 In line with the trends in station usage as revealed by the ORR data, users of Falmouth stations indicated that they had increased their usage: overall, 11% said they had increased their use 'a lot' and a further 11% 'a little'. This increase in use amongst existing users is supplemented by new users with 12% of respondents stating that they had only started using the station since the improvements. In this context, it is worth highlighting the point that 31% of passengers using the Falmouth stations are students, and around a fifth are tourists or day visitors.

4.18 These trends are shown further by station within Figure 4.3, though care should be taken when interpreting these results given some relatively small sample sizes. The results show that across all three stations, relatively high proportions of station users report an increase in rail usage since 2009 (ranging from 20% in Falmouth Town to 26% in Penmere). The substantial proportions of users reporting that they either do not know or only started using the station since 2009 for Falmouth Town and Falmouth Docks are likely to reflect tourism and leisure, along with the larger student demographic within these areas.

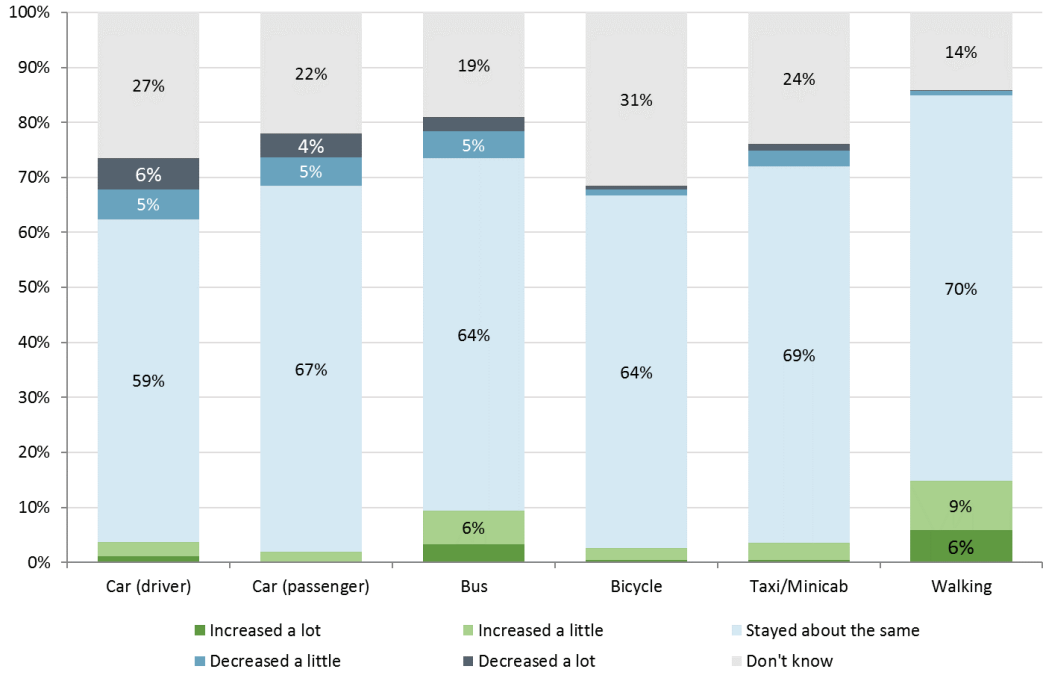
Figure 4.3: Since the improvements in 2009 has the amount you travel by rail increased, decreased, or stayed the same?



Source: Station user surveys, 2016 (Falmouth Docks n=83; Falmouth Town n=239; Penmere n=104)

4.19 Figure 4.4 shows findings for whether Falmouth station users reported having changed their use of other modes since 2009. This data is aggregated across all three Falmouth stations, as the aim of this question was to identify changes in the broader patterns of travel across Falmouth in the period since the improvements to rail service frequency in 2009[6].

Figure 4.4: Since the improvements in 2009, have you changed the amount you travel by other means? (Falmouth only)



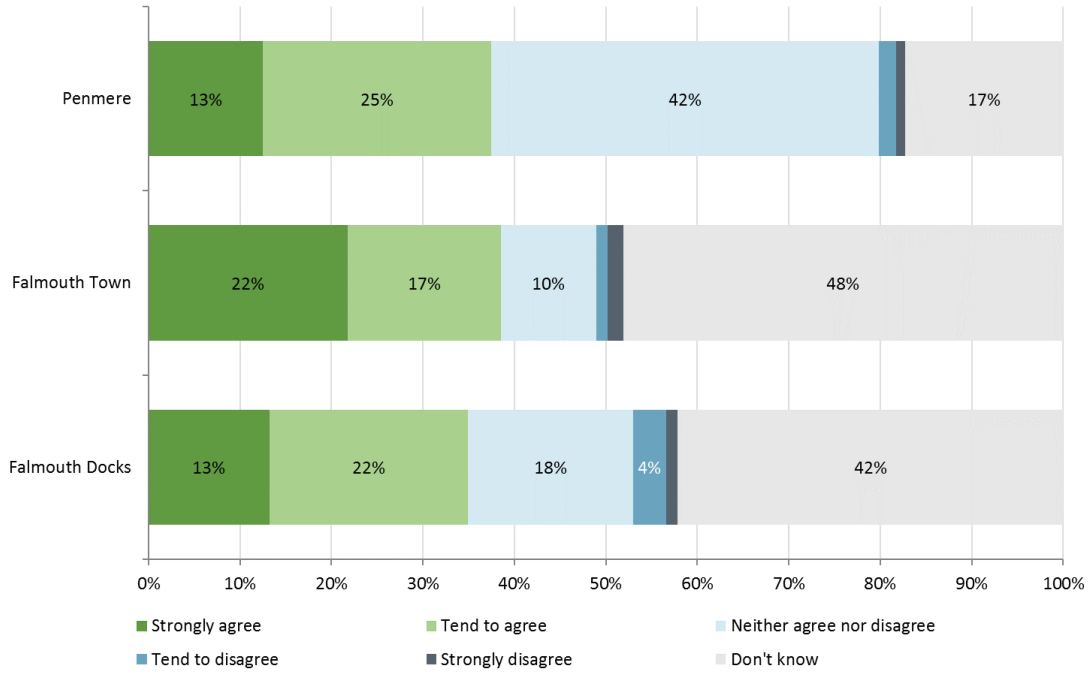
Source: Station user surveys, 2016 (n=426)

4.20 While the majority of users did not report a change in their use of other modes, there may have been a small amount of abstraction of trips from car since the improvements in 2009. This could be due to both modal shift to rail from other modes, as well as a change in the means of travel to and from the station; the increase in walking could, for example, indicate an increased propensity to walk to a station. This is supported by the high percentage of users using walk as their station access mode (75% overall, including 87% at Falmouth Town).

[6] A further consideration is the sample sizes: given the small number of respondents changing their use of other modes there is a risk that comparing results for individual stations will introduce spurious differences.

4.21 Station survey evidence also indicates that travel by rail is perceived as more convenient, since 2009, by 38% of Falmouth station users. Figure 4.5 shows these results for each Falmouth station, and reveals that the proportion agreeing that the station has become more convenient is quite consistent, ranging from 35% at Falmouth Docks to 39% at Falmouth Town. As previously, note the high proportions reporting "don't know" at Falmouth Docks and Falmouth Town, likely reflecting that these are new users of the stations since 2009 (e.g. including tourists and students).

Figure 4.5: Since 2009, travelling by rail is more convenient than it used to be



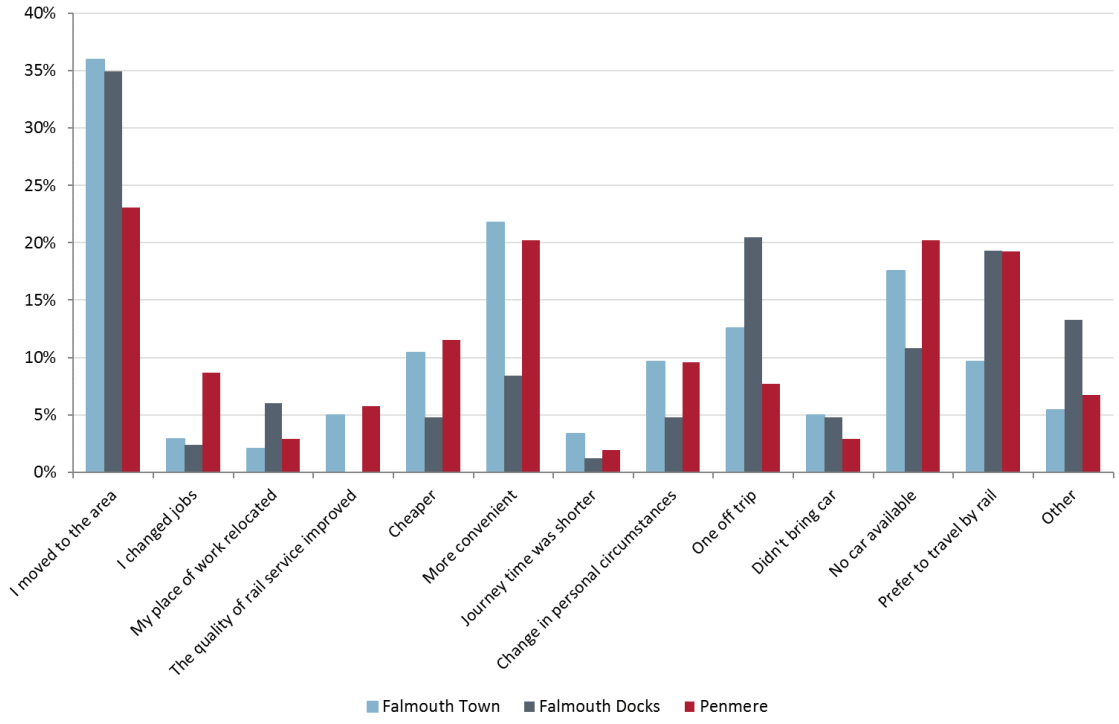
Source: Station user surveys, 2016 (Falmouth Town n=239; Falmouth Docks n=83; Penmere n=104)

4.22 These statistics potentially contribute to high levels of satisfaction at the Falmouth railway stations, where 73% of station users claimed to be either "very satisfied" or "fairly satisfied" with the station facilities. In particular, 85% of station users surveyed suggested that they were satisfied with the distance they had to travel to the station, indicating that the rail service is seen as convenient by a large majority.

4.23 Figure 4.6 outlines the reasons reported for beginning to use the station. Falmouth Town and Falmouth Docks station users identified having moved to the area as the most important factor, as we might expect given the above indications that there are a number of tourists and students among these groups. Results for Penmere were more mixed, with moving to the area, convenience, lack of car access and a preference for rail all sharing similar percentages in terms of station user motivation.

4.24 It is noteworthy that only a small proportion of users at any of the three stations (6% or less) suggested that the improvements to the quality of rail service were key in their decision to start using the station, though it is possible that some of the other stated reasons, such as moving to the area, may have in turn been in part motivated or facilitated by the increased frequency of the rail services.

Figure 4.6: What are the main reasons you started using this station?

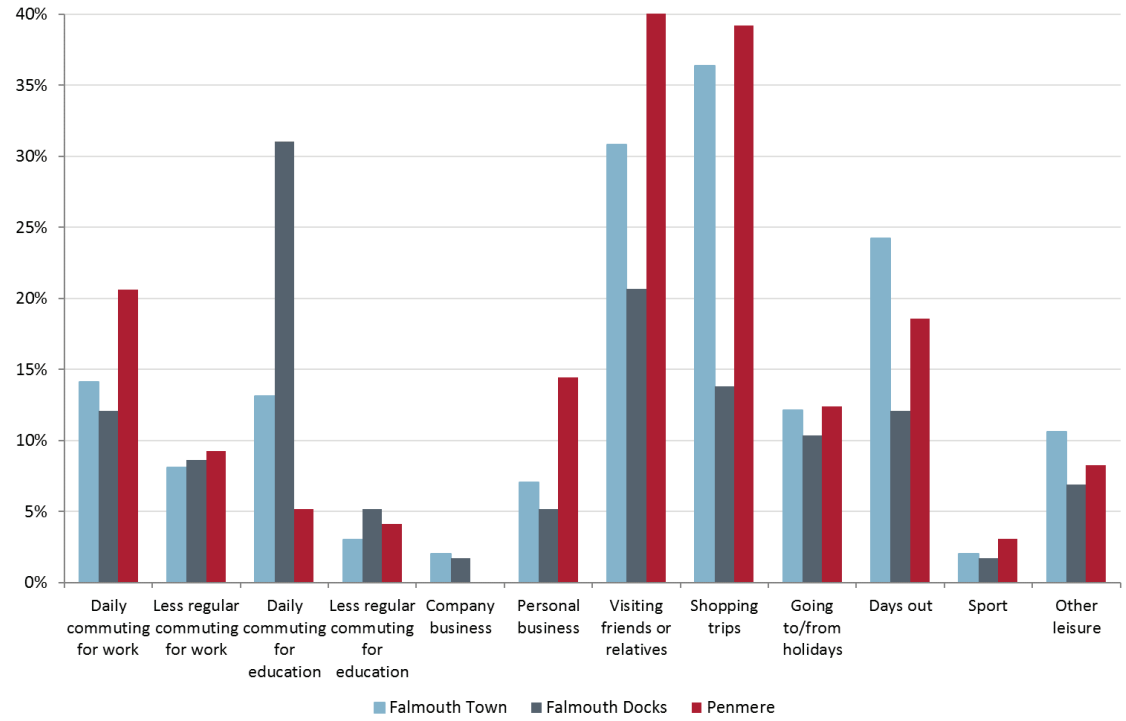


Source: Station user surveys, 2016 (Falmouth Town n = 239; Falmouth Docks n = 83; Penmere n = 104)

Journey profiles at Falmouth railway stations

4.25 Figure 4.7 provides information regarding the purpose of trips at Falmouth Town, Falmouth Docks and Penmere. At Falmouth Town and Penmere, most trips were made for leisure purposes such as shopping, or visiting friends or relatives (67% and 82% respectively), demonstrating that Falmouth is a popular visitor destination and that the line is an important connection for leisure travellers, connecting coastal communities.

Figure 4.7: For what journey purposes do you tend to use this station?



Source: Station user surveys, 2016 (Falmouth Town n = 239; Falmouth Docks n = 83; Penmere n = 104)

4.26 Commuting, less frequent commuting and business combined account for 24% of trips at Falmouth Town and 30% of trips at Penmere (lower than the England average of 54%[7]). At Falmouth Docks, although 22% of trips were made for commuting, less frequent commuting and business, more trips were made for daily commuting for education (31%) compared to Falmouth Town and Penmere.[8]

4.27 Although the improvements to rail frequency on the Falmouth Branch line have increased journey flexibility through a higher frequency of trains per hour, they have not reduced in-vehicle journey times. The impact of the rail improvements on the attractiveness of Falmouth

[7] DfT National Travel Survey Statistics, Table NTS0409 England, 2015

[8] Daily commuting for education represents a significant proportion of trips at Falmouth Docks, compared to Falmouth Town and Penmere. Falmouth Marine School and Falmouth University represent the largest post-secondary education establishments in Falmouth and Penryn.

to commuters may therefore be smaller than the impact on trips for leisure purposes, although it is not possible to draw a definite conclusion on this point.

Summary

4.28 The evidence suggests that the frequency improvements at Falmouth do appear to have generated a significant uplift in rail usage, as outlined in ORR station usage data, as well as evidence from the station user surveys at each Falmouth station. This could partly be a result of the increased convenience of rail (and the reduced generalised cost of travel) caused by the doubling of the frequency to two trains per hour, and is reflected in the survey evidence.

4.29 Only a small number of respondents report changing their usage of other modes following the rail frequency improvements, though there is some evidence of a potential small shift from car to rail. The survey evidence suggests that the main impact of the improvements have been to encourage existing users to travel more often, and potentially for new users to be attracted to using the rail services.

4.30 Notably, the majority of trips appear to be for leisure purposes, such as shopping, tourist day trips to and from Falmouth, or visiting friends or relatives, rather than for commuting. This is in contrast to national use of rail, and highlights the impact of Falmouth's long-term status as a tourist destination on the profile of rail usage in the town.

4.31 However, the proportion of education trips across the three Falmouth stations is considerable. This seems likely to be related to the accessibility of the Penryn Campus, of both Falmouth and Exeter Universities, from Penryn station on the Falmouth Branch Line. The data in

4.32 Table 4.1 does indicate a rise in journeys from the Falmouth stations to Penryn since 2008/09. It is also possible that this proportion reflects the increased ability of students to access the tertiary education campuses in Falmouth itself.

4.33 Any impacts on commuting behaviour, however, appears to be limited. While the percentage commuting by rail in Falmouth from Census data has increased between 2001 and 2011, an equivalent increase occurred in Gunnislake in the same period. There is little evidence that the rail investment has led to a significant change in commuting patterns although the relatively strong growth in rail usage in Falmouth since 2011 means that this possibility cannot be discounted.

5 Economic Impacts of the Transport Intervention

Introduction

5.1 Chapter 4 outlined the impacts on travel behaviour observed in Falmouth since the doubling of service frequency on the Falmouth Branch Line in 2009; specifically, the increase in rail trips to and from the three stations in the Falmouth area. It is hypothesised that this increase in rail patronage could lead to a variety of economic benefits to the Falmouth area.

5.2 This chapter will consider the nature of some of these economic effects, using data drawn from a range of sources; these include the Business Register and Employment Survey (BRES)/Annual Business Inquiry (ABI) both of which are available by Lower and Mid Super Output Area (LSOA/MSOA), and from the Business Structure Database (BSD), which contains firm level information. The four key economic impacts which this chapter will discuss are:

- Investment effects (changes in the attractiveness of Falmouth as a place to locate for residents, and separately, for businesses);
- Employment effects (changes in the local labour market and firm employment);
- Tourism effects (changes in the attractiveness of Falmouth as a place to stay);
- Productivity effects (changes in firm turnover and gross value added).

Investment effects (residential)

5.3 It is generally thought to be the case that individuals value rail connectivity, and as such it would follow that the improved rail services at the three Falmouth stations could lead to a change in choices about where to live in the area. This can take multiple forms, both making Falmouth a more attractive place to live, but also making proximity to rail stations a more important consideration for prospective Falmouth residents than has previously been the case. It could also be the case that the improved service patterns would lead to an increase in Falmouth's overall population, resulting in a continuation of the patterns of rail patronage growth outlined in Chapter 4.

Importance of rail services when deciding where to live

5.4 Based on the above points, it would seem plausible that rail services could have represented a significant consideration for Falmouth residents when it came to selecting their current residence, and that rail connectivity could have made a positive impact on the attractiveness of their current address. If individuals value the benefits of rail connectivity, and consider rail accessibility when deciding where to live, one would expect the proportion of residents who view rail services as important when moving to their address to be substantial.

5.5 The primary research illustrated in Table 5.1 indicates that rail is indeed a key factor in the relocation decisions for 29% of all Falmouth residents, rising to 39% of those residents moving house since 2010.

Table 5.1: When moving to your current address, to what extent were rail services important to you?

Stated importance	% of respondents
Very important	14%
Fairly important	15%
Not very important	18%
Not at all important	51%
Don't know	2%

Source: Resident survey (n=508)

5.6 Respondents in employment were asked about the importance of rail services when moving to their current job. Sixteen per cent of them described rail services as "important" in making this move, with 70% claiming rail services were "not at all important" and a further 10% describing them as "not very important".

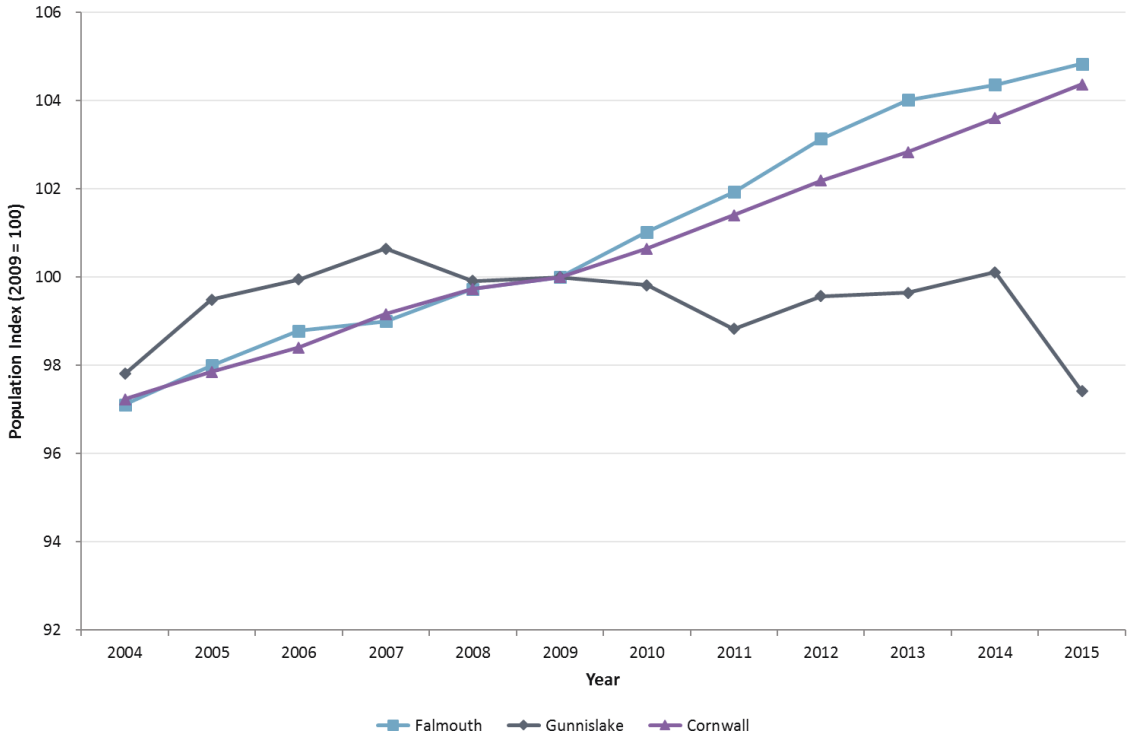
Impact on local population growth

5.7 It would also be expected that the Falmouth area would see a population growth increase since 2009, if the improvement in rail services began to attract more residents to the town. Figure 5.1 shows the patterns in population growth in Falmouth, Gunnislake and the whole county of Cornwall between 2004 and 2015.

5.8 This figure indicates that population growth in Falmouth has significantly outperformed that in Gunnislake since 2009 – coincident with the late 2000s recession. A variety of different demographic pressures exist on Gunnislake, reflecting its nature as a large village with a limited local labour market, compared to the larger town of Falmouth which retains significant local employment. However, the weaker population growth in Gunnislake could be related to its poor connectivity to nearby centres of employment; a problem mitigated in Falmouth by the rail intervention.

5.9 Population growth in Falmouth is, however, roughly consistent with the trends observed in Cornwall over this period, with steady growth both before and after the introduction of the improved rail service pattern. The data indicates a slight increase above the Cornwall trend in Falmouth after 2009 (the index year), though it is important to note that this difference is small and that it cannot definitively be linked to the improved rail services.

Figure 5.1: Change in Population, 2004-2015



Source: ONS Mid-Year Population Estimates (accessed 2017)

Impact on local property prices

5.10 Figure 5.2 presents average property price data from the Land Registry concerning Cornwall, the South West, and England. The data indicates that there has been a significant cooling of

the Cornwall property market in relation to the regional and national averages since 2014. We have not been able to obtain property price data for the Falmouth area.

Figure 5.2: Property Price Trends in Cornwall, 2009-16

Source: Land Registry (accessed 2017)

Summary

5.11 It appears that the improvement in rail services has been associated with a positive, if marginal, impact on the rate of population growth in Falmouth relative to Cornwall and the comparator, Gunnislake. Supporting evidence for this was provided by the survey of residents in which 29% said that rail connectivity was an important consideration when choosing where to live.

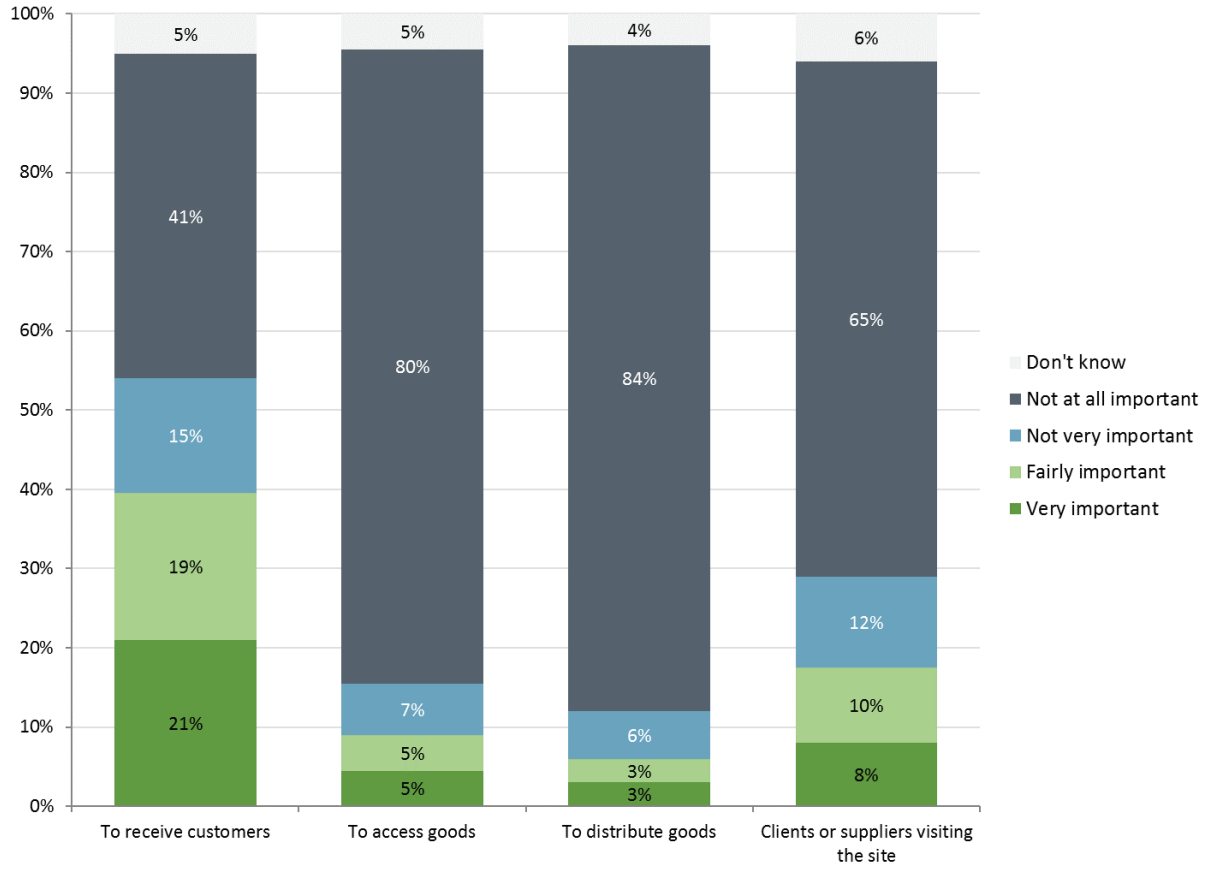
Investment effects (businesses)

5.12 Businesses may also value rail connectivity, as better rail connections lead to easier access to businesses for potential customers, suppliers and employees. It could thus be expected that the doubling of the service frequency in Falmouth would make the town more appealing as a potential location for business investment.

Importance of rail to local businesses

5.13 The results from surveys of local businesses[9] show that rail is viewed as important in 'receiving customers' for 40% of businesses, which is likely to reflect a perception of reliance on rail transport for bringing visitors to the town (see Figure 5.3). A smaller proportion of businesses (18%) viewed rail as important for client or supplier access to their site. However, rail connectivity plays a much more limited role in accessing and distributing goods with only 10% and 8% respectively of businesses regarding these aspects as important.

Figure 5.3: Relative importance of rail to different aspects of business



Source: Falmouth business survey (n=200)

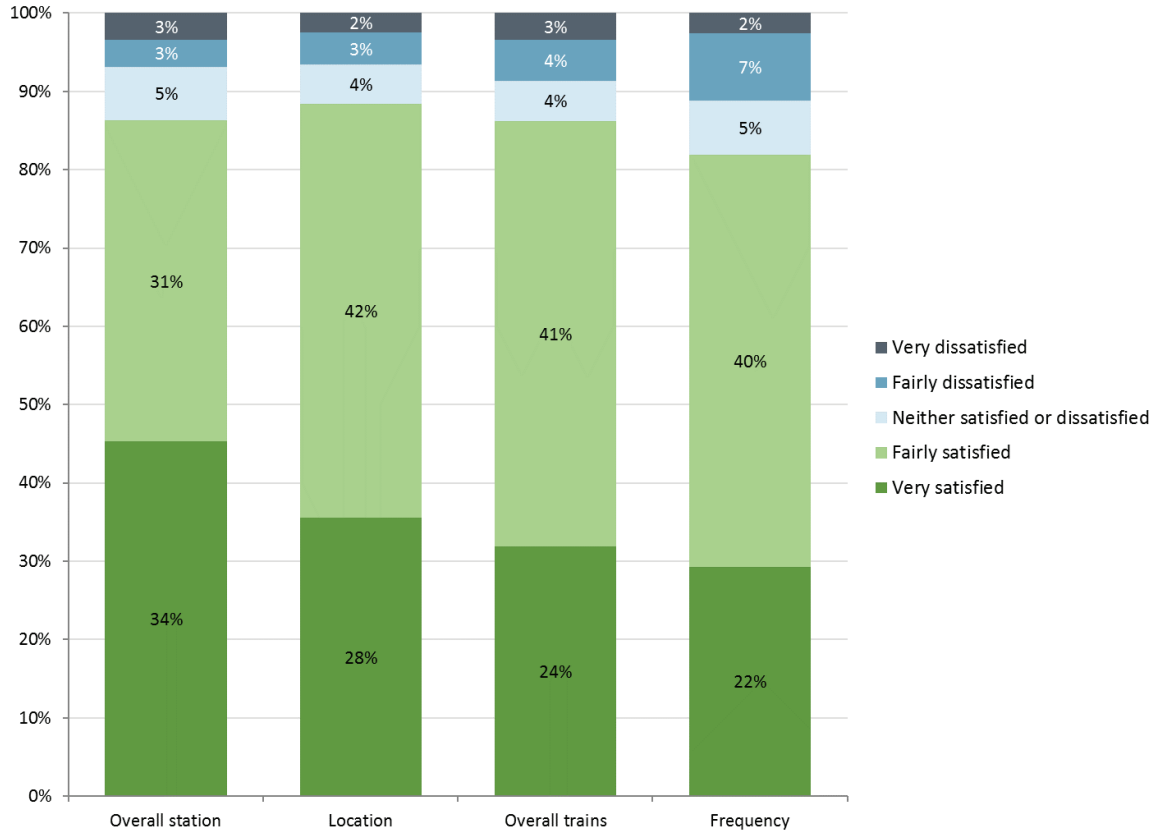
5.14 Based on the observed differences in Figure 5.3, it seems reasonable to conclude that businesses reliant on customer accessibility – including in tourism and leisure – may have benefitted disproportionately from the rail improvement.

[9] Interviews were undertaken by telephone with businesses based within 3km of the station using a sample provided by UK Changes. The profile of businesses was monitored by Standard Industrial Classification and number of employees to maintain representativeness.

Business satisfaction with local rail services

5.15 Businesses are very satisfied with the overall quality of rail services from Falmouth, with respect to the station(s), the location of those stations, the train service, and the frequency – the latter of which was subject to improvement in 2009. Figure 5.4 below illustrates the results of the business survey with respect to satisfaction with local rail services, highlighting how more than 80% of businesses described themselves as "very satisfied" or "fairly satisfied" on these measures.

Figure 5.4: Satisfaction with local rail services



Source: Falmouth business survey (n=200)

5.16 The evidence suggests that businesses are highly satisfied with the rail provision in Falmouth, and it is plausible that this may be related to the rail intervention in 2009. While it is the case that, as shown in Figure 5.3, businesses do not rely on rail transport for some of their key activities, the high level of satisfaction suggests that the improved rail services are providing what businesses want from them – in this case, customer access. This appears to highlight how tourist businesses are central to the economy in Falmouth, as these businesses are likely to be satisfied with improvements to customer access.

Summary

5.17 Despite business satisfaction with rail services being high in Falmouth, it appears that most businesses primarily regard rail as important for customer access, which is likely to be largely in relation to the tourism market. This highlights the impact of tourism on how rail is used –

and perceived – in Falmouth, particularly in relation to the rest of the country. It is therefore possible that the improved rail services have led to the town becoming a more attractive place to locate a tourist business, since this sector would appear to disproportionately benefit from improved rail connectivity to Falmouth.

Tourism effects

5.18 Given the importance of tourism to the economy of Falmouth we have looked within the station user research to explore the potential impact of the rail investment on the attractiveness of Falmouth as a tourist destination.

5.19 It is likely that leisure visitors not staying overnight in Falmouth also contribute to similar businesses to those used by tourists, and that the impact of the rail service on day trips would be similar to the impact on tourism.

5.20 To this end, respondents who identified themselves as tourists were asked the extent to which the rail services were important in their choice of where to stay and a third said they were important, including around a fifth saying they were 'very important'.

5.21 The sample of tourists at Gunnislake was extremely small (8), but none of them said that the rail service was important to their decision of where to stay, providing some support for a positive impact on tourism in Falmouth.

Employment effects

Number of employees

5.22 To examine employment effects, a Difference-in-Difference (D-i-D)[10] approach was utilised, which allowed for the difference in effects on employment in local business units to be assessed for the treatment case (Falmouth) and the comparator case without the treatment (Gunnislake). In this analysis, the treatment was the doubling of the service frequency in 2009, and the D-i-D approach estimates the trends in each case, firstly before the treatment, and then following the treatment, with the 2010 data representing the treatment year. Comparing the difference in these trends helps indicate whether the treatment led to a discernible effect. A D-i-D approach requires a common trend to be observable prior to the treatment, in order for the comparison of the trends after the treatment to be meaningful. D-i-D analysis was only undertaken where the common trend was observed, though the graphs of other trends observed have been included in this section even where the common trend prior to the intervention is not sufficient for D-i-D analysis.[11]

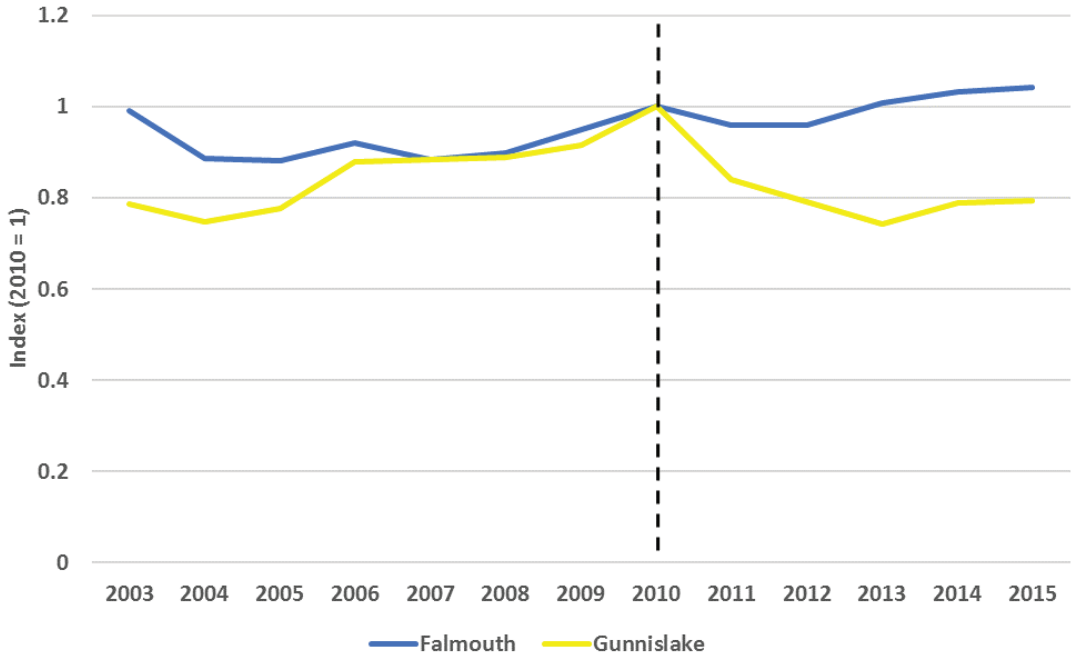
5.23 Since 2010, the number of employees within Falmouth has continued to grow at a steady rate, roughly reflecting a trend that has been observed since 2004, despite the late 2000s recession. Conversely, Gunnislake has seen its number of employees fall significantly, and as of 2015 the number of employees there remains approximately 20% below the town's 2010 peak.

[10] This approach is covered in more detail in the Technical Report.

[11] See the Technical Report for more information.

5.24 Figure 5.5 reflects the differing trajectories of employment in Falmouth and Gunnislake, using 2010 as an index year for both towns. Time series data was obtained by Cambridge Econometrics from the Business Register Employment Survey (BRES) from 2009 to 2015 and the Annual Business Inquiry (ABI) from 2003 to 2008. The measured variable was number of employees, not employment, as employment is not recorded by the ABI. The treatment year is given as 2010, the first collection of data after the completion of the intervention.

Figure 5.5: Change in employees, 2003-2015



Source: Annual Business Enquiry/Business Register and Employment Survey (from Cambridge Econometrics)

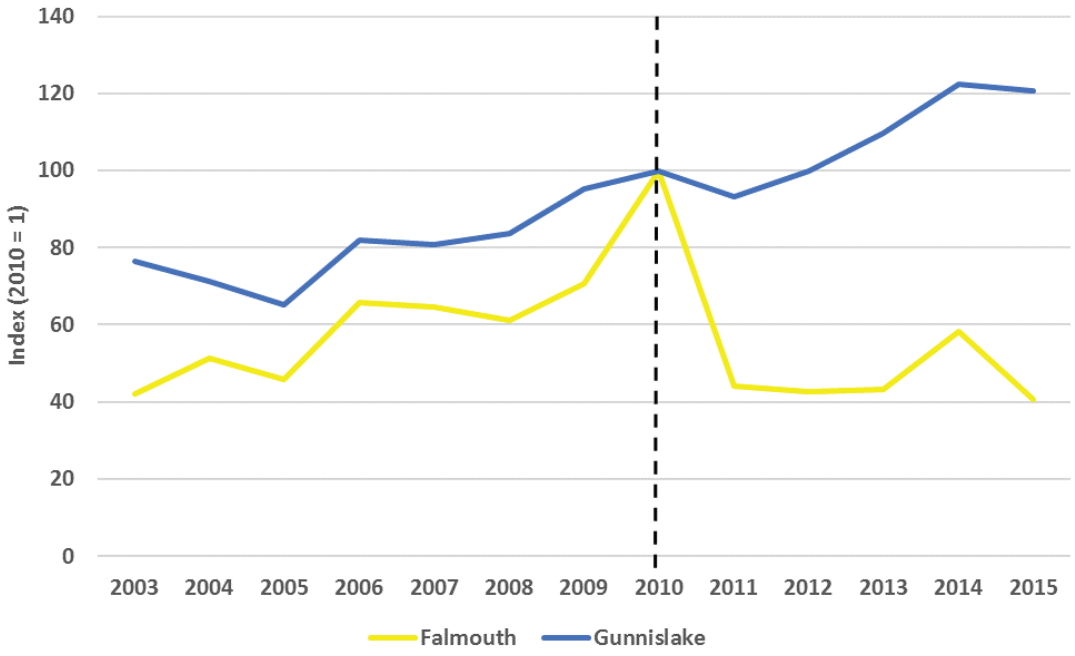
5.25 There is evidence illustrated in Figure 5.5 of a common trend between Falmouth and Gunnislake, in terms of total employees, in the period 2003 to 2010. The data from 2010 to 2015 would suggest that Falmouth has fared better than Gunnislake in the period following the improvement to rail services in Falmouth, with an 8% growth in the number of employees in Falmouth, compared to a 15% drop in Gunnislake. It is possible that these differential trajectories show a relationship between service improvements in Falmouth and greater numbers of employees, though this is hard to disaggregate from the wider economic context.

Sectoral composition of employees

5.26 Falmouth's economy, based on the number of employees, appears to have performed especially strongly within the Accommodation and Food sector, a sector closely linked to the tourism industry, and stands in contrast to the economy of Gunnislake, which has experienced significant falls in the Accommodation and Food sector.

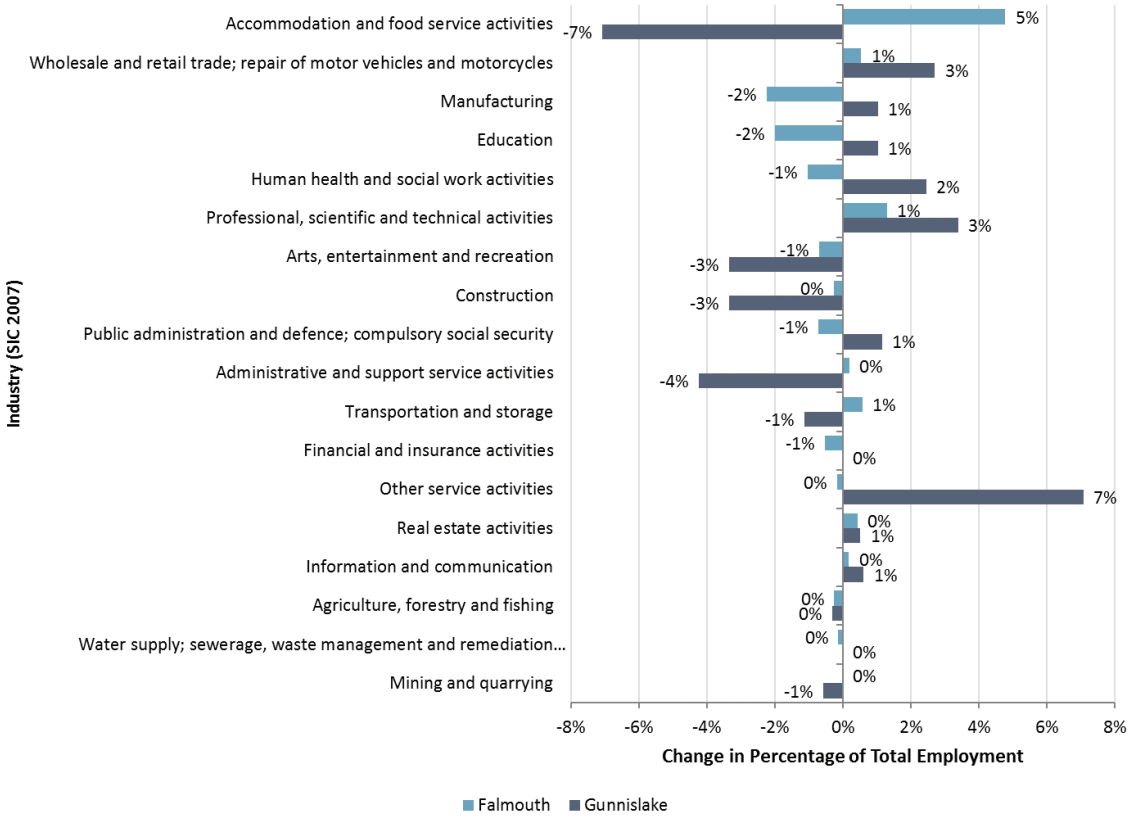
5.27 Figure 5.6 shows this divergence between Falmouth and Gunnislake with respect to the number of employees in the Accommodation and Food sector after the treatment year (2010). Both Falmouth and Gunnislake saw a similar rise on this measure between 2003-2010, but after 2010 to 2015 Falmouth continued to see an increase on this measure at roughly the same rate, while Gunnislake saw the number of employees in this sector contract significantly.

Figure 5.6: Number of Hotels, Restaurants, and Retail employees in Falmouth and Gunnislake, 2003-2015



Source: Annual Business Inquiry/Business Register and Employment Survey (from Cambridge Econometrics)

Figure 5.7: Change in sectoral composition of employees, 2008-2015



Source: Annual Business Inquiry/Business Register and Employment Survey (accessed 2017)

5.28 Figure 5.7 places this change in the context of other sectoral changes by local employees, and indicates that the percentage of the workforce within the Accommodation and Food sector increased by 5% in Falmouth, compared to a 7% fall in Gunnislake. However, it is worth noting that the sample size for this sector in Gunnislake is very small, and as such, this finding should be treated with caution.

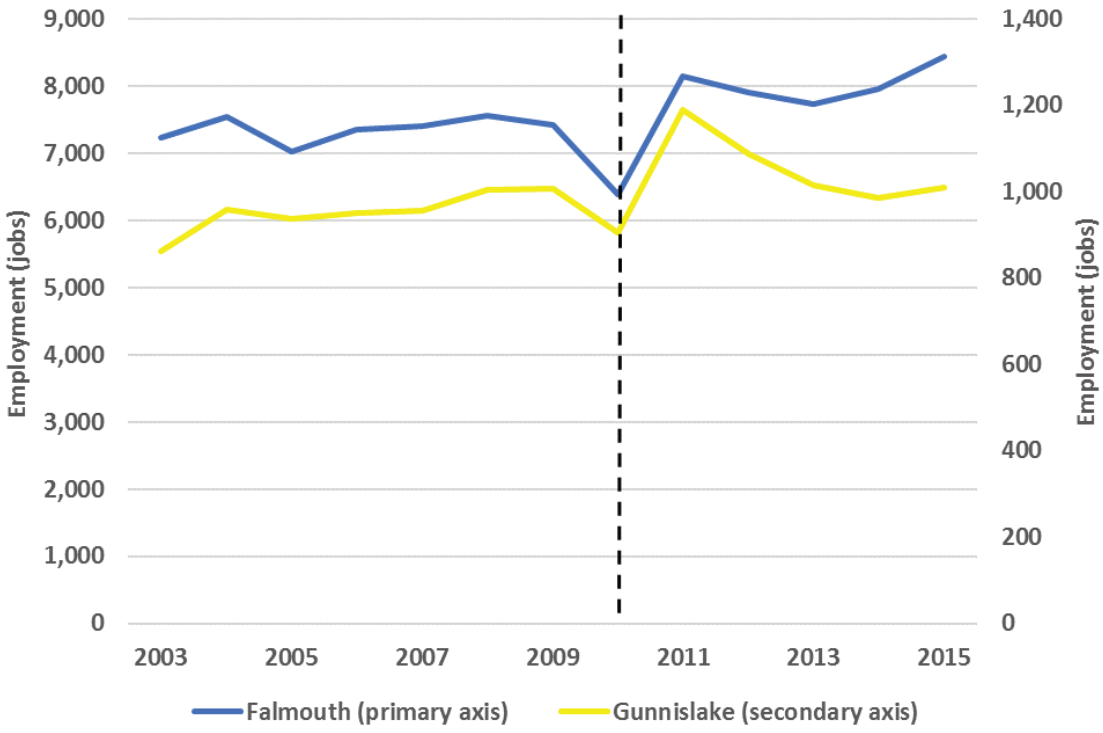
5.29 It appears likely that these changes in the sectoral composition of employees reflect the growth and decline of the tourist sector in the two areas. While the rail improvements at Falmouth may have supported the reliance of the towns' tourist economy in comparison to Gunnislake, it is difficult to isolate this from wider local trends within the South West tourist economy.

Impact on local business units and employment

5.30 Using the BSD, econometric analysis was undertaken which allowed for the impacts of the improvement in rail service frequency in Falmouth on levels of employment to be assessed. This dataset examines local business units – individual business sites or workplaces – as sources of local employment.

5.31 Figure 5.8 below shows the levels of local business unit employment in Falmouth and Gunnislake, with the treatment year indicated.

Figure 5.8: Total employment in Falmouth and Gunnislake, 2003-2015 (local business units analysis)



Source: BSD (from Cambridge Econometrics)

5.32 The econometric analysis suggests that, since 2010, local business unit employment within Falmouth has broadly exhibited clear growth, despite an initial fall during the late 2000s recession. While Gunnislake followed a similar trend during the recession, local unit employment has fallen since 2011/12. Indeed, the reported effects using the D-i-D approach (while not statistically significant) are negative, since the gap between employment in the two areas narrowed in the early years following the intervention in 2009 (with data thus available from 2010), even though Falmouth employment growth strongly outperforms Gunnislake towards the end of the post-treatment period.

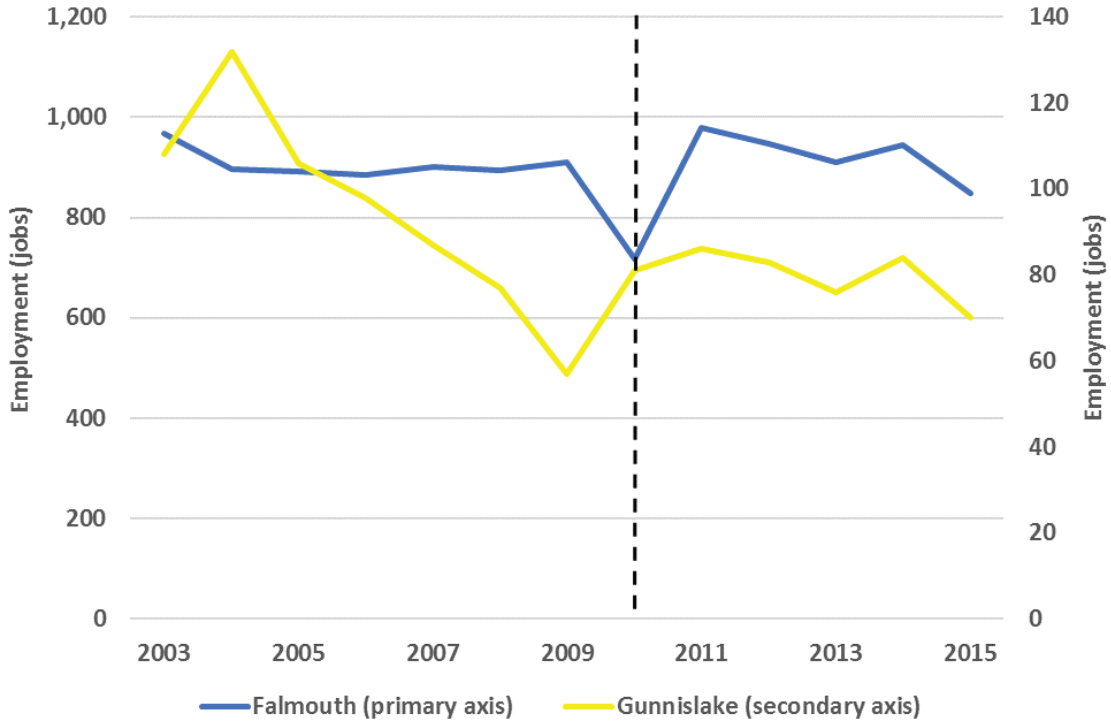
5.33 It is possible, though not conclusively proven by the data, that the divergence in local business unit employment observed towards the end of the period is linked to the improvement to rail service patterns in Falmouth and the lack of this treatment in Gunnislake. It would not be expected that the benefits of the improvement would emerge immediately, and the steadily

increasing difference between the two areas in terms of local business units employment may reflect this gradual impact.

Sectoral analysis of local business unit employment

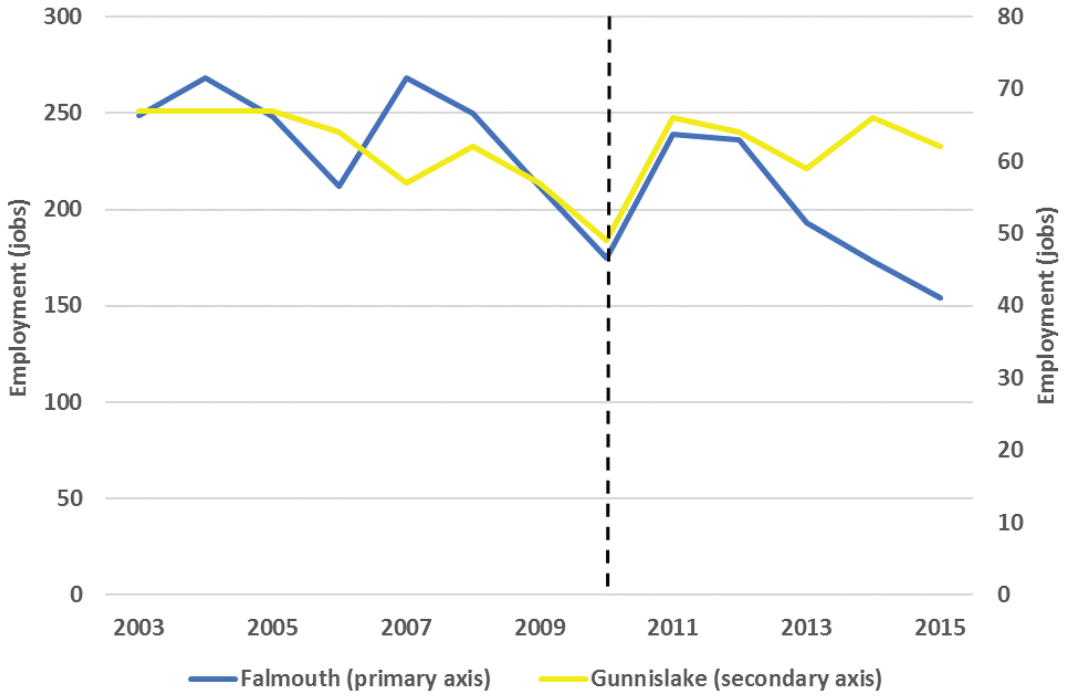
5.34 Figure 5.9 and Figure 5.10 represent the data on micro local units employment in Falmouth and Gunnislake, for the Hotels, Restaurants and Retail and Wholesale, Transport and Storage sectors respectively. These sectors map onto two of those outlined in the pre-intervention context.

Figure 5.9: Total small micro and micro local units employment in Falmouth and Gunnislake in the Hotels, Restaurants and Retail sector, 2013-15



Source: BSD (from CE)

Figure 5.10: Total small micro and micro local units employment in Falmouth and Gunnislake in the Wholesale, Transport and Storage sector, 2003-15



Source: BSD (from CE)

5.35 The data above shows sectoral micro local units employment. It appears to reflect the changing fortunes of the tourist industry in Falmouth and Gunnislake, a theme which has been mentioned above. Within Falmouth, employment within Hotels, Restaurants and Retail (Figure 5.9) appears notably more resilient than Gunnislake; in fact, Gunnislake's micro local unit employment in Hotels, Restaurants, and Retail (those firms with less than 10 workers) appears to show significant, long-term decline prior to the recession. The issue that thus emerges is that, as the trends were diverging prior to the intervention, it is hard to attribute the shift in micro local units employment to the rail intervention.

5.36 On the other hand, Wholesale, Transport and Storage (Figure 5.10) appears to show a more consistent trend between the two areas. It is possible that the decline in Falmouth post-2013 may be linked to a weakening of the maritime industry, which is traditionally a major sector in the Falmouth economy.

5.37 It is difficult to identify any specific impacts of the rail investment on these sectoral employment patterns, although it is possible that the improved rail accessibility of Falmouth could have played a role in the strength of its tourist sector following the recession. The small sample sizes in this study mean that it is not possible to conclusively state if any of these effects are statistically significant.

Summary

5.38 The evidence regarding Falmouth, relative to Gunnislake, is mixed. The number of total employees in Falmouth, as measured through the BRES data, appears to have increased

despite the coincident recession, while in Gunnislake this number has fallen. However, the D-i-D analysis results cloud this picture, highlighting a more shared trend until the later period of the study.

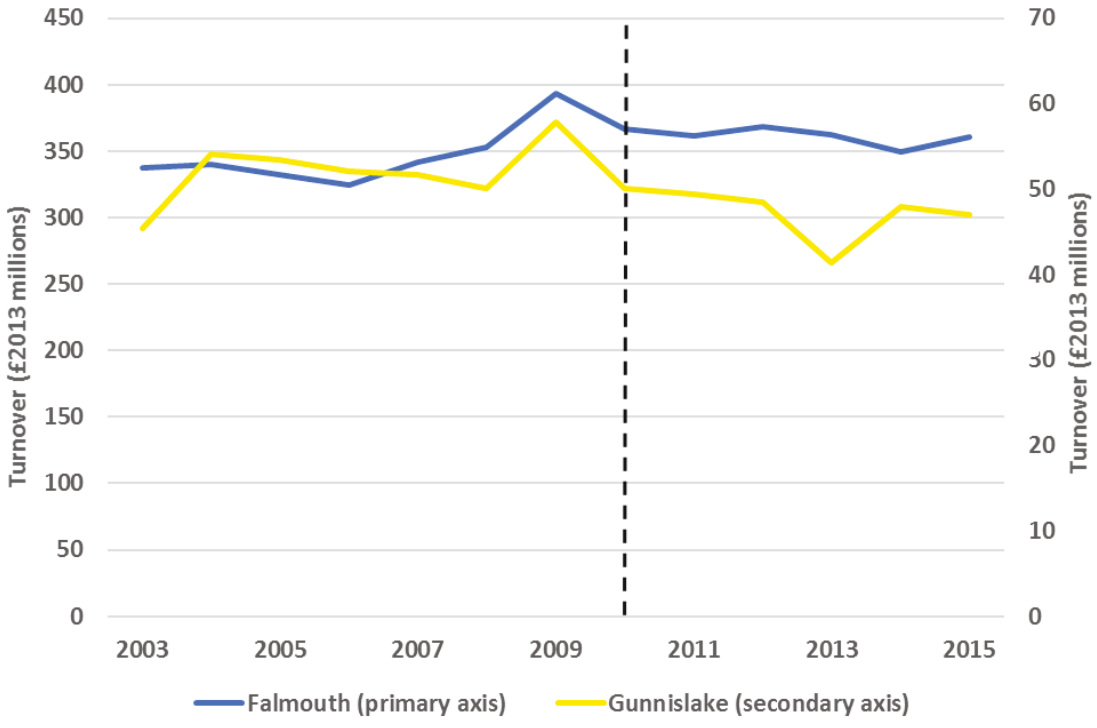
5.39 The tourist industry specifically in Falmouth, as measured through the percentage of employees working in the Retail, Accommodation, and Food sectors, appears to have grown since the recession. Again, the opposite pattern is evident in Gunnislake. However, it is difficult to ascribe this to the rail investment at Falmouth. While it is possible that the improved rail connectivity has supported the tourist industry in the town, it is difficult to disaggregate any impact from that of the late 2000s recession, which dampened growth across the country and which appears to have been especially severe in Gunnislake.

Productivity effects

Firm turnover

5.40 The analysis of turnover is illustrated by Figure 5.11, which provides the data representing the turnover of enterprises (as opposed to local business units, as in the previous section). An enterprise is defined as the overall business made up of individual sites or workplaces and is the smallest combination of legal units (based on VAT and or PAYE records) with a certain degree of autonomy. In addition, the enterprise data contains a measure of turnover not available in the local unit data. The enterprise level of disaggregation provides a useful, disaggregated measure of turnover. However, it is important to note that where an enterprise has several local units, the location of an enterprise is generally the main operating site or the head office. Hence, for regional analysis, the sample may include data for local units outside of Falmouth if their head office/main operating site is located within Falmouth. Likewise, data for some local units in Falmouth may be excluded if their head office/main operating site is located outside of Falmouth. Since 2010, the turnover of enterprises has fallen in both Falmouth and Gunnislake (likely due the late 2000s recession), but has fallen significantly more within Gunnislake over the same period.

Figure 5.11: Total turnover of enterprises in Falmouth and Gunnislake, 2003-2015



Source: BSD (from Cambridge Econometrics)

5.41 The evidence in Figure 5.11 shows that the effect of the treatment appears to be statistically significant, and based on the stated importance of rail for local business outlined in Figure 5.3, it seems plausible that the rail improvements have contributed to this differential. Many businesses report that rail is important to them when it comes to customers accessing their

business, and the relationship between customer access and turnover is particularly important in tourist-focused businesses such as those in Falmouth.

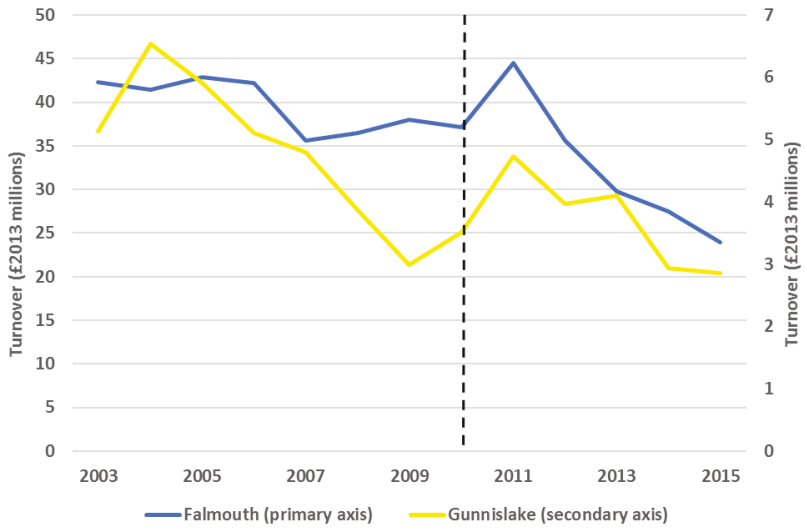
5.42 Considering the simultaneous onset of the recession, it appears as though the Gunnislake economy was hit worse than that of Falmouth, as evidenced by the steeper decline in firm turnover, and it is possible that the increased accessibility of Falmouth for tourists due to the rail intervention contributed to its resilience.

5.43 In terms of the statistical significance of this effect, the trends between the two prior to the intervention were comparable enough to merit D-i-D analysis. The econometric analysis suggested that there was a statistically significant effect on levels of firm turnover, with the benefit to Falmouth's enterprise turnover being 12.8% in the short term (2 years) and increasing to 14.7% over the long term (6 years).

Sectoral distinctions in firm turnover

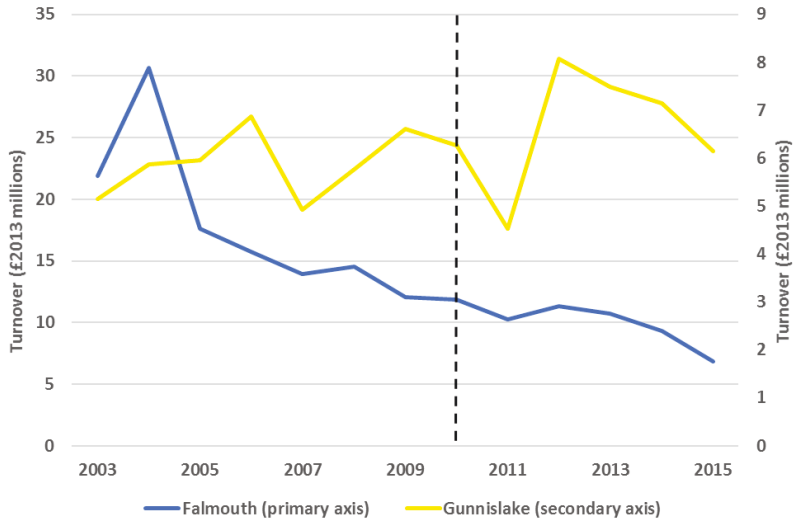
5.44 Figure 5.12 and Figure 5.13 highlight the results for firm turnover in Falmouth and Gunnislake in the Hotels, Restaurant, and Retail and Wholesale, Transport and Storage sectors respectively. This data is restricted to micro and very small enterprises.[12]

Figure 5.12: Total small micro and micro enterprise turnover in Falmouth and Gunnislake in the Hotels, Restaurants and Retail sector, 2003-15



Source: BSD (from Cambridge Econometrics)

Figure 5.13: Micro and very small enterprise turnover in Falmouth and Gunnislake, 2003-15 for Wholesale, Transport and Storage



Source: BSD (from Cambridge Econometrics)

[12] We present micro size class data rather than total data because in this instance the totals data tends to be dominated by the presence of relatively few larger entities, thus skewing the trends.

5.45 Evidence from enterprise turnover within these two sectors illustrates a complex trend, which only partly correlates with the employment data outlined earlier. Turnover within micro and very small enterprises in the Hotels, Restaurants and Retail sector appears to exhibit a similar, declining trend in both Falmouth and Gunnislake, accelerating in the post-recession period. Combined with the employment data, this could indicate a changing dynamic for firms – turnover reducing because of the recession, but employment being more resilient. This trend was observed more widely across the economy. Again, however, the divergences in trends prior to the intervention mean that D-i-D analysis is not meaningful in either sector at the micro and very small enterprise level.

5.46 The trend referenced above appears likely as reduced turnover has not been observed to translate into job losses in Falmouth, unlike in Gunnislake. Within the Wholesale Retail, Transport and Storage sector, meanwhile, there are further differences.[13] In Falmouth the long-term decline in turnover appears to predate the recession, and is likely to reflect long-term changes in the maritime sector, unrelated to the rail improvements. The same does not hold for Gunnislake, which is inland and has a far smaller transport sector. It should be stressed that the small sample sizes – combined with data only being available for micro and very small enterprises, means it is difficult to establish firm conclusions from these results.

Summary

5.47 There is insufficient evidence to claim that the improvement to rail service patterns in Falmouth has resulted in a productivity gain in the area. The local business unit employment data and the enterprise turnover data appear to correlate poorly, indicating a decline in all enterprise turnover after 2010, despite rising employment in Falmouth, although it is worth noting that this decline was more significant in Gunnislake than in Falmouth. However, the D-i-D analysis does indicate the possibility that the rail intervention did offer a protective effect to Falmouth's economy, as the divergence in enterprise turnover between Falmouth and Gunnislake following the intervention proved statistically significant. Similarly to other areas of analysis in this chapter, it is difficult to disaggregate the impact of the rail investment at Falmouth from the wider national economic context of recession which may have been experienced differently in Falmouth compared to Gunnislake for reasons that are unconnected to their rail services.

Table 5.2: Summary of econometric analysis findings

Unit of observation	Outcome variable	Sectoral analysis	Common trend?	Effect after intervention?	Figure	Comment
Local business units	Employment	All	Yes	Yes	5.8	The effect was not statistically significant

[13] While there is a danger in that employment and turnover were measured using different units – the units for measuring employment in each area were local business units, and those for turnover were enterprises – the geographical reference area was the same, and the only complication would emerge if some turnover was wrongly credited (or not credited) to Falmouth or Gunnislake due to the business unit not having the level of autonomy necessary to qualify as an "enterprise". The variables were measured through different units as turnover data is not available at the local business unit level.

Unit of observation	Outcome variable	Sectoral analysis	Common trend?	Effect after intervention?	Figure	Comment
Local business units	Employment	Hotels, Restaurants and Retail	No	n/a	5.9	While it is evident that micro local units employment in Hotels, Restaurants and Retail has declined further in Gunnislake, the trends were diverging prior to the intervention
Local business units	Employment	Wholesale Retail, Transport and Storage	No	n/a	5.10	The figures for the two towns track each other closely 2009-2012, before diverging significantly. However, no D-i-D analysis could be attempted due to the lack of a common trend
Enterprises	Turnover	All	Yes	Yes	5.11	The effect was statistically significant at the 10% level
Micro & very small enterprises	Turnover	Hotels, Restaurants and Retail	No	n/a	5.12	Clear decline in both Falmouth and Gunnislake, but not a common trend
Micro & very small enterprises	Turnover	Wholesale Retail, Transport and Storage	No	n/a	5.13	Clear decline in both Falmouth and Gunnislake, but not a common trend

Table 5.3: Results of Difference-in-Difference analysis for Falmouth employment, fixed effects model, local units, 2003-15

	Model 2a Medium-term effect, (5 years after station opening)	Model 2b Short-term effect, (2 years after station opening)
Disaggregation	All sectors	All sectors
Reported effect	-0.7%	-1.5%
P-value	0.612	0.354
Standard error	0.015	0.016
Falmouth observations	11,254	8,652
Gunnislake observations	3,026	2,337
Total observations	14,280	10,989

Notes: Data is at enterprise level, all models estimated with local unit fixed effects,

Source: BSD (ONS) and Cambridge Econometrics

Table 5.4: Results of Difference-in-Difference analysis for Falmouth enterprise turnover*, fixed effects model, enterprises, 2003-15

	Model 1a Medium-term effect, (5 years after station opening)	Model 1b Short-term effect, (2 years after station opening)
Disaggregation	All sectors	All sectors
Reported effect	12.8%	14.7%
P-value	0.000	0.000
Standard error	0.031	0.035
Falmouth observations	8,694	6,706
Gunnislake observations	2,721	2,092
Total observations	11,415	8,798

Notes: Data is at enterprise level, all models estimated with enterprise fixed effects,

*Turnover deflated to 2013 prices using a GVA deflator

Source: BSD (ONS) and Cambridge Econometrics

6 Conclusions and Scope for Future Work

6.1 This chapter summarises the transport and economic impact of the improved service at Falmouth, drawing from the content in Chapters 4 and 5, and comments on the scope for future work.

Transport impacts

6.2 ORR station usage data shows that the investment at Falmouth was associated with a significant increase in local rail patronage, which more than doubled following the improvement in frequency of service in 2009. Rail trips appear to be locally focused, with the majority of trips either to Truro or elsewhere along the Falmouth Branch Line. In particular, there was a notable rise in trips between Falmouth Town or Falmouth Docks and Penryn.

6.3 Station survey evidence highlights that a high proportion of respondents report increasing their use of rail following the investment, reflecting the ORR data. Most of these journeys appear to be newly generated through a mixture of existing passengers making more journeys and new passengers, including some recently moving to the area. However, it is also possible that a small proportion of trips have been captured from car.

6.4 Leisure trips, as opposed to commuting, account for a larger share of rail usage compared to the national average, and only a small proportion of local residents regularly (at least monthly) use rail, which potentially limits the economic impacts of the investment. It is worth noting that a significant proportion (around one third) of station users at Falmouth Town and Falmouth Docks are full time students reflecting the access to the Penryn Campus of both Falmouth and Exeter Universities offered by the Falmouth Branch Line.

Economic impacts

6.5 The eight year period following the rail investment at Falmouth has granted sufficient time to identify possible impacts of the investment on the Falmouth economy, notably within the tourism sector. However, it has been difficult to prove that these effects are due to the investment, in part due to the Great Recession.

Investment (residential)

6.6 A substantial proportion of residents (29% overall and 39% of those moving to the area since 2010) view rail connectivity as an important consideration when choosing where to live. Population growth has been broadly stable in both the pre- and post-intervention period, but compared with Gunnislake, growth has been considerably more robust. This suggests that the

transport intervention may have contributed to the resilience of the Falmouth economy in terms of its attractiveness as a place to live.

Investment (business)

6.7 It is possible, albeit difficult to prove, that the investment has led to the town becoming a more attractive place for business investment, specifically in the tourist sector. Satisfaction with rail services amongst local businesses is high and 40% of businesses view rail as important for customer access, which is likely to be largely in relation to the tourism market. This contrasts with lower levels of stated levels of the importance of rail connectivity in relation to client and supplier access, or distributing goods. This may indicate that businesses within the tourist sector have disproportionately benefitted from improved rail connectivity to Falmouth.

6.8 It is also worth acknowledging that any additional investment in Falmouth may be displaced from other locations in Cornwall, thus benefitting Falmouth at the expense of other towns.

Tourism

6.9 The station user surveys show that approximately a fifth of users are visitors or tourists, highlighting the importance of this sector. The surveys also provide some evidence that the rail investment may have improved the attractiveness of the area to tourists, with 38% of tourists intercepted at one of the stations in Falmouth saying that the rail services were a very or fairly important influence on where they chose to stay.

6.10 This may be more of a factor in their decision to visit Falmouth over a non-rail connected destination in the same area (e.g. Mevagissey), than a determinant of the region in which they decide to stay.

Employment

6.11 The evidence for a direct impact on local employment is mixed. While the number of total employees in Falmouth, as measured through the BRES data, appears to have increased despite the coincident recession, in contrast to Gunnislake, this is only partly reflected within the D-i-D analysis. However, tourism in Falmouth (as measured through the percentage of employees working in the Hotels, Restaurants and Retail sectors) appears to have grown since the recession in comparison to Falmouth, and hence it is possible that the improved rail connectivity has supported the tourist industry in the town. While it is of course difficult to disaggregate any impact from that of the late 2000s recession, which dampened growth across the country and which appears to have been especially severe in Gunnislake, it appears plausible that the improved rail connectivity allowed Falmouth's significant tourism sector to avoid some of the worst impacts of the recession.

Productivity

6.12 There is no conclusive evidence to suggest that the improvements at Falmouth have resulted in a productivity uplift for the local economy. The local business unit employment data and the enterprise turnover data appear to correlate poorly, indicating a decline in all enterprise turnover after 2010, despite rising employment in Falmouth, although it is worth noting that this decline was more significant in Gunnislake than in Falmouth, and may also suggest that the economy in Falmouth has been more resilient to the economic downturn than in Gunnislake.

Scope for Future Work

Future service enhancements

6.13 In 2014, a £146.6m package of rail improvements for Cornwall and the South West was announced, with funding provided by DfT, Cornwall Council and the Cornwall and Isles of Scilly Local Enterprise Partnership, Network Rail and train operator First Great Western[14]. The funding is expected to:

- upgrade the Night Riviera Sleeper trains, which run between Penzance and London (now almost complete);
- expand the Long Rock train maintenance site at Penzance to maintain Cornwall's sleeper trains (completed in December 2017); and
- deliver signalling improvements on the Cornish Mainline west of Totnes between Truro and Camborne in both the up and down directions by the end of 2018 (being advanced by 5 years), to provide faster journeys between Penzance and Totnes (initial stage completed by Network Rail).

6.14 The Cornish Mainline resignalling is expected to reduce signalling headways and allow for the potential introduction of half-hourly services on the Cornish mainline, which connects directly to seven of the eight largest towns in Cornwall and runs between Penzance and Plymouth. The signal improvements are expected to boost the local economy and improve connectivity, and could have a peripheral impact on Falmouth. This service will be operated by HSTs with four coaches modernised with disabled facilities, power doors, and retention toilets, the first of which have already entered service.

6.15 Great Western Railway, who operate the franchise on the Great Western network until April 2020, have already stated to introduce Hitachi AT300 bi-mode rolling stock on the Cornish Mainline. When the new timetable is introduced (not expected to be before December 2019, the trains are expected to reduce fastest journey times from London by 6 minutes to Plymouth and 14 minutes to Penzance, improve average journey times on the route by reducing the differential between the fastest and slowest journey times, and as above, could have an impact on long distance travel to and from Falmouth.

6.16 These improvements are likely to further enhance the attractiveness of rail travel within Falmouth, but this benefit is likely to be focused purely on longer-distance trips, which involve connections onto the Cornish Main Line at Truro. Since the ORR origin and destination data in Chapter 4 highlighted how only a small proportion of trips from Falmouth include such connections, the overall impact on rail patronage is likely to be limited, and hence likely to deliver negligible further economic impacts – though this conclusion is contingent on travel behaviour remaining similar despite the improvements.

6.17 Combined with the fact that eight years that has passed since the 2009 improvements, any transport impacts of the improvements assessed in this report are now likely to have been felt, which is reflected in the slowing rate of rail patronage growth outlined in Chapter 4. While the improved rail connectivity at Falmouth is likely to continue to benefit the town's tourist

[14] The details in this section are correct at time of writing. Actual service patterns and improvements are to be confirmed and may change.

economy into the future, it is unlikely that this effect will become significantly more important in the future, and hence there is likely to be little merit in further follow-up work on this particular case study.

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SDG project/proposal number	Client contract/project number
22961201	

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Version control/issue number	Date
Version 4	January 2018