

The eastward expansion of Bridgwater following the opening of the Bristol and Exeter Railway to the town in 1841

The essay looks at the development of Bridgwater, principally between 1841 and 1861. It considers the impact of the railway on an area around St. John Street which led from the edge of the urban area to the new railway station. The area developed mainly to house workers in the railway company's carriage workshops and an adjoining iron foundry. Census records imply that many of the new residents had migrated from other parts of the country even though metal trades had been established locally before the coming of the railway.

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Table of contents

1. Introduction	page 2
2. Historical context	page 2
3. Physical context	page 3
4. Demographic change in Bridgwater and its hinterland	page 5
5. The Bristol and Exeter Railway	page 6
6. New roads and houses	page 8
7. Employment in the St. John Street area	page 12
8. Migration patterns	page 15
9. Conclusions	page 16
10. Notes	page 19
11. Bibliography	page 19

Appendix 1, occupational groups derived from census returns

Pictures

1. Bridge over the Parret in 1865	page 4
2. St. John Street in 1865	page 11

Tables

1. Population change 1801 to 1901	page 6
2. Employment in the St. John Street area, 1841, 1851 & 1861	page 13
3. Three selected occupational groups analysed by place of birth	page 15

Maps

1. Bridgwater in 1820, extract from C Greenwood's map	page 5
2. Map 1 with new roads constructed 1841 to 1881	page 10

1. Introduction

This essay will look at the way in which Bridgwater expanded in an easterly direction at the time of the opening of the Bristol and Exeter Railway. It will look at the pattern of that expansion using maps, census information and other local historical sources and consider the impact of the railway on the local area in terms of housing and employment.

After outlining the historical and physical context of the town, demographic changes during the 19th century will be examined. The development of the area between the old town and the railway from 1841 to 1881 will be analysed to assess the scale of development, what new employment was created and where the new residents came from.

The contribution made by existing technologies to the development of the town in this particular area will be examined. Railways were being built across the country at this time and despite escalating land prices the aim of railway companies was to reach the centres of towns and cities. In Bridgwater's case the railway station was built about a mile from the centre of the town and on the "wrong" side of the river.

2. Historical context

The town of Bridgwater had existed since at least 1200CE when its first charter was granted by King John. That charter allowed the lord of the manor, William Brewer, to build a castle and levy tolls for fairs, markets and the crossing of the bridge over the river. For 600 years the town grew around the castle and market place on the west bank of the tidal River Parrett. The river runs into the Bristol Channel and considerable sea-borne trade grew up, not just with the ports of the channel and the River Severn, but also with Ireland, France, Portugal and North America. As a consequence, by the start of the nineteenth century, a small ship-building industry existed with ancillary trades such as rope-making, sail-making and an iron foundry.

3. Physical context

The town developed at the lowest practical crossing point of the River Parrett which shares the considerable tidal range of the Bristol Channel. This allowed sea-going vessels to reach quays built on the banks of the river adjoining the bridge. The bridge also acted as a barrier to further progress up-river so the town became a trans-shipment point with barges travelling inland as far as Langport, Ilchester and Taunton. In 1798 the medieval stone bridge with three arches was replaced by one of cast iron built by Abraham Darby of Coalbrookdale, the first such bridge outside of Shropshire. Although very elegant the bridge's approaches were too steep for the increasing traffic on one of the busiest roads to the south west and it was replaced in 1883.



picture 1 - the bridge over the Parret in 1865 [Squibbs History of Bridgwater no.46]

The medieval town had developed on a ridge of high ground which extended from the Quantock Hills in the west as far as the west bank of the river. To the north, east and south, the alluvial flood plain of the river necessitated the construction of causeways to allow roads to reach higher ground such as the Polden Hills where a ridgeway gave access to Glastonbury, Wells, Bristol and Bath.

The only development on the east bank of the river was along the first few hundred yards of the causeway to the fortified East Gate and north and south along the raised river bank. By 1800 ship-building and brick-making had developed as sources of employment in this area which had acquired the name Eastover, probably from the Anglo-Saxon word *ufer*, meaning “bank”. Greenwood’s map of 1822 clearly shows how most of the town was situated on the west side of the river.



map 1 - extract from Christopher Greenwood's map of Somerset, 1820, scale 1 inch to 1 mile, reprinted by Somerset Record Society, 1981

4. Demographic change in Bridgwater and its hinterland

The first full census of Great Britain in 1801 gives Bridgwater’s population as 3,634. A hundred years later in 1901 with only minimal boundary changes this had grown to 14,900.

In order to compare this rate of growth with that of the rural area immediately surrounding the town, a group of thirteen parishes within approximately a five-mile radius

has been chosen. The comparison of the population of this area and Bridgwater between 1801 and 1901 is given in table 1.

The group of rural parishes continued to grow during most of the nineteenth century, levelling out in the last 20 years. Bridgwater's population eventually passed that of its rural hinterland by 1841, growing by an average of just over 3% a year although not at a constant rate.

table 1 - population changes 1801 to 1901		
Census year	Bridgwater	Rural area
1801	3,634	6,727
1811	4,911	7,362
1821	6,155	8,485
1831	7,807	9,653
1841	10,450	9,939
1851	10,935	10,796
1861	12,120	10,835
1871	12,636	10,931
1881	12,704	10,612
1891	13,246	10,127
1901	14,900	10,156
<i>Rural area parishes : Bawdrip, Cannington, Charlinch, Chedzoy, Chilton Trinity, Durleigh, Enmore, Goathurst, North Petherton, Puriton, Spaxton, Wembdon and Westonzoyland</i>		
<i>Source : Victoria County History , Somerset, vol.II</i>		

5. The Bristol and Exeter Railway

The Act of Parliament for the construction of the railway from Bristol to Exeter was passed in May 1836 but contracts for construction were not let until the Spring of 1838. The Railway Company was nominally separate from the Great Western Railway but before the line opened for business an agreement was made under which the GWR operated trains for the first six years until the Bristol and Exeter acquired its own locomotives and rolling stock in 1847. One of the new company's directors, John Browne, was a Bridgwater businessman, owning several brick and tile works in the town.

The railway was completed as far as Bridgwater and opened to traffic on Tuesday 1 June 1841. For the next year it was the terminus of the line because of engineering problems. To the south of the station a bridge over the river was needed and a design by I K Brunel's using a masonry arch even flatter than his Maidenhead Bridge on the GWR suffered from subsidence and had to be replaced by a timber structure.

The railway station itself had been planned for the centre of the town close to the river bridge but in the event it was built a mile to the east of the bridge in open fields. Jarman, in his "*A History of Bridgwater*", states that the land for the railway station was given by a Bristol-based Quaker charity, the Sidcot Trust, which was a major landowner in the area and "*They afterwards divided their pasture into building lots, and quickly sold or let the same, thereby greatly increasing the income of the charity.*" It may be significant that the site chosen for the station was just outside the Borough boundary and hence the jurisdiction of the Town Council.

Once the Bristol and Exeter took over running the line in 1847 it selected Bridgwater as the site for its own carriage and wagon works, the town being roughly at the mid-point of the line. The railway's Chief Engineer, C H Gregory is quoted as saying it was "*laid out so as to form the nucleus of a complete Carriage and Engine Establishment*" (MacDermot, p.81-2). Adjoining the railway company's carriage and wagon works, which opened in 1848, a large iron foundry was built at about the same time by the firm of Hennett, Spink and Else. Although principally supplying the needs of the railway company the foundry is said to have supplied parts for Brunel's railway bridge at Saltash near Plymouth (*Porter, Bridgwater Industries Past and Present*) and the Hampton Court Bridge over the Thames in 1864 (*Squibbs, History of Bridgwater*).

Two further factors in the choice of Bridgwater for this works were probably the town's existing metal-working industry and the port facilities with easy access across the

Bristol Channel to the coal and iron resources of South Wales and the Forest of Dean. One Bridgwater firm, Sully's, owned collieries in the Forest of Dean, cargo ships and its own railway wagons.

Although successful while the Bristol and Exeter railway operated as an independent entity, the size of the works did not compare with those developed by the Great Western Railway at Swindon and it was not surprising that when the GWR took over the Bristol and Exeter in 1876 the Bridgwater works was closed.

6. New roads and houses

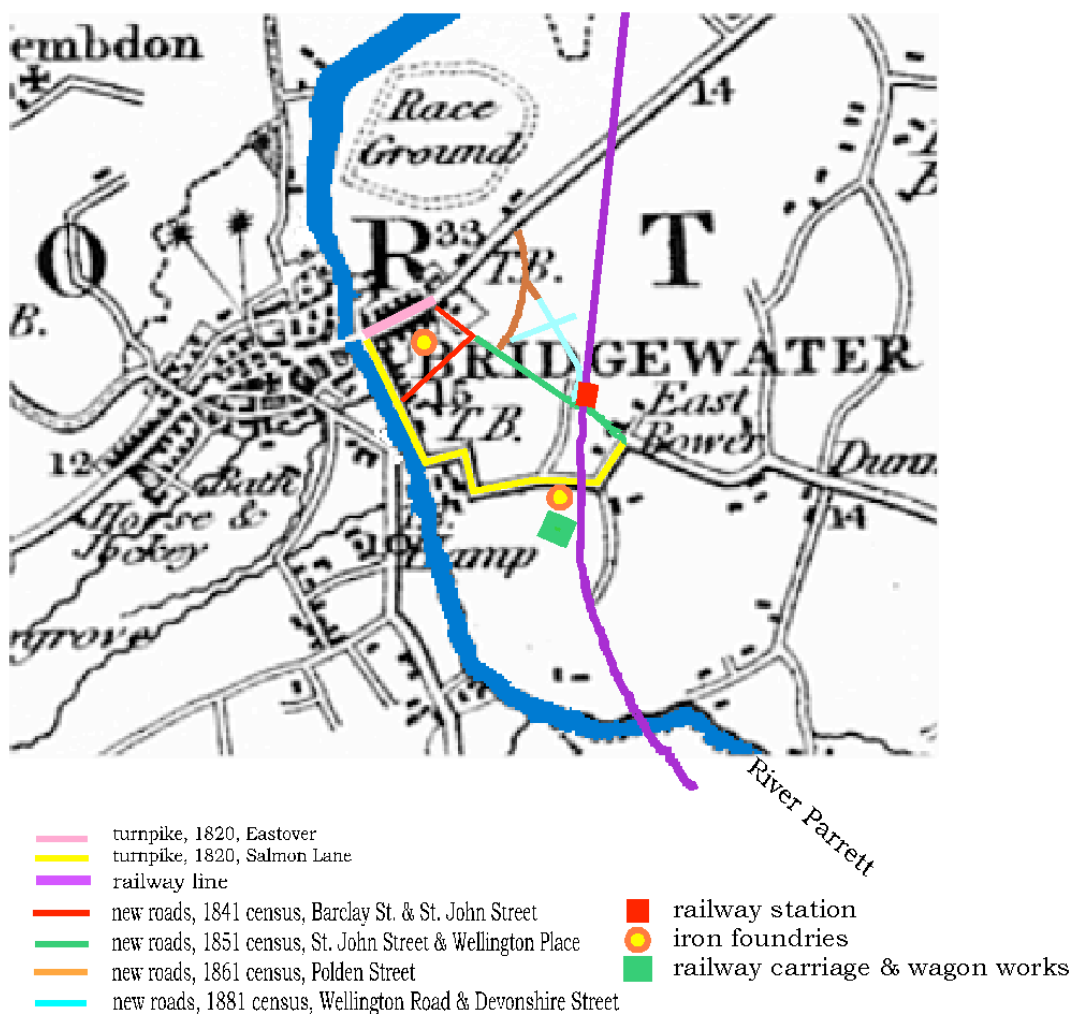
As Greenwood's map of 1820 shows (map 1) the only streets which had developed on the east bank of the river were Eastover, the first part of the turnpike road to the north east, and Salmon Lane, the turnpike to the south east. Most of the land to the east of the town was between 15 and 25 feet above sea level. The River Parrett drains a large area of south and west Somerset and on many occasions in earlier years a combination of high tides and outflow of rainfall caused serious flooding to such land. The long history of man's efforts to prevent flooding in the area is well told in Michael Williams, *The Draining of the Somerset Levels*. At the end of the eighteenth century a new drainage channel, the King's Sedgemoor Drain, was excavated. This greatly assisted the prevention of flooding and allowed large areas of land to support more intensive farming. A cut made in the river allowed a large meander to the north of Bridgwater to be filled in and reclaimed. A new turnpike road across this land reduced the distance to Bristol by several miles.

Once the site for the railway station was established a new road was planned which ran in almost a straight line from the site of the town's medieval east gate to the railway station. The new road, named St. John Street after a medieval hospital in the area, was

continued for a short distance beyond the railway station joining Salmon Lane, making a more direct turnpike road to Langport and Yeovil.

Map 2, based on Greenwood's 1820 map shows the new roads added to the area identified from census records between 1841 and 1881. The line of the railway and the railway station are also marked, together with the sites of the two iron foundries. The foundry nearest the bridge is recorded in Pigot & Co.'s National Commercial Directory of 1830 in the ownership of Brown, Watson, Murch and Co., pre-dating the railway by at least 10 years. It is recorded in later directories as Murch and Culverwell.

map 2 - Bridgwater, 1820 by Christopher Greenwood with new development between the river and railway



The 1841 Census shows that about 40 houses (57 households) had been built at the end of St. John Street, nearest the town and a further new street, Barclay Street, with 90 houses was complete¹.

By 1861, however, St. John Street was complete with almost 200 houses (270 households) and most of Polden Street, 95 houses (91 households)³.

The houses were all two-storey terraces of locally-made red brick with tiled roofs. On closer inspection the houses within terraces are not identical, with changing roof lines and door and window styles. Groups of between three and six houses of a style seem to be the norm but linked together in continuous terraces. This would seem to bear out Jarman's reference (*Ch.5 above*) to building plots being let or sold. The potential for developing small businesses was, however, recognised by a number of houses having a wide archway which gives access to the rear of the dwelling for, say, a horse and cart. "Squibbs History of Bridgwater" shows an example in a photograph of St. John Street from 1865.



picture 2 - St. John Street in 1865 [Squibbs History of Bridgwater, no.165]

The census information gives many examples of trades such as stonemasons, carpenters and plumbers who were thus enabled to live close to their place of work.

Other buildings were incorporated into the streets – the Mariners’ Chapel bears the date-stone 1837 and 8 pubs appear in the 1861 census for St. John Street³. Other buildings were fitted in behind the rows of houses such as the Roman Catholic Chapel of 1848 and Eastover School in 1873. A substantial “Railway Hotel” was built beside the railway station but, Jarman relates, was still under construction when the railway opened.

7. Employment in the St. John Street area

The censuses of 1841, 1851 and 1861 give a clear picture of the growth in this area of the town. An analysis of the occupations of the inhabitants indicates the sources of employment although information on exactly where they worked and for whom is not given.

By 1851 more precise occupations are recorded and it becomes possible to get a broad idea of employment within the area.

Accounts of Bridgwater's history paint a picture of a town providing a market for the agricultural produce of the immediate rural area from at least the beginning of the 13th century when the first charter was granted to William Brewer by King John. Brewer was licensed to build a castle and levy tolls on users of the bridge over the River Parrett and on trade at the markets and fairs. Despite the tortuous course of the river, its tidal range of about 25 feet and the resulting sandbanks a considerable shipping trade developed. One of the biggest exports from the eighteenth century onwards was bricks and tiles. The alluvial clay within a quarter of a mile on each side of the river proved the ideal material. The Victoria County History quotes Murray's Handbook of 1856 for the annual output of 8 million bricks, worth £12,000 to £13,000. This would seem to suggest that a large proportion of the population might be employed in agriculture, shipping or brickmaking.

Table 2 shows the occupations of the residents of the St. John Street area in the three census years.

table 2 - employment in the St.John Street area, 1841, 1851 & 1861				
	year	1841¹	1851²	1861³
	households	57	134	357
	employed people	98	214	616
<i>occupational group</i>				
	professional, religious & government	4	6	22
	building trades	24	21	71
	maritime	9	17	34
	metal trades	10	43	119
	footwear manufacture	8	8	17
	coach & carriage making	0	14	34
	brick & tile making	0	0	6
	food sellers	4	12	46
	timber trades	1	2	21
	hotel & catering	0	5	11
	clothing trades	1	11	77
	railway employees	0	30	36
	farming	2	11	13

domestic service	10	16	56
transport	0	2	8
others	25	16	45
<i>note : the breakdown of the above occupational groups into the occupations stated on the census returns is given in Appendix 1</i>			

By far the largest group by 1861 were metal trades. A foundry existed in Eastover in 1830, marked on map 2, which probably accounts for the 10 employees in 1841. Clearly the new building in St. John Street was the most convenient accommodation for the workers of the new foundry beside the railway.

The same can be said for the railway company employees, whether working on operating the railway or in the carriage and wagon works. It is highly likely that the numbers employed at the latter works is understated. The 71 men working in building trades included 36 carpenters in 1861, 27 more than in 1851. As their employer's name does not appear on the census return it can be assumed that some might have been employed in the carriage works.

The large increase in workers in the clothing trades is due in part to many wives describing their occupation as dressmaker (5 in 1851 and 42 in 1861).

The wider range of food sellers by 1861 is a sign that the area was becoming a shopping centre for the new suburb but perhaps the biggest surprise is the small number of men employed in the brick and tile industry. Edmund Porter, in *"Bridgwater Industries Past and Present"* states that in 1850 there were 16 brick and tile works on the banks of the river within 2 miles of the bridge. He claims, though without quoting his source, that in 1840 *"... at least 1,300 were employed in the industry being approximately 50% of the employable male population."* [page 10] Looking at some of these sites today suggests that the brickyard owners built "company houses", as most of them have isolated terraces of a few houses of the period close by. The brick and tile industry was also seasonal with many workers being laid off in the winter months or having alternative employment.

8. Migration patterns

The census records also help to show migration patterns. Bridgwater's population grew by 1,650 in the twenty years from 1841 to 1861, of which over 500 is attributable to the number of employed people newly resident in the area being studied. Including the accompanying non-workers and children probably half of that growth occurred in this area. Where did they come from?

Of the 616 employed people in 1861, 152 were born in Bridgwater, just under a quarter. Looking at the “new” industries, the foundry, the carriage works and the railway, the percentages born in Bridgwater fall to 20%, 15% and 6% respectively. Table 3 analyses the employees in these three occupational groups based on place of birth.

table 3 - three selected occupational groups analysed by place of birth			
place of birth	metal trades	coach & carriage making	railway
Bridgwater	24	5	2
rural area	4	1	3
Somerset	34	6	13
adjoining counties	32	10	14
elsewhere	25	12	4
TOTAL	119	34	36
<i>the rural area covers the same parishes as that in table 1 and the adjoining counties are Devon, Dorset, Wiltshire and Gloucestershire</i>			

The 25 workers in metal trades originated in areas where iron-based industries had been long-established such as the Midlands, Lancashire, Cornwall and South Wales.

9. Conclusions

The Bristol and Exeter Railway took advantage of the flat Somerset Levels to build the first part of their railway. By following the clay belt near the coast the line avoided the marshy areas of the Levels proper. Bridgwater was the first town of any size to the south of Bristol

so a railway station was inevitable. The arrival of the railway, though, was not sufficient stimulus for a massive expansion of the town.

The railway companies saw much greater profits from the carrying of goods than from passengers. John Browne, described in the press reports of the opening of the railway station as the “Bridgwater Director” (of the railway company), owned a number of brickyards which were nearer to the railway than the town’s parish church. Within 20 years of the railway’s arrival a short branch line was built to serve new wharfs on the river and ten years later this was extended across the river to link with the town’s new dock basins and a canal network. There are insufficient statistics on goods carried to determine whether trade on the railway was greater than that through the port but the construction of substantial goods sidings suggests that the railway company was happy with the trade generated from the town.

What made the greatest difference to the urban growth of the area under consideration was the spin-off from the railway – the carriage works and Hennett, Spink and Else’s iron foundry. These new factories on green field sites parallel the development of Swindon but on a much reduced scale. The Bristol and Exeter company could not afford a paternalistic approach of building homes for its workers. Instead it was left to the Quaker businessmen of the Sidcot Trust to seize the opportunity of profiting from the gradual sale of building plots on which the suburb of Eastover could expand.

A secondary influence of the potential for the town to develop on the east bank of the river was the massive investment in land drainage in the late 18th century. Although mainly intended to improve agricultural production, the alleviation of the risk of flooding made the land more suitable for housing development.

So the technology linked to the railway, rather than the railway itself, was the driving force for the town’s expansion towards the railway. It is also clear from the later history of the area that the carriage works and the foundry were the main drivers as new housing

development ceased in the area shortly after the closure of the carriage works. There was no new building to the east of the railway line until after the next major industry, British Cellophane, arrived in 1936.

Although the St. John Street area could be labelled Bridgwater's "railway suburb" the evidence from the occupations and origins of the first residents proves otherwise. This was not the area of pleasant villas and open spaces which town dwellers sought to escape to but more a perpetuation of the same cramped terraces of the old town. In a cholera outbreak in 1849, over 200 died in the town, 88 of whom lived in the Eastover area and received a mass burial in St. John's churchyard. In contrast, John Browne, the railway's "Bridgwater Director", lived in a large house, Elmwood, on high ground on the west side of the river but still within sight of his brickyards and the railway.

More than three-quarters of the employed population of the area in 1861 was born outside the town. More detailed analysis of the census returns ought to show how long these migrant workers stayed in the town after the carriage works closed in 1876. Although Jarman refers to the closure as "*... a blow from which it did not recover for some years.*" (p.121), the area continued to provide employment. By 1900 new engineering works and furniture factories had been established which almost certainly would have ensured continuing employment for the redundant workers. The rapid expansion in the brick and tile industry in the second half of the nineteenth century, although increasing jobs in areas of the town outside that being studied, nevertheless created a demand for tools and machinery which the skilled iron-workers were able to supply.

Bridgwater was never large enough to bring about the kind of suburban developments of larger areas like Bristol but at least the coming of the railway resulted in the diversification of its employment structure away from what might be expected in a market town. The town was set on the path to becoming the chief industrial and manufacturing town in Somerset.

10. Notes

Census records on microfiche, held at Somerset Record Office, Taunton :

- 1 1841 Census, parish of Bridgwater, enumeration district 8, microfiche reference MC816;
- 2 1851 Census, parish of Bridgwater, enumeration district 4, microfiche reference MC906;
- 3 1861 Census, parish of Bridgwater, enumeration districts 10, microfiche reference MC1240, and 12, microfiche references MC1241 & MC1242

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