

(Database component of the Victoria Country History Project)

## About the County

### COMMUNICATIONS IN CUMBRIA : An overview

Eric Apperley October 2019

The theme of this article is to record the developing means by which the residents of Cumbria could make contact with others outside their immediate community with increasing facility, speed and comfort.

**PART 1:** Up to the 20<sup>th</sup> century, with some overlap where inventions in the late 19<sup>th</sup>C did not really take off until the 20<sup>th</sup>C

#### 1. ANCIENT TRACKWAYS

It is quite possible that many of the roads or tracks of today had their origins many thousands of years ago, but the physical evidence to prove that is virtually non-existent. The term 'trackway' refers to a linear route which has been marked on the ground surface over time by the passage of traffic. A 'road', on the other hand, is a route which has been deliberately engineered. Only when routes were engineered – as was the norm in Roman times, but only when difficult terrain demanded it in other periods of history – is there evidence on the ground. It was only much later that routes were mapped and recorded in detail, for example as part of a submission to establish a Turnpike Trust.<sup>11, 12</sup>

From the earliest times when humans settled and became farmers, it is likely that there was contact between adjacent settlements, for trade or barter, finding spouses and for occasional ritual event (e.g stone axes - it seems likely that the axes made in Langdale would be transported along known ridge routes towards their destination, keeping to the high ground as much as possible [at that time (3000-1500BC) much of the land up to 2000ft was forested]. Of the trodden ways, some mainly in the south of the country can still be traced, e.g. The Ridgeway and Icknield Way but in Cumbria there is little trace. It must be likely that many would become the lanes which connect villages and perhaps even some of today's footpaths could be traced back that far. Ferguson in his History of Cumberland states that an ancient track runs up the valley of the River Patteril to cross the Eden a mile west of where the Roman bridge site which would surely have been used if it had existed. The

Track goes on south over Shap and the Tebay Gorge (the route of the M6) and another goes over Stainmoor (the A66).<sup>13</sup>

## 2. ROMAN ROADS



The Romans arrived in Cumbria in the 1st Century AD in order to subdue the Brigantes and establish a northern frontier to protect their province of Britannia. This was a military zone, and any civilising influence was purely secondary, so as a result there is not the wealth of buildings such as villas that are found in the south of the country. The Romans built military roads and established forts at regular intervals along them. Only later did these roads also become trading routes, and civil settlements grew alongside the forts to supply their needs.

Only occasionally were existing tracks adopted and improved – they went in the wrong direction and were physically inadequate. Roman roads were surveyed, engineered and constructed to a hierarchy of exacting standards: the main roads which are the typical survivors (and many still in use today), local roads with little in the way of engineering or surfacing, and private roads to a villa or mine. An area north of Penrith has been identified as possibly the one surviving example of local roads in Cumbria.<sup>21</sup>



A review of Roman Roads was carried out over 3 years (2015-2017) and made extensive use of Lidar to check the known and reveal some previously unknown roads. The site was triggered by a promise to the late Hugh Toller to complete the work he had started in the county. He was a pioneer in using Lidar to detect Roman roads.

The large numbers on the map here are Margary road numbers. This is the numbering system devised by Ivan Margary.<sup>22</sup> A few modifications have been made to accommodate new roads and also where there is new information on old ones. These changes are "unofficial".

Although there are still some big gaps in our knowledge of Cumbria's Roman roads<sup>23</sup> the last few years have seen great strides in completing the picture. The reason for this has been the advent of Lidar. Lidar data is collected from an aeroplane scanning the ground with laser beams of light which measures the height of the ground to incredible precision. In this country its primary purpose has been for flood defence but it has opened a fantastic window of discovery for archaeology.<sup>24</sup>

It is unclear how much wheeled traffic used these roads but a popular legend that has been around since at least 1937<sup>25</sup> traces the origin of the 1435 mm (4 ft 8 1/2 in) standard railway gauge, to the evidence of rutted roads marked by chariot wheels dating from the Roman Empire. It is curious that the Roman pace or *passus* was 4.855 ft or 1435 mm; a thousand such was one Roman mile.

### 3. MEDIAEVAL ROADS<sup>31</sup>

The withdrawal of the Romans in AD 410 left the way open not only for the British to re-establish themselves in the region but also for new settlers – first Anglian then Danes and Norse peoples – to move in. Each was attracted to different areas – so they and their descendants could generally co-exist for most of the time, a situation unique in the whole of Britain.

Tracks were established by usage – from farmsteads and hamlets to fields and upland pasture, or to neighbouring settlements with surplus produce to barter. However, unlike in other parts of the country, no examples of tracks that can be reliably dated to the period have been identified – there being neither physical nor written evidence. Nevertheless it is highly probable that the minor road system in Cumbria – created piecemeal over a long period – was essentially complete by AD1000.

Cumbria, most of which at the time of the Norman invasion was not yet seen as part of England, was consolidated into the kingdom through the establishment of castles and monasteries in the 1100s, and the growth of markets and towns in the 1200s. Trade and traffic were gradually increasing, mostly making use of the existing network of tracks for travel on foot or on horseback. Upkeep and repair were negligible or non-existent, but the system was generally adequate for the amount of traffic, even in winter. Heavy or bulky goods would be moved by water as much as possible.<sup>32</sup>

In Cumbria, there is little direct record of travel and trade, but examples would include:<sup>33</sup>

- the network of tracks leading from Shap Abbey into the isolated eastern valleys of Lakeland
- routes to the manorial corn mills
- the track over Sty Head and Esk Hause used by woolpack trains carrying the produce of Borrowdale farms to the storehouses of Furness Abbey for export at their landing places on Walney Channel
- tracks to the fulling mill in association with local cloth production (there are records of six fulling mills in Grasmere Parish in 1453)
- packhorse routes from mining areas – Alston silver from 1130, Goldscope copper from early 13th century
- the movement of iron ore from Low Furness to bloomery sites in High Furness
- ways to market for the sale of cloth and other goods – Kendal in particular becoming the centre for the wool trade
- corpse roads to take bodies on horseback for burial at the mother church which could be many miles away – for example from Wasdale Head to Eskdale via Burnmoor, and from Mardale Green (Haweswater) to Shap via Swindale; Loweswater to St Bees.

- tracks to harvest bracken or peat, and to move animals to and from summer grazing areas on upland pasture.

A recognisable highway administration did not emerge until the late Middle Ages, first being statutory regulated by legislation in 1555 which placed responsibility for maintenance under the parish and overseen by the local Justices of the Peace. The ad hoc and often ineffective maintenance of highways by the parish meant that roads were virtually impassable for large parts of the year by wheeled vehicles except for very local journeys. Daniel Defoe, the celebrated writer, published an account of his travels in 1728 and recorded the dire state of much of Britain's road network whilst acknowledging that where turnpikes had been established things were much better.<sup>34</sup> The large increase in traffic created by the accelerating momentum of the Industrial Revolution in the late seventeenth century, required a much more reliable transport system. This was met by the creation of private companies and trusts for roads (*turnpikes – see section 5 below*) and canals and later, railways. The parish responsibility for roads other than turnpikes was confirmed by the General Highways Act of 1835. However, it was already apparent that it was unfair upon parishes that they should have to pay for the maintenance of roads which were largely used by through traffic, ie non-residents of the parish.



Indeed many were unable to pay for maintenance. In 1848 the Public Health Act placed roads under local boards of health in the newly constituted urban administration areas and the Highways Act of 1862 combined most of the parishes for road administration purposes under the office of a County Surveyor. In 1888 the Local Government Act was passed, by which the county councils were created. These incorporated the County Surveyors first set up in 1562. Thus responsibility for all public roads (including the turnpikes, although the last turnpike in the country continued until 1895) was vested in the County Council.)<sup>35</sup>

#### DROVE ROADS:

From the later Middle Ages through to the 19th century – when the railways took over the trade – herds of Scots cattle were driven through eastern Cumbria to destinations further south. Up to 200 cattle or 2000 sheep would

move at something like 6 to 12 miles a day along routes with appropriate facilities along the way – overnight pasturing, inns for the accommodation of their human companions, and fairs and markets at which the animals could be bought and sold.

These routes would originally be wide and unenclosed. The routes mostly converged on Carlisle, continuing south to Penrith and then over Stainmore via Brough or through Kirkby Stephen to Hawes or towards Kirkby Lonsdale via Shap and Tebay. One alternative involved crossing the Solway to Bowness and continuing south towards the old fair ground at Rosley before joining the main routes south. Locally reared or fattened cattle travelled on routes north-eastwards towards Rosley or cross-country from Eskdale via Hardknott and Wrynose to Ambleside and Longsleddale before joining the routes south. By the middle of the 18th century, 80,000 cattle a year were moving south from Scotland – a large proportion of them through Cumbria.<sup>36</sup>

Until the road improvements of the 18th century, most goods were carried by packhorse. The tracks they followed – the same ones in use since early medieval times – were not usually engineered or metalled except where the conditions were difficult e.g. by zig-zagging up a steep slope. These tracks criss-crossed the whole of Cumbria, one valley being linked to the next via mountain passes, with trains of up to 30 horses travelling in single file along them, passing over packhorse bridges recognisable by their narrow width and low parapets. A wide variety of goods were transported by this means – for example slate from Honister, peat from around Skiddaw to Keswick, tobacco from Whitehaven harbour to the snuff mills at Penrith and Kendal.<sup>37</sup>

#### OVERSANDS ROUTES:

One unusual type of route as well as the crossing of the Solway. was the use of the oversands route to Furness and Cartmel and beyond over the Duddon estuary towards Ravenglass and the west coast, The first recorded crossing was in 1322, but this route was without doubt used in earlier times than that, and continued as the usual route to the area as late as the mid-19th century. Before the building of the railway, the main way of reaching Grange was the road across the Sands of Morecambe Bay from Hest Bank.





It was certainly the shortest route, and usually also the most comfortable, with guides originally provided by Cartmel Priory and still as the Queen's Guide to lead travellers over the safe routes which constantly varied according to the tides and the weather.<sup>38</sup>

## ENCLOSURE ROADS

The process of enclosing common land and allocating sections into private ownership was made simpler by a series of Acts from the mid 1700's. The impact this had on the minor road network in Cumbria was as great as that of the turnpikes on the main roads. About 25% of the total land area of Cumbria was involved – 430 square miles in Cumberland and Westmorland.

The size of the enclosure varied, from 12,760 acres of Cartmel in 1806 and 28,000 acres of Inglewood Forest after 1819, to much smaller ones. The result would be a complete re-design of the whole landscape – typically adopting grid-like boundaries between the various allotments. Sometimes old roads across the common or waste would be retained, but straightened, widened and their surfaces improved, but many were destroyed (and not even retained as rights of way).



And new roads – typically straight and wide – were created to give access to fields or to new farmsteads. The pattern however was affected by the landscape – a regular pattern could be most easily established in the coastal

salt marshes or peat mosses or where the topography was fairly uniform. Elsewhere it was more flexible.<sup>39</sup>

#### **4. THE POST (ROYAL MAIL)**

The Royal Mail can trace its history back to 1516, when Henry VIII established a "Master of the Posts"; this was for military and government purposes only and private citizens were only allowed to use it from 1635.<sup>41</sup> Charles II established the General Post Office in England in 1660, laying down the routes for post into Cumbria – “ *[B]e it enacted ... That a Letter or Pacquet post shall ... once a weeke [come] to Kendall by the way of Lancaster and to the Towne of Penrith in Cumberland by the way of Newcastle and Carlisle[.]*”<sup>42</sup>

##### **POSTBOYS:**

From its introduction in 1635, the postal delivery service in Britain was done by mounted carriers riding between "posts" where the postmaster<sup>43</sup> would remove the letters for the local area before handing the remaining letters and any additions to the next rider. The riders were frequent targets for robbers, and the system was inefficient.<sup>43</sup> In 1700, the postal network was still largely based on the six royal messenger routes set up in Tudor times. These were inadequate for business, government and private correspondence. Many important towns were not directly linked. Instead, mail between them went via London. As a result delivery times were unnecessarily long, and the postal system was too dependent on the "London Inland Letter Office". A letter from Bath to London in 1684 - took 3 days. Journey times on major coaching routes to and from London were -

London - Bristol 16 hr 45 min; London - Liverpool 21 hr 20; London - Exeter 30 hr 40

London - Norwich 13 hr 3; London - Davenport 27 hr 5; London - Glasgow 42 hrs.<sup>43</sup>

##### **MAIL COACHES:**

Between 1719 and 1763, Ralph Allen, postmaster at Bath, signed a series of contracts with the post office to develop and expand Britain's postal network. John Palmer, a theatre owner from Bath, believed that the coach service he had previously run for transporting actors and materials between theatres could be utilised for a countrywide mail delivery service, so in 1782, he suggested to the Post Office in London that they take up the idea. He met



resistance from officials who believed that the existing system could not be improved, but eventually the Chancellor of the Exchequer, William Pitt, allowed him to carry out an experimental run between Bristol and London. Under the old system the journey had taken up to 38 hours. The coach, funded by Palmer, left Bristol at 4pm on 2 August 1784 and arrived in London just 16 hours later.<sup>44</sup>



Impressed by the trial run, Pitt authorised the creation of new routes. By the end of 1785 there were services from London to Norwich, Liverpool, Leeds, Dover, Portsmouth, Poole, Exeter, Gloucester, Worcester, Holyhead and Carlisle.

The early Royal Mail Coaches were similar to ordinary family coaches but with Post Office livery.<sup>45</sup>

Between 1775 and 1815, Britain was at constant war with United States and France so the postage rates were increased to finance the war. The rates remained for 25 years after the defeat of Napoleon in 1815. Rowland Hill formulated proposals on reforming the postal system between 1835 and 1837. His pamphlet, "Post Office Reform: Its Importance and Practicability," is now regarded as a milestone in the development of the modern postal system.



He proved that carrying charges were insignificant factors in the total cost of handling mail. He also proved that complex series of rates based on distance were needless. Sir Rowland Hill noted that the collection of payment for mail

delivery could be avoided. He made a solution to postal problems by imposing a uniform postage rate regardless the distance. He also suggested the use of prepayment through adhesive stamps and to be sold at post offices. He proposed that payments be based on weight and suggested a penny for each half-ounce. <sup>46</sup>

The mail coaches were originally designed for a driver, seated outside, and up to four passengers inside. The guard (the only Post Office employee on the coach) travelled on the outside at the rear next to the mail box. Later a further passenger was allowed outside, sitting at the front next to the driver, and eventually a second row of seating was added behind him to allow two further passengers to sit outside. Travel could be uncomfortable as the coaches travelled on poor roads and passengers were obliged to dismount from the carriage when going up steep hills to spare the horses (as Charles Dickens describes at the beginning of *A Tale of Two Cities*). The coaches averaged 7 to 8 mph (11–13 km/h) in summer and about 5 mph (8 km/h) in winter but by the time of Queen Victoria the roads had improved enough to allow speeds of up to 10 mph (16 km/h). Fresh horses were supplied every 10 to 15 miles (16–24 km). Stops to collect mail were short and sometimes there would be no stops at all with the guard throwing the mail off the coach and snatching the new deliveries from the postmaster. <sup>47</sup>

The success of the mail coach system led to independent operators providing parallel services and extending them to other towns. [See Section 5 Stagecoaches] The cost of travelling by mail coach was about 1d. a mile more expensive than by private stage coach, but the coach was faster and, in general, cleaner. Crowding was a common problem with private stage coaches, which led to them overturning; the limits on numbers of passengers and luggage prevented this occurring on the mail coaches. Travel on the mail coach was nearly always at night; as the roads were less busy the coach could make better speed. As noted in Section 3 above, until the mid-18<sup>th</sup> century, the roads in Cumberland and the adjoining counties consisted of narrow lanes fit only for packhorses for which upwards of 300 were employed in transporting the merchandise of Kendal alone <sup>48</sup>. But given that the literacy rate in England in the 1640s was around 30 percent for males, rising to 60 percent in the mid-18th century <sup>49</sup> the call for Cumbrians to write letters would be very limited, so the pressure to develop more mail facilities would be small. Post chaises were introduced in 1754; in 1786 a mail coach ran between Manchester and Glasgow passing through Kendal and Carlisle.

## Mail Coaches from Carlisle, 1829 <sup>410</sup>

To LONDON, the *Royal Mail* (from Glasgow), at a quarter before seven every evening from the Bush, & Crown and Mitre alternately; thro' Penrith, Catterick Bridge, Hurrowgate (Harrogate), Leeds, Pomfret, Doncaster, Newark, Stamford, Alconbury, Biggleswade, Baldock and Barnet, to the Bull and Mouth Inn.

To EDINBORO, *the Mail*, at seven every morning, from the Bush, and Crown & Mitre; through Langholme, Hawick, Selkirk and Torsconee. to the Black Bull Inn.

To GLASGOW, *the Mail*, seven every morning, from the Bush and Crown and Mitre, thro' Gretna, Lockerby, Batock Bridge, Douglas Mill & Hamilton to the King's Arms, Trongate.

TO LIVERPOOL and MANCHESTER, *the Mail*, at half-past six every evening and the New Times, at a quarter before five every morning from the Bush, and Crown & Mitre; through Penrith, Kendal, Lancaster, Preston, and Ormskirk and through Chorley to Manchester.

TO NEWCASTLE-UPON-TYNE, *the Mail*, at seven every morning, from the Bush, and Crown & Mitre; alternately and the True Briton from the King's Arms, at six every morning thro' Brampton, Haltwhistle and Hexham.

TO PORTPATRICK *the Mail*, at seven every morning, from the Bush, and Crown & Mitre; thro' Annan, Dumfries, Castle Douglas, Gatehouse, Newton Stewart and Stranraer to the Downshire Arms.

## 5. MAPS

Up to the 16<sup>th</sup> century, the general population would have had little need to travel beyond their nearest market town so knowing where other places were and how to get to them was not relevant. The first maps were perhaps required by Government in the interests of better administration. Christopher Saxton produced a complete set of county maps [Cumberland, Westmorland and Furness, 1576] The map shows no roads, but travellers in those days would be on foot or horseback through open countryside with the location of bridges across the fast-flowing rivers being more important (Saxton shows these) <sup>51, 52.</sup>



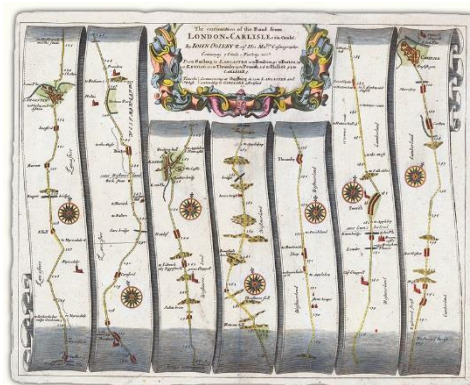
John Speed (a name commonly found today) issued copies of these in 1610 – a common practice to copy directly from predecessors.

In terms of Road maps, most people would use itineraries - Harrison's itineraries, in Hollinshed (1586) include

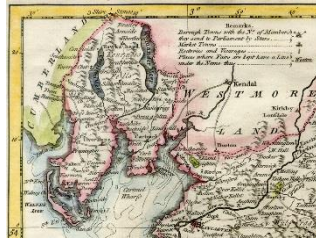
'The waie from Cockmouth to Lancaster and so to London' - which gives customary mileages as follows. Cockermouth -6-Keswick-8-Grasmere-14-Kendal-7-Burton-8-Lancaster.

Basically, one got to town A, then asked the way to town B, and so on to one's destination.<sup>53</sup>

John Ogilby produced a road book (*Britannia*, 1675) this was in the form of strip maps of the principal roads of the country giving topographical features along the route.<sup>54</sup>

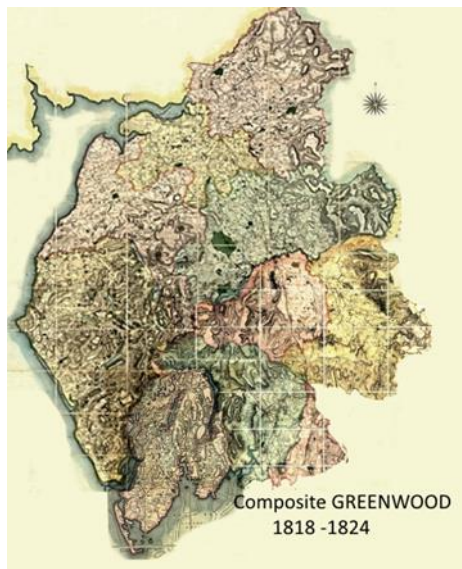


Thomas Kitchin (1719–1784) - His *Small English Atlas* (1749) is a county-based collection showing an elaborate network of major and minor roads. Here is the part of it covering Furness



From 1759 the Society of Arts offered prizes for new maps, requiring the use of triangulation and accurate distance measurements. From this were produced respectable maps - William Yates for Lancashire in 1786, (and though without a prize) Thomas Jeffreys for Westmorland in 1770 and Thomas Donald for Cumberland in 1774.

Christopher Greenwood did a general resurvey producing maps – Lancashire 1818, Cumberland 1823, Westmorland 1824.

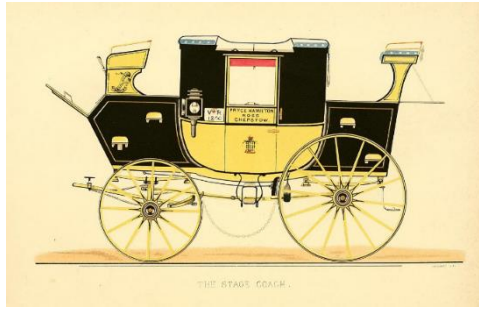


The Ordnance Survey was set up to provide military maps in consistent format in the face of threat of possible invasion during the Napoleonic wars. It began near Plymouth in 1784, but it first published its own maps (for Essex in 1805). Westmorland's first survey was not published until much later, (Papcastle 1873) firstly at 25-inch scale [1:2500] and then at six-inch scale [1:10560].(here - 6-inch map of Burneside)<sup>55</sup>





## 6. THE STAGECOACH



A stagecoach is a four-wheeled public coach used to carry paying passengers and light packages on journeys long enough to need a change of horses. When first introduced in Britain in early 17<sup>th</sup> century, the stagecoach was a heavy and cumbersome carriage often without any form of springs, but soon substantial springing was introduced. Up to eight of the more prosperous passengers could be packed inside a stagecoach. Second-class seats were available in a large open basket attached to the back. The least privileged travellers sat on the roof with the luggage, relying on a hand rail to prevent themselves slithering off. This immensely unwieldy vehicle, drawn by either four or six horses, lurched along the rutted roads at an average speed of about four miles an hour. Danger from highwaymen was only one of many inconveniences on such a journey.<sup>61</sup> Widely used before steam-powered rail transport was available, a stagecoach made long scheduled trips using *stage stations* or posts where the stagecoach's horses would be replaced by fresh horses. The first recorded stagecoach route in Britain started in 1610 and ran from Edinburgh to Leith. This was followed by a steady proliferation of other routes around the island.<sup>62</sup>



By the mid-17th century, a basic stagecoach infrastructure had been put in place. A string of coaching inns operated as stopping points for travellers. On the route between London and Liverpool, the stagecoach would depart every Monday and Thursday and took roughly ten days to make the journey during the summer months. Stagecoaches also became widely adopted for travel in and around London by mid-century. The speed of travel remained constant



until the mid-18th century. Reforms of the turnpike trusts, new methods of road building and the improved construction of coaches led to a sustained rise in the comfort and speed of the average journey - from an average journey length of 2 days for the Cambridge-London route in 1750 to a length of under 7 hours in 1820.

Examples of the regular stagecoach services from Carlisle in 1828<sup>63</sup> –

To GLASGOW, the *Independent*, at 3 every morning from the Bush and Crown & Mitre and the Bluebell; through Annan, Dumfries, Sanquhar, Cumnock and Kilmarnock to the Tontine and Black Bull Inns, Trongate.

To LONDON, the *Express* at a quarter before four every morning from the Bush and Crown & Mitre thro’ Penrith, Greta Bridge, Richmond, Borobridge, York, Doncaster, Retford, Newark, Grantham, Stamford, Alconbury Hill, Biggleswade, Baldock and Barnet, to the Saracen’s Head, Skinner Street.

TO LONDON, the *Invincible* or *Royal Bruce*, (from Edinboro’ & Glasgow) at a quarter before four every morning from the Bluebell; thro’ Penrith, Shap, Kendal, Burton, Lancaster, Preston, Manchester &c to the Swan, Lad Lane.

TO WHITEHAVEN the *Royal Sailor*, at half-past eight every morning from the Bush and Crown & Mitre thro’ Wigton, Allonby, Maryport & Workington to the Black Bull.

TO EDINBORO’, the *Independent* at 3 every morning ( except Sunday) from the Blue Bell, through Annan, Dumfries, Brownhill, and Biggar to the Star Inn.

TO EDINBURGH’, *Sir Walter Scott* every Sunday, Tuesday and Thursday at ten in the evening from the Bush and Crown & Mitre; same route as the Mail except through Dalkeith to the Black Bull Inn.

The successors to these coaches still run in 2019 (with motor-power not horse-drawn!). Examples (with comparisons with rail) are <sup>64</sup>

From	To	Means	Time	Standard cost	Discount cost	Frequency
Whitehaven	London	Coach	11 hours	£42.00		Once per day

Whitehaven	London	Rail	5-6 hours	£127	£48-53	Approx hourly
Kendal	London	Coach	9 hours	£46		Once per day
Kendal	London	Rail	3-3¼ hours	£105	£47-53	Approx hourly

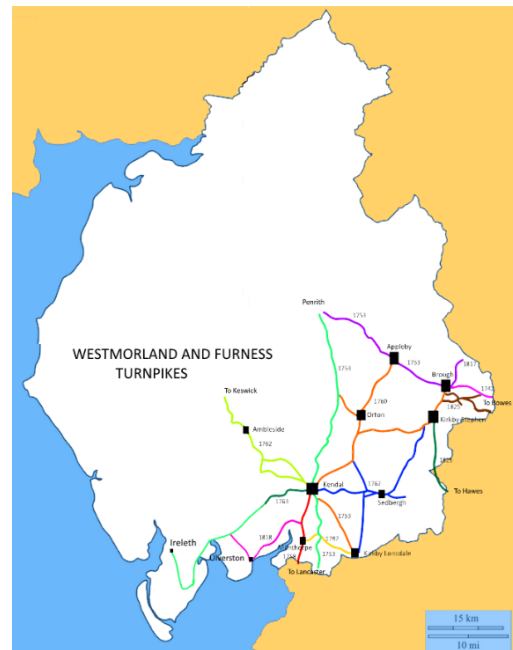
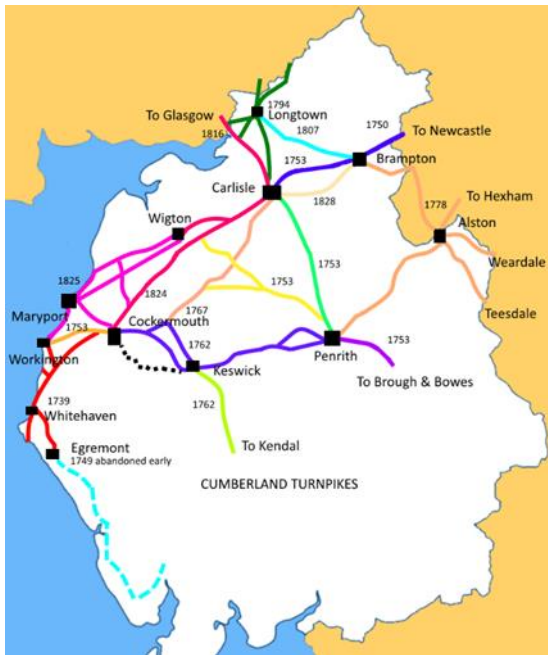
## 7.TURNPIKES

Turnpikes have been called "one of the central pillars on which the industrial revolution was based". The quality of roads was vital, because many industries producing light high-value goods, notably textiles, depended on them for relatively fast and reliable transport which rivers and coastal vessels could not provide.



The Great North Road near Highgate on the approach to London before turnpiking. The highway was deeply rutted and spread onto adjoining land.

From the late 17th century, Parliament increasingly took responsibility for repairing and maintaining roads from local authorities. Turnpike Acts authorised a trust to levy tolls on those using the road and to use that income to repair and improve the road. They could also purchase property to widen or divert existing roads. The trusts were not-for-profit and maximum tolls were set. The 'turnpike' was the gate which blocked the road until the toll was paid.<sup>71</sup>



The first such Act, of 1663, turnpiked the Great North Road between Wadesmill in Hertfordshire and Stilton in Huntingdonshire. The next was not until 1695 (Shenfield to Harwich), but after that there were several a year, and by 1750 most of the main roads from London were turnpiked.<sup>72</sup>

## TURNPIKE MANIA

"Turnpike mania" followed between 1751-72, when trusts covered more than 11,500 miles of road. By the time the last was passed in 1836, there had been 942 Acts for new turnpike trusts in England and Wales. By then, turnpikes covered around 22,000 miles of road, about a fifth of the entire road network.

The first Turnpike in Cumbria-to-be was in the Whitehaven Harbour Act of 1739; the last was Carlisle to Brampton (later the A69) in 1828. They were approved for a set period, often (21 years) then renewed but eventually folded after the railways took their trade - the last to go was Cockermouth to Maryport in 1885.<sup>73</sup>

The design of horse-drawn vehicles changed during the turnpike era. In part this was a mutually beneficial process by which the roads were improved permitting the use of lighter and faster vehicles. The easier journeys created more traffic that generated more tolls to further improve the road. In parallel with this, vehicles carrying heavy goods were forced to adapt their design to cause less damage to the road. Higher tolls were levied on vehicles that had narrow wheels since it was thought that these were a major cause of wear on the compacted gravel highway. Although the detailed designs changed, the basic classes of road user remained the same. The main classes of passenger

traffic- Horse riders (for the fit), Private coaches (for the rich), Postchaises (for the wealthy), Gigs (for the yeoman or professional), Stage coaches (for the well-off). The basis of the tolls changed over the years but generally it was commercial traffic and the wealthy traveler who were levied most heavily. The main classes of goods traffic were - Farm waggons and carts, Carrier's carts, Stage wagons, Drovers of cattle and sheep <sup>74</sup> All of these had to pay a toll to use the turnpike road. <sup>74</sup>

## 8. RIVERS and CANALS

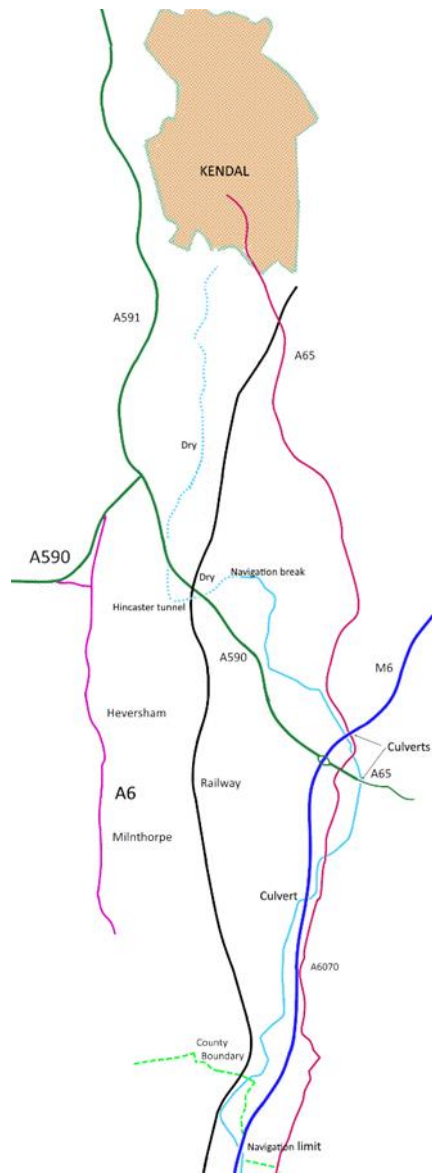
For millenia rivers had been a most practical way to travel instead of on land through forests and boggy wetlands. In Cumbria only two rivers lent themselves for this for trade – the Kent to Kendal and the Eden to Carlisle. But each of these are subject to massive flows and floods as heavy rainfall in the mountains accumulates across extensive catchments, and their estuaries have shifting sandbanks and large tidal ranges. Using these for trade could be an irregular and unpredictable operation and regular passenger services never developed. A third Cumbrian river might have been a contender – the Derwent to Cockermouth. Daniel Defoe in 1726 quoted “*vessels of good burthen may come up to it [Cockermouth].*”<sup>81</sup> But in the absence of other evidence to support this and the reputation of the Derwent as one of the fastest-flowing rivers in the country, this statement must be considered circumspect.

As the Industrial Revolution took off in mid-18<sup>th</sup> century the transport of raw materials and finished products over the roads of the day mainly by pack-horses became a major concern for inland towns. The oldest known canals were irrigation canals, built in Mesopotamia circa 4000 BC, in what is now Iraq and Iran. <sup>82</sup> Canals had been built in Europe since the 12<sup>th</sup>C <sup>83</sup>. It was the construction of the Bridgewater Canal (opened in 1761) built for 3<sup>rd</sup> Duke of Bridgewater to transport coal from Worsley, to the rapidly industrializing city of Manchester, that was the first canal in Britain to be built without following an existing watercourse. This became a model for those that followed it and opened the door to a canal mania similar to that for the railways 70 years later. <sup>84</sup> Whilst canals were built primarily for industrial and commercial purpose, they nearly always found passenger provision was worthwhile. When canals arrived on the scene, it was not surprising that Kendal and Carlisle had canals developed to serve them. [RS(1)]

Canal building in Cumbria was in general limited by the difficult terrain which determined that both construction and maintenance would be uneconomic. Nevertheless, around the fringes, opportunities were taken to enjoy the reduced transport costs that canals brought with them and stimulate commercial activity in the local area. Just three canals were constructed:-

**A. THE ULVERSTON CANAL:**<sup>85</sup> In 1795 architect John Rennie (designer of London's Waterloo Bridge) constructed the Ulverston Canal and secured a further period of prosperity for the town. The canal connected the town, only one and a half miles long from the entrance lock on the Leven Estuary to the commercial area of Canal Head beneath the town itself, with the Irish Sea and provided it with a port. This investment paid off and a thriving maritime community developed. It could take vessels of up to 400 tons, loading cargoes of iron ore, slate, stone and gunpowder from the town's hinterland, in what was essentially an elongated harbour. Ulverston became the starting point for steamers to Liverpool, and passenger ships to Scotland [See Section 10 Sea Travel] and London. With the increase in trade came an increase in the size of the town and between 1801 and 1841, the population of Ulverston doubled. In 1846, the railway came and this, coupled with the introduction of modern ships, which were too big to negotiate the inland waterway, rendered the canal defunct. It was used commercially up until World War I but was officially abandoned at the end of World War II.


**B. THE LANCASTER CANAL**<sup>86</sup> opened in 1819, was sixty-seven and a quarter miles long from Kendal south to Wigan (where it joined the Leeds to Liverpool canal). Packet boats for passengers ran between Kendal and Preston - The Kent and Lune Packet Boats sailed from the Canal Head alternately, every morning. Sundays excepted, at 7.00, for Lancaster, Preston, etc. to convey passengers and parcels, and arrives at Kendal at 9 evening.<sup>86</sup> During its working life, packet boats provided an express passenger service between Preston and Lancaster, and later to Kendal at 10 miles per hour (16 km/h), with passengers walking up or down the flight of locks at Tewitfield and embarking on a second boat. The seven-hour journey time from Preston halved the best speeds of stage coaches; because of the comfort of the journey, passengers stayed loyal to the packet boats even after the advent of railway competition in the 1840s. Coal could be brought north and other bulk cargoes such as lime and slate transported south. The canal stimulated industrial and commercial activity at places along its route, such as coke ovens at Crooklands and warehouses at Canal Head in Kendal.



In 1970, the extension of the M6 motorway north from Lancaster was allowed to cut the canal at Tewitfield and only two short sections north of here still have water in them, joined by culverts..<sup>87</sup>

**C. THE CARLISLE CANAL** opened in 1823<sup>88</sup>, eleven and a quarter miles long from a wooden jetty at Fisher's Cross, renamed Port Carlisle, to Carlisle Basin. It was built to improve facilities for coastal craft from Liverpool, Ireland and Scottish ports already trading with the city via the Solway Firth and the River Eden. Packet boats ran connecting to steamers to Liverpool from 1826, still going in 1851. [See Section 10 Sea Travel]





**CARLISLE  
CANAL NAVIGATION.**

The Directors of the Carlisle Canal Company solicit the attention of the public to their Canal as a THROUGH MODE OF CONVEYANCE FOR GOODS AND PASSENGERS in connection with the Newcastle and Carlisle Railway, and Carlisle and Liverpool Steam Navigation Company.

For the Convenience of Shipping, the Channel of the Solway Frith is efficiently Lighted and Buoyed as recommended by Captain C. G. Robinson, R.N.

The Canal is 8 feet 6 inches deep; the Locks 72 feet 6 inches long, and 18 feet 4 inches wide.

**Passage Boats Ply upon the Canal**

To suit the Arrivals and Departures of the Steam Packets to and from Liverpool. Port Carlisle being a place of great resort, (good Baths being established there), the Company Ply their Passage Boats during the Summer Months at Reduced Fares.

For further Information, as to Dues, &c., apply to

**Mr. WILLIAM WARD,**  
CANAL OFFICE, CARLISLE,

Websawth's Guide, 1851

12

This service became so popular that the company built the Solway Hotel and a special passenger jetty at Port Carlisle. In 1847 the Canal Companies passage boats, 'Swallow and Arrow' ran daily to and from Port Carlisle to meet the steamers from Liverpool and Belfast.<sup>89</sup> In 1839 over 1,000 German emigrants, using what was found to be the cheapest route, sailed into Newcastle, travelled by rail to Carlisle and along the canal to board a steamer at Port Carlisle to sail to Liverpool and thence to America.<sup>810</sup> Despite plans for improvements to navigation along the estuary, and to the docks at the canal entrance, the canal succumbed to competition from the railways and closed in 1853. It then suffered the ultimate fate of being drained, filled in and converted to railway use.

**D. NEWCASTLE-MARYPORT CANAL:** There was a proposal for a broad canal from Newcastle to Maryport in 1794, to Hexham initially on the south bank of the Tyne. This would be the first section of "*an inland navigation from the east to the west sea*" with 64½ miles to Carlisle In 1797, a Bill for this was withdrawn due to the strength of the opposition, based largely on cost.<sup>811</sup> The proposals were still being supported in 1810, but were never authorised or built. A railway was built between Newcastle and Carlisle instead, opening in 1838.<sup>812</sup>

*There are now about 2,200 miles (3,500 km) of navigable canals and rivers throughout the United Kingdom. Most of them are linked into a single English and Welsh network from Bristol to London, Liverpool to Goole and Lancaster to Ripon, and connecting the Irish Sea, the North Sea, the estuaries of the Humber, Thames, Mersey, Severn and Ribble. This network is navigable in its entirety by a narrowboat (a boat 7 ft [2.1 m] wide) no longer than about 56 ft (17 m).*<sup>913</sup>

## 9. SEA TRAVEL

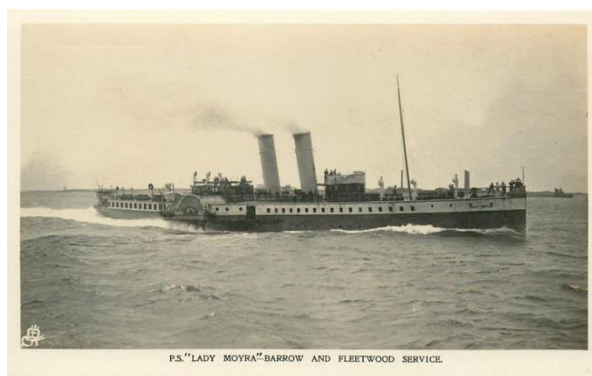
As inhabitants of an island, Britons have long used the sea for means of travel instead of land. Cumbrian ports, whilst primarily dependant on trade (and

shipbuilding) have run passenger services from Ulverston, Barrow, Whitehaven and Port Carlisle (calling at Maryport), (Workington does not appear to have done so). These services only developed when steamships came into use since sailing ships, contending with being becalmed, unfavourable winds and tides would have made a planned timetabled service impossible. The first successful steam-powered vessels were built for use on canals and rivers in the early 1800s. On early steamships, the steam engine turned paddle-wheels that moved the ship along, but by the 1850s most ships were using propellers instead (first fitted to a steamship in 1839). Many of these passenger services to other mainland ports eventually succumbed to the railways and whilst ferries continued, they moved to other ports such as Heysham.

**A: ULVERSTON:** A passenger ferry to Liverpool from Ulverston Canal started in 1835,<sup>91</sup> and it was later complemented by a service from Barrow-in-Furness to Fleetwood.

**B. BARROW:**

<p>THE BEST ROUTE TO THE ISLE OF MAN <b>IS VIA BARROW.</b> ROYAL MAIL SERVICE. Shortest Sea Passage. Reduced to about Three Hours. The Splendid Steamers, <b>DUCHESS OF DEVONSHIRE, MANK QUEEN.</b> or other First-class Steamers are intended to SAIL DAILY (Sundays excepted) during the Season as under:— FROM ABOUT WHITSUNTIDE TO SEPTEMBER 30TH, From <b>DOUGLAS to BARROW</b>, at 8.30 a.m. From <b>BARROW to DOUGLAS</b>, at 2.0 p.m. The New Steamer, "Duchess of Devonshire," one of the finest Boats, in the Channel, will occupy the station during the greater part of the Season. TRAINS RUN ALONGSIDE THE STEAMERS. N.B.—Passengers' Luggage is conveyed to and from the Steamers and the Railway Trains Free of Charge. Passengers are booked Through from all the principal Stations in the United Kingdom. JAMES LITTLE &amp; CO., Barrow.</p>	<p>THE BEST ROUTE TO BELFAST AND THE NORTH OF IRELAND <b>IS VIA BARROW.</b> SHORT SEA PASSAGE. ROYAL MAIL SERVICE. The Swift and Powerful First Class Steamships, <b>DUCHESS OF DEVONSHIRE, CITY OF BELFAST, MANK QUEEN, &amp;c.,</b> Will Sail between BARROW and BELFAST (weather permitting) in connection with Through Trains to and from all parts of England as under:— FROM BARROW-IN-FURNESS TO BELFAST. EVERY EVENING (Sundays excepted), at or after 8.30 p.m., or according to Monthly Sailing List (which may be obtained on application on arrival of Through Trains from Whitehaven and the West Cumberland District. FROM BELFAST TO BARROW-IN-FURNESS. EVERY EVENING (Sundays excepted), at or after 8.30, arriving at Barrow (weather permitting) in time for the Through Fast Train to Leeds, Bristol, London, Whitehaven, and the West Cumberland District. Trains arrive at and depart from alongside the Steamers. Passengers, Goods and Live Stock are Booked Through at Moderate Rates to and from the principal Railway Stations in England and Belfast and the North of Ireland. JAMES LITTLE &amp; CO., Barrow.</p>
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P.S. "LADY MOYRA" - BARROW AND FLEETWOOD SERVICE.

The first railway to reach a port on the North West coast of England was the Furness Railway at Barrow on Furness. Railway companies were not empowered to run shipping services at this stage, so the Barrow Steam Navigation Co was formed to start passenger services. Piel Pier was used for

Belfast and Isle of Man services until 1881, when the Ramsden Dock Station was built and the services moved to Barrow.<sup>92</sup> As iron-ore rail traffic declined towards the end of the 19th Century, the Company sought to increase the tourist passenger traffic to the English Lake District, the area in which its trains operated. In 1900 they introduced a passenger ferry service across Morecambe Bay, between Barrow and Fleetwood. This service operated successfully, using a total of four paddle steamers, until the outbreak of war in 1914. The service was not revived after the war. The ferry services to Belfast and Isle of Man were taken over by the port at Heysham.<sup>93</sup>

### C. WHITEHAVEN:

In 1847 the Whitehaven Steam Navigation Co. sailed to Liverpool 3 times a week in summer (only twice in winter), to Belfast twice a week in summer (once in winter) and to Douglas (Isle of Man) and Dublin once per week in summer.

The Carlisle Steamers called twice per week en route to Liverpool.<sup>94</sup>

### D. PORT CARLISLE:



THE SPLENDID NEW  
**IRON STEAMER,**  
**CUMBERLAND,**  
600 Tons Burthen,  
300 Horse Power,

Divided into Five Watertight Compartments, with all other recent Improvements for Speed, Safety, and Comfort, PLIES BETWEEN

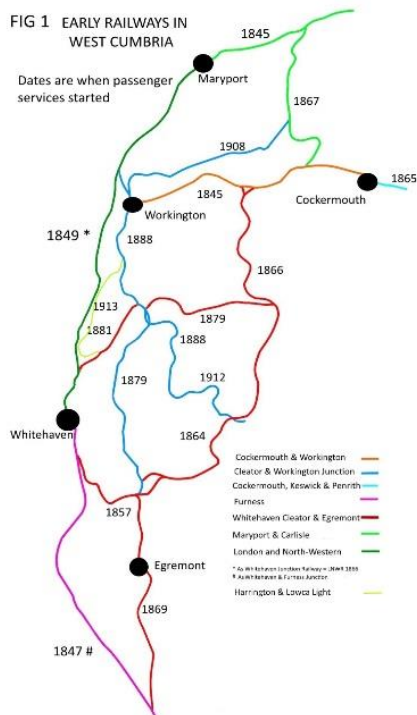
**LIVERPOOL, ANNAN, AND PORT CARLISLE,**  
TWICE A-WEEK,  
CALLING OFF WHITEHAVEN, WEATHER PERMITTING.

6-3 A Powerful Steam Tender will convey Passengers, Live Stock, &c., from Port Carlisle to the CUMBERLAND, Free of Charge; and the Sailings have been arranged, as nearly as the Tides will admit, to suit the Railway Trains from Carlisle and Dumfries to Annan, where Omnibusses attend both the Railway and Steamer. The Passage Boat plies on the Carlisle Canal to suit the Arrivals and Sailings of the CUMBERLAND.

For Particulars, as to Freight, &c., apply to  
**J. CARRUTHERS,** Steam Packet Office, Carlisle.  
**DAVID BAXTER,** Annan.  
**KITCHEN & DOUGLAS,** 61 and 69, Market Place, Whitehaven.  
**HENRY HALTON,** 31, Water Street, Liverpool.  
**ROBERT STORY,** Fenwick's Entry, Newcastle-on-Tyne.

The Carlisle and Annan Navigation Company ran packet boats along the canal connecting to steamers to Liverpool from 1826. Two powerful steamers, the "Newcastle" and the "City of Carlisle," alternately performed the sea voyage. In 1847 two ships (Fire Fly and Royal Victoria) making four sailings per week to Liverpool.<sup>94</sup> There were also sailings direct to Belfast once per fortnight. These steamers to Liverpool called at Maryport and Whitehaven<sup>95</sup>

## 10. RAILWAYS IN CUMBRIA <sup>101</sup>



Wagonways had been in use for many years in the middle ages and were possibly used by German miners at Caldbeck in 1571.<sup>102</sup> The use of iron rails developed later but the real railway age only took off when Stephenson's Rocket showed what a well-engineered steam locomotive could do [in 1830<sup>103</sup>]. In the next three decades the country went mad installing railways all over the place.

The first railway in Cumbria was the Newcastle & Carlisle, opened in 1838. Surprisingly it was designed for horse-traction - perhaps the sharper bends this permitted are the cause of the more limited speeds permissible today with well over an hour (1hr 20 min) for the fastest trains to cover the 56 miles. The Maryport and Carlisle was next, not until 1846, and by 1862 there were as many as 18 railway companies operating in Cumberland, Westmorland and Furness (8 of them in West Cumberland alone. See Fig. 1). Most started with freight traffic (coal, iron, steel) with passenger activity a little later. By 1862 all the significant towns in the county were connected by rail (except for Keswick (1865) and Appleby (1876)). By now the ordinary person was able to travel long-distances in a way which had never been feasible before. Carlisle Citadel station, dating from 1846, hosted seven different companies up to 1923 - more than any other town in Britain outside London.

When the industries they served went into decline, then the lines closed, and also twelve of these companies were absorbed in 1923 into one of two major

companies which were to serve the north) [London and North-Eastern, LNER and London, Midland and Scottish, LMS].<sup>104</sup> Further closures followed after World War II when the Government of the day nationalised all the standard gauge railways as British Rail in 1948.<sup>105</sup> So the scene then in Cumbria (as it became) was as in Fig.2

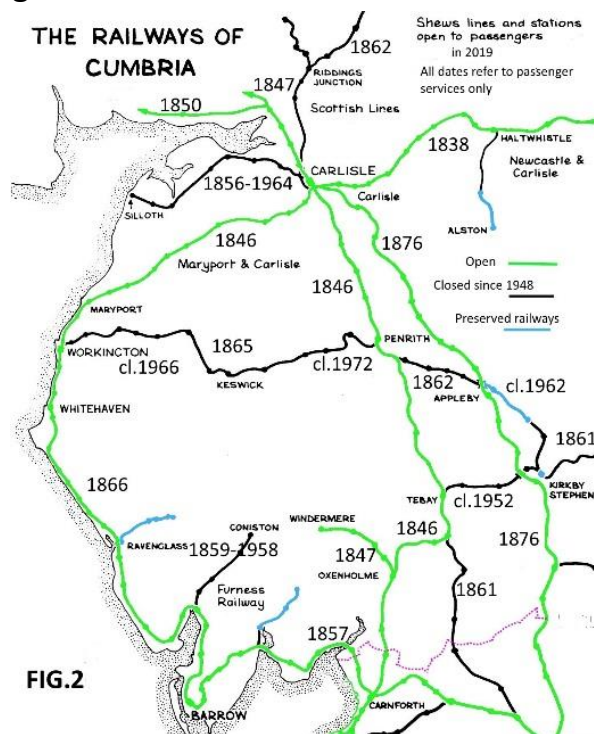


FIG.2

Further decline followed after the Beeching report of 1963 which saw many branch closures and Silloth, Keswick, Cockermouth, Coniston had by now all lost their rail services. Through the first half of the 20th century the Settle & Carlisle Railway (part of LMS) progressively lost out to the East and West Coast routes to Scotland. As a result the line came under threat of closure from the 1960s onwards, culminating in the legendary six year fight against closure from 1983 to 1989. As a result the Settle & Carlisle Railway now is the most complete piece of Victorian railway engineering in the UK, and is therefore in railway engineering and architecture terms a priceless gem. The government of 1996<sup>106</sup> “denationalised” the railways creating a company, later Network Rail, to manage the infrastructure (rails, stations, bridges, etc) and parcelling out the train services by way of franchises, many of which have had an unhappy story. In 2019, only five franchises operate in Cumbria<sup>117</sup> (some stations are now managed by a franchise company).

*Note: There is extensive data about the preserved railways in the Leisure & Tourism article in this database. (In ‘About the County Section’ [CLICK HERE](#) for this article.*



## 11. BUSES AND TRAMS



George Shillibeer's London Horsebus of 1829

The Horsebus<sup>111</sup> was designed by an English coach-maker, George Shillibeer, as a vehicle that could be stable and carry a large number of passengers.

Shillibeer's design worked. On 28 April, 1828, the first Paris omnibus began service, and followed by London in 1829. These were primarily used by the 'middle-classes' whilst the poorer working-classes still walked. But there had been earlier attempts - The first known public bus line (known as a "Carriage" at that time) was launched by Blaise Pascal in 1662 and was quite popular until fares were increased and access to the service was restricted to high society members by regulation. Services ceased after 15 years. In Britain, John Greenwood opened the first bus line in Britain in Manchester in 1824. His pioneering idea was to offer a service where, unlike with a stagecoach, no prior booking was necessary and the driver would pick up or set down passengers anywhere on request.<sup>112</sup>

Steam powered horsebuses were tried in 1830. However, the heavy road tolls imposed by the turnpike trusts discouraged steam road vehicles and left the way clear for the horse bus companies, and from 1861 onwards, harsh legislation virtually eliminated mechanically propelled vehicles from the roads of Great Britain for 30 years, the Locomotive Act of that year imposing restrictive speed limits on "road locomotives" of 5 mph in towns and cities, and 10 mph in the country.<sup>113</sup>

Trams in Cumbria did not appear until later – see Part 2.

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[LINK TO PART 2: Into the 20<sup>th</sup> Century and on.](#)

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Drove roads are often wider than other roads, able to accommodate large herds or flocks. Packhorse ways were quite narrow as the horses moved in single file, whereas drove roads were at least 40 feet (12 m) and up to 90 feet (27 m) wide. In the United Kingdom, where many original drove roads have been converted into single carriageway metalled roads, unusually wide verges often give an indication of the road's origin. Most of the remaining traces of drove roads which have not become today's main roads seem to be in Wales and Scotland - [www.geograph.org.uk](http://www.geograph.org.uk) has many images. From

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## 10 RAILWAYS

101 The Cumbria Railway Association has an extensive archive and an excellent website ([www.cumbrianrailways.org.uk/](http://www.cumbrianrailways.org.uk/)) where much more information about this topic can be found. Another useful source of background is J D Marshall & M Davies-Shiel, *Industrial Archaeology of the Lake Counties*, 1969, David & Charles, Newton Abbot.

102 Presumed date of site with the first known rails in the British Isles, Emanuel Stolne silver mine near Caldbeck in the Lake District, worked by Austrian miners. citing *Allison, Warren; Murphy, Samuel; Smith, Richard, An early railway in the German mines of Caldbeck. In Boyes, Grahame (ed.). Early Railways 4. Sudbury: Six Martlets. pp. 52–69. (2010)*

103 The first passenger-carrying public railway was the Oystermouth Railway, authorised in 1807 initially worked by horses; The Liverpool and Manchester Railway (L&MR) was the world's first intercity passenger railway in which all the trains were timetabled and operated by steam locomotives. The Rainhill Trials were an important competition run in October 1829, to test George Stephenson's argument that locomotives would provide the best motive power for the then nearly-completed Liverpool and Manchester Railway (L&MR). Five locomotives were entered, running along a 1 mile (1.6 km) length of level track at Rainhill, in Lancashire (now Merseyside). Stephenson's *Rocket* was the only locomotive to complete the trials, and was declared the winner. Interestingly the *Rocket* was conveyed to Carlisle by wagon from the North-East and then by barge to Port Carlisle and hence shipped to Liverpool.

([https://en.wikipedia.org/wiki/History\\_of\\_rail\\_transport\\_in\\_Great\\_Britain\\_to\\_1830](https://en.wikipedia.org/wiki/History_of_rail_transport_in_Great_Britain_to_1830))

104 LNER incorporated North British and North Eastern Railways; those incorporated into LMS (10) can be found here

([https://en.wikipedia.org/wiki/List\\_of\\_constituents\\_of\\_the\\_London,\\_Midland\\_and\\_Scottish\\_Railway](https://en.wikipedia.org/wiki/List_of_constituents_of_the_London,_Midland_and_Scottish_Railway))

105 A number of railways had closed before 1948 – Brampton Light Railway (with its horse-drawn dandy to the mainline at Milton) (1891), Solway Junction Railway (with its viaduct

across the Solway),(1921); Lowca Light Railway, (1926); Furness Railway - Conishead Priory Branch (1916), Piel Pier Branch (1936), Arnside to Hincaster Branch (1942)  
*A light railway is a railway built at lower costs and to lower standards than typical "heavy rail": it uses lighter-weight track, and is more steeply graded and tightly curved to reduce civil engineering costs. These lighter standards allow lower costs of operation, at the price of slower operating speeds and lower vehicle capacity.*

106 Railways Act 1993 passed on 5 November 1993

107 Virgin (West Coast), Northern, Transpennine, Scotrail, Caledonian Sleeper.

## 11 BUSES & TRAMS

111 A horse-bus or horse-drawn omnibus was a large, enclosed and sprung horse-drawn vehicle used for passenger transport before the introduction of motor vehicles.

<https://en.wikipedia.org/wiki/Horsebus> [Accessed 28 July 2019]

112

[http://www.petergould.co.uk/local\\_transport\\_history/generalhistories/general/horsebus.htm](http://www.petergould.co.uk/local_transport_history/generalhistories/general/horsebus.htm) [Accessed 28 July 2019]

113 Locomotives Act, 1861 Pratt's *Law of Highways* Edition 10, Shaw & Sons (1865) p. 388

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