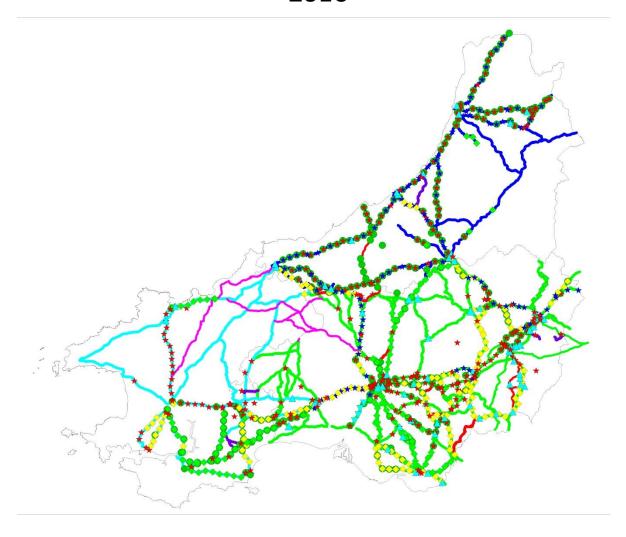
TURNPIKE and PRE-TURNPIKE ROADS

Medieval and Early Post-Medieval Sites Scheduling Enhancement Project

2016



Prepared by Dyfed Archaeological Trust For Cadw





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By

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SUMMARY

The Turnpike and Pre-Turnpike roads project forms an element of the Cadw grant-aided medieval and post-medieval threat related assessment project.

This report summarises the work done in both phases of the project. Phase I consisted of a desk-based project to identify turnpike roads from easily accessible documentary sources and, where possible, to also identify pre-turnpike roads. The routes of the roads and associated features were mapped in Mapinfo and records were created for the HER.

In Phase II enhancement of the HER continued, concentrating on Carmarthenshire, but including Ceredigion and Pembrokeshire. A case study of a specific turnpike was also undertaken.

Visits were made to sites where field remains of turnpikes and associated structures were known to survive. This was to assess the form and extent of survival and the prospect of positive management for other similar site types in the project.

The project is intended to increase understanding of this class of landscape feature and associated structure, to provide information to enable their historic value to be sustained and to identify specific parts of roads that may warrant designation as Scheduled Ancient Monuments.

INTRODUCTION

This project formed part of a wider pan-Wales Cadw funded initiative to assess all classes of medieval and post medieval sites for scheduling enhancement. The project aimed to investigate the medieval and post medieval road network and related sites, few of which were scheduled. The project provided an opportunity to update and enhance the representation of turnpike roads and their associated features within the regional HER. This has resulted in a useful data set and tool for studying, interpreting and understanding the development of the turnpike road system.

The digitisation of the turnpike road network in a GIS has been, perhaps, the most significant element of the project for what it can tell us about landscape change, and the historical development of transport links during the $18^{\rm th}$ and $19^{\rm th}$ centuries, and its associations with what went before and came after.

A study of the Roman road network previously been undertaken by Dyfed Archaeological Trust (DAT) (Schlee 2005), showed that many roads originally thought to be of Roman date, in fact originated in later periods. The research undertaken on Roman roads had not been matched by similar research on medieval and early modern roads, and they have not been mapped in any detail. This project has addressed this issue, and the research priority 'Transport Corridors' identified in the Industrial and Modern Wales section of *Introducing a Research Framework for the Archaeology of Wales*, which states that 'further study is needed to establish the significance of the canals, roads, railways and ports of Wales'.

The main products of the project are the enhancement of the descriptions of turnpike related features that are already recorded in the Historic Environment Record (HER), the creation of new HER records for previously unidentified or unrecorded features, an assessment of the condition and value of the features as a cultural heritage resource and the identification of features that may be considered for statutory protection.

Roads and routes through the Welsh landscape have changed and developed since prehistoric times. The routes between destinations have been influenced by many factors. The earliest routes were influenced by factors such as geology, topography and vegetation, but obviously, another important factor was the location of settlements of all kinds and how these have changed and developed through the ages, along with the need to access natural resources and environments.

Roads can be influenced by the routes established in preceding times. Through gradual erosion resulting from prolonged use and weathering, a simple track would eventually become incised into the landscape as a hollow-way. This kind of route can only take so much traffic before it becomes impassable, necessitating the establishment of alternative routes and diversions, eventually creating "braided hollow ways" or extensive areas of erosion. A similar process of gradual erosion and route variance can be observed in the present day on popular walking routes in coastal and upland areas.

There are also numerous other influencing factors such as cost and engineering and transport technology, along with other factors that change and develop through time, including political expediency at a national and local level, the

demands of commerce, industrial and agricultural economics, and perhaps less obviously, influences such as land ownership, tourism, communication technology and social change.

Late 18th and early 19th century travellers in South Wales, particularly in Carmarthenshire and Ceredigion, frequently commented on the appalling condition of the roads. This was at a time when the condition of roads across England and Wales was generally improving as a result of turnpike trusts creating new roads and upgrading existing roads. Prior to the creation of the turnpike road system, most roads, lanes and tracks linked villages and small towns; long distance road travel was rare, and virtually impossible for wheeled vehicles. Some improvement was carried out by large landowners, but it was not until the creation of turnpike trusts that a co-ordinated road network came into being. By 1750 about 150 trusts had been established in England and Wales, rising to almost 700 by 1800 and over a 1000 in 1825.

Some of the early turnpike routes in south-west Wales were improvements to existing roads, but by the end of the 18th century new routes were being created and the older roads (or sections of them) either became downgraded to a local lane or track, or were abandoned.

Strategic routes, such as Thomas Telford's coach road to Hobb's Point at Pembroke Dock, were heavily engineered and received Parliamentary funding. During the second half of the 20^{th} century and the 21^{st} century sections of some turnpikes have themselves been bypassed and subsumed into the local road system.

As part of the turnpike system, toll houses, gates, milestones and new bridges were erected along the routes. Over time, other buildings associated with the road network, such as post offices, inns and blacksmiths were developed along the road routes.

PROJECT AIMS

The overall aims of the project are:

- to identify turnpike roads from easily accessible documentary sources and where possible also identify pre-turnpike roads.
- to map the roads identified from documentary sources using GIS.
- to record the identified roads on the Dyfed HER.
- to identify those sections of road that have the potential for survival of early features, such as abandoned roads or turnpike roads downgraded to lanes and tracks, and verges of current main roads.
- to undertake field visits to selected sections of road to assess survival, condition and vulnerability.
- to enhance HER records for data gathered during field visits.
- to identify sites that are potentially of national importance and make scheduling recommendations.
- to produce a short report on the project.

Only the first three of these aims were addressed during 2014/15.

The research objectives of the project include:

- an application of definition, classification, quantification and distribution of these sites in south-west Wales
- assessment of the archaeological significance of these sites in both a regional and national perspective
- assessment of the vulnerability of this element of the archaeological resource,
- recommendations for scheduling of key sites
- enhancement of the Regional HER, making the information available through Archwilio and the Archwilio app.

METHODOLOGY

This project is loosely based on a pilot project undertaken by Gwynedd Archaeological Trust in 2013-14, and upon the previous threat related study of Roman roads undertaken on behalf of Cadw (Schlee 2004).

The desk-based study was designed to provide a dataset compiled from material held in the Dyfed Archaeological Trust Historic Environment Record (HER) and National Monument Record (NMR) along with other secondary sources.

No comprehensive study has been made to the physical remains of pre-turnpike and turnpike roads in south-west Wales, although there are some useful general works such as *Roads and Tracks of Wales* and *Welsh Cattle Drovers*, (Moore-Colyer 2001 and 2002) and specific studies such as 'The forgotten roads of Carmarthenshire' (Evans, 1983, 1985, 1988) 'The Early Effects of Carmarthenshire's Turnpike Trusts, 1760-1800' (Lewis 1967), and the Early Years of the Turnpike Trusts in Cardiganshire (Davies 2003) which offer more detail, but in limited areas.

Books about the Rebecca Riots (including Molloy 1983; Williams 1955) also contain references to the history of the turnpike trusts.

Other information on the turnpike road network was obtained from the county histories for Pembrokeshire, Carmarthenshire and Ceredigion.

The primary sources were digital Ordnance Survey mapping (1st edition) and the Old series Ordnance Survey mapping.

The vast majority of the network of turnpike roads still form part of the current road system. Aerial photographic coverage of the area supplied under licence by Cadw provided additional information about the current survival and form of the turnpike road network.

Milestones, toll gates and toll houses were included on the GIS mapping as this provides important contextual information for the road construction and phasing. Other features that are to some extent associated with the major road routes, including bridges, inns, smithies and post offices, have not been recorded as part of this project.

Standard HER database fields were used for recording the features identified in the.

SOURCES

Pre-turnpike routes

Pre-turnpike routes described in secondary sources are often only described in relation to nearby settlements or landscape features that the route passes through. Wherever possible these have been plotted in relation to roads on the $1^{\rm st}$ edition Ordnance Survey Mapping. Where written descriptions in secondary sources are the only available evidence it is possible that the GIS plotted routes are not the exact routes that the roads originally followed.

Some sections of pre-turnpike roads are no longer roads or tracks. Where the routes of Pre-turnpike roads (or parts) are known, these have been plotted in a Mapinfo GIS table. Sections of pre-turnpike roads that were later turnpiked have not been recorded separately. No prospecting for evidence of previously unrecorded pre-turnpike roads has been undertaken as part of this project.

Old Series Ordnance Survey Mapping

The main source of evidence for turnpike routes used in this project was the OS Old Series mapping. On the Old Series mapping, turnpike road routes are depicted by 'shading' (effectively thickening) one side of the road.

The Pembrokeshire maps were surveyed from 1809 to 1812, and published between 1818 and 1820, with some revisions in 1836 to 1842. Carmarthenshire mapping was surveyed between 1809 and 1820, was revised from 1829-30 and was published between 1830 and 1837. Ceredigion mapping was surveyed between 1810 and 1833, was partly revised in 1833 and was published between 1834 and 1837.

The Old Series mapping therefore provides a record of the extent of turnpike roads after the turnpike system had been in operation for around 40 to 50 years (in some areas). However, some caution is needed in necessarily accepting all these routes as turnpike roads. Although most of the turnpike roads had been constructed or were under construction, according to secondary sources (that have researched the surviving records of the Turnpike Trusts meetings), some existing main routes depicted as turnpike roads on the Old Series mapping, although included in the various Turnpike Acts, were, for a variety of reasons, never actually adopted by the Trusts.

Stretches of road with additional mapped evidence of turnpike road infrastructure, such as toll gates are needed to add credence to their status at turnpike roads at the time of the map surveys.

The Old Series mapping marks toll gates and toll houses. Although turnpike road mileages are depicted only as points, they are assumed to have been marked on the ground with mileposts or milestones.

Comparison of the mapped data with documentary sources suggests that not all toll gates and toll houses are depicted. The toll points may have been bars, chains or mobile booths that were not permanent fixtures and may therefore not have been included on the mapping.

1st Edition Ordnance Survey Mapping

Following the end of the Rebecca Riots in 1843, a Parliamentary Commission of Enquiry was held in 1844, resulting in the reform of the turnpike system in Wales. All the turnpike trusts within each county of Wales were amalgamated and tolls on vital commodities like lime were reduced by half.

By 1864 most of the turnpike trusts had been abolished and under the Highways Act of 1878 all 'disturnpiked' roads became 'Main Roads' and with the Local Government Act of 1888 responsibility for the maintenance of main roads passed to Highways Boards of local county and borough councils, funded by the rates.

By 1896 roads were classified as first or second or third class roads according to whether they were Main or District roads (as classified by Rural District Councils), metalled or un-metalled. On the OS $1^{\rm st}$ Edition mapping, both 'Main' roads and 'District' roads were depicted with one thickened side of the road along its length, making it impossible to differentiate between turnpike, main and district roads. Third class roads were shown without shading.

The OS 1st Edition mapping for Pembrokeshire, Carmarthenshire and Ceredigion which was published between about 1865 and 1890 (having been surveyed from

approximately 1854 onwards) effectively represent the 'post-turnpike' era and has potential pitfalls for identifying turnpike roads.

Mapped details, such as toll houses and gates can help identify the turnpike roads. Milestones (with distances) and mileposts (without distances), also help ascertain whether a route was turnpiked or not. In some (but not all) cases, the milestones and mileposts coincide with mileage markings on the Original Series mapping.

On some roads the 1^{st} edition mapping also records 'pickets' (Pkt.). These are assumed to have some connection with road surveying and maintenance, but may not relate to the turnpike system.

2nd Edition Ordnance Survey Mapping

The 2nd edition Ordnance Survey mapping also depicts milestones. In most instances these coincide with the $\mathbf{1}^{\text{st}}$ edition milestones, but differences in the locations of mileposts and milestones along the same stretches of roads represented on the $\mathbf{1}^{\text{st}}$ and $\mathbf{2}^{\text{nd}}$ edition OS mapping presumably result from different repairs or upgrades of the roads, presumably, but not necessarily while the turnpike system still operated.

Turnpike road infrastructure

Milestones, stones, posts, guide posts

Milestones (most often marked as M.S.) were generally only marked on OS $1^{\rm st}$ and $2^{\rm nd}$ edition mapping. On the Old series mapping, turnpike mileages are marked as numbered points. These are assumed to mark the locations of mileposts, but these have not been recorded in the HER.

Milestones are traditionally associated with turnpike roads, but this is not always the case. An act of 1744 made milestones compulsory on most main roads and the General Turnpike Act of 1766 mandated the turnpike trusts to erect milestones along roads they controlled. The absence of milestones on historic map depictions of road routes may be due to roads that were originally included in the various Turnpike Acts never being adopted by the Trusts. Alternatively, despite the routes being managed by the turnpike trust, milestones may never have been erected.

Milestones are also known to have existed on routes that pre-date the turnpike road system.

Guide posts are marked 'GP' on the Ordnance Survey 1st edition mapping, and are probably associated with pre-turnpike and non-turnpiked routes. On some routes, Historic Ordnance Survey mapping also mark the location of roadside stones. These may be prehistoric features that came to be used to mark a route in later years, or may have been erected once the routes had become established.

Toll Houses and Toll Gates etc.

Only toll gates (T.G.) were generally marked on the Old Series OS mapping. The OS $\mathbf{1}^{\text{st}}$ Edition mapping generally records toll gates as T.G. but sometimes spelt out the word Toll Gate or Toll House. Where a toll house or gate is marked there is often a line drawn across the highway. This shows the precise positon of the barrier and thus where the toll was operated. During the project it was noticed that 'T.P', generally interpreted as identifying a 'turnpike', often appeared to

indicate the location of toll houses or toll gates. 'T.P' indications were therefore included in plotting toll gates and toll houses. In addition, place and house names often suggest the presence of a toll house or gate on the OS 1st Edition mapping. Primary sources, especially the minutes of turnpike trust meetings and newspaper articles mention tollgates that are not indicated on historic mapping or whose names cannot be located on the mapping. Many of these may have been mobile 'toll-booths' that could be moved to temporarily exploit particular stretches of road at specific times. 'Chains' and 'bars' were also used to strategically block roads for the purposes of collecting tolls.

The HER enhancement undertaken during this project has called in to question some of the house names and place names that have previously been interpreted as relating to the turnpike road system. The presence of the word 'gate' in a place name does not necessarily derive from it having been the location of a toll gate. There were a number of examples where 'gate' marked the edge of unenclosed common land, or a gate-house/lodge associated with an estate or large house.

Other sources

Some of the potential pitfalls of the information that can be extracted from the historic Ordnance Survey mapping sources have been discussed above. Other maps in secondary sources also contain evidence of the turnpike road network. A map illustrating communications in Carmarthenshire circa 1840 is included in the Carmarthenshire County History (Lloyd 1939). It depicts the roads in use at that time based on information extracted from the commission of enquiry into the turnpike trusts undertaken in 1843. Although most of these routes are confirmed in the maps included in various secondary publications (Williams, D; Evans, MCS etc.) there are some discrepancies. Unfortunately, there are fewer mapped sources available for Ceredigion and Pembrokeshire.

An unprovenanced map of routes and turnpike roads in use between 1839 and 1844 (held in the Dyfed HER), appears to be derived from 1^{st} edition Ordnance Survey mapping but does not differentiate between 'routes' and 'toll roads'. It has minor differences from the Lloyd 1939 map.

Maps in Williams 1955, show fewer turnpike roads, but usefully attributes the mapped routes to specific turnpike trusts. The map coverage is incomplete and although the information is presumably derived from primary sources, the mapped routes are not referenced.

Other secondary documentary sources refer to a plethora of Parliamentary Acts (which lasted 21 years) and bills of various dates for the construction and maintenance of various roads. These references often do not mention the name of the trust involved, and in many cases it would be necessary to return to the primary sources to establish clearer dates for the formation of several of the turnpike trusts.

The minutes of several turnpike trusts survive in County records offices. These provide additional detail about when specific lengths of roads were constructed or repaired, but few if any of these records span the entire life of the Trust. It is also often difficult to identify the place names by which stretches of road are referred to.

RESULTS

TYPES OF ROAD

Roman roads

The Roman road network established during the occupation of Wales was primarily built for military purposes, linking the network of forts established in strategic locations. The engineering capabilities of the Romans meant the chosen routes of these carefully constructed roads were less dictated by topography than prehistoric route-ways. Following the end of Roman occupation in south-west Wales, some of the Roman roads routes did not prove useful to subsequent generations and fell out of use; others routes remained relevant and were adopted in part or in their entirety by road networks in later periods. The Cadw funded Roman Roads Forts and Vici Project has ascertained that in Dyfed, only 15% of Roman roads were found to be followed by the modern road network.

Medieval routes, pilgrimage and monastic routes

These have not been researched as part of this project.

Packhorse roads and tracks

These have not been researched as part of this project.

Drovers' roads

These have not been researched as part of this project.

Bridges

These have not been researched as part of this project.

Post roads, Coach roads and Pre-turnpike roads

Post and coach roads are bracketed together here because there can be little doubt that one route served both functions, and it is likely, too, that there was considerable overlap with the roads depicted by Ogilby. Currently there is nothing to suggest that roads were developed in order to cater for the post. Rather existing roads linking towns were utilised to develop the postal service.

Stage-coaches began to appear in the first half of the 17th century. From as early as 1621 Parliament was attempting to manage road use in order to protect the surfaces of existing roads by measures such as restricting the maximum weight of such vehicles or the number of horses employed (Hindle 1993, 65). Even so until the later 18th century, wheeled traffic remained rare in most regions of the United Kingdom. As with the postal service, many turnpike roads in Wales are almost certain to have been in existence by the time that coach traffic began to develop.

The following roads are recorded between 1536- 1642: Cardigan to Narberth; Cilrhiw – Cynwyl Elfed – Carmarthen; Cynwyl Elfed – Crymych- Whitechurch; Cemais – Whitechurch –Boncath- Cenarth – Newcastle Emlyn; Mynydd Melyn – Pontfaen – Puncheston – Haverfordwest; Newport – Fishguard

Turnpike roads

Few roads before the 18th century were suitable for wheeled transport and most travel was by horseback. In 1555 the Highways Act was passed which placed responsibility for the upkeep of roads on individual parishes through the use of 'statute labour' known as 'corvee'. Each able-bodied person of a certain age was required to give six unpaid days of unpaid labour annually. Horses and carts could be lent to the road workers instead of undertaking the manual labour. In each parish two 'Surveyors of Highways' directed the necessary works. The unpaid work came to be known as 'diwrnod i'r brenin' (a day for the king), and was regarded as more of a holiday than a day's labour. (Davies 2003). For non-turnpiked roads this system remained the law until 1835 (Pritchard 1952, 15).

The quality of road maintenance depended on the resources available within each individual parish. Large, rural upland parishes had inherent problems maintaining a satisfactory road network. Local magistrates regularly brought actions against parishes if the work was not completed and the resulting fines were used to pay contractors to undertake the work that the parish residents had not completed. These simple roads eventually became inadequate to cope with increasing amounts of traffic and larger numbers of wheeled vehicles. The increase in wheeled traffic, which inflicted much damage to the roads, was at least in part a consequence of the development of agricultural and industrial production and commerce, including the demand for lime in industry and agriculture.

After the Restoration of Charles II in 1663 the government established turnpike trusts under the first Turnpike Act, to improve the road network. The trusts were usually made up of local gentry and other wealthy people who could invest money in road maintenance. To qualify as a turnpike trustee a person would have to have an income of £80 from rents, or real estate worth over £2,000. Investors obtained private acts to enable them to borrow money on the security of turnpike tolls, to use on road maintenance. Road bonds were issued with a fixed interest of about 5%. In addition to the road itself, a turnpike road was also expected to have set milestones along the route, and turnpike or toll gates houses were also constructed for the collection of tolls.

The Acts were sponsored by the landlords, who obtained the support of the local clergy and influential or rich tenants, together with local industrialists whose interests would benefit from the construction or repair of the roads. Each Act lasted 21 years, in the original hope that the roads could be built or repaired and the borrowed money repaid within that period. The renewal of the acts allowed the Trusts to develop new routes, or to abandon routes that were too expensive or unprofitable to maintain.

The work of the trusts was intended to supplement rather than replace the duties of the parish in maintaining the roads. If a turnpike trust failed to fulfil its duties the parish through which the road passed was still held responsible for the cost repairs. This remained the case until 1835.

In the early years of the trusts, the tolls were collected by the trustees, but the system gradually changed. Toll gates were leased by auction to 'toll farmers' for up to three years. By doing this, the trustees could know what their income for the year would be in advance. Once they had paid off their lease, the toll farmers could pocket any additional income from tolls within the period of the lease. This

system was open to abuse, and the increasing burden of road tolls on the rural population eventually became one of the triggers for the period of social unrest known as the Rebecca Riots.

Tolls varied according to the amount of damage a particular vehicle type might cause to the road. Narrow-wheeled vehicles were considered particularly damaging. In the late 17th century, wheels less than 4 inches wide were prohibited from the roads. After 1773 traffic on wheels over 16ins wide were relieved from tolls. Narrow wheeled mail coaches were also exempt, along with all military horses, waggons and coaches, travellers to and from places of worship, funeral corteges, and vehicles transporting dung, lime and timber for agricultural purposes. The exemption for transporting lime was discontinued at the early 1800s, although typically, a lime cart would only have to pay one toll if its return journey could be completed in a 24 hour period.

By 1750 about 150 trusts had been established in England and Wales, rising to almost 700 by 1800 and over a 1000 in 1825. Some of the early turnpike routes in southwest Wales were improvements to existing roads, but by the end of the 18th century new routes were being created. By 1843 southwest Wales saw 23 trusts in operation, responsible for nearly 10,000 miles of roads in Carmarthenshire, Cardiganshire and Pembrokeshire.

Methods of road repair remained basic until the 19th century. The description left by a traveller journeying through South Wales in 1791, of the manner in which roads were repaired, is worth quoting:

"Their custom is to throw down vast quantities of huge stones, as large as they come out of the quarry, the size of a man's head, and many of them four times as big. These are spread over the road in heaps, perhaps a mile distant from each other, covering a great many yards of it. You must either drive over them, or wait till the people, who arc there with large hammers for the purpose, have broken them. This they only do into pieces the size of a pretty large flint . . . (Morgan 1795).

Many of the existing highways followed medieval or even Roman routes which, being intended primarily for travel by horse, were often too narrow or followed gradients unsuitable for wheeled transport.

In his report on the agriculture of Breconshire, John Clark (1794) describes the problem:

"There was a misfortune attending the original making of the turnpike roads throughout the whole ...Wheel carriages were not then so common as they are at present: hence the advantage of level roads were [sic] but faintly seen. The gentlemen therefore, unfortunately did not go to the root of the evil; for, except where the hills were very steep, they contented themselves with widening the old road. This was the case of almost all the kingdom....and their descendants, at this day, feel, and are long likely to feel, the sad effects of this puny parsimony."

Charles Hassell (1794, p31) also mentions:

"One observation remains to be made with regard to the turnpike roads, and particularly the main road from Milford Haven to London; namely that it was found too narrow at first, being barely 24feet from ditch to ditch; and by scouring

the ditches from time to time, it is now brought rather within its original width, which renders it extremely difficult and almost impossible to be kept in repair". ...I therefore beg leave strongly to recommend to Gentlemen of the Old Trust, to widen that road to the breadth of 30 feet as soon as their funds will enable them so to do.'

Macadamised road surfaces incorporating crushed rock to create a better road surface were not adopted in Wales until 1826 (Lloyd, 1939, p 352).

TURNPIKE TRUSTS IN CARMARTHENSHIRE

There appear to have been between nine and twelve turnpike trusts in Carmarthenshire. Varying amounts of readily available information about the activities of these trusts was identified during the project. Unless the secondary sources mention improvements made to specific roads by specific Trusts, it is difficult to establish exactly which Trusts undertook which road improvements. For example, there were apparently five different Trusts controlling the roads in and out of Carmarthen (the London quarterly review vol. 74 1844). By the end of the 18th century the Carmarthenshire turnpike trusts, controlled approximately 330 miles of the country's roads.

The Carmarthenshire Main Trust

On 21 January 1763 the Main Trust became the first turnpike authority to be set up in South Wales when it brought a bill before parliament (passed on 7 March 1763) to repair the mail coach road from Trecastle Mountain on the Breconshire border, westwards via Llandeilo, Carmarthen, and St. Clears, to Tavernspite on the Pembrokeshire border.

By 1772, both the mail coach roads between London and Milford Haven had been enacted as turnpikes along their entire lengths through South Wales. One ran via Gloucester, Ross-on-Wye, Monmouth, Abergavenny, Brecon, Llandovery, Llandeilo, Carmarthen, Tavernspite, and Haverfordwest; the other from the ferry across the Severn, by Chepstow, Newport, Cardiff, Cowbridge, Neath, Swansea, Pontardulais, Llanelli, Kidwelly, and Carmarthen, where it linked with the inland route).

The Kidwelly Trust

In 1765, the Kidwelly Trust obtained Parliamentary approval to improve the lower mail coach road from Pontardulais via Llanelli and Kidwelly, to Carmarthen. In 1791, the South Wales Association for the improvement of roads (founded in 1789 by landowners and industrialists interested in the improvement of the coastal mail coach road between the river Severn and Milford Haven) threatened to take legal action against the parishes for the upkeep of the roads that the Kidwelly Trust had failed to undertake. The Trust managed several routes between:

The Llandeilo and Llandybie Trust

Road improvements undertaken by the Llandeilo and Llandybie Trust were also included in the 1765 Act. In 'A History of Carmarthenshire' (Lloyd 1939) it is noted that the Landybie Trust undertook road improvements centred on Kidwelly. They also proposed maintenance of the road from Betws to the Glamorgan

boundary near Penlle'r Castell, but this was never undertaken. The Trust managed several routes between:

The Llandovery and Llangadog Trust

The Llandovery and Llangadog Trust was founded by Act of Parliament in 1779 to turnpike the road 'to and through the town of Llangadog, over Coed-yr-Artwydd, by Pont ar Lleche and Gwinfe Chapel, over the Black Mountain, by Cwm Llwyd and by Gelli Veinon and Eskirn-y-Gelin, to the River Amman. This route was abandoned by 1784 in favour of developing other roads to service the growing Black Mountain lime industry. The Llangadog trust had about 41 miles of road with 13 gates and bars. The roads were maintained primarily to facilitate the carriage of lime. The Trust managed road routes between:

The Llandeilo Rwnws Bridge Trust

The Llandeilo Rwnws Bridge Trust was established in 1784 to build a bridge to enable farmers to transport lime carts from the south across the River Towy (there were no bridges across the Towy Valley between Carmarthen and Llandeilo. The bridge at Llandeilo Rwnws (near Nantgaredig), below the junction of the Cothi and the Towy, was completed in 1787. It was a small permanent trust- it controlled only one mile of road (PRN 109099) and one toll gate (PRN 97341) under the ownership of John Jones of Ystrad who rented it to the Three Commotes Trust.

The Carmarthen and Lampeter Trust

This Trust was formed in 1788 to manage a road between Carmarthen and Lampeter. When the Act was renewed in 1809 responsibility for the two routes was split between the Carmarthen and Lampeter Trust and the Llandovery and Lampeter Trust. The Carmarthen and Lampeter Trusts operations were extended to include roads from Llandysul to Alltwalis Hill via Pencader and to Llanfihangel-ar-Arth. This new road division was officially described as the Tivyside District of the Carmarthen and Lampeter Trust, which managed only 7miles of road.

The Llandovery and Lampeter Trust

This trust was formed along with the Llandovery and Lampeter Trust in 1809 when an act of 1788 which joined Carmarthen and Lampeter and Lampeter with Llandovery was renewed with responsibility for the two routes being split between the two trusts.

At the end of the 18th century it controlled 18 miles of road. Cartographic evidence in secondary sources suggests the Llandovery and Lampeter Trust managed several road routes between:

The Whitland Trust

The Whitland Trust was established in 1791. There are no mapped milestones along the majority of the Known or attributed Whitland Trust turnpike roads. This may reflect the extent to which the trust had difficulty in achieving its goals, through financial mismanagement and as a result of the Rebecca Riots.

The Three Commotts Trust

The Three Commotts Trust was established in 1792 and was sponsored by Sir William Paxton. Proposals to repair six roads located in the 'Great Mountain' and

Llangendeirne areas were never undertaken. The trust managed several road routes between:

Carmarthen and Newcastle Turnpike Trust

The Carmarthen and Newcastle Turnpike Trust was formed in 1803 to manage roads linking Carmarthen with Llandysul, and Newcastle Emlyn.

Brechfa Trust

The Brechfa Trust managed 2 routes between Llanllwni and Brechfa (109031) and Nantgaredig to llansawel (109032).

Main (1763) and Llanwrda Branch

The dates of establishment for this trust are at present uncertain. It may have managed the toll road from llanwrda to Maestwynog (PRN 109067).

TURNPIKE TRUSTS IN CEREDIGION

An act of parliament enabled the establishment of the Cardiganshire Turnpike Trust in 1770. The county was divided into two parts, the Upper District or (Aberystwyth) Road Board, and the Lower District (Cardigan) Road Board. The dividing line was roughly between Aberaeron and Tregaron (Davies 2003).

In 1770 a turnpike running from Aberystwyth via Devil's Bridge and on to Shrewsbury was opened. The road from Aberystwyth to Machynlleth was commenced in 1771 (Davies 2003, 10).

Subsequent bills for other roads were obtained in 1791, 1812 and 1833. By 1843 there were 22 toll gates in Ceredigion.

TURNPIKE TRUSTS IN PEMBROKESHIRE

An initial unsuccessful attempt to address the poor state of the roads in Pembrokeshire was made when a voluntary society (the 'Old Trust') was set up in 1764 (Hassell, 1794). Turnpike trusts along lines of those in Carmarthenshire and Ceredigion were set up in Pembrokeshire, between 1771 and 1832 (Howells 1987). These included:

The Fishguard Trust

The Fishguard Trust ran the road between Fishguard and Haverfordwest. This road was accompanied by numerous milestones. The roads between Haverfordwest and St David's, St David's to Fishguard and Haverforwest towards Cardigan are represented as a toll roads on the historic mapping, but David Williams (Williams 1955, 168) suggests that although these roads were included in the bills to parliament due to local opposition and other factors, these roads were never adopted by the Fishguard Trust. This is also suggested by the absence of milestones on these routes. The proposed turnpike from Fishguard towards Cardigan is accompanied by milestones only as far as Newport, suggesting this was the limit of the Fishguard Trust's activities.

The Milford Trust

The Milford Trust managed the road that ran between Milford Haven and Haverfordwest founded in 1791 by Charles Francis Greville.

The Pembroke Ferry Trust

The Pembroke Ferry Trust managed the road that ran between Pembroke Ferry and Haverfordwest, founded in 1788 by Lord Milford (Howells 1987,360).

The Tavernspite Trust

In 1771 Pembrokeshire gentry petitioned parliament to grant permission to build the Pembrokeshire sections of the 'London Road'. The proposed route ran from Tavernspite through Narberth to Haverfordwest and on to Hubberston Hakin, and another road branching off from beyond Tavernspite to Pembroke and the Haven. The Trust was originally called the Pembrokeshire Trust, but became the Tavernspite Trust in 1809 when the petition was renewed.

Unattributed Toll roads

The following roads along the south coast of Carmarthenshire and Pembrokeshire are not represented in Williams, D. The roads represent the medieval route that ran from Pontarddulais, Llanelli, Kidwelly and then via ferries to Llanstephan and Laugharne to Tavernspite. The route was originally proposed for improvement through the turnpike system. They are depicted as toll roads on the Original Series or 1st edition O.S. mapping, but appear not to have been adopted by turnpike trusts.

THE END OF THE TURNPIKE TRUST SYSTEM

It took a while for the trustees of the turnpike trusts to realise that the toll rates dictated by Acts of Parliament could not produce enough annual revenue to keep the roads in repair and to repay the interest on debts, and during the first half of the 19th century turnpike trustees were often unable to repay the capital invested in road maintenance and could not meet the annual interest payments due to subscribers. In these circumstances responsibility for road maintenance often reverted back to the parishes, causing much grievance.

Clauses in the early Turnpike Acts which exempted lime and coal from tolls, were in many cases repealed when the acts came up for renewal. This resulted in increasing tolls on lime (and other commodities). Some level of toll on lime transport was justified since it was the weight of this traffic which was to a large extent responsible for the poor condition and need for repair of the roads.

But along with increased tolls, there was a proliferation of tollgates and side bars and chains, located so as to make it increasingly difficult to undertake journeys that could avoid paying tolls.

Revenue was also increased by "farming" the tolls. The toll gates and bars would be auctioned or 'let' to the highest bidder on an annual basis. The 'toll farmer' then collected the tolls, paid his rent, and could keep any extra revenue at the end of the year as profit.

These, and other iniquities in the activities of the turnpike trusts, coupled with poor harvests (as a result of several years of bad weather) and increased taxes and rents, combined to make life very difficult for the rural population and lead to significant levels of rural poverty.

Eventually the accumulated resentments boiled over, resulting in a period of civil unrest from 1839 to 1843 which became known as the Rebecca Riots. The rioters

organised many public protests and meetings, but also destroyed several toll houses and toll gates in protest at the level of tolls. Eventually military forces were deployed to quell the unrest.

Eventually the authorities gained control and by the end of 1843 the riots had largely been quelled. A government enquiry was set up and an act to reform the turnpike trusts was passed in August 1844.

FIELD VISITS

Methodology

Having mapped the turnpike road network through GIS, and having completed enhancement of HER records for toll roads, toll houses/tollgates, and milestones, the dataset was assessed for potential candidate sites that might benefit from statutory protection.

A small selection of sites within Carmarthenshire were visited to assess their survival on the ground. This fieldwork was partly to assess potential for scheduling recommendations and partly as a sample condition survey to summarise the general range of states of preservation.

Threats, survival and condition

The vast majority of the old turnpike routes are still in use as public roads and are of little significance as 'ancient monuments'. Although it is possible that remains of the earlier turnpike road structure and surfaces still survive beneath modern road surfaces, any original fabric is likely to be damaged by service trenches, drains, road repairs and roadside lighting etc. Although remnants of turnpike roads surviving beneath modern roads might therefore be considered to be 'under threat' it is unlikely that any such survival could be considered to be of sufficient archaeological significance (or appropriate) to warrant the statutory protection of a modern road route.

Maps and aerial photographs suggest that parts of some turnpike roads may survive on one side or the other of the modern roads. In several instances, the old route has been slightly straightened, or altered to accommodate a new river crossing. The original road often becomes a layby, access road or roadside verge adjacent to the modern road.

Some lengths of modern roadside hedges and ditches may be associated with the original turnpike route. How much of these features will be of 'original' construction is uncertain. Roadside hedgerows and ditches are highly likely to be altered or modified, however, the proportion of such damage to the entire feature is minimal and it is unlikely that any such ubiquitous features could be considered to be of sufficient archaeological significance to warrant statutory protection.

In a few instances, sections of bypassed road now lie beneath agricultural land, or have become field access tracks. In these locations there is more potential for the original road fabric to survive, however, the extent of survival, or the effects of cultivation on the survival of buried road surfaces may not be apparent from the evidence visible above ground. Abandoned sections of road are vulnerable to damage from farm machinery, off-road vehicles and erosion.

Milestones

Milestones are generally threatened with disturbance or destruction by road maintenance and road improvement works and traffic accidents. HER enhancement of the milestones data-set concentrated on recording mapped evidence of milestones. No attempt was made to check the survival or condition of either previously or newly recorded milestones.

Toll houses

Toll houses have the greatest potential to benefit from statutory protection. During the field visits, several tollhouse sites were visited to provide a 'snapshot' of the range of conditions in which they survive.

Not all toll houses are the same. Several mapped examples appear to have been existing buildings adopted and adapted to a toll house function, but other than documentary evidence there are few if any physical clues of their former function. The remains of toll houses ranged from complete destruction with no below ground remains likely to survive to standing occupied buildings.

HER ENHANCEMENT

Prior to this project, no turnpike roads were recorded on the Dyfed HER. There were 99 records relating to toll houses and toll gates, and 235 records relating to milestones.

Enhancement of existing HER records

134 records for Carmarthenshire and 21 records for Pembrokeshire have been enhanced.

No existing records for toll houses and milestones in Ceredigion were have enhanced.

New HER records

664 new HER records within Pembrokeshire, Carmarthenshire and Ceredigion were created as part of this project. This includes 91 new records relating to tollgates and tollhouses, 461 new records relating to milestones and mileposts. And 157 new records and linear plots for turnpike road routes.

Completed HER records

All the 157 turnpike road records for Carmarthenshire, Pembrokeshire and Ceredigion have been uploaded to the HER. Turnpike road descriptions include the start and end points of each stretch of road (as defined by mapped settlements and place names), attribution of each segment to the appropriate turnpike trust (where known) and brief details of the relevant turnpike trust.

Only the 69 new records for toll gates, toll houses and 400 milestones within Carmarthenshire have been uploaded to the HER.

HER records awaiting completion

76 milestone records and 11 toll structure records in Pembrokeshire require further enhancement before these can be uploaded to the HER.

93 milestones and 17 toll structure records in Ceredigion require further enhancement before these can be uploaded to the HER.

Incomplete data sets

95 short segments of former turnpike road that are no longer main road routes have were plotted as Mapinfo linear files for the purposes of identifying potential stretches of turnpike roads that are no longer part of the modern road network. Most of these 'bypasses' are the result of modern road improvements that have taken bends out of the earlier routes, or where new river crossings have been built. Other segments may survive as minor roads, road verges or laybys, or have been built over. Very few segments have been returned to farmland or survive as field boundaries. These files have no associated metadata and are not intended to be entered in the HER.

A partial data set of 72 records of guide posts have been created in a Mapinfo table. This data will only be developed for the HER if the opportunity arises in the future.

Polyline plots of pre-turnpike routes described in some secondary sources have been plotted, but records have not yet been created. This data will only be developed for the HER if the opportunity arises in the future.

CASE STUDY:

THE DEVELOPMENT OF THE ROAD SYSTEM ON THE BLACK MOUNTAIN BETWEEN LLANGADOG AND BRYNAMMAN

Background history

This area has been chosen as a case study because it benefits from good survival of physical evidence of pre-turnpike and turnpike routes associated with the agricultural lime industry in east Carmarthenshire. The roads and routes are accompanied by a variety of roadside features including milestones, toll houses, bridges and inns. On the mountain itself, the various routes can be related to specific areas of lime production, and the sequence of the roads is reflected in the style of the associated lime kilns. The value of the surviving physical evidence is enhanced by a good quantity of primary documentary evidence in the form of historic newspaper articles and accounts of Rebecca incidents, and the survival of some of the turnpike trust meeting minutes. In addition there are good secondary documentary resources relating to the development history of the road network and landscape history of this area.

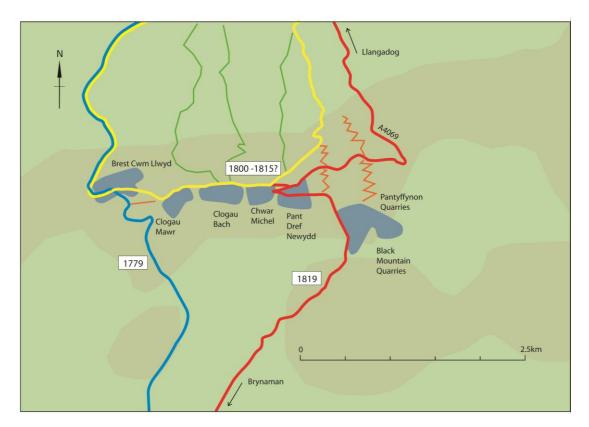


Figure a:

In the 18th century the industrialisation of the Amman and Tawe area had not yet begun and there was only light foot or horse traffic across the Black Mountain, with relatively little wheeled transport. There are numerous meandering sledge/packhorse tracks on the north slopes of the Black Mountain, visible as landscape features (orange zig-zags in Figure a).

As agricultural production expanded and intensified, demand for lime as a fertiliser and soil conditioner increased and its production became an increasingly important industry. With the increase of the lime trade there was increased traffic on the route from the quarries, necessitating upgrading of roads aided by the creation of Llandovery & Llangadog Turnpike Trust in 1779. Earlier routes from surrounding farms (and linking to pre-turnpike road routes) up to the lime kilns can be traced on historic mapping, and are still visible as landscape features on the unenclosed common (See green routes in Figure a). These were probably abandoned when the road running along the north side of the mountain was constructed.

The Trust's main interests were in the road system connecting with the limestone quarries on the north side of the mountain. The quarries marked the limit up to which the road was most often repaired. By 1786 a tollbooth had been built on the route at Penybont to capitalise on the increased traffic of lime carts (Evans 1985). The multiplicity of abraded tracks leading to and from the formal roads, and up into the quarry areas, reflects the density of traffic and the need for well-maintained road surfaces. Soon after its formation, the Turnpike Trust abandoned the old road over the mountain known as the Bryn Road (See blue route in Figure a), to concentrate on developing new routes up to the lime kilns. The Bryn road is still well preserved, and survives as a distinct landscape feature. More tollgates were built at various locations on the way to the Black Mountain.

In 1794 the Trust sought to extend their influence over other roads leading to the quarries (see the yellow route on Figure 1). By 1813 the Trust abandoned part of the original road having been given permission to operate a turnpike from Pontarllechau, over Pont Newydd and Pont Flocksman, to the limekilns and over the mountain to the Glamorganshire border (Evans 1985). Part of this road (see the red route in Figure a) was also abandoned in favour of a new route over the Black Mountain (now the A4063). The new road was completed in 1819. The former route is still visible as a landscape feature. The new road route over the mountain made it easier to exploit new sources of stone and other minerals which had previously been too difficult or uneconomic to exploit. It also meant that coal to fuel the limekilns could be transported more efficiently from the south to the north side of the mountain and lime production could be increased. In 1820, the first toll-gate on the south side of the mountain was set up (Rees 1896). Several toll house sites still survive along the A4069 in a variety of states of preservation. At least two milestones survive in-situ.

Limekilns and quarries

There are extensive remains of limestone quarrying and lime production on the Black Mountain. Following the research undertaken as part of the Calch project, it is hoped that it may now be possible to propose some parts of this industrial complex for statutory protection. As is clear from the previous section, the history of lime production and the evolution of the road network in this area are inextricably linked.

Toll roads

The link between the lime kilns and the road network remains very apparent. As the quarries spread along the mountain, so did the roads, and because much of the area is unenclosed upland pasture, pre-turnpike roads and other abandoned routes survive very well as visible landscape features.

Toll houses

Documentary sources suggest that there were at least six toll structures along the A4069 between Llangadog and Brynamman. Of these, two survive as intact, roofed buildings. Currently neither are in use. PRN 61205 is a Grade II Listed tollhouse (LB21895) with associated property boundary walls. The other is a former tollhouse on the edge of Brynamman more recently used as a shop. The extent to which any evidence of its former function may survive is unknown.

Other than a small area of level ground adjacent to the road and bridge at SN73871964 no visible surface evidence of the toll house at Cowslip Corner is apparent.

At SN72832449 the walls of a well-built toll house PRN 7843 survive to approximately 1m above ground level. The house and bridge appear to have been built at the same time. Considerable effort was expended in building the toll house which is built upon a masonry abutment built out from the rock of the river embankment. Although the toll house has been demolished, a photograph of its former appearance exists.

The minutes of the Llandovery and Llangadog Turnpike Trust contain numerous references to various other temporary gates and chains being errected.

Historic newspaper articles recount several Rebecca skirmishes and destruction of toll houses along this route. The following newspaper articles relating to Rebecca activity in the vicinity of the Black Mountain have been identified at Carmarthenshire Archive (microfiche reel no. NP10247) from 'The Welshman and General Advertiser for the Principality of Wales' as part of the Calch project:

28th July 1843 -

"On Thursday night a gate situated at a place called Waunystradfris, in the immediate neighbourhood of Llangadock, leading to the seat of E. P. Lloyd, Esq., of Glasnevin, was destroyed, and intimation given that a toll-bar on the road near Llangadock, leading towards the Black mountains, would be taken down this week if not at once removed."

4th August 1843 -

"Pentarlleche gate between Llangadock and the Black Mountains, was destroyed on Tuesday night by a party of Rebbeccaites, who came from the direction of Llandilo. It appears that they had sent threatening letters before, and two constables were employed to guard the house and gate, but they were compelled to go home for tools and made to assist in the work of destruction. In about a quarter of an hour, both gate and house were level with the ground."

11th August 1843-

"TOLLS ETC - (Llandovery)

There are here two turnpike trusts which intersect each other in the usual way in which the trusts in this county do, the tolls taken on one not freeing the tolls demanded on the other. There is the Lampeter and Llandovery trusts, and the Llandovery and Llangadock trust. There is the same complaint against side bars without end, and illegal demand of toll by the contractors. On Wednesday, Lewis, the contractor of the tolls on one of these trusts, was fined 20s. at Llangadock, for demanding full toll instead of half toll on lime. The trustees of both these trusts met here on Wednesday, and have determined to take the whole question of the tolls demanded into consideration, and have appointed a commission to inquire into the propriety of every toll-bar and gate on the trusts, and to do away with those which may be considered unnecessary and vexatious."

15th September 1843 -

"FOUR MORE GATES DESTROYED – Last Wednesday night a party of mounted Rebeccaites, about 300 in number, visited 3 turnpike gates in the neighbourhood of Llangadock and completely destroyed them. Two of them had been before down and re-erected. The names of the gates are Wainstredverys, Pontarlucoe and Carig-Southey."

13th October 1843:-

"Meeting on CEFN-COED-YR-ARLLWYD. A meeting of the Freeholders, Farmers and others of the parishes of Llangadock, Llanddausaint, Llandilo, Llansadwrn, Cilycwm and the adjoining parishes, was held on Tuesday last, the 10th instant, at Cefn-Coed-yr-Arlwydd, a piece of waste land, near Llangadock. It was convened by printed handbills extensively circulated throughout the surrounding district; they stated that the meeting was called for the purpose of petitioning Her Majesty to listen to the public's grievances, and request her Ministers to devise some method of affording them relief...There were about 1200 people present, mostly respectable farmers."

Milestones

Thirteen milestones are mapped between Llangadog and Brynamman. Of these only two are known to survive: PRN 108403 at SN7249115737 and PRN61190 which is a listed structure (LB21970).

FIGURES

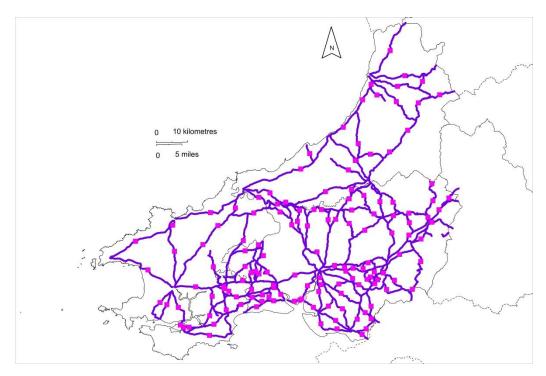


Figure 1: Mapinfo GIS map showing plotted turnpike roads with associated spot data locations within the Dyfed region.

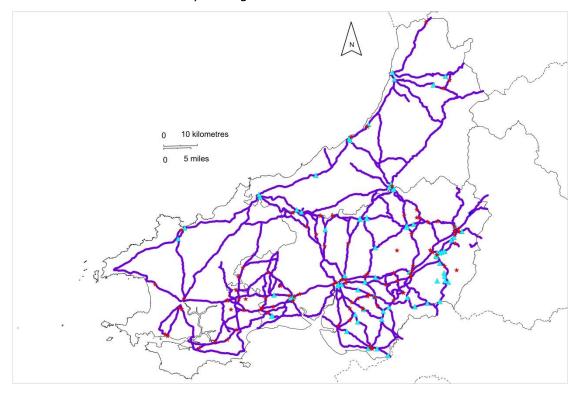


Figure 2: Mapinfo GIS map showing the turnpike road network with existing toll records (red stars) and new records (blue triangles).

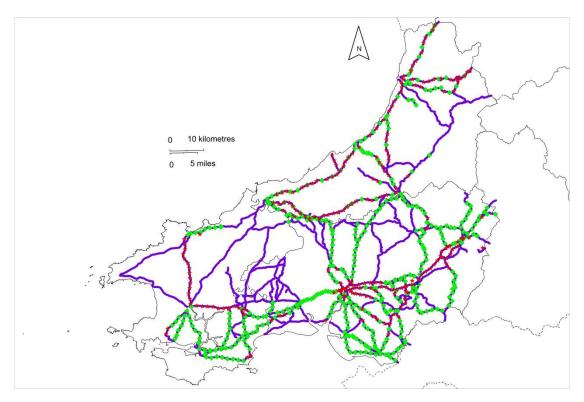


Figure 3: Mapinfo GIS map showing the turnpike road network with existing milestone records (red stars) and new records (green diamonds).

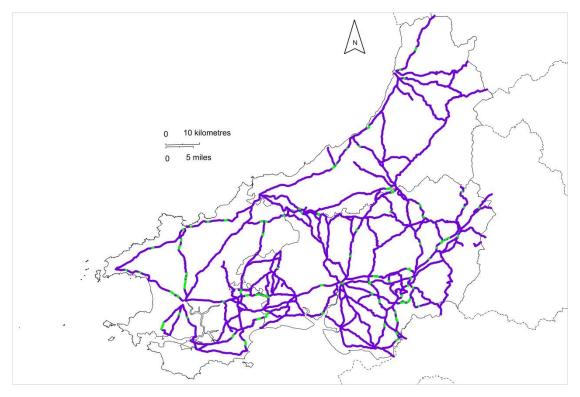


Figure 4: Mapinfo GIS map showing the turnpike road network and turnpike road segments that are no longer main roads (in green).

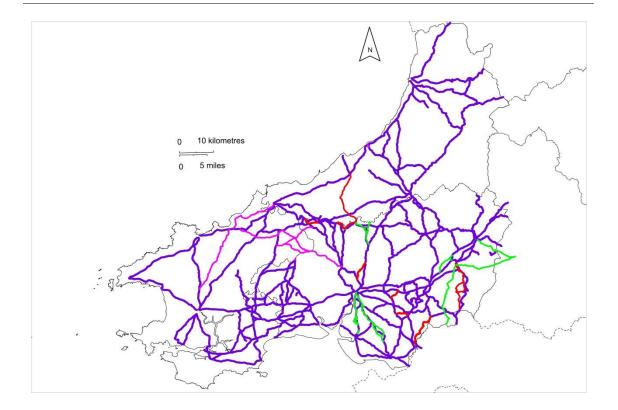


Figure 5: Mapinfo GIS map showing the turnpike road network (purple) with preturnpike and other roads (green, pink and red) yet to be recorded in the HER.



Figure 6: Example of Milestone. Protected as Listed Building

REFERENCES

Clark, J. 1794. *General View of the Agriculture of the County of Brecnock*, p.29. London.

Davies, D 2003. The Early Years of the Turnpike Trust in Cardiganshire. *Ceredigion*, Vol. XIV. 7-19.

Evans, M C S. 1983 'Forgotten roads of Carmarthenshire: 1. Alltwalis Hill to Llanfihangel-ar-Arth and Llandysul' *Carmarthenshire Antiquary* Vol XIX p.33-41.

Evans, M C S. 1985 'Forgotten roads of Carmarthenshire: 2. Llangadog to Trecastle, Brynamman and Swansea' *Carmarthenshire Antiquary* Vol XXI p.33-47.

Evans, M C S. 1988 'Forgotten roads of Carmarthenshire: 3. Carmarthen to Llanelli and the River Llwchwr. *Carmarthenshire Antiquary* Vol XXIV p.57-73.

Hassell, C 1794 A General View of the Agriculture of the County of Pembroke. London

Howells, B. 1987 (Ed. Davies, E) Pembrokeshire County History Vol. 3 Early Modern Pembrokeshire 1536-1815. Haverfordwest.

Lewis, A H T, 1967 'The Early Effects of Carmarthenshire's Turnpike Trusts, 1760-1800', *Carmarthenshire Historian*, 4, 41-54.

Lewis, A H T, 1971 'Carmarthenshire Highways of the Late Eighteenth Century: As Described by Contemporary Travellers', *Carmarthenshire Antiquary*, 7, 41-47

Lloyd, J E (ed), 1939. A History of Carmarthenshire Volume 2 1536-1900. Cardiff.

Map of the Turnpike Trusts in South Wales, n.d., early 19th century (copy held with Historic Environment Record for Carmarthenshire, Ceredigion and Pembrokeshire) marked with routes and turnpike roads in use between 1839 and 1844.

Margery H, 1992. The Old Series Ordnance Survey maps of England and Wales Volume VI (Wales). Headley Brothers Ltd.

Moore-Colyer, R. 2001 Roads and Tracks of Wales. Landmark.

Moore-Colyer, R. 2002 Welsh Cattle Drovers. Landmark.

Morgan, Mrs. 1795. A Tour to Milford Haven in the year 1791. pp. 120-121.

Schlee, D 2005, Roman military roads forts and vici in southwest Wales. Unpublished DAT report 2004/109 for Cadw.

2008. A Research Framework for the Archaeology of Wales. IfA Wales. http://www.archaeoleg.org.uk/intro.html

Williams, D, 1955. The Rebecca Riots, a study in Agrarian Discontent. Cardiff.

APPENDIX 1

Identified roads & PRN for the Carmarthenshire Turnpike Trusts

Carmarthenshire Main Trust

- 109059 St Clears to Red Roses
- 109060 Llanddowror to Narberth
- 109061 St Clears to Llanddowror
- 109062 Carmarthen to St Clears
- 109063 Red Roses to Begelly
- 109064 Llandeilo to Carmarthen
- 109067 Llanwrda to Pont yr Efail
- 109068 Dolau Hirion to Llandeilo
- 109069 Llandovery to Llangadog
- 109100 Llandeilo to Carmarthen
- 109124 Carmarthen to Llanstephan
- 109144 Abermarlais Carriageway
- 109145 Abermarlais to Cwmifor
- 109147 Trecastle to Llandovery
- 109148 Bridge at Dolauhirion
- 109149 Llandeilo to Carmarthen

The Kidwelly Trust

- 109091 Carmarthen to Kidwelly
- 109086 Kidwelly to Llanelli
- 109087 Ty Coch to Cwmffrwd
- 109088 Llwyn yr-eos to join the Kidwelly road
- 109089 Llanelli to Pontardulais
- 109090 Between Llanon and Pontardulais
- 109092 Llanon to Fforest
- 109093 Pensarn to Llanon
- 109094 Carmarthen to Llanelli
- 109095 Llandybie to Carmarthen
- 109096 Kidwelly to Pembrey
- 109097 Pembrey to Llanelli
- 109098 Pemberton to Loughor Bridge

Two additional routes may have been managed by the Kidwelly Trust, but are not included in Williams, D. (1955):

- 109110 Kidwelly to Ferryside
- 109111 Llangydeyrn to Llanddarog

The Llandeilo and Llandybie Trust

- 109146 Llandeilo and Talley (and beyond?)
- 109068 Llandeilo and Llandybie
- 109133 Ammanford to Pontardulais
- 109069 Ammanford to Gwaun-Cae-Gurwen
- 109070 Glanamman to Derwydd
- 109071 Ffairfach to Glan Towy
- 109072 Edwinsford to Felin Newydd and Pont ar Annell

The Llandovery and Llangadog Trust

- 109024 Llandovery to Llangadog
- 109025 Brynaman to Gwaun-Cae-Gurwen
- 109026 Ffairfach to Llangadog
- 109027 Ashfield Row (Llangadog) to Brynaman
- 109040 Llangadog to the Black Mountain
- 109143 Llangadog to Brynaman

The Carmarthen and Lampeter trust

- 109028 Pont Tyweli (Llandysul) to Llwyncroes
- 109029 Cwmann (Lampeter) to Carmarthen
- 109030 Llanfihangel-ar-arth to Brynawelon

The Llandovery and Lampeter Trust

- 109018 Nantybai to Rhydgroes
- 109019 Llandovery to Nantybai
- 109020 Lampeter to Goleugoed-ganol
- 109021 Llandovery to Llansawel
- 109022 Pencarreg to Bwlch Caermalwas
- 109023 Bwlch Caermalwas to Llansawel

The Whitland Trust

- 109040 Redstone Cross to New Inn
- 109041 Narberth to Redstone Cross
- 109042 Narberth to Efailwen
- 109043 Narberth to Princes Gate
- 109044 Llandewi Velfrey to Blaen-Pant
- 109045 Crosshands to Whitland

- 109046 St Clears to Maesgwynne Quarry
- 109047 Whitland to Groess-Ffordd
- 109048 Crossroad cottages to Blaen Dyfnant
- 109101 Post-gwyn to Efailwen
- 109106 Blaen-Pant to Bwythyn y Rhos
- 109107 Efailwen to Blaunwaun
- 109127 Tavernspite to Whitland
- 109136 Whitland to Llanboidy
- 109137 Blaeny waun to Llanboidy

The Three Commotts Trust

- 109073 Nantgaredig to Tumble
- 109076 Tumble to Llanelli
- 109077 Llandeilo to Carmarthen
- 109079 Nantgaredig to Cwnm-difa
- 109080 Tumble to Llandeilo
- 109081 Cwrt-y-garth to Cae-Newydd
- 109082 Broad Oak to Abercamlais
- 109083 Castell-y-rhingyll to Rhydarwen
- 109084 Cross Hands and Pontardulais
- 109085 Crosshands to Drefach

Carmarthen and Newcastle Turnpike Trust

- 108729 Carmarthen to Newcastle Emlyn
- 109033 Carmarthen to Newcastle Emlyn
- 109034 branching at Cynwyl Elfed, rejoining at Aber-arad
- 109036 Tanerdy to Cynwyl Elfed
- 109037 Pentre Cwrt to Llandysul
- 109039 Drefach to Llysnewydd
- 109108 branch off 109033 joining the Newcastle Emlyn toll road

Unattributed Turnpike Roads

- 109119 St Clears to Laugharne
- 109121 Three Lords Bushes to Laugharne
- 109120 Amroth to Laugharne
- 109122 Tavernspite to Three Gates
- 109123 Three Gates to Little Mountain
- 109125 Llanstephan to Ferry

109126 - Llanstephan to Black Scar Point

109135 - Tucking Mill to Little Mountain

APPENDIX 2

Identified roads & PRN for the Cardiganshire Turnpike Trusts

Upper Road Board Roads

- 108993 Aberystwyth to Pont Llyfnant
- 108994 South Gate (Aberystwyth) to Llanfarian
- 108995 Llanfarian to Llanrhystud
- 108996 Llanrhystud to Aberaeron
- 108997 Llanrhystud to Bryn Goleu
- 108998 Devil's Bridge to Rhayader
- 109000 Aberystwyth to Eisteddfa Gurig
- 109001 Tregaron to Pontrhydfendigaid
- 109002 Pontrhydfendigaid to Cwmystwyth
- 109003 Devil's Bridge to Aberystwyth
- 109004 Devil's Bridge to Dyfryn Castell
- 109005 Llanfarian to Pont Cwrt
- 109006 Lampeter to Aberaeron
- 109007 South Gate (Aberystwyth) to Pontrhydfendigaid
- 109008 Felinfach to Olmarch-Uchaf

Lower Road Board Roads

- 109009 Aberaeron to Llandysul
- 109010 Newquay to Llandysul
- 109011 North from Newcastle Emlyn
- 109012 Llanybydder to Llanwnnen
- 109013 Newcastle Emlyn to Cardigan
- 109014 Cenarth to Cardigan
- 109015 Newcastle Emlyn to Lampeter
- 109016 Pont-faen to Mydroilyn
- 109017 Cenarth to Newcastle Emlyn

APPENDIX 3

Identified Turnpike roads and PRN in Pembrokeshire

The Fishguard Trust

- 109057 Fishguard to Scleddau
- 109058 Fishguard to Haverfordwest
- 109102 Brynawelon to Haverfordwest
- 109103 Fishguard to Cardigan
- 109104 St David's to Haverfordwest
- 109105 St David's to Scleddau

the Milford Trust

109056 - Milfordhaven to Haverfordwest

the Pembroke Ferry Trust

109055 - Haverfordwest to Burton Ferry

The Tavernspite Trust

- 109128 Pembroke Ferry to Tenby
- 109129 Pembroke Ferry to Tenby
- 109130 Llanion Barracks to Waterloo House
- 109131 Pembroke to Milton
- 109134 Tenby to Templeton and Narberth
- 109043 Narberth to Princes Gate
- 109049 Haverfordwest to Hakin
- 109050 Pembroke to Templeton and Cold Blow
- 109051 Loveston to Canaston Bridge
- 109052 Kilgetty to Bush Farm
- 109054 Narberth to Redstone Cross
- 109075 Robeston Wathen to Haverfordwest

TURNPIKE and PRE-TURNPIKE ROADS

Medieval and Early Post-Medieval Sites Scheduling Enhancement Project

2016

April 2016

This report has been prepared by D Schlee

DAT Archaeological Services Project Manager

Signature Suncer Sulle Date 30/03/2016

This report has been checked and approved by K Murphy on behalf of Dyfed Archaeological Trust Ltd.

Trust Director

Signature Date 30/03/2016

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

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