

Llanfair Caereinion

Digital Place Plan



Consultation Draft
August 2023



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The UK Shared Prosperity Fund is a central pillar of the UK government's Levelling Up agenda and provides £2.6 billion of funding for local investment by March 2025. The Fund aims to improve pride in place and increase life chances across the UK investing in communities and place, supporting local business, and people and skills. For more information, visit <https://www.gov.uk/government/publications/uk-shared-prosperity-fund-prospectus>

Glossary

Augmented reality – Interactive experience with a real-world environment using a smart device. Augmented reality experiences often include visual elements overlaid on the surrounding environment.

Broadband – A high-speed internet connection.

Cisco Meraki unit – A brand of Wi-Fi access points used across Wales.

Digital champion – Someone who is digitally experienced and can help and support others to improve their digital skillset.

Digital strategy – A plan of action that focuses on digital technology as a way of achieving a set of goals.

Internet of Things (IoT) – A network of devices and sensors.

LoRa – A way of sending small pieces of information frequently from sensors to a cloud where people can access it. A long-range and low-power wireless communication systems.

LoRaWAN – A set of rules that determine how information is sent across the LoRa network (the network protocol).

LoRaWAN gateway – A device that collects the information sent from a sensor and sends it on to the cloud, where it can be accessed.

Superfast broadband – Broadband that provides download speeds of 30 Mbps or more. The connection is typically provided by a fibre cable to the street cabinet and then a copper cable to the premises ('Fibre to the Cabinet').

Third-party data – Datasets (that can be bought) which are produced by organisations that do not directly interact with the source of the data, such as the customer or a business.

Town Wi-Fi – Public Wi-Fi which covers a town or town centre.

Ultrafast broadband – Broadband that provides download speeds of 300 Mbps or more. The connection is typically provided by a fibre cable the entire way from the local exchange to the premises ('Fibre to the Premises').

Wi-Fi access point – A unit that provides Wi-Fi and location and mobility analytics.



1 Introduction

A Digital Place Plan is a strategic document for a community which sets out how technology and data can be used to help achieve its goals and address its challenges. Every town's goals and challenges are unique and they can include a wide range of topic, such as increasing footfall, growing the town centre economy, improving traffic management, cleaner safer streets, or increasing public involvement & engagement.

The idea of towns having their own Digital Place Plan ('the Plan') is a recent idea. For most towns it is likely to be something new and unfamiliar. However, for towns that wish to become smarter and more digitally confident, there are a range of resources available – from Powys CC to UK Government. A Digital Place Plan is designed to boost interest, understanding and support for digital technologies and the use of sensors to improve the performance of a town centre. And the process of preparing a Plan will encourage new action in support of existing town centre regeneration plans.

A Digital Place Plan also sets a course for a town to become a **Smart Town**. A Smart Town actively embraces new technologies to achieve economic, social and environmental benefits. This involves local stakeholders designing solutions and projects with digital in mind. Smart Towns adopt the same technology and data that national brands have been using for decades to enable small businesses and town centres to compete on an equal footing. Ensuring that every business and organisation within a town has access to the same information they need to grow their businesses and the town as a whole.

This Digital Place Plan for Llanfair Caereinion was published in July 2023, following a period of research and community engagement between April and June 2023.

1.1 The Plan making process

1

Review of strategic and local digital priorities

This identifies relevant local authority, regional and national digital priorities as found in strategies, investments in infrastructure and available funding streams. The review ensures that actions proposed in the Plan align with wider developments.

2

Review of local plans and partnerships

This identifies relevant existing local plans and town partnerships/working groups. This review ensure that actions align with a town's wider priorities and are proportionate to the local capacity for change.

3

Digital place assessment

The assessment reviews what digital infrastructure is currently in place, how it is being used, and what changes are planned. The assessment identifies where a town is on its Smart Town 'journey' by identifying what the town is already doing well and areas in which it could improve.

4

Engagement with local stakeholders

Engagement with local businesses, community organisations and other local stakeholders to reflect on the findings of the reviews and digital place assessment and discuss the actions proposed to be included in the Action Plan.

5

Production of the Action Plan

The Action Plan identifies the most impactful and feasible actions that can be taken to become a digitally smarter town, based on the learning from the previous stages and examples of good practice from elsewhere.

1.2 About Llanfair Caereinion

Llanfair Caereinion is a small town in the historic county of Montgomery in northern Powys. The town is situated on the River Banwy and the A458 road that connects the west coast of Wales with Shropshire. The nearest large towns are Welshpool (8.5 miles), Newtown (11 miles) and Shrewsbury (27 miles).

In 2011 (latest available data), the town had a population of 1055, and the parish in which it sits had a population of 1810.

Historically, Llanfair Caereinion was an important centre for the local farming community as it hosted livestock sales and housed a market hall (demolished late 19th century).

Today, the town remains a centre for the hamlets and villages around it, and is home to Ysgol Bro Caereinion, a new all-age, dual-stream school that opened in 2022.

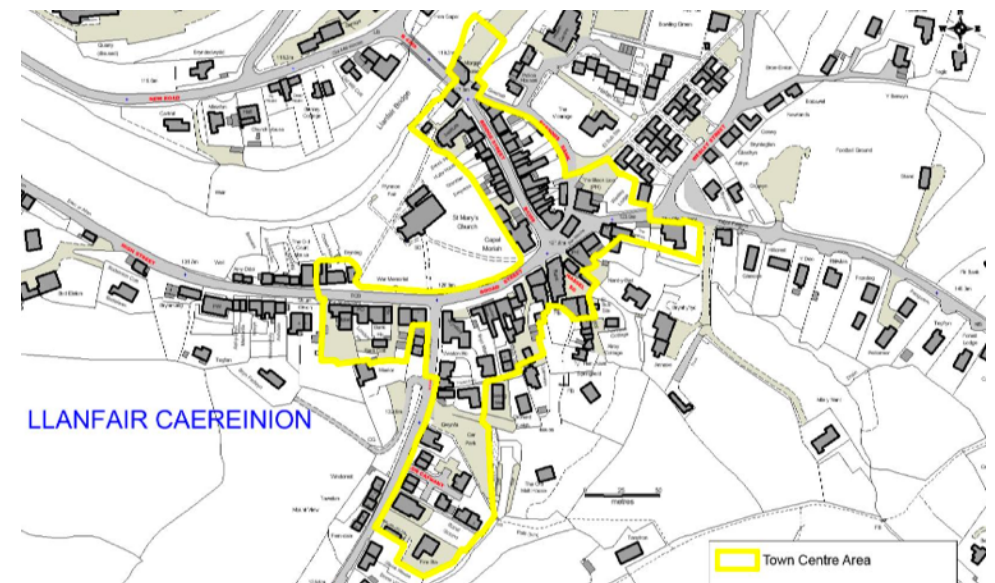
The town centre

Llanfair Caereinion's town centre is small, comprising Bridge Street, Market Square (the site of the old Market Hall, demolished late in the 19th century), and parts of High Street and Watergate Street. Much of the town centre is designated a Conservation Area.

The number of businesses in the town centre has decreased in recent years – most that remain are hospitality or service businesses, although there remains a convenience store housing the Post Office, a general store and a high-quality butcher.

A repair garage and petrol station housing a convenience store are situated across the river, near to (but technically outside) the town centre (see Figure 1).

Figure 1: Llanfair Caereinion town centre, as defined in the Local Development Plan. Source: Powys Adopted Local Development Plan



Tourism

As defined in the 'Tourism – A Way Ahead for Llanfair' report produced for Llanfair Caereinion Town Council in 2020 (see p10), the town's 'Tourism Ethos for the 2020s' is:

'A town which welcomes a growing number of tourists from close to home and far away, encouraging them to spend the maximum time as possible here to explore our culture, local ethos and businesses.'

The town's main visitor attraction is the **Welshpool and Llanfair Light Railway**, a historic steam railway built in 1903 to connect farming communities with the market towns. Closed in 1956, the Railway was reopened by enthusiasts in the 1960s and today is operated by a charity with hundreds of members and volunteers and a small team of paid staff.

The Railway operates a different timetable throughout the week and year, but at peak times (summer weekends) three services a day depart Llanfair Caereinion (the line's main station). The Railway also organises special events throughout the year aimed at different audiences, including families (for example, the Fireman Sam and Paddington Visits) and railway enthusiasts (the annual Steam Gala), and attracts around 25,000 visitors across the year.

The Railway's main station sits on the Banwy Industrial Estate, north east of the town centre, along with the Railway's visitor and community centre Llanfair Connections, and the Cloverlands Model Car Museum.

Other visitor attractions include the Town Trail, which starts by the station and tells the history of the town; Deri Woods and its woodland walk; and the nearby Mid Wales Alpacas centre a couple of kilometres from the town itself.

Visitor accommodation in Llanfair Caereinion comprises a small family-run hotel in the town centre, a few B&Bs and self-catering properties, and several caravan parks in the surrounding area.



Events, activities, and venues

The main regular community event held in Llanfair Caereinion is the town **Carnival**, which comprises a parade of floats through the town to a fun day on Mount Field (the town's public recreation and playing fields). It is organised by a committee of volunteers and takes place on the third Saturday in June. The Llanfair Caereinion agricultural **Show**, which when it was revived in 1973 was held on Mount Field, is now held in Llanerfyl, a few kilometres from Llanfair itself.

Llanfair Institute is the main community venue in the town. Opened in 1913, it was extensively refurbished for its centenary using a Big Lottery Grant, and now comprises a Main Hall, Youth Room, office (leased by the Town Council), and a 16-track recording studio. The Institute is run by a voluntary Committee and hosts a wide range of events throughout the week and year, from music gigs to plant sales and coffee mornings to dances to – in recent months following the closure of the café in the town centre – a community café.

The Institute is also home to the town's **Community Library**, which is volunteer run as a partnership between Powys Library Service, Llanfair Caereinion Community Library Group, the Town Council and the Institute. As well as lending service, the Library offers free Wi-Fi and use of its (recently upgraded) computers.

The town's football club, **Llanfair United Football Club**, is a large part of the town's identity and they have their home ground is on Mount Field. The Club has ladies', men's, reserves, walking football and junior teams, and home matches regularly attract around a hundred spectators and more for particularly significant matches. The Club leases the building and operates the Black Lion pub in the town centre in order to help raise funds in the absence of a dedicated clubhouse.



2 Strategic and local digital review

This section identifies relevant digital programmes, planned investments in infrastructure and funding for digital at a strategic (national, regional, and local authority) and local level. This ensures that the actions contained in the Action Plan align with strategic priorities.

2.1 National and regional digital strategies

- Welsh Government's **Digital Strategy for Wales**
- Mid Wales Growth Deal's **Vision for Growing Mid Wales**
- Powys County Council's **Digital Powys 2019 – 2025: A digital transformation strategy**

There is strong support for the use of digital infrastructure and data from the national to the county level. At the regional level, high-quality digital infrastructure has been identified by the Mid Wales Growth Deal as a strategic growth priority area and therefore is a focus for investment.

All the strategies emphasise the importance of digital technologies and enabling digital change at all levels of governance. They also recognise the transformative potential of digital technology and data for small businesses, local government, and community groups.

With the national, regional, and county level strategies in place, there is a well-defined and supportive framework for implementing a Digital Place Plan in Llanfair Caereinion and strong support for the adoption of a 'data-driven decision making' approach.

2.2 Digital funding streams

There are a range of funding streams available for digital initiatives in Powys towns like Llanfair Caereinion:

- **UK Government:** The Shared Prosperity Fund is a central pillar of the UK Government's Levelling Up agenda and is a major funding stream for investment in local digital infrastructure and skills development. In Powys, funding is being allocated in alignment with the 'Mid Wales Regional Investment Plan', jointly produced by Powys and Ceredigion County Councils. The Regional Investment Plan identifies both digital connectivity and skills as key opportunities for the region and a focus for investment. Powys has been allocated £22.7 million Shared Prosperity Funding between 2022 and 2025.
- **Welsh Government:** Transforming Towns is a funding programme to redevelop and improve town centres. Within the Placemaking Grant stream of the programme, the 'Digital Towns' strand can support interventions that 'support baseline digital infrastructure capabilities such as Wi-Fi analytics and LoRaWAN and IoT'. Welsh Government founded and funds the Smart Towns Cymru programme, which is being delivered by Menter Môn and runs to 2025.
- **Mid Wales Growth Deal:** Digital was identified as one of the Deal's eight 'Strategic Growth Priorities' and focus is placed on investing in digital infrastructure across the region, focusing on high-quality broadband, 4G, and other forms of digital connectivity.
- Projects led by community groups or centred on community facilities can access a wide range of funds, such as the **National Lottery's** People and Places Grant.



2.3 Digital infrastructure investments



Town Wi-Fi – Working with Llanfair Caereinion Town Council, Powys CC have installed a town Wi-Fi network in the town centre. The network covers the town centre as well as the Railway (see Section 3 for further information).



LoRaWAN gateway (Internet of Things) – Powys CC have installed one LoRaWAN gateway in Llanfair Caereinion, providing good LoRaWAN signal coverage across the area (see Section 3 for further information).



Full-fibre broadband – Openreach currently do not have plans to upgrade the fibre broadband network in Llanfair Caereinion from fibre to the cabinet (FTTC) to fibre to the premises (FTTP). See Section 3 for further information.

2.4 Digital support for businesses

Alongside and following the production of this Digital Place Plan, a programme of **support with developing digital skills** will be delivered by **Cwmpas** on behalf of Powys CC. Open to businesses, local community groups and residents, the programme will deliver support tailored to individual needs and support people to gain relevant qualifications, as appropriate. To learn more and express an interest in receiving support, visit: powysdigitaltowns.info

Business Wales provides business support which covers a wide range of areas, such as marketing, and this includes digital-specific support for businesses (such as using new software or technology). Business Wales provides general resources covering a wide range of topics, personalised 1-to-1 training, and signposting to other relevant Welsh Government

resources and services, such as: **Superfast Cymru** and **Social Business Wales**.

A previous phase of the **Powys Digital Towns** project, delivered by the Focus Newtown Enterprise Hub on behalf of Powys CC, provided skills and training to participating Town and Community Councils.

Resources from these programmes and other sources have been collated on this project's Resources webpage:

powysdigitaltowns.info/resources

2.5 Summary of strategic review findings

Strategic plans supporting digital	Strong support for digital across all sectors and at all levels of governance, as reflected in the strategies of Powys County Council , the Mid Wales Growth Deal , and Welsh Government .	✓
Funding opportunities	The Welsh Government's Transforming Towns programme and the UK Government's Shared Prosperity Fund are available to support place-based digital initiatives.	✓
Investment in infrastructure	There has been significant investment in local digital infrastructure, and more is planned in the medium-term.	✓
Business support	A programme of support with developing digital skills is being delivered through this project by Cwmpas . Business Wales provides digital support and resources.	✓

2.6 Local plans and strategies

'Llanfair Caereinion Into the Future 2021–2027' Town Plan (2021)

Llanfair Caereinion's Town Plan, produced by the Town Clerk on behalf of the Council in June 2021, sets out its stance on various subjects and its plan for improving the town for its residents. It was partly based on the findings of a consultation exercise undertaken by the Town Council in 2018.

The Plan includes nine high-level objectives for the Council for 2021–2027, as well as eighteen more specific objectives, each with accompanying Actions and information on how they will be achieved. Many of these specific objectives focus on the Council's ways of working, but others are more outward-focused, such as the objective 'to attract investment in both public and private sectors to ensure the economic well-being of the residents of Llanfair Caereinion and District' and to provide 'grants and donations to local organisations.'

Although the Plan makes no specific reference digital or data, its ambition to collate evidence to inform policymaking aligns with the Smart Town ethos of enabling data-driven decision making. Furthermore, the Town Council's Town Plan Monitoring Review document, published in late 2021, highlights the town's website and Facebook page as ways by which it is contributing towards its 'Community consultation, engagement and communication' objective, whilst it identifies a potential future Town Wi-Fi system as means to contribute towards its objective to 'Support local industry and tourism'.

Llanfair Caereinion Town Council Budget Report 2023–24 (late 2022) and Minutes of the Annual Meeting of the Full Council (May 2023)

The Town Council's latest Budget Report financial year sets out the principles and details of the Council's budget for the current financial year ending in March 2024.

The Budget shows that the Council estimates that it plans to spend around £90,000 this financial year, including up to £35,000 on major projects including: repairs to the Institute, starting a Youth Club, refurbishment of the town's public toilets and installation of water points, new disabled facilities and baby changing units; the installation of bus stops around the town; the installation of a Fitness Trail and Tourism Maps around the town, and progressing 'proposals to take lorries out the town'.

Although not specified in these documents, there is great potential to integrate digital and a data driven decision-making approach in these projects, for example using LoRaWAN people counting sensors to monitor usage of the refurbished public toilets or a new Fitness Trail, or using air quality sensors to measure the need to and impact of reducing HGV traffic in the town centre.

'Tourism – A Way Ahead for Llanfair' (2022)

This report on tourism from early 2022 was commissioned by the Town Council as part of an Arwain-funded project to examining ways of increasing the number of visitors to the town and their spend. Its production involved desk research and consultation sessions with local stakeholders.

The report characterises the town's 'tourism position today' (early 2022) as 'small but stable', and highlights the importance of the Railway, impending relocation to Llanfair of the Cloverlands Model Car Museum, and visitor facilities in the town centre and around the town.

Reflecting on the findings of the public consultation exercise, the report states that events were the most popular and frequently suggested way of encouraging visits to the town, along with celebrating the town's heritage and culture, promoting the beautiful scenery in which it sits, and promoting it as a place for visitors heading to more popular tourist destinations on the coast to break their journey and use the facilities and amenities. Reflecting on the consultation process, the report suggests that there was little engagement from town centre businesses, and suggested that this might reflect their scepticism about the potential for increasing tourism in the area.

The report's main mentions of the importance of digital are in terms of its potential for promoting the town and its attractions: it states that a 'well-functioning, clear website is essential' for this and so includes developing such a website for the town in its short-term steps for advancing tourism in the town. This was duly delivered, and the town's visitor-focused website is of a high quality: llanfaircaereinion.org.

The report does also identify, however, a number of areas in which digital and data could play a part. The first of these is the mention of the need to be able to **measure the impact of tourism on the town**, which requires reliable local data on the number of tourists and what they do in the town. Here, there is a clear role for digital, as the footfall data collected by the new town Wi-Fi system can provide near-live data on the number of people visiting the centre, suggest whether they are likely first-time visitors (a device not seen before) or a repeat visitor (device seen previously), and state how long they remained within the centre (see section 3.3 for further

information). In addition, should stakeholders want to measure footfall in a specific area – for example, the start of the Town Trail– battery-powered LoRaWAN sensors could be used to measure this and the data automatically displayed on a public or private web dashboard. Similarly, door opening and closing sensors could be used to measure the usage of facilities like the (soon to be refurbished) public toilets. Once collected, this activity data could be cross-referenced against available data on effect – for example, takings in local businesses or the running costs of facilities – to get a greater understanding of the impact of tourism on the town.

Another area identified in the report in which digital could play an impactful role is encouraging, promoting and measuring the effect of **events** – identified by local consultees as a way of encouraging visits to the town. In terms of promoting events, using the town's tourism website to do this systematically would seem to be a logical next step (and indeed, the website states its Events page is 'coming soon'), as well as taking a more coordinated approach to promotion via social media. A more resource-intensive approach could be to use the new public Wi-Fi splash page to promote events to those who connect to the network, and even to collect (with requisite consent) users' email addresses, thereby generating a database of interested people who could be sent a regular or irregular email promoting upcoming events. To promote events to residents/people in the town centre using its services, a digital noticeboard could be used.



2.7 Local capacity for change

The ability for a place to integrating digital and data to support placemaking and town centre regeneration, along with improving place management, is influenced by the extent to which a range of stakeholders feel invested in their town centre and the level of cross-organisation partnership working.

Local representative groups and organisations

- Llanfair Caereinion Town Council
- Llanfair Caereinion Community Partnership
- Powys County Council
- Powys Association of Voluntary Organisations – Community connector coordinate third sector initiatives in the town

As in many smaller towns, the main organisation active in Llanfair Caereinion is the Town Council, which comprises twelve elected councillors (all currently independent) and an employed Town Clerk. The Council's role is wide-ranging and includes being the Trustee of Mount Field recreation grounds and Deri Woods, responsible for maintaining various other town facilities including the playground, tennis courts and public toilets. The Council meets monthly and has in place a comprehensive set of plans (see above) and policies.

The Llanfair Partnership was established as a means for representatives of local groups to learn about helpful programmes and share and coordinate local activity. The Partnership last met in October 2021 but the Town Council plan to re-establish it in the 2023–24 year.

A number of voluntary groups look after other important features of the town, such as the Institute's Committee, the Friends of Deri Woods, and the various committees that support the town's various sports clubs.

Due to the small number of businesses in the town centre, there is no chamber of commerce or other group solely dedicated to representing these important town centre stakeholders, although the Town Council has proposed establishing a quarterly Business Forum in recent years.

2.8 Key findings

- National, regional and local authority-level strategies support the production of a Digital Place Plan and investment in digital interventions in Llanfair Caereinion.
- Public funding is available to help local stakeholders deliver these interventions, in particular Welsh Government's **Transforming Towns** programme and UK Government's **Shared Prosperity Fund**.
- Local plans and strategies make some reference to the potential for digital and data to support local priorities; there are many areas of development identified where integrating digital and a data driven decision-making approach could be valuable.
- As in many small rural towns, there are several active voluntary groups and organisations but no dedicated business group, and so the extent to which there is enough **local capacity to drive change** is a cause for concern amongst stakeholders.

3 Digital place assessment

The digital place assessment identifies where a town is located on the Smart Town journey based on what infrastructure is already in place and how it is currently being used, and identifies the next steps it should take to move forward. At the beginning of this process, towns should be aiming for a minimum basic level of physical infrastructure and online presence: Stage 1 (Getting Started).

3.1 Basic building blocks

1 - Physical infrastructure

- **Superfast or ultrafast broadband**
Faster and more reliable broadband for homes and businesses is key for enabling people to take advantage of the opportunities presented by the internet and to provide a solid base of connectivity for other Smart Towns infrastructure.
- **Mobile data**
Reliable and fast mobile data is key for enabling businesses and other stakeholders to get the most out of tech solutions, particularly when they are on the go.
- **Smart footfall sensors**
Smart footfall counting units provide clear and usable information about how many people visit the town, how frequently and how long they stay. These pieces of information are vital for understanding how the town is currently functioning as well as the impact of any events and other changes on how people use the town.

- **LoRaWAN gateway**

A LoRaWAN gateway is a critical piece of equipment as it provides a means for Internet of Things sensors to upload data to the internet. This data could range from the number of parking spaces available to remotely identifying when a bin needs emptying.

For an introduction to LoRaWAN and IoT, see:

<https://digitalanddata.blog.gov.wales/2022/02/23/from-bees-to-trees-and-everything-in-between-wales-harnesses-the-internet-of-things/>

2 - Online presence

- **Unified website**
A single website functioning as an online visitor destination for the town and providing a platform for promoting businesses, launching local campaigns, promoting events and activities.
- **Social media**
An active use of social media (such as Facebook, Instagram and Twitter) for promoting activity in the town centre.

3 - Business support and skills development

- Opportunities for businesses to receive digital skills training to better utilise digital, data and tools to acquire and retain more customers.

3.2 The journey

There are three key milestones on the smart town journey shown in Figure 2. For most towns the journey will begin somewhere between Stages 0 and 1 with the need to get started on putting in place some or all the essential components of a Smart Town.

As a town progresses across its journey, it is able to take on larger initiatives unique to the town, its infrastructure, plans, and partnerships. Smart Towns that have been working with digital technology for some time have often only reached Stage 2 (Using).

Figure 2: Milestones on a place's Smart Towns journey

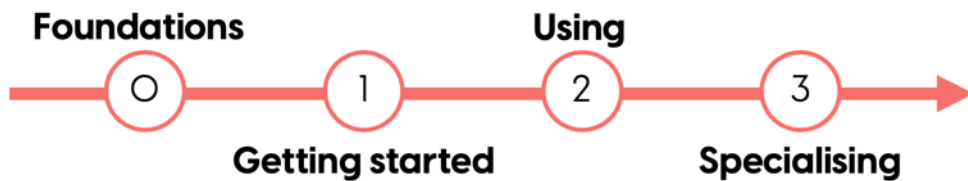


Figure 3: Explanation of Smart Town journey milestones

0 - Foundations is the starting point for most towns, there may be some basic building blocks in place but they are not being exploited in a joined up manner

1 - Getting Started involves a town having the basic building blocks in place, including the essential infrastructure of a 21st century town and a unified online presence.

2 - Using is the next step in the journey and involves partnership working between businesses and local stakeholders to use the data and analytics collected from the equipment in the town centre to launch new initiatives.

3 - Specialising involves a town partnership with experience using digital technology, taking on larger initiatives that are unique to the town and its ambitions. At this stage towns are able to utilise specialist equipment unique to the challenges and ambitions of the town as well as develop original insights that could spark new projects and initiatives.

3.3 Physical infrastructure

Broadband

Most premises in Llanfair Caereinion are currently covered by Openreach's Fibre to the Cabinet (FTTC) broadband network and so have access to 'superfast' broadband with download speeds of **up to 80 Mbps** (depending on the distance between the property and the nearest street cabinet). Welsh Government's 2022 Public Review of broadband provision suggests that a small number of premises at the edge of the town cannot achieve 'superfast' (30 Mbps or greater) speeds.

Currently, there is no 'ultrafast' full-fibre broadband (Fibre to the Premises, which supports download speeds of up to 900 Mbps) available in Llanfair Caereinion. Data from the Welsh Government's 2022 Public Review suggests that this might change for some parts of the town in the next three years, although no provider (Openreach or an 'altnet') submitted firm plans.¹

Mobile data (4G and 5G)

Outdoors, 4G coverage is available in Llanfair Caereinion across all four of the main mobile network providers (O2, Vodafone, Three, and EE). Coverage is less reliable indoors. There is no 5G coverage in Llanfair Caereinion or the surrounding area on any network.

¹ Some clusters of premises in the town were classified as 'under review', meaning suppliers have reported planned commercial broadband coverage but the plans have

Town Wi-Fi

As part of Powys CC's Town Wi-Fi Programme, a town Wi-Fi network was installed in the town centre in the spring of 2023. The network comprises five Wi-Fi access points (installed on Primrose Cottage, Crown House, Holly Cottage, the Railway Station and at the Football Club) and provides coverage of the town centre (the top and bottom of Bridge Street, and parts of High Street) and two of the town's main attractions: the Railway and the Football Club on the public Mount Field recreation ground.

Figure 4 New town Wi-Fi Access Point locations



been judged as being at risk or not being completed, but others were classified as 'white', meaning no qualifying infrastructure exists and none is likely to be built within three years.

As well as providing a reliable and free means for the public to get online, the system also collects 'smart footfall data', including:

- Number of visitors to the town centre (i.e. footfall)
- Frequency of visits (i.e. how often people visit, which can be used to measure the number of tourists visiting)
- Dwell time of visitors (i.e. how long visitors stays in the centre)

This data can be utilised by local businesses and stakeholders for a wide range of uses, including informing their opening hours, staffing, and marketing. The data and functionality of the town Wi-Fi system represent a major opportunity with the potential to grow the local economy, attract more visitors, and create a more inclusive and accessible town centre.

Powys CC are exploring funding opportunities for the footfall data to be shared through a public online platform. The importance of accessible data which can be used by local stakeholders to take action and make decisions is discussed further in the following section.

LoRaWAN (IoT)

Powys CC has invested in LoRaWAN, a Low-Power, Wide-Area Network technology that enables the use of low-cost sensors for monitoring and managing buildings, green infrastructure, and a wide variety of other applications. LoRaWAN coverage is provided by a LoRaWAN gateway, which receives data from sensors and uploads it to the internet, where it can be processed and analysed. Each gateway can support hundreds of sensors.

A LoRaWAN gateway operating on The Things Network is located above the town on Ysgol Bro Caereinion. This provides reasonable coverage of the town centre and the surrounding area. Any gaps in coverage could be addressed by installing further outdoor or indoor gateways; this would

also provide redundancy, should the main gateway go offline for some reason.

Digital heritage and culture

The content of Llanfair Caereinion's Town Trail, which starts outside the Railway and provides information about the town's history, is on information boards around the town and a printed leaflet, which contains a QR code linking to a simple web-based version.

Powys CC Library Service have developed a comprehensive digital transformation strategy and utilisation of digital tools and methods to access its services and archives is a key part of it. This includes an iPad lending scheme launched in 2022, which provides loans of iPads free of charge to Powys residents via local libraries.

In addition, StoriPowys, an online hub for Powys CC's libraries, museums, and archives, has been established as part of the digitalisation programme. The website sits separately from the Council's main website and enables residents to learn about and access a range of digital and cultural services online.



3.4 Online presence

Only a few of the businesses in Llanfair Caereinion have a strong online presence. The Railway has a high-quality website and actively updated Facebook page with around 20,000 followers, as does the Cloverlands Model Car Museum. Within the town centre, the Goat Hotel has a website and Facebook page (around 1,000 followers, last updated in February), and the Black Lion and Red Lion pubs have fairly regularly updated Facebook pages (around 1,000 followers each) but no websites.

Amongst local community organisations, the Town Council has a basic but practical and regularly updated website and Facebook page, whilst Facebook pages are well used by groups like Llanfair United FC, events like the Carnival, and venues like the Institute to share updates.

As discussed above, a visitor-focused town website (llanfaircaereinion.org) promotes the town's attractions and provides practical information about visiting the town. The website is attractive and the information it provides appears to be reasonably up to date, although it is not yet used to promote upcoming events. The website appears near the top of the list of results returned when searching for the town on Google, which suggests that it is effective at capturing interest from people enquiring about the town; website analytics could be used to test this and learn more about visitors to the website and how they interact with it.

Figure 5 Llanfair Caereinion's visitor website (llanfaircaereinion.org)

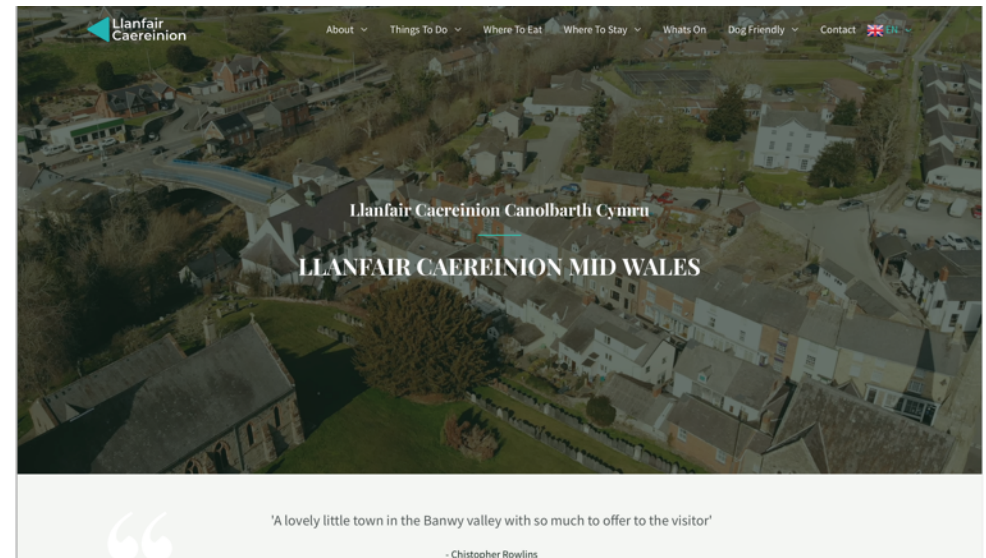


Figure 6 Welshpool & Llanfair Light Railway's website (wllr.org.uk)



3.5 Digital skills

Cwmpas is delivering a **digital skills programme** for businesses, community groups and other local stakeholders in conjunction with this Plan. It is designed to address the town-specific skills gaps identified through the plan-making process, including:

- **Community organisations and venues** – Skills levels within and between organisations and venues varies and similarly their needs can vary significantly. Some stakeholders from community organisations expressed interest in support with improving digital marketing and managing websites, although others were content with using Facebook like at present.
- **Town Council** – The Town Council has been central to the installation of town Wi-Fi. There is a mix of digital skills and experience within the Town Council and as the organisation managing the town Wi-Fi system, it is key that there is capacity to understand, interpret, and, if necessary, distribute the data.
- **Businesses** – Most businesses in the town seem satisfied with their current digital skills level, perhaps reflecting the sense that they are focused on serving the local population. The assessment of the town's online presence suggests that some of the businesses would benefit from support to promote themselves online, even if only by establishing a basic social media presence.



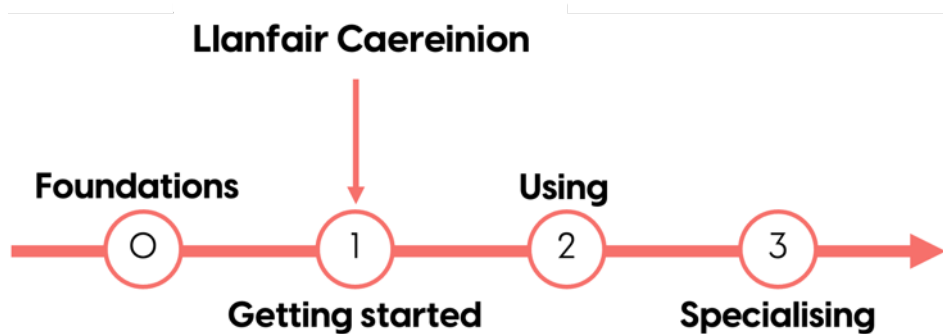
3.6 Where is Llanfair Caereinion now?

In terms of its physical digital infrastructure, Llanfair Caereinion is generally well-served, with a new public Wi-Fi system in place and LoRaWAN coverage provided by the town's single gateway. As such, the next steps for the town should focus on leveraging this infrastructure at the town-level to maximise the benefits for the local community, economy, and environment; the Town Council and/or Llanfair Partnership are the organisations best-placed to lead on this. The absence of plans from any provider to provide full-fibre broadband in the town in the next few years, however, is a cause for concern, and so town stakeholders should continue to work with the local authority to try and address this or mitigate the issues it raises.

For a small town, Llanfair Caereinion has a reasonable online presence thanks to its visitor website, Town Council website and active use of Facebook pages by community groups, events and venues. Town centre businesses should be encouraged and supported to improve their online presence, particularly if the town wishes to continue to improve its tourist offer.

The assessment suggests that Llanfair Caereinion is positioned at Stage 1 of its Smart Town journey.

Figure 7: Llanfair Caereinion position on its Smart Towns journey



3.7 Summary of digital place assessment findings

Physical infrastructure	<p>Most of the basic building blocks are in place, including a new town Wi-Fi system and a LoRaWAN gateway.</p> <p>The absence of plans to provide the town with full-fibre broadband and the patchy indoor mobile phone coverage are causes for concern.</p>	-
Online presence	<p>The town's main tourist attractions (the Railway and Model Car Museum) have a good online presence.</p> <p>The town has a visitor-focused website that is high quality and reasonably up to date.</p> <p>The online presence of businesses and community groups and venues in the town varies, but most use Facebook pages to provide updates.</p>	✓
Business support and skills	<p>Cwmpas are delivering bespoke digital business support and skills as part of the Powys Digital Towns programme.</p> <p>Business Wales provides a wide range of support for businesses looking to utilise digital tools and platforms.</p>	✓

4 Digital priorities for Llanfair Caereinion

The digital priorities are the main areas where digital, technology and data could have the greatest positive impact in Llanfair Caereinion. The priorities align with existing plans and visions for the town and the work and priorities of local organisations. The issues and opportunities raised by businesses and stakeholders during the plan-making process have been central in the formulation of the priorities.



Sharing and understanding locally-collected data

Data collected locally by the new public Wi-Fi system and/or other sensors can inform how Llanfair Caereinion is managed and support local businesses. For this to happen, however, local stakeholders need to have easy access to the data and the confidence and skills to interpret and take decisions based on it.

As such, ensuring businesses, local organisations, and Powys CC officers have easy and secure access to footfall data from the town Wi-Fi system along with necessary skills training is a priority. This will require establishing channels for distributing the data and providing local stakeholders with the relevant training and support.



Monitoring the town trail and other green spaces

The town trail and the green spaces around the town centre are important to Llanfair Caereinion both as a place to live and as a tourist destination.

These assets require monitoring, managing and maintaining, however, and this could be helped by the use of sensors connecting to the existing LoRaWAN gateway.

The data generated could also be used by community organisations to strengthen applications for funding to improve or develop the spaces.



Promoting the town and its events

Events contribute to the sense of community for Llanfair Caereinion residents but also offer a way to increase the number of visitors coming to the town and contributing to its economy.

Although in a small place the main limiting factor to increasing the range of events is likely to be volunteer capacity, greater use of digital marketing could help promote events to potential attendees from outside the town, whilst installing an engaging digital noticeboard somewhere in the town centre could catch the attention of residents and visitors already in the town.



Supporting the Institute and monitoring public facilities

Llanfair Caereinion Town Council plans to refurbish the town's public toilets, which are an important asset for the town, whilst the Institute is a venue central to the town and its community.

Data collected by sensors could be used to help stakeholders better understand the running costs and maintenance requirements of these facilities and identify ways in which they could be improved, as well as evidence the impact of grant funding.

5 Digital Action Plan

The Digital Action Plan provides a clear pathway with project ideas categorised based on deliverability (estimated cost and time required).

Summary of digital project ideas

Short-term – Actioning of quick-win for a permanent or temporary scheme

- 1 Set up channels to share data and insights from the town Wi-Fi system
- 2 Digital skills programme

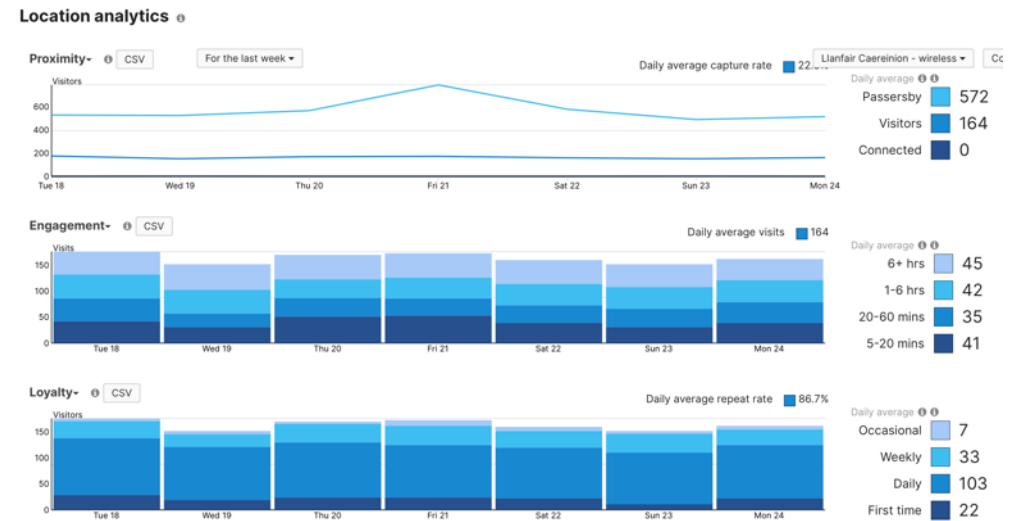
Medium-term – Delivery feasible within the next 12 to 18 months but will require further planning, funding, and statutory approvals.

- 3 Town centre digital noticeboard
- 4 Smart green space management

Strategic – Significant intervention that requires the involvement of organisations above town level and additional planning and funding.

- 5 Smart utilities pilot for community buildings

Figure 8 Footfall data from the town Wi-Fi system, as displayed in the Cisco Meraki dashboard



Project 1: Set up channels to share data and insights from the town Wi-Fi system

Priority: Sharing and understanding locally-collected data

Vision: 'Businesses, community organisations, and other stakeholders utilise footfall data to support their activities and decision-making with easy access to it in near real time.'

Lead organisations: Llanfair Caereinion Town Council and Powys County Council

Description: The town Wi-Fi system collects anonymous aggregate footfall data, showing the number of visitors to the town centre, frequency of visits, dwell time, and the busyness of different areas. Currently, the data is visualised as interactive graphs and maps, which are accessible via the system's secure administrative dashboard (see above).

A variety of different channels could be used to share the data with stakeholder groups based on their different needs, and it likely that more than one will be required. Channels to consider include:

- Online platforms that process and visualise the data, such as Patrwm.io (used in Gwynedd)
- Town apps that process and visualise the data such as Vzta (used in Rhondda Cynon Taf).
- Regular email newsletters that feature graphs and stats from the system (used in Cardigan).

Consultation with town centre businesses indicates that for the data to be used to make significant operational decisions (e.g. opening times, staffing, promotions), it needs to be accessible on demand.

Cost: Depends on channel.

Case study: Gwynedd and Anglesey

Through the 'Smart Gwynedd a Môn' initiative, Gwynedd and Anglesey CCs and Menter Môn worked with town and community councils across both counties to install town Wi-Fi systems and display the data on Patrwm.io.

Outcome: Data generated by the Wi-Fi systems is publicly accessible (on [Patrwm.io](https://patrwm.io)) and is used to inform business decisions, to measure the effect of interventions and events in the towns, and to compare trends across towns.

Further information

Cisco Meraki Guidebook – The document explains the types of data generated by the Wi-Fi system in greater depth and highlights best practice for managing and sharing the data. Available at smarttowns.cymru/en/cisco-meraki.html

Detailed example of a Welsh high street using the system – The document shows step-by-step how an anonymous Welsh high street collaborated to utilise data from a Cisco Meraki system (hosted on Patrwm.io) to compare high street footfall with footfall to specific shops: Available at smarttowns.cymru/en/case-studies/using-cisco-meraki-mr20-to-monitor-building-footfall-and-compare-with-the-high-street

Project 2: Digital skills programme

Priority: Sharing and understanding locally-collected data

Vision: 'Local stakeholders have the skills and confidence to interpret data and use digital tools to achieve their organisation's or business's goals.'

Lead organisations: All local stakeholder groups

Description: Stakeholders from all local groups are eligible for bespoke help to improve their digital skills with the programme delivered by Cwmpas. The training programme has been funded by Powys CC through the UK Government's Shared Prosperity Fund and is being delivered in Llanfair Caereinion alongside the development of this Plan.

Cost: Free.

Further information

Sign up for training – The website contains more information about the skills training and a form to sign up: powysdigitaltowns.info/

Digital Toolkit for Business – Business Wales provide comprehensive business support and have produced a guide: businesswales.gov.wales/superfastbusinesswales/

Case study: Mold, Flintshire

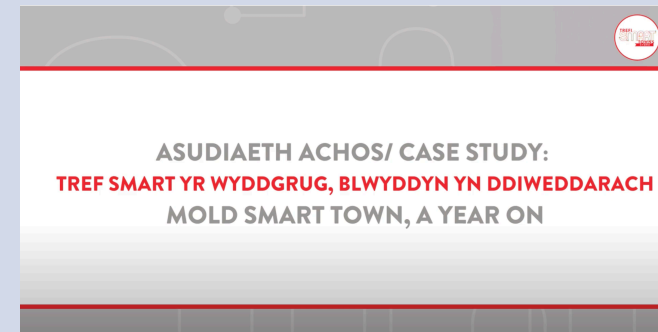
As part of the 'Mold Smart Town' initiative, Flintshire CC installed a town Wi-Fi system and LoRaWAN gateways in the town centre. Footfall data from the Wi-Fi system is shared and utilised by businesses, the Town Council, and across the County Council.

Outcome: Businesses have the ability to see daily footfall trends which has provided evidence on whether to open at times traditionally considered 'too quiet' (e.g. Mondays). This insight has given businesses reassurance to open for longer and for more days of the week.

The Town Council is using the data to measure the performance of Mold Castle and Bailey Hill, a local visitor attraction located close to the high street. The Town Council is able to make changes to how Bailey Hill is managed and promoted by measuring the proportion of visitors to the town who are visiting Bailey Hill (by comparing footfall recorded on the high street and at Bailey Hill).

Flintshire CC Streetscene Team is using the data to plan maintenance and repair work on the high street for the quietest times of the week, reducing potential disruption to visitors and businesses.

Video: [YouTube](#)



Project 3: Digital noticeboard for town centre

Priority: Promoting the town and its events

Vision: 'Businesses and local groups regularly use the town centre digital noticeboard to publicise local events, activities and other promotions to a wider audience. This content is managed by the local community and is updated in real-time, ensuring that promotions are relevant and engaging.'

Lead organisations: Llanfair Caereinion Town Council and Llanfair Partnership

Description: The Town Council, businesses, and other local organisations would benefit from the increased visibility provided by promotions and notifications displayed on a digital noticeboard in the centre of Llanfair Caereinion. A noticeboard would be complementary to existing Facebook groups and the Llanfair Chronicle, providing a new way to promote activities and events as well as share important local news.

Footfall collected by the town Wi-Fi system could be used help identify the best location to install a noticeboard. Options include at one of the gateways to the town (that is, the Watergate Street public car park or by the Railway), outside the Institute, or at the junction of Broad and Bridge Streets.

Cost: £10,000 to £20,000 for an outdoor freestanding noticeboard depending on the model and specification; options include single-sided or double-sided.

Case study: Rhayader, Powys

Rhayader 2000 have installed an interactive digital noticeboard on the footway adjacent to the crossroads in the town centre. The noticeboard has an interactive touchscreen and can be used to find out about upcoming local events as well as accommodation, food & drink, and activities in the local area.

The noticeboard links with the town's websites and uses the same branding, thereby tying the two together to create a cohesive visitor experience. In addition, the touch screen digital signage grabs attention far better than printed signage.



Project 4: Smart green space management

Priority: Monitoring the town trail and other green spaces

Vision: 'More people use the town's parks and footpath as maintenance and management decisions are informed and supported and enhanced by sensor data.'

Lead organisation: Llanfair Caereinion Town Council

Description: Install people counting sensors at the entrances to Deri Woods and select footpaths to:

- Generate an evidence base showing the number of people using the green spaces and paths, at what times, and how they use them.
- Inform the cost and scheduling of maintenance.
- Determine the need for additional amenities.
- Collect the evidence needed to support future grant applications and investments.

Data from the sensors will show the number of people visiting and at what times as well as the usage of different trails and areas in each Park. By using a battery powered system, the sensors can be moved in future to measure other locations in future.

Cost: Outdoor people counting sensors costs between £400 and £600 each in addition to set up costs.

Case study: Three Castles Walk, Monmouthshire

MonLife (a part of Monmouthshire County Council) has installed people counting sensors in parks, footpaths, and green spaces across the county. As part of this programme, sensors have been installed along the Three Castles Walk, a 19 mile circular route linking the medieval castles of Grosmont, Skenfrith & White Castle.

Outcome: The sensors show how many people are walking different parts of the trail and the busyness of different sections of the Walk throughout the day, week, and season. This data is used to demonstrate its usage and justify investment, as an evidence base for funding applications, to meet statutory reporting duties, and to target maintenance work along the Walk.



Project 5: Smart utilities pilot for community buildings

Priority: Supporting the Institute and monitoring public facilities

Vision: 'Community venues like the Institute serve as high-quality spaces for local communities, with their long-term sustainability supported through the implementation of smart sensors that reduce consumption of electricity, gas, and water and so running costs.'

Lead organisation: Powys CC in partnership with the Town Council and Trustees of venues

Description: The cost of running community buildings has been very high since the increase in energy costs of 2022. A smart building solution would enable real-time monitoring of electricity, gas and water use, enabling proactive monitoring of usage to prevent wastage and reduce costs.

A smart building solution utilising the LoRaWAN network would be customised to the design of each building, ensuring that it does not duplicate any existing systems and addresses the specific challenges faced by each building.

A smart utilities monitoring solution would typically involve the following sensors:

- Room occupancy
- Smart radiator valve
- Electric meter
- Water meter
- Gas meter

Structuring the programme as a 12 month pilot would allow enough time to design and use an evaluation framework that assessed the efficacy of the approach and calculate return on investment.

As noted earlier in the Plan, the technology is used across the private sector as well as the public sector (e.g. schools and colleges).

Cost: £20,000 to £30,000



Delivery guidance

Delivering a digital project like those proposed above can be a daunting prospect, but there are many resources available to help.

One of these is the **Smart Towns Delivery Manual** – a guide for how stakeholders can design, plan, deliver and evaluate place-specific Smart Towns projects. The Delivery Manual breaks down the process into six manageable stages, as well as providing technology-specific advice, information on risk management, and a directory of providers of Smart Towns consultancy, training, hardware and software solutions.

You can read the Delivery Manual in full on the Smart Towns Cymru website: [Smart Towns Delivery Manual](#)

Figure 9: Delivery approach



Summary of delivery approach

1. Identify the problem or opportunity

Identify and thoroughly explore the problem or opportunity you have identified and consider at a high-level what sort of action you might take to address it.

2. Explore possible solutions

Scope out possible solutions to the problem or opportunity you identified and tested in the previous stage.

3. Plan and procure

Work out how to deliver the preferred option identified in the previous delivery stage and procure the necessary goods and services.

4. Install and maintain

Install, test, and maintain any necessary new hardware and software as planned.

5. Share and use the data

Share the data being collected with stakeholders and then support them to analyse and draw insights from it.

6. Monitor and evaluate

Monitor how the new scheme performs and evaluate the effect it has had on the problem or opportunity you sought to address.