WELCOME TO OUR

DIGITAL CONNECTIVITY TOOLKIT

City of Westminster

Local Government Association

This toolkit has been created by Westminster City Council, in conjunction with the Local Government Association as part of the 2020/21 Digital Connectivity Fund. Its main aim is to share the best practice learned from our experience of improving full fibre connectivity in a highly urban environment, moving from one of the worst connected areas in the UK to having the highest full fibre availability in London in 2020.

This toolkit has five main sections...

1. OVERVIEW

Background, rationale, and objectives of the toolkit.

GO TO SECTION

2. MAPPING

How to map connectivity in your geographical area, with examples from Westminster.

GO TO SECTION

3. ENGAGEMENT

How to engage with relevant stakeholders and recommendations from our behaviour change study.

GO TO SECTION

4. INTERVENTIONS

Examples of interventions we have implemented to boost full fibre availability and our approach to improving connectivity.

GO TO SECTION

5. TESTING & FEEDBACK

How we tested the toolkit and its contents, and the opportunity for you to give your feedback.

GO TO SECTION

1: OVERVIEW

BACKGROUND

As part of the City for All Plan, Westminster City Council has pledged to create a Smart City, with great connectivity and innovative technology utilised in service delivery and the public realm. Our objective is to enhance the digital experiences and capabilities for our communities.

Our focus in the Digital Place team is to encourage and support the development of a robust digital infrastructure in Westminster that will enable the creation of a truly Smart City. We have developed various projects and initiatives in order to work closely with broadband providers, as well as our residents and businesses, to make Westminster an attractive place to build fibre connectivity and ensure effective utilisation.

Our journey began in 2016 when Westminster was languishing near the bottom of the connectivity league tables in the UK and since, thanks to our hard work and effective solutions, we have assisted the borough in becoming the London borough with the most fibre availability, as well as being the fastest London borough to rollout fibre in 2020.

RATIONALE

We submitted a funding bid to the LCA for this project as we wanted to share the knowledge that has been amassed over the past few years, to help other local authorities boost their full fibre rollout and avoid as many pitfalls as possible.

The Covid-19 pandemic highlighted the digital divide across the UK and created an increased reliance upon digital infrastructure that was shown to be lacking in not only rural environments, but many urban settings too.

With the 2025 copper switch off looming, and the focus of Central Government funding remaining solely on rural settings, it is up to local authorities with connectivity not-spots to fill the gaps and implement cost-effective, successful interventions.

OBJECTIVES

The objectives we set when we began creating this toolkit were:

- Share our learning and best practice for improving connectivity, particularly full fibre networks.
- Help reduce duplication of effort across local authorities and the avoidance of pitfalls.
- Provide examples and inspiration for cost-effective, successful interventions for local authorities to employ.

CONTENTS

This toolkit has been designed to take you on a step-by-step journey in how to improve the efficiency, accuracy, and value for money for digital connectivity interventions.

We found that the best way to begin planning any intervention, is by **mapping** the connectivity in your geographical area using the Ofcom Connected Nations data.

Next, **engagement** is key to supplement the data with first-hand experience and local expertise; engagement is also a great tool to understand what the barriers are to connecting your not-spots.

Once you have a clear idea of the levels of connectivity in your area, and what the experience is on the ground, as well as any barriers to connectivity, it is then possible to tailor **interventions** to target specific areas and specific barriers.

2: MAPPING

INTRODUCTION

To maximise the impact of your connectivity initiatives effectively you will need to gather a range of both qualitative and quantitative data, this will allow you to develop a clear picture of connectivity in your area using officialstatistics, actual user experience, and local knowledge to assess challenges and opportunities.

We found that an effective way to begin this process is to utilise the officialconnectivity data released three times a year by Ofcom. This allows you to keep the quantitative data as fresh and relevant as possible, as well as allowing you to shortlist target areas across your geography in which to carry out further data collection and engagement.

This section will take you through a step-by-step process of how to access the relevant data from Ofcom, how to collaborate with Geographic Information System (GIS) specialists to create the maps, and how to format them to show the data you are most interested in.

The main objectives of carrying out this mapping work are:

- To gain an initial – quantitative – overview of connectivity in the area.
- To create a visual aid to act as a catalyst in your engagement sessions – the map will help to direct the conversation and get specific local expertise at a granular level.
- To supplement other research and data collection and allow you to begin to shortlist your target areas for intervention.

We expect that by the end of this section of the toolkit you will have the ability to download the relevant data from Ofcom, collaborate with your GIS specialist colleagues to create and update the map, adapt the map to show the data relevant to you in an accessible format, and ultimately begin to assess your target areas.

Please note that this section is focussed on fixed broadband connectivity levels. This type of mapping can be replicated with mobile connectivity if you have collected this data.

2: MAPPING

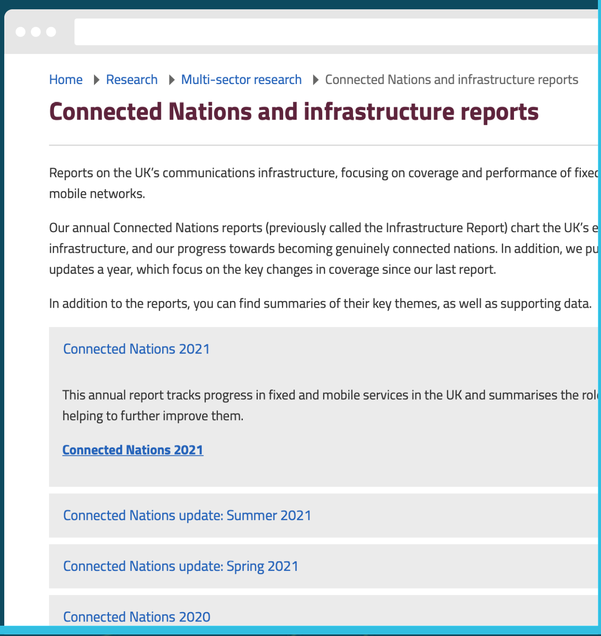
DATA - FLOWCHART

Ofcom release a full Connected Nations Report annually, usually in December, with data up to the end of September the same year. Updates are also released in spring and summer, with data up to the end of January and May respectively.

There is lots of data available for the whole of the UK so you will need to extrapolate the aspects that are relevant to you – we suggest downloading data at both output area and postcode levels to give you an overview layer, and a more detailed layer for your maps, your GIS team should have access to the shape files corresponding the output areas and postcodes in your geographical area so you won't need to worry about this – see below for a step-by-step process of how to access the data.

STEP 1

Click here to go to the relevant section of the Ofcom website, once here you will need to select the relevant year for your data collection – historical data could be useful to help you represent the current yearly progress of connectivity to present.



2: MAPPING

DATA – GIS BRIEF

To get the most out of the Ofcom data for your mapping work it is essential that you work with the GIS (or equivalent) experts within your organisation – alternatively, you can use external expertise to create maps for you. Below is a template email brief for you to send to them so that they can create the map which will form the basis of your engagement and targeting work going forward.

Please note, if you use an external organisation to create the maps you may need to provide them with postcode and output area polygons – they are free to local authorities but not to private organisations.

If you don't already have access to the GIS platform used by your organisation you may also need to ask your colleagues to create a login for you so that you can subsequently adapt and present the maps.

Please note, we chose areas unable to access 30mbps as our metric for 'not-spots' but depending on your levels of connectivity you may wish to adapt this.

For examples of best practice engagement including downloadable templates see the **Engagement Section** of the toolkit.

To:

Cc:

Dear [Insert name here],

I hope you're well.

Could you please help me to create some GIS maps/layers using the attached data? Ideally, I'm looking for a map to show the following:

- Ordnance Survey base map with street names
- Layer showing borough and ward boundaries (or other relevant demarcation for your geographical area)
- Layer showing output area unit areas/polygons in the borough unable to access 30mbps (if you want to be specific here you may wish to direct them to the data, e.g. Column [X] in the spreadsheet entitled [x])
- Layer showing postcode unit areas/polygons in the borough with gigabit availability (this will help you to give a visual representation of good connectivity in your area)
- Layer showing output area unit areas/polygons in the borough with residential premises unable to access 30mbps (you may want to specify which sheet this data is coming from to ensure the differentiation between all premises and residential premises)
- Layer showing postcode unit areas/polygons in the borough with residential premises with gigabit availability

Thank you for your help.

Kind Regards,

[Insert name here]

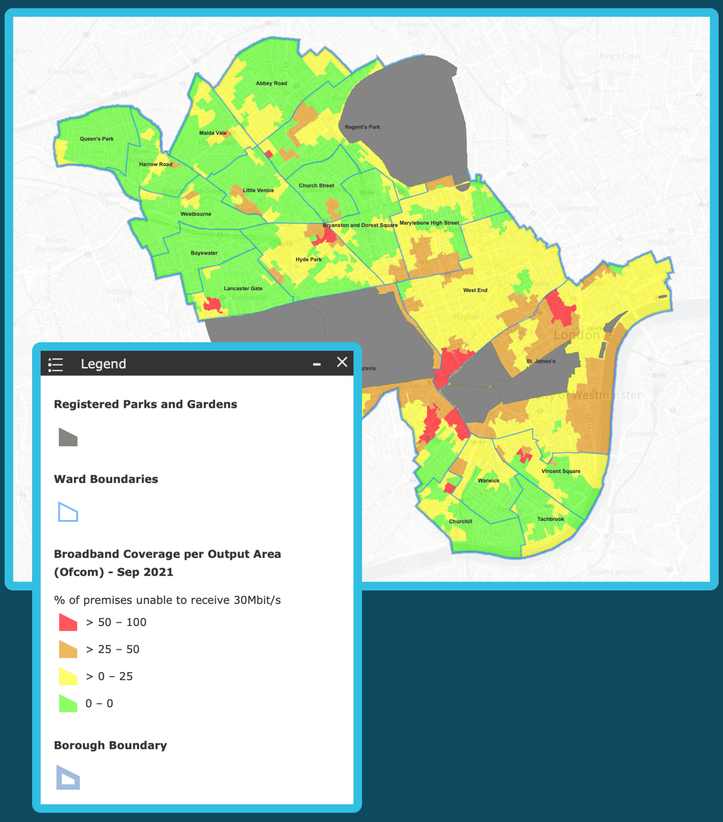
REMEMBER TO ATTACH THE RELEVANT OFCOM DATA ZIP FOLDERS!

RESOURCE LINK

EMAIL TEMPLATE (.DOCX)

2: MAPPING

WCC EXAMPLE MAPS AND SUGGESTIONS



- Colour coding the connectivity you're showing is a great visual technique.
- If you have large areas of green space like parks you can block them out like we did.
- You can choose to show output area or postcode area data.
- You can set your own metrics and colour on your GIS platform.
- You can add multiple layers and toggle through them to create different views.

If you're interested in getting more information on how to use a GIS platform to create maps, see our **in-depth guide** on the next page. Alternatively, **get in touch** with us via email.

FURTHER MAPPING

In Westminster, we supplemented our mapping work by conducting an Open Market Review (OMR) in which we asked all active full fibre networks in Westminster to submit their current commercial build plans until summer 2024. This was to help us establish not only where connectivity is, but also where it is going to be so that we can more accurately target not-spots and pockets of deprivation.

You can read more about the OMR in the **Interventions** section.

2: MAPPING

DATA – GIS HOW-TO GUIDE

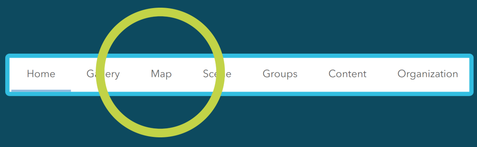
Once you have liaised with your CIS specialist colleagues to create the maps, you will need to ensure you know how to use them and how to display the data in a way you find useful and will be able to explain to your stakeholders.

By this point you will also have access to whichever online CIS platform your company, or the CIS team you're working with, has access too so that you can begin to amend the maps and create a clear visual aid for your engagement and mapping work. In these examples we have used the ArcGIS platform, but any online CIS platform should broadly reflect this process

Below is a step-by-step guide on how to adapt the maps, in the interest of clarity and brevity these steps show you how to create maps in the same style as WCC – see the **example map** on the previous page.

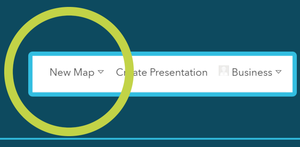
STEP 1

Firstly, you need to create a new map and add the relevant layers. From the home page select '**Map**' from the menu ribbon across the top of the page.



STEP 2

Then select '**New Map**' from the top right-hand corner of the page.

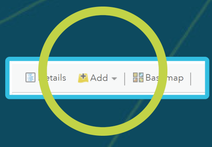


STEP 3

From the drop-down menu you will need to select '**Create New Map**'.

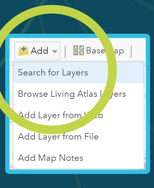
STEP 4

Now you will need to choose which layers you need to show – in the top-left hand corner of the page you will see three options, choose '**Add**'.



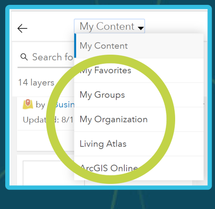
STEP 5

From the drop-down menu choose '**Search for Layers**'.



STEP 6

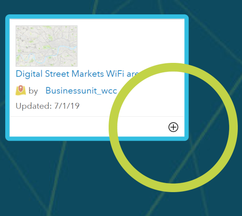
The search tab will now open, it will automatically show 'My Content' in order to make sure your search is successful click the arrow next to this and select '**My Organisation**' from the drop-down menu.



STEP 7

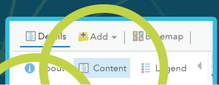
Now use the search bar to search for the layers your CIS specialist colleagues have created for you – they should have given you the names of these layers in your email correspondence.

Once you find the correct layers you will need to click to small plus sign on the bottom corner of the layer.



STEP 8

Once you have added all your relevant layers they should be visible in the



3: ENGAGEMENT

INTRODUCTION

As discussed, having access to the right data is crucial to developing a clear picture of what connectivity infrastructure is available.

To supplement this, it's also important that stakeholder engagement is carried out effectively and on an ongoing basis.

Doing so helps to create a holistic approach to your connectivity work, combining quantitative and qualitative data to ensure interventions are appropriate, timely, and cost-effective.

Effective engagement should precipitate efficient governance, mitigation of risks, relevance of intervention, and the overall success of work undertaken.

3: ENGAGEMENT

BENEFITS/CHALLENGES OF ENGAGEMENT

As with any other aspect of local authority work around connectivity, there are both benefits and challenges to undertaking engagement.

Some of the benefits have already been alluded to but below is a simple list of the main benefits and challenges to help justify the time taken to engage stakeholders, and avoid pitfalls when doing so:

BENEFITS

- Effective utilisation of lived experience and local expertise, allowing for accurate targeting of initiatives to areas most in need.
- Better knowledge of issues and barriers, allowing for insight based solutions.
- Ability to build strong networks to disseminate information regarding works and promoting the uptake of full fibre to improve commercial viability to networks.
- Collaboration with relevant stakeholders helps reduce duplication of effort and concentrate resources more efficiently.
- Ongoing engagement allows for fluidity of initiatives and iterative delivery to ensure ongoing value for money and boost likelihood of successful projects.

CHALLENGES

- Engagement can be extremely time consuming for officers. However, engagement at higher levels (such as ward councillors, or senior operators within organisations/associations) can enable a trickle-down effect of information to a much larger audience and can help amplify certain messages to certain audiences.
- Some stakeholders may be resistant to works taking place, e.g. landlords or property owners might have safety concerns, residents may have health concerns, etc. In this instance it's useful to collaborate with partners such as local, regional, and national health and safety bodies, networks, and other experts to create strong persuasive arguments and allay relevant concerns.
- There may be confusion for some stakeholders on what the role and ability of a local authority is with regard to improving connectivity, this could cause friction as the efforts of the authority might not meet the expectations from some stakeholders. In this instance it's useful to have a stock response or FAQ sheet to explain the role of the authority, the work being undertaken currently, and the ability of the authority in enabling and empowering networks to improve connectivity simply and efficiently. (Below are examples from our work in Westminster – **Fig.1** shows a stock response to individual residents or businesses, and **Fig.2** shows a stock response for a collaboration with Ward Councillors if specific problem wards are identified).
- The networks operating within your area may be restricted in the resources they can allocate to connectivity works at any given time. There are two potential options to mitigate this issue:
  - **Prioritisation** – using the maps and data analysis you've already undertaken you could make a sliding scale of priority for areas to be eligible for works to commence more quickly, i.e. X% of premises unable to access 10 Mbps, 30Mbps, etc.
  - **Employment Collaboration** – in Westminster we have seen some successful recruitment of residents seeking employment through our employment coaches collaborating with broadband networks looking to develop their workforce.
- If the engagement is successful, the volume of connectivity enquiries or issues from residents and businesses may become overwhelming. To make dealing with enquiries more efficient, as well as ensuring no enquiries slip through the cracks, in Westminster we developed a Customer Relationship Management database to store them, and an online form that could be completed by residents to submit enquiries. The database can be populated automatically using the form and Microsoft Office software, or manually if the enquiry is received using an alternative method such as email or telephone (**Fig.3** below shows a mock example of the data we collect).

You should take time to highlight any benefits and challenges specific to your authority, its local area, and your stakeholders to help build your business case for any interventions you employ, as well as the development of a risk register with sufficient mitigations.

FIG.1

3: ENGAGEMENT

INTERNAL ENGAGEMENT AND GOVERNANCE

It's perhaps apparent that internal engagement and effective governance are essential in all work around connectivity to boost the likelihood of the success of your initiatives, however it's still useful to set out why it's so important.

If you're able to set up strong channels of engagement early in the work, it can create a solid foundation on which to develop all future work and projects.

There are some internal teams and colleagues who will naturally be involved in this work, for example highways, housing, policy, and planning to name a few.

If you can collaborate effectively with these colleagues, you can establish easy, efficient, and most importantly, low-to-no-cost solutions to help improve the rollout of full fibre connectivity.

One example of this would be to ask networks to install fibre alongside current or planned street works to reduce the impact on residents.

Another example would be utilising the housing safety expertise of colleagues to create robust, uniform criteria for cabling proposals and wayleave agreements to reduce bureaucracy around these processes, and also help in encouraging housing associations and landlords to adopt similar approaches and take up full fibre.

These internal networks will also help to create a single point of contact within the authority for all external stakeholders for connectivity issues and queries. This will reduce duplication of effort among teams, and provide a seamless, user-friendly communications process for residents, networks, and all external partners.

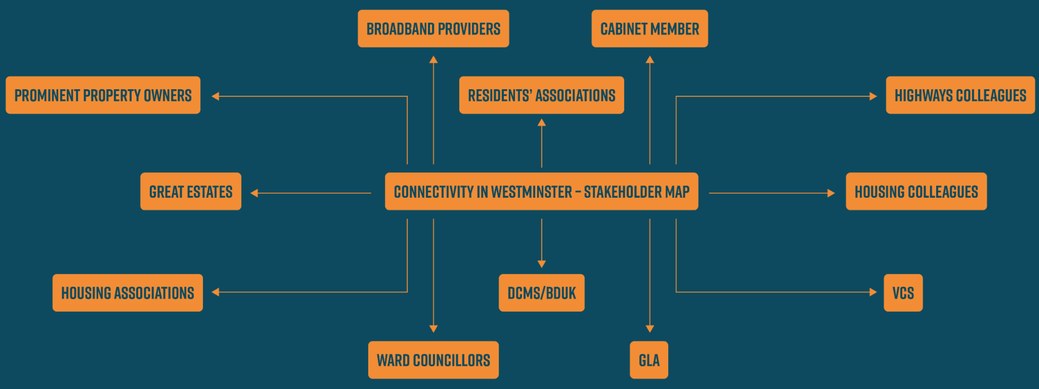
At Westminster City Council we aim to make working with the council as simple and efficient as possible, as this helps develop strong relationships and improve overall satisfaction during and post-engagement.

Approaching connectivity work with a robust and effective system of governance is also conducive to increasing the success of projects. The creation of awareness and excitement about the work you are doing, why it's important, and how it's helping residents and businesses will help ensure ongoing support from senior officers and councillors, hopefully leading to smooth approval and change processes going forward.

3: ENGAGEMENT

STAKEHOLDER REGISTER

Another useful visual technique to help understand who your stakeholders are, and how and when they should be engaged is to create a stakeholder register. In order to begin creating this you may find it useful to start with a stakeholder map to identify all relevant stakeholders to you, see example below:



The example shown lists the stakeholder or stakeholder group, along with their level of interest in the work or project, the power they have over the work or project, or its success.

The level of risk they pose to the work or project is then assessed using a sliding colour-coded scale from red (highest level of risk), to green (lowest level of risk).

Utilising all this information, you should then be able to assess how frequently the stakeholder/group needs to be engaged, what information they would be most interested in, and how best this information should be displayed.

You may find a different method of showing this information that is more suited to your work, this is just an example that worked for us.

Please see below an example based on our engagement work:

STAKEHOLDER	INTEREST	POWER	RISK SCORE	ENGAGEMENT FREQUENCY	NOTES
DCMS	1	2	2	Infrequent.	Could be useful for knowledge sharing when designing projects to avoid pitfalls, implement best practice, etc.
WARD CLLRS	3	3	9	Initially, then when required.	It is good to get an initial idea of local issues and utilise the local knowledge – important to keep updating as works to take place as Ward Cllrs can help keep residents onside.
HOUSING ASSOCIATIONS	3	2	6	As required for specific work.	HA's power is limited to their own housing stock and if they don't connect it will impact your connectivity availability as a whole, however when you can share knowledge and show successes it will be easier for them to reflect your work.
RESIDENTS	5	4	20	Frequently - Residents should be engaged on an ongoing basis to give insight into actual customer experience and barriers that might exist in their area. They can also help to map demand in an area, and act as conduits with property owners/landlords if they don't own the property in which they live.	Residents have fairly high power as they need to take up service and this determines commercial viability.
CABINET MEMBER	5	5	25	Frequently – The Cabinet Member should be kept up	The CM is arguably the most important

3: ENGAGEMENT

TEMPLATE SLIDES

Once you are clear on who your stakeholders are, and when and how you will engage with them, it could be useful to create some form of presentation to maximise the visual representation of the mapping, and some of the key barriers you have already identified, as well as any questions you would like them to answer to utilise their experience and expertise.

- Ward Councillor Engagement.
- Prominent Property Owners/Housing Associations.
- Broadband Providers.
- Residents' Associations.

If you would like to see our template engagement slides for reference you can download them below:

RESOURCE LINK

ENGAGEMENT TEMPLATE SLIDES (.PPTX)

3: ENGAGEMENT

INTRODUCTION
BENEFITS & CHALLENGES
INTERNAL ENGAGEMENT AND GOVERNANCE
STAKEHOLDER REGISTER
TEMPLATE SLIDES
BEHAVIOUR CHANGE PROJECT
BEHAVIOURAL INSIGHTS
METHODOLOGY
EXECUTIVE SUMMARY

BEHAVIOUR CHANGE PROJECT

Throughout 2021, we worked with Westco to carry out a behaviour change project around the awareness of full fibre connectivity in Westminster, specifically its availability and the benefits of full fibre compared to other forms of connectivity.

Over the next few pages you can read about the methodology and executive summary of the project[1], and you can also download the full version of the report here:

SUMMARY REPORT (.DOCX)

From this report we have created a handful of example engagement materials, from social media posts, to flyers, to help inspire your engagement around full fibre connectivity works, their importance, and to help drive uptake. The materials can be seen below.

We'd love to hear about your successes and challenges around engagement to help us improve this toolkit and develop our resources to help other authorities – if you want to share then please **get in touch**!

1 Please note that some insights from this study or similar studies could vary depending on the geography and circumstances of local authority areas.

RESOURCE LINK

SOCIAL MEDIA EXAMPLES (.ZIP)

3: ENGAGEMENT

BEHAVIOURAL INSIGHTS

The behavioural insights work led us to the development of the following five points of interest that should always be accounted for in any external communication involving connectivity work. The five points have also been separated into two main categories for ease of reference:

COST

1. **Cost of Connection** – most respondents were shocked to learn that some residents may need to pay more than others towards the costs of getting their property connected due to a variety of factors increasing the build cost. They said they would be willing to pay a nominal fee, if necessary, but this would be a maximum of £50. **In communications materials you should therefore focus on any initiatives you are deploying to mitigate or cover these costs, for Westminster City Council that would be our voucher schemes.**

2. **Cost of Service** – most respondents also agreed that the cost of service or package would be the main determining factor over which network or ISP (Internet Service Provider) they choose. **It could be worth highlighting any social tariffs available in your area, as well as the average price of standard broadband in your area in comparison to full fibre packages (this could be supplemented with further detail from below).**

KNOWLEDGE AND UNDERSTANDING

3. **Jargon** – as has been identified by Ofcom, most respondents agreed that there is an unreasonable amount of confusing jargon used in broadband advertising, as well as potentially misleading speeds, promotions, etc. Although there was a decent understanding among respondents around standard broadband, confusion over the difference between part and full fibre, and the availability of both was prevalent. **It is important in Local Authority communications to be as clear as possible about what interventions and work you are doing to improve full fibre access and why this is important. Infographics like the below from Ofcom help explain this.**

4. **Inertia Related to Renewal** – most respondents felt that it can be too much hassle to change ISPs regularly, and that this had led them to remain with the same ISP even if not totally satisfied. **Therefore, any communications around full fibre aiming at boosting uptake need to be clear in the improvement to service, and in the ease of switching or taking up service.**

5. **Tangible Benefits** – following from the above point respondents also agreed that they would need to understand the clear, tangible benefits of taking up a new full fibre service if they were to switch. **Local Authority communications should have a clear focus on displaying real world benefits for residents and property owners. Infographics and descriptions relating to things like education, working from home, video streaming, gaming, and so on help to make the tangible benefits, real.**

3: ENGAGEMENT

METHODOLOGY

OVERVIEW

Westco conducted five online focus groups between July and October 2021 with residents and other stakeholders on the topic of digital connectivity in the borough. The focus groups were conducted on the online browser-based platform XLeap. Participants were asked to write down their answers to the questions the moderator posed and feedback was recorded anonymously.

RECRUITMENT

Participants were recruited through a variety of approaches:

- Westminster City Council invited larger landlords directly to participate in a focus group.
- Westminster City Council conducted an online self-selecting survey – promoted through the council's existing channels to recruit residents.
- Professional recruiters were employed to recruit residents from hard-to-reach groups.

In order to identify suitable candidates, Westco developed a **screening questionnaire** signed off by Westminster City Council. The questionnaire ensured that a mixture of residents with different demographic characteristics – as well as different attitudes toward the council – were recruited. The screener also allowed exclusion of individuals who are well informed about digital connectivity, such as people working for internet service providers. Finally, the screening questionnaire was designed to also identify participants who were communicative and articulate, ensuring that everyone attending the focus group would provide lively debate and discussion.

INCENTIVES

All residents were offered a £50 gift voucher for attending the focus group. Offering incentives is considered standard practice when conducting qualitative research, and incentives for this project were given in accordance with the Market Research Society (MRS) guidelines. The use of incentives improves attendance, and it ensures that those who are motivated to attend are not only those with strong opinions that they wish to share. Other than focus group attendance, there were no other conditions participants were required to meet to receive the incentive.

SAMPLE AND QUOTAS

The sample was designed to focus on Westminster residents. The following criteria were considered to ensure a good mix of participants:

- **Demographics**
- **Tenure**
- **Knowledge and awareness of internet services**

We spoke to:

7 LANDLORDS **12 RENTERS** **20 OWNER OCCUPIERS**

3: ENGAGEMENT

EXECUTIVE SUMMARY

To understand residents' attitudes toward digital connectivity and how that can affect behaviour, this report explores participants' feedback through the COM-B model of behaviour change. This model outlines how an individual's "capability", "motivation" and "opportunity" interact with one another and impact on behaviour.

CAPABILITIES

PHYSICAL

The cost of connecting households up to the 'full-fibre' network may also be a significant barrier to overcome. The majority of residents said they would only be willing to pay a nominal amount to connect their household up to the 'full-fibre' network – no more than £50 in most cases.

Many residents described the internet as a utility that is essential for modern life, much in the same way as water or energy. In this way, many residents feel that it is unfair that some residents should have to pay more to access high speed internet or should have to pay high costs for high speed internet access.

This view is not universal with other residents arguing that the types of internet connections available for properties should be a consideration when individuals decide where they want to live.

Additionally, for almost all participants 'cost' was the main or a significant factor when determining choice of internet service package. Some commented that the affordability of internet access was particularly important at a time when the cost of living was rising. Participants often described trying to get the best possible package within their budget – so other considerations like internet speeds and customer service are still seen through the perspective of cost.

This suggests that for many residents – there is limited financial capacity to pay for costly works to connect their households up to the 'full-fibre' network. There may also be resistance to ongoing monthly costs of 'full-fibre' internet access – if the prices significantly differ from 'part-fibre' costs.

PSYCHOLOGICAL

Many residents described their internet connection as 'fibre' or 'fibre-optic' rather than 'part-fibre' or 'full-fibre'. This may be indicative of a barrier associated with knowledge – participants may think they already have access to 'full-fibre' connections when in reality they have only got 'part-fibre' broadband. Some residents go so far as to argue that the label 'part-fibre' is misleading because from their perspective the speeds are limited by the copper cables from the cabinet to households.

OPPORTUNITIES

PHYSICAL

Some participants live in areas where 'ultrafast' broadband is already available. Meanwhile, the majority of participants who do not already have access to 'ultrafast' broadband live in areas with access to 'superfast' broadband. This suggests that many residents will gain access to 'full-fibre' broadband as part of the commercial rollout.

Furthermore, some residents also mentioned that they have already received letters from the council giving them notice about works to connect their neighbourhood to the 'full-fibre' network and the disruption this might cause. Therefore, many residents are likely to gain access to 'ultra-fast' broadband imminently.

Another key physical barriers that some residents might experience is as a result of living in a high density building where the landlord or building management company, is not necessarily the owner/freeholder. In such situations residents may not easily be able to contact the freeholder to gain wayleave for works to connect their flat to a 'full-fibre' network.

Alternatively, the freeholder may have ensured the building has access to the 'full-fibre' network through a specific internet service provider – who would then have a monopoly on 'full-fibre' internet in the building.

MOTIVATIONS

REFLECTIVE

Many residents feel that their current internet speeds are sufficient for their needs. This view was often discussed in the context of smaller households, for instance this was a view for older residents with no dependents. As such, many residents argue that any marketing to encourage the rollout of the 'full-fibre' network should include tangible examples of how even faster internet will benefit them.

4: INTERVENTIONS

INTRODUCTION

At this point in your work, you should not only have a clear map of the connectivity infrastructure that currently exists in the area – as well as the future infrastructure if you've carried out an Open Market Review, more information on this later in this section – but you should also have plenty of intelligence from expert local and industry stakeholders on what barriers and opportunities exist across the area.

With the above information collected and collated, you should now be able to start designing interventions to efficiently overcome established barriers, exploit opportunities, and utilise hyper-local expertise to facilitate an increase in full fibre network development.

Interventions can be designed both broadly and narrowly, and you will see examples of both below, but they should always have a specific focus from the previous steps you have taken. Whether it be a known barrier, an opportunity that's been established, a pocket of deprivation that's been identified, the intervention should have an accurate and cost-effective, evidence-based approach.

This laser-focus helps build trust and support atop the foundation you've laid, and should hopefully help create fast, smooth approvals processes to launch agile projects.

This is the approach we've used frequently in Westminster, and we've seen successful implementation of many interventions that have helped us become the London borough with the highest full fibre availability[1].

1 Ofcom Connected Nations Report 2021 - **https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-2021/main-report**

4: INTERVENTIONS

ENGAGEMENT

In this toolkit, we've already discussed the value of meaningful stakeholder engagement in gathering evidence and utilising local expertise to help shape interventions, but engagement can also be a very useful tool to facilitating full fibre rollout in areas where there is specific demand.

You can use the relationships you've developed through previous engagement with groups such as Ward Councillors, Residents' Associations, and other relevant groups, in order to actively ask for information to be shared about pockets of deprivation or poor connectivity in communities.

Using the CRM database discussed earlier in the Engagement section, you can then group any areas of demand into streets, postcodes, output areas, or even wards. Using this information, you can then lobby networks to build in these areas by showing a clear demand for better connectivity. This should help them create a business case for building in these areas using an increased uptake metric.

This is the most basic and cost-effective approach, as it's effectively free apart from the time taken to prepare for and conduct engagement. However, taking this time is worth it as you can hopefully assess and convey demand in your area, and lobby for ad-hoc rollouts as described above. In some cases, this may not work however it is a useful first port of call in your approach, as it will help identify any extra barriers or challenges to connecting areas for which you may need to design further interventions.

Aside from using engagement to lobby networks, you can also use it work with housing associations, prominent property-owners, or even smaller private landlords in your area. Through engaging with these groups - using the techniques and materials discussed earlier, stemming from the behavioural insights work conducted – you can help address and allay any concerns these groups may have around connecting their properties, and use them as a conduit to share information with residents and tenants to help boost full fibre uptake once the network is connected.

4: INTERVENTIONS

OPEN MARKET REVIEW (OMR)

As mentioned in the **Mapping** section, in Westminster we conducted an OMR to supplement our research and show us not only where connectivity is, but also where it is going to be so that we can more accurately target not-spots and pockets of deprivation.

In summer 2021, we asked all active full fibre networks in Westminster to submit their commercial full fibre rollout plans until summer 2024. This helped us to ascertain the following:

- The current levels of connectivity across the city, with slightly more up-to-date data than Ofcom could provide at the time;
- Where full fibre networks are likely to be within the next three years, and therefore areas that shouldn't be priority areas for us to target;
- Not-spots that will still exist in three years, i.e. top priority areas for intervention; and
- Where specific networks will be so that we can try to lobby for increased speed of rollout, or slight extension of networks in areas where we can establish demand through our engagement.

It's important to note that networks may required you to sign Non-Disclosure Agreements (NDAs) before they will share this data with you, as it's commercially sensitive to them. If you have any concerns about these NDAs you should seek feedback and approval from your legal department before signing. If you choose to carry out an OMR using the same methodology as Westminster City Council there should be no issues with sharing incorrect or commercially sensitive data.

As we're not data experts in the Digital Place team at Westminster, we outsourced the collection and collation of data from OMR submissions to the experts at **Point Topic** whom we had worked with on a number of projects previously, and they had also provided advice and guidance to us on a number of data topics.

Working with an expert partner, whose services provided great value for money, was invaluable to our work as they were able to collect, collate, synthesise, and analyse the data quickly and easily for us to be able to digest and then pass on to our GIS colleagues to map.

You may have a similarly trusted partner, otherwise you might be able to find a local or national organisation who could help. If you are required by networks to sign any NDAs before they share their data, sharing with a named partner for the 'named purpose' – i.e. collating and analysing the data – should be expressly covered within the NDA, however it is good practice to make both the

Once you've collected all the relevant data, you can once again liaise with your GIS colleagues or external GIS experts to help you create an aggregated map of all the data, in line with any NDAs you've agreed to, to show the collective planned full fibre rollout for your area, and any remaining not-spots.

This can help you create a sliding scale of priority areas in which to intervene, and also help you utilise your previously established stakeholder engagement links to analyse what barriers and opportunities exist in these areas to create bespoke interventions.

In Westminster, our OMR was originally carried out to determine the intervention areas for the **residential voucher scheme**; however, we've found it useful for many areas of our work as we can target specific networks, areas, even buildings, to lobby for faster rollout, or to slightly extend a network based on demand.

Download Westminster City Council's OMR Document here:

WESTMINSTER CITY COUNCIL'S OMR DOCUMENT (.DOCX)

See the **residential voucher scheme map of intervention areas here**

4: INTERVENTIONS

VOUCHER SCHEMES

Voucher schemes can be an effective and efficient intervention, providing gap-funding to help overcome any barriers to developing connectivity in certain areas which would likely result in extra build costs to networks.

The Department for Digital, Culture, Media, and Sport (DCMS) have seen lots of success with the **National Gigabit Voucher Scheme** which has up £210m available funding for vouchers of up to £3,500 for businesses, and £1,500 for residents to get them connected.

The National scheme has a strict focus on improving connectivity in rural areas, and therefore local authorities with urban areas will need to design their own interventions, and even voucher schemes.

In Westminster we launched two separate voucher schemes, one to specifically help connect businesses, and one to connect residents:

CONNECT WESTMINSTER BUSINESS

In August 2017 Westminster City Council launched the Connect Westminster voucher scheme. Through the scheme businesses with a trading address in the Westminster Local Authority or the West End partnership areas are able to apply for a voucher worth up to £2,000 that covers the capital costs for businesses seeking gigabit-capable broadband connections.

The scheme was developed in response to continued demand from businesses for support with accessing gigabit capable broadband connections following the end of the National Gigabit Voucher Scheme run by the Department of Culture Media and Sport.

The Connect Westminster voucher scheme is funded by the European Regional Development Fund and Westminster City Council, with each covering 50% of the project costs. The total funding allocated to project is £2.8m with £2m of this for vouchers and the additional £0.8m spread across marketing, staff costs, project evaluation and legal fees.

The target outputs for the scheme are:

- To provide support to 1,000 businesses where support has a minimum value of £1,000.
- To support 1,000 businesses to take up broadband speeds of at least 30mbps.
- To support 56 businesses, introduce new to the firm products and/or services.

To date the scheme has so far achieved:

- 1,221 total applications received.
- 1,158 of these have been eligible.
- 1,013 vouchers issued to businesses.
- £1,578,542.82 of funding paid to businesses for improved connectivity.
- 152 broadband providers registered onto the scheme.

To read about Connect Westminster Business in more detail, download the full report here:

CONNECT WESTMINSTER BUSINESS VOUCHER SCHEME TOOLKIT (.DOCX)

CONNECT WESTMINSTER RESIDENTS

In late 2020 we started laying the foundations for a residential voucher scheme with the aim of replicating the success of Connect Westminster Business and reducing residential not-spots (areas where >50% residential premises cannot access at least 30Mbps).

The rationale for the scheme was developed through our analysis of Ofcom Connected Nations reports when it was discovered that despite rapid growth in full fibre availability, the reduction of not-spots was making little to no progress. This, coupled with the fact that funding for our very urban area was

4: INTERVENTIONS

DIGITAL STREET MARKETS

In 2018 Westminster City Council ran a public consultation on our markets. This led to the creation of 'A Strategy for Westminster City Council's markets 2019-2022.

One of the recommendations made by both traders and customers was that they wanted to have wi-fi networks on the market to enable them to take card payments and receive information about the markets online.

The Digital Street Markets Project directly responds to this need as it will provide a geographically targeted intervention to support SMEs with a focus on two key areas:

1. Delivery of a free wireless connectivity on all street markets owned by Westminster City Council.

2. Delivery of a two-year programme focussed on digital skills training to enable the beneficiaries to make best use of this new connectivity and enhance their skills.

WIFI FOR TRADERS

Two WiFi networks have been deployed to the six street markets owned by Westminster City Council.

The first is a private network exclusively for market traders giving them a secure and reliable internet connection at all times whilst trading. The expectation is that access to this network will enable all traders to make use of contactless card payments and be present on social media whilst trading to advertise offers and promotions.

The second network will be accessible to anyone visiting the market including local residents, tourists and workers. The networks that have been deployed are using Hotspot 2.0 technology which means that a user only needs to complete the registration / sign-up process once before their device will automatically connect to any of the networks automatically each time, they visit a market.

FUNDING INFORMATION

The main cost of deploying and maintaining the network is initially being covered by Westminster City Council using funds secured from the European Regional Development Fund. Once these funds are spent there would be a cost to cover in order for the networks to remain active. If the Council decides to cover this there would be an ongoing cost. In terms of savings, market traders should be able to increase their productivity through the use of card payment machines which are quicker for accepting payments than cash, allowing for quicker transactions with customers. Access to and sharing of footfall data will give traders an idea of when the best days to be at the markets are allowing them to judge whether trader on certain days is financially viable.

TRAINING

There will be nine digital and business support training courses for SMEs. Each course will last for two weeks (10 days). These courses will be for large groups of SMEs and be delivered alongside a wider programme of business support tailored for start-up businesses. Attendees can dip in and out of training to ensure they attend the relevant modules.

The Digital Training Programme will provide intensive practical workshops for small groups which focus on product development related to digital activities. This includes creating websites, developing digital marketing channels and search engine optimisation.

This programme will deliver the following activities:

- 1-2-1 training for market traders and ERDF eligible SMEs.
- Group workshops for market traders and ERDF eligible SMEs.
- Online content and training.
- Peer support.

Please revisit this part of the toolkit to read more about successes and challenges we experience throughout the project life cycle.

4: INTERVENTIONS

PARKING BAY SUSPENSION DISCOUNTS

Despite the legal grey area around utility powers and use of parking bays to conduct works, in Westminster we have the unusual circumstances of all parking being fully controlled and charged, and a very high demand for kerbside space across the city.

Utilities organisations, through the London Joint Utilities Group (LJUG), agreed that the suspension of parking bays, and removal or relocation of any vehicles in contravention of the suspension, aided them in completing their work more efficiently.

Therefore, the decision was taken to set up a mechanism for this suspension to take place with a further specific discount for broadband networks to improve connectivity due to the extremely poor levels of connectivity the city was experiencing at the time, as mentioned earlier.

The discount was initially seen as a way of improving the cost model for networks to build the new full fibre networks and provide higher levels of availability, and the wider economic benefit of this improvement bolstered the rationale.

Across the rest of the UK, the **National Joint Utilities Group** would be the organisation who could provide guidance and policy around this sort of intervention in areas that don't share the same unique circumstances as Westminster.

To date (early 2022) this intervention has achieved the following:

- 8,783 suspensions.
- Across 734 streets.
- In 28 different parking subzones.
- Seen total build costs in some instances reduced by up to 1/3, creating commercial viability in a wider range of areas.

However, this intervention has not existed without some challenges:

- Initially, a self-service portal was offered to simplify the process for networks to build, however this resulted in large numbers of bays being suspended for long periods of time, leading to a considerable amount of resident and councillor complaints.
- This system also resulted in a lack of proactivity from networks in cancelling suspensions if works were completed earlier than expected, not undertaken at all, or even if the suspensions were larger than necessary for the build.
- Another issue with this method was that there was technical difficultyin the configuration of the discount on the suspension system, meaning that costs had to be manually configured retrospectively, increasing the administration.
- There is also a difficultyin balancing the economic benefit of works to improve connectivity, with the need for parking for residents, businesses, and indeed other utilities too.

The above challenges with regard this policy relating to the self-service portal have since been addressed by making schemes applicable for this discount ineligible for self-service to provide a greater discretion and guidance for colleagues, and a maximum limit of 20 parking bays to be suspended at any time unless a greater need is evidenced and approved.

Click on the link below to download our policy document for further information.

CONCESSIONARY PARKING SUSPENSION POLICIES V1.0.DOCX

Please note – this is ultimately a temporary measure that was undertaken due to the desperate need for connectivity improvement, and once our target of full fibre ubiquity in the city has been reached, this is likely to be reviewed.

4: INTERVENTIONS

CITYWIDE WAYLEAVE

There will be nine digital and business support Local Authorities, property owners and housing associations own a significant number of units of housing within local authorities. This critical mass can be an attractive investment proposition for broadband providers and can help them make the investment case for building new fibre infrastructure within your area.

At Westminster City Council, we own 20,000 units of housing stock which is made up of a blend of multi-dwelling units and single dwelling units. By grouping these units into a single wayleave will encourage providers to invest time and money in improving the infrastructure to the stock.

We adopted the Standardised wayleave model approach as set out by the City of London.

The main objectives of the Citywide Wayleave agreement are:

- To gain an understanding of baseline connectivity within the property list.
- To attract broadband providers to make investment decisions to improve levels of connectivity in housing stock.
- To understand the process to assess and monitor build from broadband providers.

Below is a flowchart detailing the key steps that need to be taken to assess the effectiveness of adopting this wayleave model, and successfully implementing it as a local authority.

CHECKLIST

1. Asset Mapping – Firstly, you should conduct a full asset mapping exercise in conjunction with housing colleagues. This will not only allow you an overview of what assets are available to be connected, which can be shared with networks to allow them to register their interest, but it will also allow you to accurately monitor progress as connections go live.

Your asset list should include, but is not limited to, the following:

- Address and location details.
- Whether the property is listed (if so, what Grade).
- Whether the property sits within a conservation area (or otherwise has any restrictions).
- Whether the property is part of community supported housing.
- Whether the property exists within any development plans.
- Whether the property is subject to a long-term lease, or is otherwise not under the direct stewardship of the local authority.

2. Connectivity Mapping – In the Engagement Section we explained the importance of mapping connectivity across the whole of the relevant geographical area for your authority.

   In this situation it is a useful supplement to the above asset mapping as it allows you an overview of any existing and planned network build that could be extended to include authority owned assets.

   The connectivity mapping also allows you to prioritise any areas where there is extremely poor connectivity to ensure your residents who are most likely to get left behind or be digitally excluded, are in fact included and prioritised to show the value of the connectivity.

3. Consultation – Once you have compiled all the relevant data you should use this to inform consultations with the networks who are active, or would like to be active, in your area. This consultation should tap into their technical expertise and awareness of any challenges and opportunities, as well as ascertaining how you can tailor the agreement to create the most mutual benefits and a seamless, fast-paced process to rollout new full fibre networks to as much of your housing stock as possible.

   Post-consultation you will be able to tailor the City of London standardised wayleave model, or any other model agreement you are working from, to meet the circumstances, need, challenges, and opportunities that exist in your area.

4. Agreement – Post-consultation you should be in a position to set out your standard agreement and expectations and submit this to all networks so that they can sign up to the wayleave.

   Your asset list should include, but is not limited to, the following:

   - Standard Wayleave Agreement.

4: INTERVENTIONS

FUTURE

In Westminster, we've committed to creating a Smart City for All which includes:

- Greater access to connectivity, both full fibre and wireless.
- Improved digital inclusion.
- Implement smart care solutions.
- Develop innovative solutions to improve service delivery and quality.
- And much more...

To do this, we will need to continue to think creatively and innovatively and work together with local and national government partners to share knowledge, best practice, and mitigate risks together.

To read more about our City for All plan, particularly around creating a Smart City for All, click **here**.

If you're interested in discussing any of our interventions in further detail or would like to share any case studies of interventions of your own in this toolkit please get in touch.

FUTURE INNOVATION AND DEVELOPMENT OF INTERVENTIONS

Here are some basic ideas we'll be using in 2022 to help direct our work around connectivity

ENGAGEMENT

This is a recurring theme of our work but ongoing engagement allows us to best understand barriers and work out how to overcome them.

KNOWLEDGE SHARING

Utilising best practice from elsewhere and continuing to share our successes, challenges, and learning.

INNOVATION CHALLENGE

In 2021 we launched our innovation challenge for staff and residents to submit ideas to improve service delivery - we will utilise any ideas around connectivity.

EDUCATION

Educating ourselves on tech and connectivity, as well as educating residents and property owners to improve the understanding of connectivity and uptake.

HACKATHONS

Group sessions with peer groups and external organisations to help shape our thinking and understand various issues.

HORIZON SCANNING

Keeping an eye on all developments in telecommunications and connectivity to ensure we're responding

5: TESTING & FEEDBACK

Throughout the development of this toolkit, we have strived to engage as many other authorities as possible to test, sense-check, and feedback to us to try and ensure we're delivering a product that's useful and effective.

When engaging with authorities we had the following priority areas to assess:

- Content – there were a number of questions we needed to review here:
  - Would the content be replicable outside of Westminster or similar London Boroughs?
  - How much information should form the main toolkit? What extra information, assets, and templates should be downloadable?
  - What content do other authorities want to see?
- Format – we wanted to create a toolkit that had a simple user interface, and created a pleasant, seamless, user experience. This led our thinking when we designed the chronological layout of the sections of the toolkit.
- Accessibility – this has led all our thinking regarding design and delivery as we wanted to ensure that our content was universally accessible to assist as many other authorities as possible.

We engaged with various authorities through platforms and networks like sub-regional speciality groups, LCA networks, webinars, and group & 1-2-1 sessions. The feedback we received was mostly positive and justified our choices. The final product has been created accounting for our initial plans and all feedback received to date.

We hope that you have found the toolkit we've delivered useful and would love to hear from you if you've applied any of the techniques discussed in your area.

If you would like to submit any further feedback on this toolkit, share any of your work, or discuss anything further around connectivity please get in touch.