

RTPI Research Paper

SEPTEMBER 2019

APPENDIX 3: INFRASTRUCTURE PROVIDER INTERVIEWS

Findings from Cambridgeshire and Peterborough, Staffordshire and Glasgow





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Key findings

- Providers made general comments with little reference to the specific governance arrangements in the different areas. The exceptions are the energy companies who are aware of the different structures, but only engage at a local authority level, and Anglian Water who report a positive experience with the Cambridgeshire and Peterborough Combined Authority.
- 2. Engagement with the planning system focuses more on sites and projects, and less on strategic issues. In many cases, this is too late to make meaningful contributions to forward planning and leads to sites being considered in a piecemeal way. However, there is some evidence that this is improving, and all providers want more engagement.
- 3. Providers report that there is a disjointed approach with a disparate number of different organisations and people involved in infrastructure planning which leads to confusion and a lack of integration with no one in the organisation taking the lead. This is particularly the case in the energy sector where there is a lack of coordination between developers and the independent providers. There is some support from ScotRail for a more joined up approach and bringing relevant organisations under one roof.
- 4. Providers focus on their own issues which do not necessarily align with wider objectives. There is some concern that Local Authorities have competing and conflicting interests so do not always work together effectively. There is a lack of agreement about the alignment of strategic goals in the transport sector in Glasgow and to a lesser extent in Staffordshire.
- 5. The lack of geographical alignment and focus on different timescales, particularly concentration on the short-term leads to difficulties, tension and delayed delivery. This is a symptom of the regulatory context in which providers work and the restrictions placed on funding infrastructure. The energy providers are particularly conscious of their inability to invest in assets unless there is growth on the ground, and they can get a revenue return.
- 6. Providers are proactively gathering and using Local Plan and Local Development Plan data to understand the strategic infrastructure requirements and inform their strategic forward plans. There are examples of using it in Network Impact Assessments and in modelling to produce capacity plans. The energy companies are particularly advanced with this and agree that it would be useful to have a standard set of data on the amount of development in its location and phasing including GIS layers provided by authorities. Introducing the case studies

Introduction

PBA, now part of Stantec, worked with the University of the West of England to deliver the RTPI integrated infrastructure planning research. PBA work across all regions of England, also in Scotland, and understand how providers operate and how they work to provide infrastructure as part of large-scale development projects.

As part of this research project PBA were specifically tasked with interviewing infrastructure providers within the case study areas. We undertook targeted interviews, either by telephone or face to face, with a range of providers to get their views on the issues relating to the integration of infrastructure. These specifically sought to understand relationships and governance arrangements, the potential lack of spatial thinking and aligned geographies and what this may mean, the practicalities of dealing with different organisations, the challenges that exist as well as any good practice, and the institutional and regulatory barriers when dealing with a market and the lack of incentives.

The following questions were used as prompts for the discussion.

- How important is the planning system to your work?
- At which point do you engage most? at early strategic stage for the insert place... and / or at a detailed development management level on schemes? Do you have a single point of contact?
- Where is the focus of your engagement? With .. insert organisation...., or other? If so what about? Which is the most meaningful for you? Which is your priority?
- What are the problems and challenges you face when engaging with planners and the planning system in delivering your infrastructure?
- Do you have any suggestions about how the relationships and process could be improved?
- Do you have any good practice examples of working with planners to deliver infrastructure?
- Do you think you have adequate knowledge of the governance structure to know how to engage?
- Are you clear about the different organisations, their roles and how they relate to each other?
- Do you understand what their strategic goals are and do you think they are informing your investment decisions?
- What are your priorities and how do they relate to existing or emerging planning strategies?
- What timeframes are you planning for? How relevant are long term strategies to your funding plans?

In addition, specific questions were asked relating to detailed issues within the area such as the

City Deal projects, smart canals, rail stations, infrastructure delivery plans and the impact of the regulatory environment and the effect this has on the delivery of infrastructure.

The original intention was to identify a key topic in each case study area and interview two different infrastructure providers. However, it became clear that it would be useful to cover more topics across the case study areas, so the following sectors were identified. We interviewed more than 10 people working across these sectors in these areas, those interviewed are set out in bold in the tables at the beginning of each section.

Case study	Interviewees
Staffordshire	Transport
	Energy
Cambridgeshire and Peterborough	Water
Glasgow	Water
	Transport

Case study areas and sectors

Cambridgeshire and Peterborough

Water interviews		
Anglian Water	Doug Mlambo - Surface Water Engineer Jonathan Glerum - Regional Flood Risk Manager Allan Simpson - Strategic Growth Manager	
Internal Drainage Board	Various discussions with a range of stakeholders	

Water

Anglian Water

Each representative from Anglian Water had different operational roles within the company. This has allowed for a good range of views on the issues. The key findings are set out below.

Some interviewees expressed the view that there is a disjointed approach between the Water Industry Act and Regional / Local Planning, with the back and forth momentum with planning causing delays. Most Local Planning Authorities are starting to engage more and big infrastructure projects supporting hundreds of homes, for instance, needs early engagement and cross consultation. Developers are now picking up early engagement with most projects, which is a positive step. This can be achieved through LLFA (Lead Local Flood Authority) requirements and AW's own policy is pushing this.

The move from a consultant model to a co-creation model to help LPA / LLFA and to inform local plan productions, which enables stakeholders to write policies together. AW like to see Local Plans setting out the position and some interviewees report that where spatial planning issues are considered with the Combined Authority the experience has been positive. However, sometimes the lack of clarity is an issue, particularly on neighbourhood plan issues. It is suggested that there needs to be improvement on shaping the distribution and timing of growth, and it is understood that there is an appetite from most LPAs for timing and phasing advice earlier on in the Local Plan Process.

There are challenges with getting Sewers and SuDS (Sustainable urban Drainage Systems) adopted and the disjointed approach between local authorities and adopting departments can cause confusion at planning. The AMP (Asset Management Plan) process and cycle should look to not restrict capital investment and inform planning cycle.

Some good examples of collaborative working have been reported with market intel teams now talking to planners and an outcome focus approach has helped. Wider involvement across the Cam Cox corridor for growth is currently being looked at which offers an opportunity for wider involvement. Another good example is Water Resources East (which Anglian Water set-up). It covers water resources and public supply in the Essex / Cambridgeshire & Peterborough area and involved engagement with end users and suppliers. AW are currently looking at constraints and

planning where and how multifunctional assets and multi-functional spaces can best be utilised, with IDB's and LPA heavily involved and to align with Water Resources Management Plans.

Various views were expressed about the effectiveness of current approaches and exploring how they might be improved to achieve greater integration. In addition, consideration was given to whether structural barriers hindered the coordination of infrastructure.

Respondents report that there are numerous different water providers and different approaches by stakeholders, and there is a need to start working closer together. AW are currently pushing harder on a joined-up approach on grey water use / harvesting, but in relation to Water Cycle study's, the refresh of these is slow, in most part to do with the timings of the LP's from examination, modification and adoption stages.

There is variable performance, some LPAs are good at using SPD for water usage / efficiency, water demand and resources. But there is a need to increase the link with wider boundaries and to use a collaborative approach to planning and AMP 5. There is recognition that managing flow from sites is fundamental and resilience planning requires wider engagement including climate change impacts and water stressed areas. SUDs can be seen a tick box exercise which are retrofitted into develop and that more needs to be done to ensure that there is positive collaboration and working with charities and customers taking on maintenance.

One respondent considered that the public facing side could be better and that Local Planning teams need to communicate better operational issues / capacity constraints reporting and how they can better manage growth. They would like better community interaction to help shape / inform strategic policy and allow for public to better understand some of the drivers shaping Neighbourhood Plans for instance. There was general agreement that more collaboration and engagement between water companies and local authorities would be helpful.

There are real opportunities to use data better for example by logging growth sites onto internal GIS system and tracking new development within the area. They would like to get LPA to send through more data on sites. The idea is it layers on capacity and number of heads and allows the process to be more dynamic. AW want to push consistency of data and are employing Edge to undertake this work, but want to see LPAs being able to deliver more detail to feed into this process.

There was agreement that timescales and the short-term AMP period can cause difficulties and delays, with planners working on short timescales. Dismay was expressed about Government delaying their decision making which is having knock on effects. AW are finding is difficult to give any certainty in the current climate. The use of regions, which dictates the scope of studies, has some impact and inhibits the ability to look at wider impacts and cross boundary effects.

Finance is a structural barrier to development and again is region specific, so it restricts collaboration. Regulations have competing demands and means that there is a disconnect with what regulators want and what customers want. Water transfer and water legislation can also be a hindrance. It was suggested that Sewerage Undertakers and other water infrastructure providers should be statutory consultees.

A number of examples of good practice for integrated infrastructure planning were identified:

• Northstowe, as a good model for alternative delivery where the developer (of this 9,000+

unit new settlement) set-up Technical Liaison Groups at an early stage that engaged with the planners, water companies (AW and CW) and drainage authorities (EA and IDBs) on pre-application technical matters and delivery

- Hamptons Site has set out good practice for blue water recycling
- North Cambridge park and ride, which uses SuDS features to drain into lakes
- Alconbury Weald good example of phased, interactive solution. Very successful approach but it didn't start off that way as the EA / LLFA / developer had mixed approaches, and the steering group therefore started off on the wrong footing.
- Waterbeach is a brownfield barrack site. It has been a challenge and a bit more complex and involved a new sewerage treatment works.

Holland was considered a good example of a place where Cities look after their infrastructure, but this won't work here because the bulk of the work is with the private sector. Interestingly monopolies were not seen to be a hindrance and that standards were in most part consistent.

On the use of data one respondent recognised that the power network invests heavily in forecasting, and that AW are looking to explore linking up with this approach and linking it to delivery. There is also an opportunity to share growth forecasting, which all utilities currently look at separately. A central database would be good. The local authority would also need to have access and understanding of this. Shape files could be used which would link within a central GIS database. It needs to be easy to scrutinise as there are examples where data is not accurate.

Infrastructure studies were seen as potentially offering the opportunity for better coordination, with the ability to explore barriers and solutions as more issues, constraints and opportunities are addressed.

Infrastructure Drainage Board

From an IDB perspective the key points raised were as follows:

- Early engagement very important, and as early as possible in the Local Plan process the better. Reference was made to the Water Resource East scheme which is seen as a good example of collaborative working.
- Provision for maintenance is essential, developers need to be aware / and note importance of access arrangements and maintenance (i.e protection of bylaws).
- Developer contributions can miss this out, they tend to not be aware of funding IDB for maintaining flows from development sites.
- Developers look at sites in piece meal fashion rather than a strategic manner, which the IDB can facilitate.
- Currently not a statutory consultee and this can cause difficulties.
- Northstowe good example of early involvement and development of a steering group which the IDB was a member.

Glasgow

Water interviews			
Scottish Water	Kieran Downey and Dawn Lochhead (Flooding Managers)		
Transport interviews			
ScotRail	James Ledgerwood		
Strathclyde Partnership for Transport (SPT)	Bruce Kiloh		

Water

Scottish Water

Scottish Water engages on a number of areas:

- Directly responding to individual Planning Applications to confirm satisfaction with what is being proposed, as regards the impact on the drainage network.
- The Development Planning team has relationships with the Scottish Local Authorities (LA) and developers and actively engages with them to assess the impact of development on the drainage network at a catchment level and to also jointly develop mitigation strategies.
- The Flood Risk Management Team has relationships with the Scottish LAs and actively engages with them to develop joint projects. Recent examples of this are the Integrated Catchment projects for Aberdeen, Edinburgh, Tayside, Falkirk and Ayrshire.

There is less engagement with the strategic long-term policies, plans and vision of the area, but there is use of data from Local Development Plans which is being used to inform our longer-term thinking.

The main issue is aligning joint infrastructure projects due to differing priorities and the availability of funding, particularly with LAs who have a much wider remit than just development, planning and infrastructure.

The status of the economy and the associated uncertainty of LA and developers plans mean that it is difficult to confidently assess the impact on the drainage network and to develop mitigation strategies.

There is no 'one' organisation that is responsible for the planning of drainage and surface water infrastructure. Scottish Water are responsible for the sewer network and the LA are responsible for roads drainage and planning for development. But there is a gap in terms of planning for

infrastructure that considers all surface water. This drives planning for solutions for tactical issues and not long-term planning for all infrastructure.

The best example of working together is the Metropolitan Glasgow Strategic Drainage Partnership¹.

- The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) is a collaborative partnership formed by organisations involved with the operation of the sewerage and drainage network within the metropolitan Glasgow area.
- The MGSDP is a National Planning Framework 3 (NPF3) 'National Development' a nationally significant exemplar of catchment-scale water and drainage infrastructure planning.
- Delivery of the MGSDP Vision and Objectives, in line with the Guiding Principles, will better service existing communities, unlock potential development sites and build greater resilience to long-term climate change, ensuring that aspirations for regeneration and growth are supported by improved infrastructure capacity.

Another example is the ongoing Integrated Catchment projects, working in partnership with LAs, for Aberdeen, Edinburgh, Tayside, Falkirk and Ayrshire. To initially understand the flood sources and mechanisms from the below and above ground drainage networks (sewers, open and culverted watercourses), and understand the interactions and interdependencies of the drainage networks. The aim is to develop schemes for common flooding issues and work in collaboration to deliver these schemes.

Surface Water management projects in Falkirk, Dundee and Glasgow ran with support from LAs and key agencies such as SEPA and Scottish Canals. This has involved innovative and non-standard approaches to realise development and regeneration opportunities.

Scottish Water is very forward looking and now pro-actively utilises all Local Development Plan data to inform strategic Network Impact Assessments and treatment works growth projects. Data is interrogated and interpreted to ensure strategic infrastructure requirements are understood further in advance of development being realised.

Transport

ScotRail

While ScotRail are the delivery body for rail in Scotland, there are a significant number of commitments written into the franchise which are much more than connections between different places. Commitments include issues around:

- Sustainability
- Social Inclusion
- Economic Development

¹ See: mgsdp.org

A smarter approach to infrastructure planning: Annex 1

ScotRail are proactive on these commitments and are making great headway. They are also tasked with aligning strategically with national, regional and local bodies.

It is important to note that while ScotRail do pass comment on some planning issues (if they are engaged), they do not have a full planning team or a statutory remit as a planning consultee. Whilst they see no requirement to become statutory consultees on all planning matters, they note that it may perhaps be useful for ScotRail to be included when developments occur at or near the railway and stations. Perhaps importantly suggest that ScotRail should be included to consider the standard / level of development contributions when developments are in close proximity to the railway.

On a wider basis, one of the big issues in Scotland is the lack of alignment between land use planning and transport. This is still a major problem and can be evidenced by housing allocations being passed in locations which are not sustainable and have no links to rail.

The interviewee notes that Local Authorities in the past and perhaps sometimes still do not understand the link between economic growth / development and the railway. Although they consider that generally integration with local authorities is improving.

Currently ScotRail are making a big push on integration – how to complete the last mile to / from the train station. This can be walking, cycling, parking, bus etc as well as softer measures in terms of information provision. They have recently rolled out Station Travel Plans to help this process and assist Local Authorities.

ScotRail's priorities include:

- Providing the best possible passenger service on the railway
- Scottish intercity connectivity, with rail the most efficient and cost effective way to travel between Scottish cities
- Last mile connectivity to and from rail stations.

ScotRail are involved in City Deal to a degree in that they have been invited to a number of development sessions and asked to comment on specific proposals however they have no formal remit or any specific City Deal projects themselves.

ScotRail were also engaged on a few occasions by the Connectivity Commission as their work developed. Again, they were not formally appointed, but asked opinions and to pass comment.

In terms of a Transport for Glasgow, ScotRail note that there is currently no joined up transport and planning, and delivery body available in the area. The interviewee believes that something like the TfGM model would be worth considering as it could bring transport planning and planning, development and investment under one roof which could ease some of the issues mentioned above.

Strathclyde Partnership for Transport (SPT)

The Case Study interviews already sought the views of Bruce Kilhoe at SPT. PBA work with SPT and through this relationship provide some further views about the issues.

SPT's role is to provide regional oversight of strategic transport across the region. They operate

and run the Glasgow subway and have responsibility for buses as well as providing subsidy where necessary. There are political sensitivities around transport issues which relate to its role speaking on behalf of the 12 LPAs who have different political control.

There are geographical inconsistencies across the region because SPT covers the 12 LPAs but there are only eight which are part of the City Deal which causes some tension. However, SPT work closely with ClydePlan, their offices are physically close together, and have regular engagement and joint involvement on the RTS and also have some shared resources. There is a view that greater integration would be helpful and that perhaps they should be one body.

SPT have good knowledge of the governance structures and regular engagement at officer level amongst team members. The fact that there are planners as well as transport professionals in the team means that they understand the roles and relationships within the different organisations and have built good relationships.

SPT are taking forward the new Regional Transport Strategy (RTS) they have appointed PBA to do this. The strategic goals are reasonably clear, and they are specifically seeking to align the emerging objectives of the RTS so that they are aligned and consistent with the National Transport Strategy. Specifically, they are working with Transport Scotland to align priorities and so the regional aims sit neatly underneath the national approach.

In terms of rail, SPT have no formal powers or remit, this has led to a source of frustration for local authorities as they believe it is difficult to engage with the rail industry in terms of strategic planning.

SPT are aware of the City Deal and sit on the Transport Group so see all the projects but do not run it. While they have written a Strategic Business case for public transport projects this has not got off the ground and presently is not one of the projects being taken forward.

They are aware of and have regular engagement with the Connectivity Commission and have established an advisory group which is undertaking an independent review of the RTS, and specifically involving a wide range of people and is being led by one of the key figures from the Connectivity Commission. SPT are reading the outputs of the Connectivity Commission with interest however have not yet made a public statement on the outcomes.

Staffordshire

Energy interviews		
Cadent Gas	Anonymous	
Western Power Distribution (WPD)	Andrew Akani, Design Manager	
Transport interviews		
Highways England	Patricia Dray and Patrick Thomas, Asset Managers, Birmingham	

Energy

Cadent

Cadent engage with Local Planning Authorities in various ways, at a project specific level and development management but in most cases, this is too late and is considered too far down the line to make a meaningful contribution to their ability to forward plan.

They do engage in relation to forward and strategic planning in relation to plant protection and interference as well as discussing capacity maps. Pre-recession a lot of work was done to positively work to understand future growth plans and capacity issues. This was then less of an issue as the number of homes reduced. But now, given the Government objective of much higher rates of house building, it is more important again because the network is growing at a much faster rate. This has been exacerbated by the change to plastic pipes which reduces the capacity and also the requirement for Electric Power Generator Units which is taking capacity away from the network.

There is no requirement on Cadent to actively engage with local authorities, but they are gathering information from local plans about the growth strategies and locations for growth, and are using sub-consultants to interpret and analyse this data so it can be inputted into their own model and inform capacity maps. The more data they have the better the ability to understand implications, although this is not provided in a standard form and requires interpretation. There is good and bad practice and it would be useful if a standard form of data with GIS map layers, numbers and timescales was provided consistently.

Capacity maps are very useful and show across the country where there is and is not capacity. They are hoping to produce these on-line with a RAG assessment to show where there is and is not capacity. Nationally it is interesting that the areas of greatest growth ambitions are generally the areas that have the least capacity and most work is required to upgrade, such as East of England as an example.

They are working with some authorities in a very proactive way; meeting them to discuss the

capacity maps and identify where there is and isn't capacity. This 'Proactive Planning' approach is not happening across the country yet but is very useful where it is occurring. There are benefits for both Cadent and the LAs as well as delivery on the ground because it enables them to identify what work will be required and factor in the inclusion of a new large main. In addition it can help undertake general reinforcements and bigger pipes/regulators etc to bolster capacity overall. This is preferable to undertaking specific and individual reinforcements which may need to be added on in ad hoc and piecemeal fashion which means digging the road up each year, which is expensive and controversial.

Working with LAs is Ok but there is a huge number of them and not many staff to do it. There is also a lack of understanding about how the process works with some not knowing that Cadent doesn't actually lay a lot of the infrastructure anymore. A significant issue exists in the large-scale expansion of settlements, because the gas network is designed to dissipate as it extends further out. So, where sites of more than 1000 homes are tacked onto existing towns, the gas pipes and network are not set up to cope and requires considerable reinforcement. Where these sites include multiple developers, who all use different GT / UIPs (independent Gas Transporter / Utility Infrastructure Provider) who work individually and compete with each other, this means rather than delivering a single large scale new connection, each one connects and reinforces their own bit because they have to act in isolation, which is not the best approach. Better coordination and working together of the developers and GT / UIPs on large scale housing sites to deliver a coordinated approach would be far more cost effective and cause less delays. However, it is unlikely to occur because it would have to erode the competitive connections market, which would fall foul of the monopolies commission.

The regulatory environment they work in influences the approach and specifically how they can fund upgrades. They must prove an economic return and cannot gold plate the network to address future requirements. Rather they must receive a connections request before they will proactively invest. This means that while they want to know what is planned 10-20 years ahead, they are wary of investing in reinforcements for sites in plans that may not come forward. They have had bad experiences with this and need to be sure that the houses will come forward. They cannot risk building pipes if houses never get delivered, for whatever reasons. They are experimenting with obligated reinforcements where there is funding provided up front.

Cadent have a wide geographical remit and understand capacity issues across a large part of the Country. While they are aware of different governance structures and organisations, they only get involved in working with the different LAs and don't engage on a strategic sub regional or regional basis which would add another tier of complexity into the process. The timescales they work to are one year to ensure network is protected, five-year plans and starting to look ahead to 10-year growth plans. However, they will not invest in assets unless there is growth on the ground and a revenue return.

Western Power Distribution

Western Power Distribution (WPD) is a regulated authority who own the network and then bill the suppliers who bill the individual consumers. They need to ensure they do not take advantage of their monopoly position so have a statutory obligation to offer minimum cost scheme, unless commercial customers want a more secure connection such as banks or vehicle manufacturers etc. Most people don't understand how they operate. There is a split between the primary network

which is the high voltage and the local network which can be done by local teams through incremental upgrades which take a couple of months to do and is cheaper. These improvements and reinforcements at the local and smaller scale go into the general business plan and can be funded and done as necessary when they are needed, according to projections and how this relates to what is happening in reality.

The primary network is much bigger deal and requires huge lead in times and is very expensive if there is new capacity needed for this element. These works may require planning permission or have to go through infrastructure planning process. The interviewee, a Primary System Design Team Manager for the West Midlands region, looks after the primary network (33kV, 66kv and 132kV), this is akin to the A road and motorways, and is overseen by a centralised team based at Tipton. Low voltage (230v/415v) or high voltage (11kV) networks and connections are looked after by decentralised local Network Planners in 8 local offices (Tipton, Birmingham, Telford, Stoke, Worcester, Gloucester, Hereford and Ludlow). Both teams work closely together getting feedback on local developments and providing technical support where local network capacity is an issue. Until the recent organisation restructure as part of our DSO transition, the interviewee was responsible for the short, medium- and long-term development strategy for the West Midlands Primary network to ensure it can meet current and forecast new connections (both demand and generation). WPD review various information sources including economic forecast data, Local Authority long term strategic plans / planning data, electric vehicle manufacturers forecasts, the future energy scenarios (produced by National Grid), actual connection enquiries, etc to inform their forward plans.

WPD engage at all levels of planning from development control to strategic planning and are clear about the roles of LPAs and the County. For significant developments which requirement 132kV infrastructure and / or new Primary substation sites, WPD want to know as early as possible. The team is also responsible for the management of new load or generation customer connections to the primary network, from initial enquiry through to commissioning. The focus of most engagement is at Local Authority level. Due to the volume of LA's in the region, engagement at County level is not always practicable. However, for any significant developments, County level engagement is undertaken.

Although WPD can easily identify relevant network reinforcement strategies to facilitate the proposed developments, the LA are not usually in a position to finance the progression of the works until a developer shows up, which is sometimes a bit too late to deliver the necessary network capacity to facilitate the proposed developments. WPD have had a number of instances where the LA has coordinated all the developers in a proposed area and facilitated a consortium type approach to share electricity upgrade works to facilitate timely connections to all the developments without having a scramble for the existing spare capacity.

They are aware of the Strategic Infrastructure Plan but have not had an input into it. They have had some detailed discussions with regards to some proposed development (enterprise) zones, eg I54 to enable power getting there on time to fit in with development. The priority is trying to understand where the high growth areas will be and set up strategies, and also understand the likely clustering of electric vehicles (and charging points), heat pumps and new builds with electric (rather than gas) heating as this has a significant impact on the network. They need information as early as possible and Councils are getting better at telling them, especially now they have to share and consult on IDPs. This is really useful and enables information to be shared to inform plans

both ways. The essential thing is to have some certainty about timescales of growth because they can't forward fund, so need certainty in short and medium and also as much into long term as possible.

The two main challenges are funding and timescales. Under the existing regulatory framework developers are responsible for paying for any capacity to facilitate their developments. The regulatory provisions mean that WPD are not currently incentivised to invest ahead of need by the current regulatory framework. Forward funding is difficult and speculative development can't be justified because OFGEM won't allow it, so any cost they invest will go back to the bill payer and they can't take risk that a site won't be developed. However, they are trying to be more proactive about forward funding to get capacity and paying for infrastructure assets by encouraging an LPA or consortium to do this and then it is reserved for them for 10 years.

In terms of funding sources to cater for future network growth / expansion these are limited to organic low voltage driven demand growth as the costs have to be socialised. However, OFGEM is carrying out a consultation (expected to conclude at the end of 2019) on the charging methodology for new developments, i.e. whether the deep charging approach should be retained, or a shallower charging approach introduced.

In terms of timeframes they are planning for Short (1-2 years), medium (2-4 years) and long term (4-9 years). WPD recognise that this is often too short for strategic planning and are keen to look further ahead. There has been an 8-year distribution period given by OFGEM recently which has been helpful in moving on from the usual 5-year periods. It is noted that these change over time and are different for each provider. They are starting to draft their outline business plan for 2023-28 and have appointed consultants to collect data on growth plans, timings and understand where there will be changes and demand for electric vehicles and charging, heat pumps etc. This is a big challenge going forward and could have big implications. Especially as they are still calculating consumption rates on the old template and figures and need to try and understand how this will change in the future.

Transport

Getting any meaningful responses from transport providers in Staffordshire has been surprisingly difficult. We have struggled with many of our contacts and have been passed around organisations and between them. Of the ten people we contacted, across six different organisations, we have only had a response from two at Highways England. There have been change in personnel and roles and responsibilities which has added to the difficulty. It is likely that the lack of resources and continued changes is leading to a lack of priority for strategic infrastructure issues across the area. It is also acknowledged that there is little incentive for these organisations to engage in research and provide feedback. This experience emphasises the difficulties in engaging with organisations and getting to the right people and highlights the lack of time and resources available.

Highways England

HE engages at all stages from Local Plans to responding to individual planning applications. One interviewee believes that we need to be involved at every stage to ensure that the appropriate level of infrastructure is identified and secured at each stage. Both respondents agree that engagement in the planning system is exceptionally important to their work and is equally undertaken at the project and strategic local plan stage with several points of contact within the HE team. Within

Staffordshire most of the engagement is at Borough / District level given the setup of the Authorities in Staffordshire. Currently East Staffordshire BC and Cannock Chase, Stoke.

Priority is dependent on the progress of the authorities' relative Local Plan and is also driven by where our investment decisions on the SRN will be taking place. The HE priorities are delivering the RIS, Safety and encouraging economic growth. Some of these compliment planning strategies more than others.

They believe that geographical coverage does affect their ability to engage, as does the current progress and status of the Local Plan. While they are not currently delivering any joint funding bids, these have the potential to add value depending on the circumstances and if prepared and worked up sufficiently. In terms of timescales HE is planning for RIS2 (2020- 2025) and RIS3 (2025-2030). Long term strategies are relevant insofar as funding from central government is in 5-year blocks, but they consider that there is an argument that they should cover longer period (10 years plus?).

There are challenges dealing with the planning system because it is not always clear whether there is a unified approach. Also comments that the various councils sometimes do not engage with each other as they should, or they have competing / conflicting interests.

HE is clear about the role of Staffordshire CC in relations to other authorities in highway authority terms but are less so in planning terms. They understand the County's strategic goals, and although some investment decisions are clearly aligned, this is not always the case. They are aware of the Strategic Infrastructure Plan but have not had an input into it so far.

There are some examples of good practice, including having regular meetings with planners to agree improvements to A500 / A34 Talke junction worked with Stoke on Trent planners to help coordinate / deliver their Etruria Valley Link Rd project with HE's A500 Etruria widening scheme.

In terms of improving the process it would be helpful to convene single regular meetings with all the Staffordshire local planning authorities to discuss and agree strategies for regional / cross boundary issues. In addition, it is felt that plan preparation should be given sufficient priority and that there should be more engagement with the LEP and STB's.

PBA are working with SPT in Staffordshire. In our experience the County Council have a clear focus on wanting to deliver essential development infrastructure themselves – this has been evident on various schemes we have been involved in (Tamworth and Stafford)

There is a strategic leadership focus on supporting growth and development, especially allocated sites; this doesn't always translate on the ground with day-to-day officers. The language may be pro-development, but this is often conditional on clients doing as Staffs want rather than what is the collective best interest – if clients don't follow SCC path, everything takes longer.

The latest West Midlands Rail Executive Strategy doesn't link in with the Local Plans and wider strategies for growth and development. This is an issue across the West Midlands, but remains true in Staffordshire

Midlands Connect has recently highlighted that one of the key routes highway improvements in the Region is located in Staffordshire (M54 to M6 N link). The South Staffs November 2016 Infrastructure Delivery Plan reports lots of unknowns relating to this link. Less than a year later, HE announced that the scheme would be complete substantially earlier than the IDP suggests. However, the Local Plan does not use this as a mechanism to structure growth and development.

Staffordshire is split in that it looks both south to Birmingham and north to Manchester; this splits the movement strategy more than in other places.

Conclusions

The findings can be distilled into five main themes which are explored below.

Engagement

As professionals working in the infrastructure field and with direct relationships and contacts in these organisations it has been surprisingly difficult for us to undertake these interviews. This was particularly the case with the transport providers. We can speculate that this is due to a range of issues specifically not getting through to the 'right' person, people having changed roles, and particularly a lack of willingness to engage and concern that they need clearance from managers, and concern that their name may be associated with the responses. In addition, these are requests which have nothing in it for them and they are not incentivised to deal with. The difficulties of access to and engagement with providers is corroborated by both the in-depth case study work and the wider national on-line survey.

While getting to the right people initially was an issue with the water and energy sector, once a contact was established very constructive discussions took place. There is evidence that they are working proactively to engage with authorities, for example Cadent are using a far more positive approach than previously in targeting and talking to LPAs where there is likely to be future growth, capacity and reinforcement issues. This approach has considerable benefits but is extremely resource intensive and is not being rolled out nationwide.

In general, there is a good level of engagement reported, but there is a particular emphasis on site specific issues rather than strategic issues. Cadent are concerned that engagement happens "too late and is considered too far down the line to make a meaningful contribution to their ability to forward plan".

Some concern was reported about the knowledge and skills of local authorities. Highways England report that while "There is a strategic leadership focus on supporting growth and development, especially allocated sites; this doesn't always translate on the ground with day-to-day officers". This is supported by the energy providers we spoke to who reported a lack of understanding on behalf of LPAs about what the providers do, what they can do and what is required as well as the regulatory environment they work in.

There is concern about the lack of integration between organisations and the large number of players within the system. Anglian Water say there are "numerous different water providers and different approaches by stakeholders, and there is a need to start working closer together". This is particularly the case in the energy sector where there is a lack of coordination between developers and the independent providers. The lack of alignment and disjointed nature of organisations is reflected by many of the interviewees.

There is some indication that engagement is improving with Anglian Water identifying examples of collaborative working and using outcome focused approach with market intel teams now talking to planners. Moving forward Highways England are keen to work together and suggest that "it would be helpful to convene single regular meetings with all the Staffordshire local planning authorities to discuss and agree strategies for regional / cross boundary issues". Likewise, ScotRail believe that "something like the TfGM model would be worth considering as it could bring transport planning

and planning, development and investment under one roof". This is particularly the case in relation to data sharing which is considered in more detail below.

Priorities

There is a general view that it is difficult aligning priorities of all the different organisations involved and that in some cases there is a lack of agreement and good cross boundary working relationships. Highways England believe there are "challenges dealing with the planning system because it is not always clear whether there is a unified approach". They also recognise that their own priorities in Staffordshire are also driven by where our investment decisions on the SRN will be taking place.

In Glasgow the picture is more mixed. While there appears to be a good level of collaboration and alignment around water issues, Scottish Water express concern that no one organisation is responsible and that "this drives planning for solutions for tactical issues and not long-term planning for all infrastructure". For transport our experience of working with SPT suggests that they are working with Transport Scotland to align priorities, so the regional aims sit neatly underneath the national approach. However, this is not supported by ScotRail who believe that "one of the big issues in Scotland is the lack of alignment between land use planning and transport".

Geography and timescales

There are difficulties created by the different geographical coverage of organisations which deliver infrastructure and the authorities growth strategies. This disconnect does not assist the provision of integrated infrastructure and is particularly the case in the transport sector. For example, in Glasgow the SPT covers 12 Authorities whereas the City Deal only covers eight. Difficulties are also seen in Staffordshire which looks both North and South which splits the movement strategy and it is reported that the West Midlands Rail Executive Strategy doesn't link effectively with the Local Plans.

Lack of certainty is a problem for infrastructure providers. Their timescales are not generally aligned with plan making. These are generally five years which is far shorter than the LPAs 20-year plans or longer. WPD recognise that this is often too short for strategic planning and are keen to look further ahead. For significant developments which require 132kV infrastructure and / or new Primary substation sites, WPD want to know about them as early as possible, because there are considerable lead in times and resources required. They report that "The essential thing is to have some certainty about timescales of growth because they can't forward fund, so need certainty in short and medium and also as much into long term as possible".

Highways England support this recognising the limitations of the five-year funding rounds and suggest that there "is an argument that they should cover longer period", of at least 10 years.

Regulatory framework and funding

There are numerous restrictions on the utility providers which fetter their ability to invest because as Cadent report they "must receive a connections request before they will proactively invest". They are not allowed to invest in assets unless there is growth on the ground and a revenue return because the regulator has to approve funding fairly according to strict criteria. This fear of speculative investment is echoed by WPD who confirm that where there is undue risk it can't be justified "because OFGEM won't allow it²' so any cost they invest will go back to the bill payer and they can't take risk that a site won't be developed.

There is also a problem of the lack of coordination between developers and GT / UIPs on large scale housing sites. Cadent believe that a more coordinated approach would be "far more cost effective and cause less delays". WPD agree with this and are trying to be more proactive about forward funding to get capacity and paying for infrastructure assets by encouraging an LPA or consortium to do this and then the electricity is reserved for them for 10 years.

Data sharing and good practice

Data sharing and the use of information is increasingly important. All four utility companies we spoke to are very keen to understand the future locations for growth and are diverting resources into understanding this. They are specifically engaging with consultants to identify the growth plans of LPAs and to map these. This appears to be particularly well developed in the gas and electricity industry with sub consultants being employed to gather and model data for use on capacity maps. There is a wish for standardised data sets to be made available and to roll out the information and to be made available for all, with a RAG assessment accompanying the maps. The water companies are also doing this to a slightly lesser extent and there was recognition by Anglian Water that "the power network invests heavily in forecasting and that they are looking to explore linking up with this approach and linking it to delivery".

We have found some other examples of good practice including:

- Scottish Water are a good example of a more proactive organisation, who are looking more positively at data sharing and working collaboratively. Metropolitan Glasgow Strategic Drainage Partnership which is a collaborative partnership to improve infrastructure capacity by focusing on delivering the vision, unlocking sites, building resilience and meeting regeneration aspirations.
- Anglian Water are also working together with interested parties and have identified numerous good practice examples including Water Resources East which is scheme for water resources and public supply in the Essex / Cambridgeshire & Peterborough area which involved considerable and successful engagement with end users and suppliers.
- Highways England have used regular meetings with planners to agree improvements to A500 / A34 Talke junction.
- Cadent rolling out their Proactive Planning approach to local authorities to engage early and understand future growth plans.

² This is the view of the interviewee and has not been confirmed.



For more information about this research visit:

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