

# **Exploring methods for the identification of Strategic Planning Areas**

**Final Research Report**

**Provided to Welsh Government**

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## **Considerations for developing a strategic planning area: a short policy note**

The Planning (Wales) Act (2015) provides for Welsh Ministers to designate strategic planning areas in Wales, alongside a strategic planning panel for that area. The strategic planning panel will consist of one or more local planning authority members and nominated members. Once designated a strategic development plan can then be prepared for the strategic planning area.

One or more local planning authorities will be required to act as the “responsible authority” for preparing and submitting the proposal for designating a strategic planning area. Preparation of the proposal must include consultation with each local planning authority included in the proposed area and anyone else that may be specified in the direction from Welsh Ministers. The directed local planning authority must prepare the proposal for a strategic planning area within six months of the direction being given.

Strategic planning areas must comprise “(a) all of the area of one local planning authority, and (b) all or part of the area of at least one other local planning authority”. Along with the proposal, the responsible authority must submit to Welsh Ministers a report about the consultation. The proposal itself must include a map of the proposed strategic planning area boundaries, a statement justifying these boundaries as well as any other information required by Welsh Ministers.

Whilst it is for Welsh Ministers to direct the designation of a strategic planning area, the expectation is that this will follow an initial request made by local planning authorities. This may place an onus on Local Planning Authorities to develop an initial concept for the proposed strategic planning area prior to the development of a full proposal. In developing the concept, and the full proposal, there are a number of considerations that can influence the final shape of the boundary of a strategic planning area. This research set out to identify these in order to provide a guide to the considerations that could influence the justification for the boundaries adopted for a strategic planning area. This policy note provides a brief summary of some of the more significant considerations.

A crucial consideration at the outset of the process is to identify why a strategic planning area is required. This should clearly set out the problem(s) that need(s) to be addressed and why alternative approaches (such as a joint local development plan or cooperation amongst local planning authorities) are not appropriate for this. This early consideration should also identify how the proposed strategic planning area fits with a National Planning Framework, should that be in place.

A clear specification of a limited number of objectives for a strategic planning area will greatly assist in developing defensible boundaries for the proposed Area. It also influences the sources of data to be used in determining those boundaries. A strategic planning area designated to tackle issues of housing land supply could well have a different boundary to one that was designated to meet an environmental challenge, for example. The greater the number, or range, of objectives the greater the difficulty will be in developing one coherent boundary for the strategic planning area.

Paradoxically, in developing the boundaries for a strategic planning area we should already have some idea of the area that we wish the plan to cover. Our starting point can affect the final outcome. A strategic planning area that takes its point of focus as a city, such as Swansea, may well

have a different boundary to one that takes a broader geographic area – such as the Swansea Bay City Region - as its starting point. This relates back to the significance of specifying the planning problem that the strategic planning area is intended to address. Moreover, affected local planning authorities might reasonably be expected to be represented on the strategic planning panel that puts the proposals for the strategic planning area to Ministers. This reinforces the importance of undertaking an initial consideration of the area to be proposed.

Developing the datasets on which to base the proposals for a strategic planning area is a relatively straightforward process and need not be time-consuming or expensive. Our work has demonstrated the types of data that can be usefully applied, most of which is publicly available. If the particular objectives identified for the intended strategic planning area suggest that there are some gaps in the existing data then time will need to be allowed for the acquisition of appropriate data. This may need to be undertaken prior to any request for direction being made of Welsh Ministers.

Early consideration will also need to be given to a number of crucial choices that can influence the shape, and the reach, of the boundaries for any proposed strategic planning area. As these choices will need to be part of the justification reported alongside the proposed boundaries it is important that the rationale is established at an early stage in the process. This does not prevent future iteration, but provides the basis for taking the initial steps in an iterative process. We identify four areas where initial choices are particularly important:

What are the areal units that you will use to designate the eventual boundaries? Whilst data might be collected for small areal units (such as Lower Super Output Areas) is it intended that the eventual boundaries proposed will follow the boundaries of these areas, or might they be scaled up to ward boundaries or even to existing unitary authority or local planning authority boundaries? This decision can have practical implications, particularly in terms of achieving 'buy-in' from elected members and in the extent to which boundaries are 'recognisable' to those who live and work within an area.

What thresholds are to be used to determine whether an area should be included in a strategic planning area or omitted? This is particularly significant where there may be distance-decay effects, such as in retail hierarchies or travel to work patterns. Equally, where activity patterns are less frequent (as may be the case with strategic resources such as high-level shopping facilities) should the use-threshold relate to a monthly visit or something less frequent?

What weight is to be given to the choice between balance and concentration? For some objectives this might be a straightforward choice, resource-based objectives such as planning for mineral extraction tends to focus on those areas where there is a concentration of relevant resources. For socio-economic objectives, however, there may be an argument for balancing areas of high activity with areas of low activity, depending on the objectives underpinning the strategic planning area. The choice made will have a significant impact on the selected boundaries of the proposed strategic planning area.

A choice may also need to be made regarding the extent to which the boundaries reflect desired outcomes, rather than simply respond to existing patterns of activity. Data reflects past and current activity patterns, and is often the result of past planning decisions and planning structures. Drawing strategic planning area boundaries solely on the basis of existing activity patterns may simply project those patterns into the future. Developing proposals for strategic planning areas may need to include an 'opportunity' element which reflects the objectives of the proposed strategic planning area and so establish new patterns of activity. In doing so it will be essential that these future-

looking choices can be adequately justified, such as through proposed infrastructure investments, rather than simply being a statement of hope.

In developing proposals for strategic planning areas the value of qualitative data should not be overlooked. Different groups have very different activity patterns and different perceptions of what is local and what is greater than local. Developing an understanding of these different perspectives through dialogue with different communities, whether these are local groups, business interests or those with more policy-orientated perspectives, will help to enrich the overall justification for a proposed strategic planning area, and may assist in final decisions on the precise location of particular boundaries.

The final choice on the boundaries of a strategic planning area will always be a political one. In making this choice consideration should also be given to the efficiency of the area incorporated within the boundaries of the strategic planning area, and the area lying outside of the boundaries. A strategic development plan will be required for the area within the strategic planning area, with pared-down local development plans sitting alongside this. Areas outside of the strategic planning area will still require full local development plans. The resource implications of this may wish to be considered as part of the process of developing the final boundaries of the strategic planning area.

Developing a strategic planning area will be a highly political process, as well as a technical exercise. It will also have lasting effects in terms of long-term development patterns for the matters under consideration, which will impact on the quality of people's lives and the prosperity of our economy. It is important that sufficient time is given to developing robust proposals for strategic planning areas, particularly given the levels of consultation required. This will likely involve work prior to the initial request to Welsh Ministers as well as substantive work on the proposal itself.

## Background

The Planning (Wales) Act (2015) received Royal Assent in July 2015 and suggests wide-reaching changes to the planning system in order to deliver appropriate and accountable development across Wales. The Act recognises that planning for land-use development needs to address national, regional and local concerns across a range of activities, interests and functions. It also draws on evidence suggesting the need for a planning system that better addresses issues that cross unitary authority and local planning authority boundaries.

Section 4 of the Act makes provision for Welsh Ministers to designate strategic planning areas and a strategic planning panel for that area. Welsh Ministers must state their reasons for directing the submission of a proposal for a strategic planning area, which may suggest the underlying objectives for this. The strategic planning panel will consist of one or more local planning authority members and nominated members. The responsible authority (see below) must prepare proposals for a strategic planning area within six months of the direction being given.

Strategic planning areas must comprise “(a) all of the area of one local planning authority, and (b) all or part of the area of at least one other local planning authority”. One or more local planning authorities will be required to act as the “responsible authority” for preparing and submitting a proposal for designating a strategic planning area. Preparation of the proposal must include consultation with each local planning authority included in the proposed area and anyone else that may be specified in the direction from Welsh Ministers. Along with the proposal, the responsible authority must submit to Welsh Ministers a report about the consultation. The proposal itself must include a map of the proposed strategic planning area boundaries, a statement justifying these boundaries as well as any other information required by Welsh Ministers.

These current changes to the planning system in Wales raise a number of significant research questions. How should the boundaries of a strategic planning area be defined? Might different rationales lead to potentially different boundary definitions? What weight should be attached to different sources of evidence? Proposals for strategic planning areas must be justified and evidenced, relying on the consideration of a broad scope of evidence and the interpretation and weighting of this evidence. It is anticipated that analysis of different functions and activities across an area, which operate at different spatial scales, could give rise to a number of options for defining a single strategic planning area.

The objectives driving a strategic planning area and evidence base used to map the geographical patterns relating to these objectives, will influence the shape of its boundaries. For this reason, the appropriateness of any given boundary is contestable. For example, boundaries familiar to those involved in administrative functions (e.g. wards; unitary authorities; city regions) may not be meaningful to others. For others, different boundaries make sense: water catchment areas do not follow administrative boundaries; and the geographies of everyday life might revolve around neighbourhoods, communities, social networks and symbolic boundaries.

From our reading of the original Bill, strategic planning areas are intended for consideration of matters of greater than local significance - where local is defined as within the remit and boundaries of a local planning area. However, the idea of ‘local’ and ‘more than local’ might vary between functions interests and activities. This might also influence the boundaries that might be seen as appropriate for a strategic planning area, depending on the objectives and evidence base underlying

it. The original Bill further suggested that strategic planning areas might be designated in three particular areas: Cardiff Capital Region, Swansea Bay City Region and the A55 corridor in North Wales.

In order to explore these, and other matters, Cardiff School of Planning and Geography proposed a research study to Welsh Government to explore the potential for a method that might help the designation of strategic planning areas.

The project had three inter-related research objectives:

- Explore the qualitative and quantitative evidence that may be drawn upon in order to construct strategic planning areas.
- Through exploration of different options, develop a method of using this evidence to generate different options for identifying a strategic planning area.
- Assess the appropriateness and usability of the methods by (a) exploring how they might be applied in the Cardiff Capital Region and (b) test the robustness and sensitivity of the outcomes of this by testing them in the Swansea Bay City Region and North Wales region.

It is important to clarify that this research project does not set out to define strategic planning area boundaries for particular areas of Wales. Neither does it set out to produce a prescriptive method for defining strategic planning area boundaries to be rolled out across Wales. Rather, the project seeks to explore the issues that might be encountered in deriving strategic planning area boundaries in order that these can be taken into consideration in practice. We hope that this work will contribute to the dialogue around strategic planning areas in order to help add rigour, robustness and defensibility to the process of their designation and therefore to the areas themselves. In doing so, we develop a framework for approaching the delineation of a strategic planning area boundary; suggest a method for integrating and applying quantitative and qualitative data across a range of functions, interests and activities in order to broaden the evidence base for the designation of strategic planning areas, and test this in three parts of Wales.



## Designating strategic planning areas: the boundary problem

### *The existence of embedded planning geographies*

Strategic planning rose to prominence in many industrialised countries in the 1960s and 1970s based on the need to more comprehensively manage growing metropolitan regions and coordinate services within the region. As concerns of globalisation, environmental degradation, and institutional complexity arose there was a growing acceptance that administrative borders were not always the most relevant scale at which to plan and there was a need to identify more strategic boundaries with which to plan within.

One of the more common means of identifying the boundary for area-based plans takes an administrative unit such as unitary authority, county or region as the defining area. An alternative unit for this can also be found in the National Park Authorities in Wales. A second, long-established method by which strategic boundaries are defined is based on the intensity of interaction between different areas. This functional approach has been broadly defined as areas or locational entities which have more interaction or connection with each other than with outside areas. For planning purposes functional areas have most commonly been developed based on travel-to-work areas and housing market areas. Finally, a third common method of defining planning boundaries has been to use physical features, such as watersheds or river-basin catchment areas.

Whether these means of developing boundaries are entirely appropriate for the purposes of developing proposals for strategic planning areas is a matter of conjecture. It may be more appropriate to seek an approach that builds on a combination of each. There is also an argument that planning geographies may become embedded and replicated over time, both in terms of the objectives underlying the planning area and the boundaries of planning areas themselves, giving rise to an argument for a fresh view of the boundaries of potential strategic planning areas.

In order to avoid such embedded geographies it is important to consider the definition of planning boundaries at two levels. Firstly, to consider the objectives underlying the creation of planning areas (i.e. the functions, interests and activities being addressed within the plan for the area). Second, to consider the boundaries themselves (e.g. is a broad evidence-base being used to designate the boundaries; are there other influences on the boundaries such as existing administrative geographies; what ideas of 'local' and 'more than local' might be at stake)?

### *Key concepts for considering the definition of planning boundaries*

In so doing, there are six concepts that we take into consideration: positionality; territory; place; networks; scale; and time. These are not only concepts though, they also have implications for evidence on which proposals for a strategic planning area might be based.

**Positionality** refers to the fact that as human beings and organisations, we all operate in particular contexts which influence our actions and understandings. Contexts include: personal beliefs; personal experiences; training and education and professional practices. Spaces are socially constructed; they do not exist without human actions. These include actions such as drawing and labelling boundaries on maps (e.g. ward; output area; unitary authority; region; country); the influence of various global processes on localities; and the meaning people give to spaces. If we

accept that space is made by human action, and that human action is subject to positionality, we can see that the contexts in which strategic planning areas are spaces that will be constructed based on particular evidence bases; professional training and practices; user experience etc.

**Time** is a key geographical concept as processes creating spatial variation always occur across time; it is time which gives use change. Understanding the past can be important to understanding present socio-spatial patterns. It is also important to consider how socio-spatial patterns might change in the future and how any actions today may influence those future patterns. The rhythms, or repeated patterns, of activity and phenomena can also be important. It is important to consider how socio-spatial activity, natural processes and the interactions between these vary repeatedly over days, weeks, months and years, for example, and how the data reflects this.

**Territories** can be thought of as contiguous areas defined/organized/managed by particular individuals, social groups or institutions and are often tied up with ideas of access, politics and power. In this work, we are using territory to mean defined spaces, which are bounded in relation to a particular function or purpose. For example, we could think of administrative geographies; housing markets; water catchments.

From the 1970s a body of work within geography emerged which reacted against spaces being defined just as territories. This pushed for richer understandings of space as central to human experience, both being made by social processes and influencing these processes. The term **place** is often used as a label for thinking about space in this way. Place includes interest in how people experience and feel about the spaces they live in, and how this influences behaviour. It also includes an emphasis on the practices, or 'doing' of life: what do people do; how do they experience space (e.g. where do they go; how often; why); how do they feel about it; how does this influence their behaviour. Individuals and groups have different experiences of place. In this way we can see how place relates to positionality.

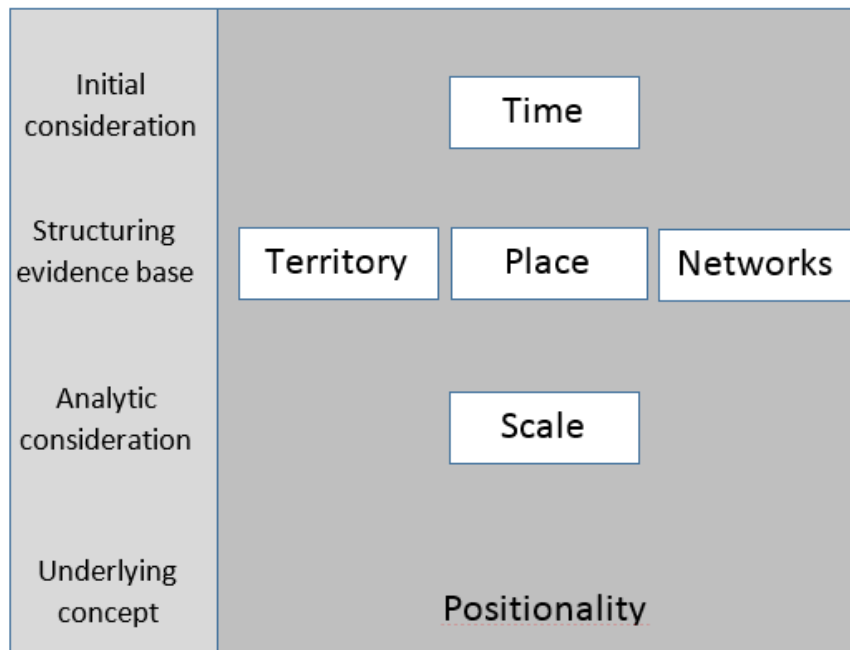
The role of **networks** and interconnections in making spaces is especially important in an increasingly interconnected and globalised world. Network connections are often referred to as relational space. Advocates of thinking relationally argue for a rejection of places as bounded spaces in favour of thinking about the accumulation of networks; flows and processes that form them and the way that they are continually made, unmade and remade (Jones, 2009). Networks can include social (e.g. friendship groups) and organisational (e.g. working relationships) networks and the way that they cause capital; people; knowledge etc. to flow across the Earth's surface.

**Scale** can be used to refer to the spatial extent at which interest is focussed. It can relate to the spatial extent of territories, places and networks. Decisions are often made to operate or focus at particular scales. These decisions may be based on factors such as resources, data availability, theoretical considerations or convention. Scale is an important consideration because in selecting a level to focus at, decisions have to be made about what is included and what is excluded and why. Assumptions might also have to be made when defining the boundaries of your scale of focus (e.g. what are meaningful boundaries to use and for who?) The impacts of these need to be considered (e.g. whether the scale of focus alters observable patterns; whether the scale you are working at impacts on your intended outcomes).

### *Bringing the key concepts together*

The six concepts describe above relate to our proposed method in different ways. Figure 2.1 illustrates how these six concepts impact on our proposed method.

Figure 2.1: Concepts for consideration of evidence base for designating strategic planning areas



Positionality is an underlying concept of this study. Individual strategic planning areas will have different shapes and sizes depending on the objectives underlying the strategic planning area and influences (including the selected evidence-base) evidence used for its creation. We explore a method which will allow those designating strategic planning areas to explore evidence bases that may be drawn on and how the weighting of these evidence bases might create different strategic planning area boundaries. It is also possible that the geographical position of the strategic planning area and those constructing its boundaries may also influence the evidence base drawn on to construct strategic planning areas. Therefore we explored these ideas in more than one location.

When conceptualising strategic planning areas consideration needs to be given as to the extent which they will be historically and future sensitive. This is especially as strategic planning areas have the potential to be long-term drivers of change. Attention might also be given to different rhythms of life (e.g. daily, weekly, monthly, yearly).

Politics and policy largely remains a territorially bounded concern where politicians represent a defined territory and jurisdictional issues often remain geographically circumscribed (Haughton et al., 2010; Morgan, 2007). Evidence suggests policymakers tend to fall back on understandings of space as territory rather than alternative spatial conceptions (Harris and Hooper, 2004; Healey, 2004). Strategic planning areas are themselves user-defined territories. In addition, it is likely that the majority of the evidence base that will be used to designate the strategic planning areas will mostly be derived from quantitative data linked to territory. The proposed method broadens understandings of space in order to broaden the evidence-base for designating strategic planning areas.

Certain elements of place (e.g. culture; individual and group perceptions of place; everyday practices of life) are not generally considered in the designation of planning areas. Yet, they are fundamentally important, not least because they influence the behaviours of people. We undertook qualitative

research to explore the potential for building perceptions of place into the designation of strategic planning areas.

Networks and interconnections are crucial to the designation of strategic planning areas. We can particularly think of the importance of flows to designating planning areas (e.g. commuting patterns). Aside from commonly-used flow data, there are three other areas that might be important in the designation of strategic planning areas: the interconnections of social groups; leisure / recreational patterns and existing individual and institutional working practices/relationships.

Analysis of the data involves consideration of issues of scale, in relation to both the evidence-base (thresholds; data classes etc.) and to decisions over the final strategic planning area boundary.

## Study research methods

### *Overview*

This research adopted a mixed-methods approach drawing on both qualitative and quantitative data. As much as possible we followed the process described in our recommended method which adapted earlier work. An advisory group was involved throughout the project. The study began in April 2015 and concluded in September 2015.

We have based our work on datasets and techniques that would be readily available to a strategic planning panel. The Planning (Wales) Act allows six months for the development of proposals for strategic planning areas and so we were guided by this in our consideration of data sources that might be used. We have also been mindful of the costs of undertaking surveys and data-collection exercises and wished to explore the potential of existing datasets. We have undertaken primary qualitative research owing to a lack of data in this area.

The appropriateness and usability of the method was first tested out in the Cardiff Capital Region owing to the particular complexity of the Cardiff Capital Region, and the interest of the Cardiff University's City Region Exchange. Once complete, quantitative data mapping was applied to the Swansea Bay City region and North Wales in order to assess the robustness and sensitivity of the method when applied in a different location. These correspond to areas currently identified as potential candidates for the development of strategic planning areas. Interviews were also conducted in Swansea to test some of the issues that arose in the Cardiff Capital Region.

### *Quantitative data collection*

Through primary research and consultation, the quantitative element expanded and adapted on technical and analytical work on indicator selection (Coombes and Wong, 1994; Hemphill et al., 2004; Wong, 2006) and overlay GIS mapping processes (Wong et al. 2015). We followed the processes detailed in sections 5 and 6 and which are not reiterated here.

Identification of potential functions, interests and activities to test using the method were based on an iterative process of literature review; consultation (primarily but not solely through the advisory group) and data exploration.

In selecting data sets, consideration was given to availability of datasets based on cost and ease of access.

Themes and data sets analysed are provided in section 6. It is important to emphasise that these only serve as proof of concept and are not exhaustive. Neither do they produce a prescriptive list of data sets that must be included in an analysis. Decisions on data should be made locally as set out in the described method.

### *Qualitative data collection*

Qualitative data collection was conducted primarily across the Cardiff Capital Region. There were three elements to this qualitative data collection; *thematic stakeholder interviews*; *political stakeholder interviews*; and *community focus groups*. In addition, follow up interviews were conducted with *Stakeholders in Swansea Bay City Region* to give a broader context to the findings.

*Thematic stakeholder interviews* were conducted with individuals with expertise in particular areas in order to reflect potential stakeholders that might be involved in a consultation. In all four interviews were conducted across the Cardiff Capital Region. Interviews were conducted in person at the individual's place of work. One promising lead did not result in an interview. Interviews were recorded and transcribed. Thematic analysis was undertaken alongside the other qualitative data. The aims of thematic stakeholder interviews were to:

1. *Identify the socio-cultural priorities that might cut across local planning areas in the Cardiff Capital Region.*
2. *Identify the sub-regional geographies of these socio-cultural priorities with a particular focus on the Cardiff Capital Region*
3. *Explore ideas of local and 'greater than local' within (a) the Cardiff Capital Region and (b) socio-cultural priorities identified above*
4. *Identify potential datasets for capturing the above data*

*Political stakeholder interviews* were conducted with local councillors. These were conducted as an extension to the original research plan on the suggestion of the advisory group. Three local councillors were interviewed, one from each of the unitary authorities in which focus groups were planned. All councillors sat on the planning committee. All interviews were conducted in the councillor's own home. Interviews were recorded and transcribed. Thematic analysis was undertaken alongside the other qualitative data. The aims of the political stakeholder interviews were to:

1. *Identify the different spatial imaginaries being operationalised by local councillors within the Cardiff Capital Region*
2. *Test the potential for strategic planning areas that misalign with existing administrative boundaries to achieve political 'buy-in'*

*Community focus groups* were conducted in localities in three unitary authorities in the Cardiff Capital Region. Focus groups included an individual mental mapping exercise. Locations of focus groups were selected to provide contrasting geographical, demographic and economic case studies. Two focus groups were undertaken with one in Cardiff and one in Monmouth. A third planned focus group in Ebbw Vale failed to take place on two occasions. Focus groups occurred in community centres. In order to achieve a breadth of opinion across the region, each focus groups contained a different socio-economic demographic. In order to include the voice of a group who are seen as underrepresented within planning policy, the Cardiff focus group included a group of young adults with learning difficulties and two key workers. The Monmouth focus group included retired people. It had been intended that Ebbw Vale would provide a different socio-economic demographic again. Focus groups were recorded and transcribed. Thematic analysis was undertaken alongside the other qualitative data. The aims of the focus groups were to:

1. *Explore varying conceptions of 'the local' among residents of the Cardiff Capital Region*

2. *Explore perceptions of place and uses of space among residents of the Cardiff Capital Region*
3. *Explore the meaning of administrative boundaries to residents of the Cardiff Capital Region*

*Interviews with Stakeholders in Swansea Bay City Region* were conducted in order to test some of the qualitative findings from the Cardiff capital Region. The aim was to undertake two interviews to give perspectives from different parts of the region. One of these was undertaken. Other leads did not result in interviews. The interview was recorded and transcribed. Thematic analysis was undertaken alongside the other qualitative data.

All research participants have been anonymised with identifying information not included in this report.

### *Advisory group*

The project was undertaken in conjunction with an advisory group recruited through Welsh Government. The group consisted of members of 10 of the Welsh planning authorities. Members of Welsh Government also attended the meetings. The group met three times throughout the research. The advisory group provided the benefit of professional experience to the research project and comment on the emerging research process and the final report draft.

## Findings of the qualitative research element and implications for the method

This section summarises the main findings from the qualitative research, discussing the power and significance of administrative geographies; non-administrative geographies of south east Wales and the need to better represent alternative geographies in the planning process. It then outlines the implications of these findings for developing a proposed method of designating strategic planning areas.

### *The power and significance of administrative geographies*

The designation of strategic planning areas involves the drawing of boundaries. One of the main findings from the qualitative research was that meaningful boundaries vary between people, which has implications for the process of designating these areas.

Individuals and institutions involved in policy, service delivery and planning in the Cardiff Capital Region worked strongly within administrative geographies. In particular, they perceived the Cardiff Capital region in terms of administrative territorial units (e.g. wards; unitary authorities; regions) and the networks which bind different territorial units together.

In their work, individuals focussed on different scales of territorial unit. Definitions of 'local' mostly related to the territorial scale on which they focussed. For example, local councillors focused on their own wards which they described as local (although councillors also frequently worked across their unitary authority, this was seen as greater than local working). For those whose focus was regional (i.e. across 2 or more unitary authorities) or national, the unitary authority was commonly described as local.

Discussion of working across local territorial areas can be thought of in terms of both networks and place. The existence or non-existence of working relationships between local territorial areas (e.g. between wards or unitary authorities) was often put down to the strength and quality of personal relationships and people that worked well or did not work well together. Also, territorial areas sometimes became characterised, with these senses of place reflecting working relationships. For example, wards could be characterised in terms of the social and physical similarities and differences within them with perceived sharing of similar characteristics leading to joint working between wards; unitary authorities were often portrayed as having different cultures with some being seen as easier to work with than others.

Across the research, there was a strong suggestion that strategic planning areas needed to be coterminous with existing administrative geographies (e.g. following unitary authority boundaries; following the Cardiff Capital Region) to be successful. Reasons included: non coterminous boundaries would further complicate existing administrative geographies potentially leading to confusion and rejection of the strategic planning area as not adding value; coterminous boundaries aided communication between different governance and policy structures given that much service delivery is structured within existing administrative boundaries; and coterminous boundaries could build on existing relationships of trust which have been built up. There were already concerns about the potential tensions between strategic development plans and local development plans and the organisational structures around them. Such a strong suggestion raises the likelihood that strategic planning areas may default along the lines of existing administrative boundaries. This may, or may not, be appropriate.



## *Non-administrative geographies of south east Wales*

Alternative geographies to the administrative geographies which dominate political discourse were evident, particularly through the focus groups.

Administrative territories generally did not hold as much significance to those outside of the policy and practice environment. In particular, there was a lack of awareness of the more recent concept of the Cardiff Capital Region. Unitary authorities and wards both had some meaning to people. Perhaps this was because the Cardiff Capital Region is newer than other administrative boundaries or because it is seen as a political exercise rather than something which people readily engage with. It seemed more likely it was down to the significance of different boundaries in people's own lives. This was reinforced by the fact that the geographical categories that had most significance to people were countries; towns/cities; and the sub-geographies of towns/cities.

National boundaries had a large amount of significance to people. This particularly revolved around English and Welsh national identities and boundaries. These were most pronounced and nuanced within Monmouth, which has long been seen as a liminal town in terms of English and Welsh national borders and identities.

Towns/cities and their sub-geographies are good starting points to explore the nuance of 'local' identities that emerged in the research. Cardiff and Monmouth were both clear spatial and individual identities for people living in those areas; most people identified these as coherent areas and felt like they were residents of one of them. Yet, it was apparent that while people shared the use of these terms, there was less agreement as to their boundaries which did not always resonate with towns/cities as administrative units. Instead, these became labels to which individualised and nuanced local geographies were sometimes appropriated. For example, one of the thematic stakeholders described how contemporary suburban geographies of North Cardiff retain a legacy of historical village identities (e.g. Lisvane: Llanishen; Rhiwbina; Whitchurch). The extent of people's awareness of the historical legacy present in these contemporary identities would seem to vary. Above and below the terms Monmouth and Cardiff, alternative conceptions and characterisations of the local were revealed. And these senses of the local bore little resemblance to administrative geographies.

For people in both Cardiff and Monmouth 'local' was defined as accessible services (e.g. health care; library; shops; parks) and networks of friends and family. At the most extreme, it was defined as the place that has everything you need. A second key component of the local was familiarity; the local consisted of places you knew. People reported that they knew they had left when things became less familiar, less a part of everyday life. Symbolic markers often heralded the entering or exiting of the local. The local always seemed to extend outwards from the home; home was the centre of whatever was considered local. Some talked of how even spatially near places might not be considered local if they were not familiar.

Even though this definition was fairly consistent, the resulting senses of locality varied. The biggest variation was in terms of scale. In Cardiff, senses of the local tended to be smaller than those in Monmouth. In Cardiff, walkability was important to definitions of the local; everyone defined the local as an area that was walkable. Two people mentioned the specific distance of about a mile across with home at the centre. In Monmouth, ideas of the local were much larger scale. Across the group the local regularly included Abergavenny; Cheltenham; Crickhowell; the Forest of Dean; Hereford; Monmouth; Ross on Wye; Tintern; Welsh Marches; Wye Valley; and other villages surrounding Monmouth. Specific symbolic markers of returning 'home' included the M50 and the Severn Bridges.

There were also differences between Cardiff and Monmouth in terms of the geography of the local. In Cardiff, the local was mostly portrayed as a discrete and continuous bounded territorial unit. In Monmouth, there was more variation in this. One respondent described a hierarchy with an

‘immediate’ and ‘wider’ local area. There was a strong sense that the local could also consist of several discrete areas with intervening areas that are not local. The discrete areas contain networks and services that cause them to be frequented and become familiar and therefore local. The in between places are just to flow through on the way to the local. In Cardiff, more of a distinction was made between the local and non-local places which you might feel a connection to. Examples of this included: places people used to live; places visited because friends/family lived there; places people close to you have a knowledge of which they have shared with you and connections made through online gaming.

Definite rhythms of activity appeared across these larger ‘local’ areas. In Monmouth, which we have suggested occupies a liminal space between England and Wales, most undertook daily and weekly leisure activity in and around Monmouth (one went Cheltenham and Abergavenny weekly). Activity undertaken every 1-2 months regularly encompassed places such as Bristol; Cardiff; Hereford; Malvern; Worcester; Berkshire; Hampshire; Sussex; Yorkshire; and Cheshire. These less frequent activity spaces transverse several administrative boundaries, including the Welsh border.

Definitions of local can change over time. Most clearly, this occurred when individuals moved house, reinforcing the idea that home was often the centre of the local. Moves on various scales were reported to have influenced perceptions of the local including within a town; between towns and between Wales and England. Some talked of connections remaining to areas they had previously lived in, but some also talked again of familiarity; as one place faded in familiarity another took its place, with new symbolic boundaries defining new conceptions of the local.

Senses of the local varied between individuals within the Cardiff Capital Region, potentially influenced by socio-demographic characteristics such as mobility; disposable income and stage of life. Common across these is that whatever the scale of the sense of the local, they tend not to follow administrative geographies. Understanding these senses of local needs attention paid to socio-spatial relations through territory, place, networks and flows. In general, networks and flows seemed key in developing ideas of the local. The local was about familiar places and activity spaces, with familiarity arising from the interactions between where people go and who they know.

### *The need to better represent alternative geographies in the planning process*

Thematic and political stakeholders as well as members of focus groups suggested that some themes/functions, social groups and geographies were underrepresented in the planning process. The examples that follow are influenced by the interests of those that took part in the research and are intended only as illustrative of some of the issues raised.

There was a feeling that planning tended to focus on traditional functions, issues and activities. In doing so it neglected other important themes. Particularly mentioned were the Arts and ethnicity identity and related issues of equality.

It was felt that certain social groups were not well considered by the planning process. Ethnic minority groups; young people and people with learning difficulties were all named as groups that were underrepresented.

It was apparent that less attention was paid to non-administrative geographies including perceptions of the local as place and the networks and boundaries that help define these perceptions.

More specifically, rural and urban areas were discussed as having different needs (including in delivery of the Arts) while it became apparent that the focus of strategic planning areas in Cardiff, Swansea and the A55 corridor potentially underrepresented some of the issues particular to rural mid and west Wales, for example. There was enthusiasm for a mid Wales strategic planning area. Monmouth also feels underrepresented in Welsh planning. Monmouth holds a liminal position between England and Wales; historically its boundaries have been contested in terms of being English and Welsh and still today there exists strong English and Welsh identities as well as those

that are more nuanced. Some suggested that the river running through Monmouth is a symbolic boundary, with those living to the east looking towards England and those living to the west looking towards Wales. Local councillors and local people both felt marginalised by Welsh Government and its policy. This spatial imaginary is also apparent among those working in policy. That is not to say that Monmouth is deliberately excluded, but that for some, there was a lack of clarity as to which other areas, both in England and Wales, it best fits with.

### *Implications for designating strategic planning areas*

A starting point of this research was to challenge the replication of existing planning geographies within the creation of strategic planning areas.

The importance of considering alternative geographies was highlighted by some of those involved in policy, service delivery and planning. A disconnect between the political idea of the local as the unitary authority and residents' ideas of local which revolved more around community and neighbourhood was evident. It was also suggested that instead of defaulting to administrative boundaries it might be necessary and possible to base boundaries of strategic planning areas instead on the geographies of the functions, activities and issues at stake rather than administrative geographies. This might include consideration of the rhythms (e.g. daily, weekly, monthly, yearly cycles) of activity patterns. It was also pointed out that it is possible to work with agencies/organisations in doing so, even if their boundaries are not coterminous with your own – as long as the other party's own governance structures were tied to the alternative area.

Given the strength of the existing administrative geographies, it seems necessary that a primary stage of designating strategic planning areas is given over to their consideration. Thought should be given to the advantages and disadvantages of strategic planning areas being coterminous with existing administrative geographies. Alternatives should also be considered.

There are clear risks to the strategic planning area boundaries not being coterminous with the existing administrative boundaries. However, there is also a risk to underrepresenting alternative geographies of daily life in strategic planning area designation. As an example, a thematic stakeholder suggested that for ethnic minority people, particularly Somali people, there is a symbolic boundary that they do not cross over into Mermaid Key in Cardiff Bay. In this example, a flagship regeneration project has marginalised people. At this micro-level it can be seen how misunderstanding the impact of boundary lines on the ground can negatively impact on those living there. At a more macro-level, planning activity happens across unitary authority and national borders; particularly in north Wales, cross-border working with English counterparts is common. There is a fear that this might be jeopardised by Welsh strategic planning areas. Consideration of the impact of the boundaries drawn for a strategic planning area is important. This might include addressing concerns about the potential tensions between strategic planning areas and local development plans and the organisational structures around them.

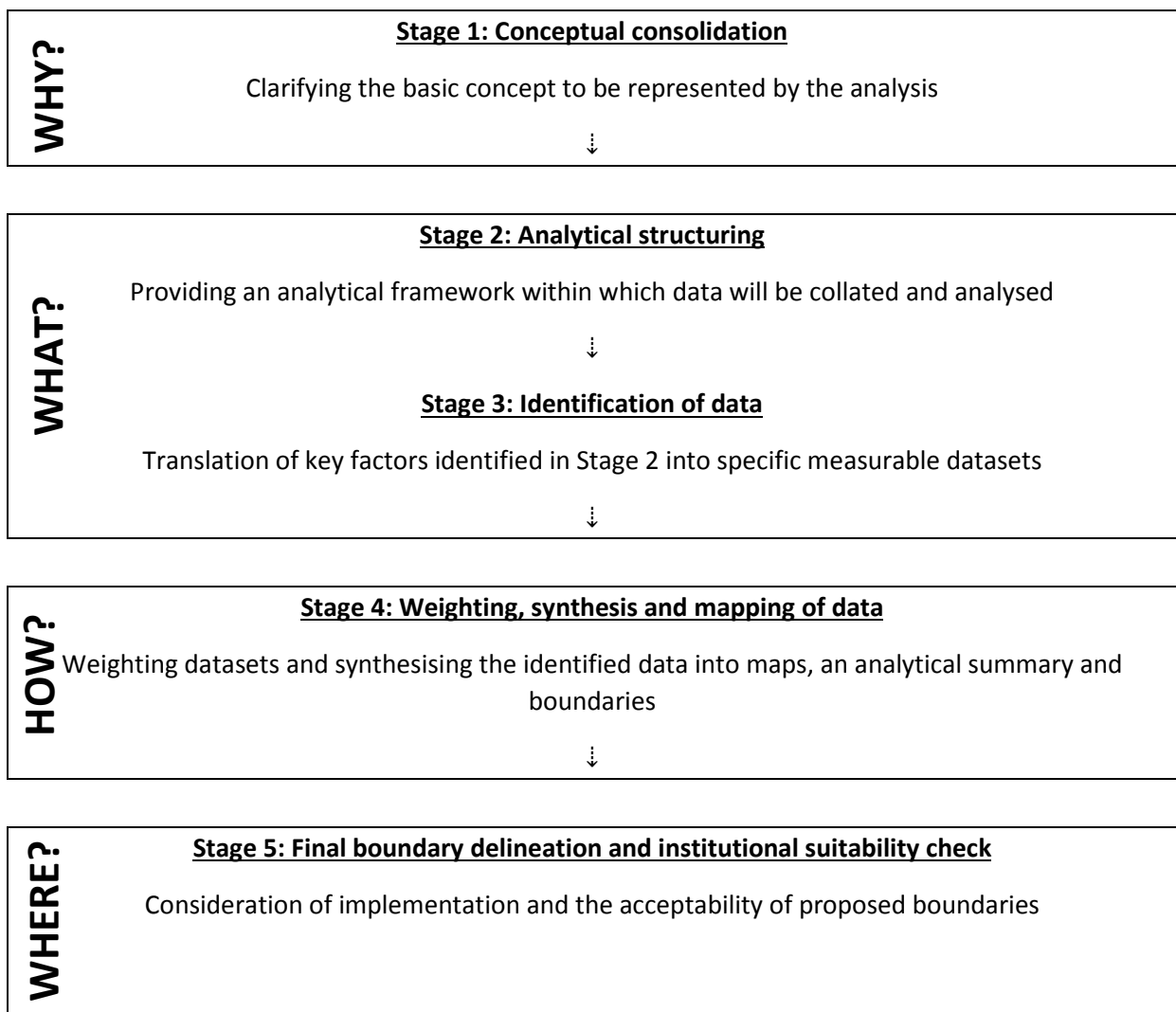
Overall the qualitative research demonstrated the importance of speaking to people who live and work in the geographic area of interest and who therefore have insights into functions, activities and interests that might underlie a strategic planning area. It would seem necessary to use consultation throughout the process of designating a strategic planning area. At the outset, this could help challenge the objectives and boundaries of the strategic planning area. It could then be employed throughout the iterative process of boundary definition.

## A Framework for developing a proposal for a Strategic Planning Area

The following section outlines a framework which might be employed to facilitate the designation of strategic planning areas. Through primary research and consultation it expands and adapts on technical and analytical work on indicator selection (Coombes and Wong, 1994; Hemphill et al., 2004; Wong, 2006) and overlay GIS mapping processes (Wong et al. 2015). It follows 5 stages (Fig 5.1).

Alternative proposals for a strategic planning area may be possible, particularly for alternative boundary definitions. Our approach demonstrates how to approach the process of developing a proposal for a strategic planning area, and more importantly justifying the choices made. This is not intended to be a prescriptive process but to raise considerations which will influence the designation of the strategic planning area.

Figure 5.1: Five stages of the method (adapted from Wong, 2006)



## *Stage 1: Conceptual consolidation*

This foundation stage ensures direction and purpose prior to the collection of data. There is a danger that a poorly developed conceptual phase may result in the exercise turning into a haphazard collection of data that does not allow for the rigorous delineation of a strategic planning area. Proposed strategic planning areas will have different drivers within different localities. The drivers will ultimately shape the boundaries of the map. At the outset it is necessary to be clear about the focus of the strategic planning area and the responsible authorities should be clear of the resources (budget; FTE capacity) available to undertake this work.

The conceptual consolidation stage should be viewed as an internal and external consultative exercise where key questions are posed and the answers are then utilised to narrow down the specific data that should be collected. Initial questions at this stage to be answered include:

- **Why is a strategic planning area necessary and what is greater than local?**

The starting point will be the direction given by the Welsh Ministers, however generally a strategic planning area may be broadly or narrowly defined in scope. The responsible authorities involved in proposing the designation of a strategic planning area should initially identify the reasons as to why a strategic planning area might be necessary, such as to take greater advantage of functional economies present among a group of local authorities, improve regional transport coordination, or address cross-border environmental externalities. This process will assist in identifying the issues that are considered to be of a greater than local significance for those involved and help to identify potential other local authorities that may need to be engaged with early on in the process. Consideration should be given to issues of scale, generally defining what matters, what should remain local concerns, and which issues require wider geographic coverage. It is important that the responsible authorities explore the full range of thematic areas the strategic planning area potentially encompasses and begin to narrow down the focus of the strategic planning area. To do this, consideration should be given to whether the strategic planning area is being viewed as a means to solve a particular problem (such as regional traffic congestion, a rise in greenhouse gas emissions, etc.) or achieve a particular policy objective (such as housing targets, increased regional competitiveness, etc.).

- **Who should be consulted and how might they be affected by the designation of a strategic planning area?**

Internal departments and agencies as well as external stakeholders should be identified for consultation and be allowed the opportunity to be actively involved in further refining the characteristics of a strategic planning area. A consultation exercise might include qualitative data collection through: workshops with members of participating planning authorities to map themes that might be augmented by interviews with key stakeholders and community focus groups to test and hone potential thematic areas. By doing so it is anticipated that there will be a discussion as to the inherent features (increased GDP, improved travel times, reductions in carbon emissions, etc.) that may ultimately result from the successful designation of the strategic planning area as well as the drawbacks. It is important to understand who will be affected by the strategic planning area boundaries and

ensure that differential impacts on various socio-economic groups are being considered. This could consider issues such as sense of place; community, or everyday practices. A mix of stakeholder consultation, interviews, and quantitative data (e.g. census data) may be useful to understand how the 'lived experiences' of particular groups may be impacted by the implementation of specific types of boundaries.

- **What might the boundaries of the strategic planning area look like?**

strategic planning area boundaries have the potential to generate new types of geographies that are institutionally and culturally unfamiliar to users and which may result in various levels of acceptance or even possibly resistance by certain stakeholder groups. By exploring potential concerns around what boundaries are and how they might be defined this question seeks to challenge perceptions of how borders are created. Consideration of the risks and rewards of strategic planning areas that cut across traditional administrative boundaries should occur at this stage. Potentially there are risks to designating strategic planning areas which misalign with existing administrative boundaries, particularly unitary authority boundaries. However, these boundaries are not always the most appropriate ones for mapping specific thematic objectives (such as environmental concerns, mineral extraction, or in some cases regional transport connections). Alternative boundaries, such as ward boundaries, may prove a more spatially precise and suitable boundary to address particular issues while statistical boundaries (such as Lower Super Output Areas (LSOAs) and Middle Super Output Areas (MSOAs)) may provide more detailed lower level data. Additional consideration might include issues of governance; politics; working practices; buy-in; and/or practicality; but should also include consideration of the benefits of non-traditional boundaries (e.g. better mapping of and planning for thematic objectives; economic benefits of more accurate geographic focus on themes) as well as consideration of potential future boundary changes that might also occur. Identifying the risks and rewards early on allows consideration of the weighting that might be given to particular types of boundaries during the later stages of strategic planning area boundary designation.

This stage also provides the opportunity to explore whether the strategic planning area will be 'geography' led or 'theme' led. 'Geography' led strategic planning areas might start with a pre-existing idea of what boundaries a strategic planning area might have and then attempt to test the suitability of that boundary (i.e. Cardiff Capital Region boundary comprised of ten local authorities). 'Theme' led strategic planning areas, meanwhile, might be more amorphous in terms of the actual boundaries based on the theme selected (tackling climate change for example) and may require starting from a higher spatial scale (i.e. South Wales) and gradually narrowing down the precise boundary.

### *Stage 2: Analytic structuring*

This stage aims to set out the structure and requirement upon which key elements/components of the data will later be developed and assessed. The objective of this stage is to define the principles to be used to guide the analysis and interpretation of the data.

When selecting the datasets, consideration should be given to:

- **Interactive effects and thresholds**

*Will the data be collected by exploring the level of interaction or variance between locations and if so how will that be measured and how will the threshold of interaction be defined?*

When exploring interactive effects, such as commuting flows, the presentation of the data may require that small instances of flows be removed for clarity purposes. Scale is an important consideration here as well given that flow data can contain large rows of data if a particularly small scale, such as Output Area, is utilised. Determining the thresholds of significance are also important, as they will vary depending on the context and data, for example what might constitute a significant level of density in South Wales may be entirely different than a significant level of density in North Wales.

- **Temporality**

*Are the boundaries to be defined based on a static period of time, such as the situation as it currently exists, or in relation to the amount of change that has occurred in locations over time and what is the baseline?*

When selecting the baseline to be used, ensure you have considered how particular points in time may have influenced the data, such as a recessionary period. For qualitative data, conceptions of place may be temporally inconsistent so it is important to ascertain the time frame within which stakeholders are framing their discussion as some may be quite contemporary perceptions while others may be long standing and historically derived. When exploring quantitative data consider how low the starting baselines (such as exceptionally low house prices in some areas relative to others) may create a distorted impression of an area in relation to the surrounding region. Percentage change rather than absolute change is typically a preferred measure for change over time however this will entirely depend on the data being analysed.

- **Consistency and comparability**

*Is data going to be collected in a consistent manner, such as similar time periods, sample sizes or definitions of terms, that allows different data sets and neighbouring areas to be compared?*

If utilising data collected individually from local authorities, there is a need to ensure that the way in which the data was collected is consistent across local authorities. It is recognised that not all potentially useful data can be collected to match the same time periods however in these cases consideration of important time factors should be flagged. Sample sizes with large error percentages should be avoided to improve the robustness of the data. When collecting qualitative consultation data, ensure a consistent interview and stakeholder engagement protocol is developed prior to implementation to ensure consistency.

- **Scale**

*At what spatial scales will the data be collected? What scales are too large and which are too small and why?*

While administrative geographies such as unitary authority boundary and ward are convenient spatial scales for political and institutional purposes, it is important to also consider whether they provide the scale of analysis to understand internal processes. The unitary authority scale specifically, is a rather large and fairly inappropriate scale from which to develop a detailed analysis, especially if using data that is highly localised such as measures of wealth and poverty. Ward level data provides a useful scale from an institutional level however it may not be as appropriate a scale to discuss 'neighbourhood' scale effects as they are not consistent in terms of population or characteristics in the same way that statistical boundaries are and the boundaries often change making comparison over time difficult. Statistical boundaries such as MSOAs, LSOAs, and OAs provide a greater level of consistency as they include measures of proximity (to give a reasonably compact shape) and social homogeneity (to encourage areas of similar social background) in their construction, however data is not always available at these scales. Care must therefore be taken when discussing data collected at different spatial scales. Generally the LSOA level (with an average population of roughly 1500 residents) is viewed as a useful proxy for a 'neighbourhood' however this scale may not be useful for a more regional analysis, therefore the MSOA scale (with an average population of 7500 residents) may be more useful for exploring broader macro scale issues.

- **Use of quantitative and qualitative data**

*How will quantitative and qualitative data be combined together to enrich the analysis?*

Qualitative data may be particularly useful for considering the level of weighting to give to each piece of data as well as the identification of data in Stage 3. Additionally, it provides a useful means by which to determine the thresholds to be used and may provide suggestions for 'best fit' when ultimately determining boundaries in Stage 4 and acceptability in Stage 5. Understanding the potential uses of qualitative data up-front ensures that the appropriate data is collected during the consultative stakeholder process and is done so in a consistent and rigorous manner.

### *Stage 3: Identification of data: defining and populating a matrix*

Thematic objectives of the strategic planning area identified in Stage 1 should be used as a means to identify datasets of interest. It is recommended that these datasets be listed across a matrix (see Table 5.1). For each thematic objective, identify data sources which might be used to evidence the appropriate boundaries of an strategic planning area, recognising that certain datasets may cover more than one thematic objective. In this illustrative example we have selected three broad themes.



Table 5.1: The use of a matrix to identify datasets based on theme

<b>*EXAMPLE*</b>	<b>Thematic objectives of strategic planning area</b>			
		<b>Economic</b>	<b>Environment</b>	<b>Health &amp; Well-being</b>
<b>Data (Quant and Qual)</b>	<b>Dataset 1</b>	<b>x</b>		
	<b>Dataset 2</b>	<b>x</b>		<b>x</b>
	<b>Dataset 3</b>	<b>x</b>	<b>x</b>	<b>x</b>

Due to the polyvalence of policy concepts no single dataset can usually be found to adequately represent an issue, therefore proxy datasets are often used leading to imperfect data and the need to rigorously assess the value of data collected. Data sources could include: quantitative (e.g. secondary data sources) and qualitative (e.g. existing working knowledge but expand this using stakeholder consultation, which can also help identify further data sets and knowledge bases). The ability to justify the inclusion of a particular dataset is a significant consideration.

When first identifying data, five basic criteria to be considered for each dataset are:

- Interpretation and relevance: What does the data explain? What is it a proxy for? How is it relevant to an issue of greater than local significance? Are there health warnings related to the data and what, if any, potential solutions are there to address them?
- Data availability: Is the necessary data accessible? What format is the data in? Does the data need to be 'cleaned'? Is there a cost involved in gaining access to the data?
- Geographical specification: Is the data available for all areas under consideration? What spatial scale is the data available at and is that scale fit for purpose?
- Time-series prospects: How current is the data? What time periods has it been released in (quarterly, annual, etc.) and do those periods allow observation of trends and to be updated in the future if necessary?
- Operation and implementation: How will the data be presented (percentage/absolute/ratio/text)? Is the supporting data available to present the data in the required format (the denominator)? Are you going to need to aggregate or disaggregate the data?

The answers to these issues as well as any other potential concerns related to the data should be documented.

In identifying the datasets to be used, three main categories are likely to emerge. The first are **Territorial Features** which typically are datasets that are highly unlikely to change in the medium to long-term, such as topographic data of hills and valleys, shorelines and rivers, land cover data, major infrastructure, etc. It is important to identify these features as they may ultimately create particular constraints on the boundaries that are selected and influence the

interpretation of other datasets such as travel to work areas or climate change vulnerability. The second type of datasets are **Place Characteristics** which are more connected to the conceptual objectives identified in Stage 1 and which are more likely to change over the medium and longer term, such as socio-demographic data or house price data. Additionally qualitative datasets may feature quite heavily among this category as stakeholders identify particular geographies and perceptions of their area. Data in this category will most likely form the bulk of the datasets used to identify strategic planning area delineation. The third type of datasets are **Networks and Flows** which are ones utilised to identify the functional characteristics of places, such as commuting flows or housing market areas, and that are potentially useful for identifying multiple datasets that may be combined to more precisely elucidate a particular concern, such as through the combination of data on pensioners with poor health and poor air quality. Qualitative data on matters such as daily working practices would also be included in this category.

#### Stage 4: Weighting, synthesis and mapping of data

The objective of Stage 4 is to create a potential strategic planning area for each thematic objective through an iterative mapping process. The first part of this process is to assign indicative weightings of importance (High, Medium, or Low) to each dataset based on the thematic objectives of the strategic planning area (Table 5.2). Datasets identified as **Territorial Features** in Stage 3 will typically be assigned a 'High' rating given their immobility and general influence on boundary definitions, however this will vary depending on each case. Assigning weightings to the **Place Characteristics** and **Networks and Flows** datasets will vary more on the interpretation of the dataset and a judgement on its suitability.

Table 5.2: Assignment of weightings to datasets based on thematic objectives of strategic planning area

<b>*EXAMPLE*</b>	<b>Thematic objectives of strategic planning area</b>			
<b>Data (Quant and Qual)</b>		<b>Economic</b>	<b>Environmental</b>	<b>Health &amp; Well-being</b>
	<b>Dataset 1</b>	<b>Low</b>	<b>Low</b>	<b>High</b>
	<b>Dataset 2</b>	<b>Medium</b>	<b>High</b>	<b>High</b>
	<b>Dataset 3</b>	<b>High</b>	<b>Low</b>	<b>Low</b>



For each thematic priority (e.g. economic) map each data set in turn (e.g. 1, 2 and 3), including any relevant qualitative data that you have collected (Table 5.3).

Table 5.3: Drawing of a boundary for each dataset within each thematic priority

<b>*EXAMPLE*</b>	<b>Thematic objectives of strategic planning area</b>			
<b>Data (Quant and Qual)</b>		<b>Economic</b>	<b>Environment</b>	<b>Health &amp; Well-being</b>
	<b>Dataset 1</b>	<b>Low</b>	<b>Low</b>	<b>High</b>
	<b>Dataset 2</b>	<b>Medium</b>	<b>High</b>	<b>High</b>
	<b>Dataset 3</b>	<b>High</b>	<b>Low</b>	<b>Low</b>

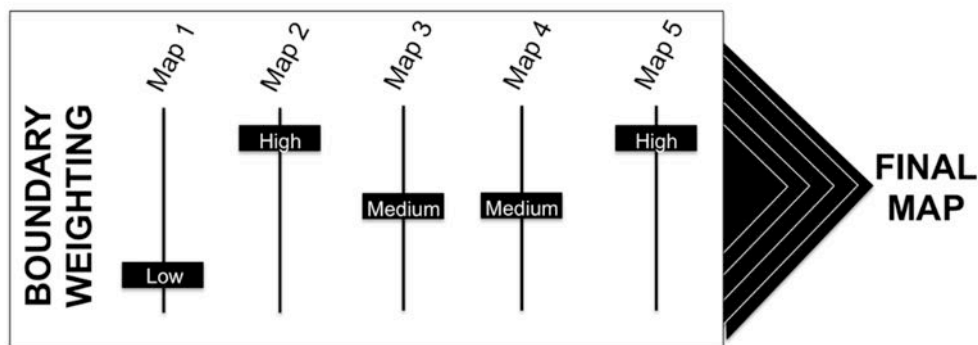


Initial boundary mapping involves identifying a potential boundary for a strategic planning area for each map based on the intensity, distribution and patterns of each feature. This identification will

not be a systematic process, but rather a subjective process based on interpretation of the data and the application of expert and stakeholder knowledge. The boundary line drawn should vary in thickness depending on the weighting assigned to it, with thicker lines for High rated datasets and thinner lines for Low rated datasets. Of importance is that each boundary drawn has a justification for its selection. The boundary itself does not need to be a hard boundary at this stage, but rather can be an indicative, 'fuzzy', boundary depending on the dataset being mapped and patterns observed. This stage may also involve removing maps if it is determined that the data does not provide particular insight into the designation of a strategic planning area boundary. Local and expert knowledge derived from consultation processes will also be of importance in the process of identifying areas, there is therefore scope throughout this stage for an iterative process of refinement and readjustment of boundaries as knowledge is applied to the boundary definition process. Mappings might also include English or other non-Welsh territory data where appropriate due to cross-boundary concerns as well as sub-geographies of importance, such as particular concentrations of activity that do not constitute a strategic planning area boundary but which may be important during the latter development of a strategic development plan.

Once boundary lines have been drawn for each dataset based on Theme, a master set of boundaries should then be developed on a single map. This can be done by overlaying the boundaries drawn one on top of the other for each Theme, ensuring the weightings assigned to the lines are maintained (Figure 5.2).

Figure 5.2: Overlaying maps of different weightings on to a single map



This overlay process allows the dominate boundary lines that are emerging to be seen within each theme along with the more peripheral or outlier boundaries. Changing these weightings will influence the shape of the boundary and can allow later iterations following consultation procedures.

### *Stage 5: Final boundary delineation and institutional suitability check*

This last stage involves the selection of the final boundary for the strategic planning area. Utilising the final overlay maps developed in Stage 4 for each theme, an iterative process of boundary definition can be undertaken. This is done by first identifying those areas that fall within all boundary lines. It must then be determined whether or not this boundary is potentially contestable based on previous consultations with internal staff and stakeholders in terms of suitability to the purpose of the strategic planning area as defined in Stage 1. If aspects of the boundary are contested then explore the reasons why these particular areas should or should not be included in the final strategic

planning area, noting the concerns as the discussions unfold and the decisions that were made. Continue this process of expansion and contestation for each boundary layer, starting with the 'High' weighted boundaries and moving to the 'Medium' and then 'Low' weightings. As progress is made from 'High' to 'Low' the significance placed on each boundary map will decline, with outlining areas of 'Medium' and 'Low' boundaries carrying less importance and becoming more easily dismissed in decisions about whether to expand the final boundary, while decisions to include outlining boundaries would require greater justification. With each iteration decisions will be made about what areas should be included and which excluded. It is important that where decisions made about inclusions or exclusions are substantially different from those suggested by the data on the map, that the reasons behind those decisions are documented and justified. With each map iteration, the boundary will become more defined until a single boundary remains.

Through this process, however, the boundary selected may not align to administrative boundaries. There is a need to consider the suitability of a strategic planning area that does not follow unitary authority and local planning authority boundaries on the basis of administrative efficiency and democratic representation. Administrative efficiency should be considered in terms of the cost-benefits of including or excluding areas that do not make up a contiguous unitary authority boundary, as those areas not included in a strategic planning area will be required to develop a more detailed local development plan compared to those areas that do not have one. In some cases however it may be more cost-effective and appropriate to keep larger areas of a unitary authority out of a strategic planning area if they do not align to the objectives of the strategic development plan. In cases where parts of a unitary authority are kept out of a strategic planning area, it is recommended that the boundary selected be aligned to ward boundaries in order to ensure that political representation corresponds to the boundaries of the strategic planning area.

Once a single boundary has been defined for each theme (in this example Economic, Environment, and Well-being), each boundary should be assigned a weighting and an overlay process as noted in sections 5.18 and 5.19 should be repeated. For example more emphasis may be placed on the Economic objectives, therefore the boundary for this theme may be weighted more heavily and given greater consideration than the other two themes.

Once a final boundary has been defined, existing or new primary qualitative data collection with stakeholders (e.g. workshops) and community focus groups might be used to test the sensitivity of the final strategic planning area.

## Testing the proposed framework

### *Part 1: Thematic weighting*

The proposed method has been quantitatively tested on three case study areas that have been noted in the consultation document *Positive Planning: Proposals to reform the planning system in Wales* (Welsh Government, 2013). These are Cardiff, Swansea, and the A55 Corridor. We refer to these as Cardiff Capital Region, Swansea Bay City Region, and the A55 Corridor (North Wales Region). For the purposes of this report it should be noted that the regional names utilised herein are not to be considered synonymous with pre-existing bodies and the boundaries that they currently operate within.

The purpose of testing the approach is to understand whether the quantitative aspects of the method are flexible enough to allow a range of locations and circumstances to be taken into account while also being prescriptive enough to allow considered analysis. The qualitative work undertaken for this report has also been tested for inclusion and has influenced the ways in which the boundaries for the Cardiff Capital Region and the Swansea Bay City Region were defined.

As noted previously, three broad strategic planning area objectives were identified for testing, one based on economic factors, one based on environmental factors, and another based on well-being factors. The three objectives have been applied to each proposed region. While the datasets and weightings differ for each objective, due to resource limitations the same datasets and weightings have been applied to each region. When applying the method in practice it is anticipated that datasets will be derived through a process of consultation and in alignment with the more bespoke objectives determined in the initial stages of the strategic planning area process.

The datasets selected provide an example of the types of data that might be used and is by no means considered to be exhaustive. In utilising the datasets the following assumptions were made:

#### ***Interactive effects and thresholds***

For the purposes of this exercise data was mapped and classified for all of Wales and utilised in the same manner for each region. This means that visual concentrations differ for areas of higher population versus more rural locations. For example, the intensity of commuting flows in the Cardiff City Region are far greater than those seen in Swansea Bay City Region. While this was taken into account when identifying thresholds for boundary inclusion in each area, when developing an individual strategic planning area it is important to ensure thresholds set are appropriate to the unique characteristics of the region.

#### ***Temporality***

The majority of data utilised throughout this report utilised absolute data rather than change data. This was done because the exercise did not wish to make assumptions

about time horizons of a strategic development plan. Rather the decision was made to test the approach with recent data to provide an understanding of potential boundaries based on the current state of affairs in the city-regions. In undertaking a strategic planning area, local authorities may wish to include data that allows consideration of future scenarios.

### ***Consistency and comparability***

The majority of data used in this exercise was collected from official statistical sources or government derived datasets and boundaries. These sources were used to ensure rigour and ease of comparability. Census data was particularly useful given the representative nature of the data, helping to avoid issues of small sample sizes.

### ***Scale***

Apart from predefined boundary data, most datasets were used at the MSOA scale. Several datasets were also tested at the LSOA and unitary authority scale in order to test their suitability. These are included as illustrative examples. For the purposes of this test however, it was determined that the MSOA scale may be the most appropriate for regional analysis when data is available at this scale.

### ***Use of quantitative and qualitative data***

Qualitative data was primarily included in three stages of the quantitative mapping process. It was first used to help select indicators for use, largely based on consultation with the advisory group. Second, it was used in determining the weightings of indicators through discussions with the advisory group and expert stakeholders. Finally, it was utilised to make decisions about inclusion of particular areas in the final strategic planning area following stakeholder interviews.

The testing of the approach included utilising different datasets to test their appropriateness and usability, with some themes such as the Economic theme utilising significantly more indicators than the Environment theme. Testing on the themes suggests that in many cases fewer indicators that are aligned to the specific objectives of the strategic planning area are preferred to numerous, less aligned indicators.

## ***Economic Factors***

The economic health of a region is seen as a key issue of concern for the delineation of a city region. The selection of indicators and definition of a boundary for this theme is predicated on ensuring employment opportunities in key sectors is included in the strategic planning area as well as identifying areas potentially in need of additional economic opportunities in order to strengthen the region as a whole.

The criteria used in the identification of strategic planning areas for each region is based on the economic factors included as follows:

1. Commuting flow data. This data provides a useful proxy for daily interactions of individuals within a region. It offers the opportunity to understand the extent and density of travel within and between places, highlighting the predominant travel patterns of individuals at the regional scale. It is also useful for locating the sub-geographies of activity within a region. Commuting flow data therefore acts as a key baseline indicator for defining the boundaries of a region and is useful to help in determining the potential extents of other indicators when patterns are not strongly apparent.
2. Housing and rental market areas. Housing and rental market areas provide a useful means of understanding housing dynamics within a region. They help to identify the areas within which people may potentially move and link this to travel to work patterns. From a policy perspective they help to support those planning for housing and as such these strategic planning areas have taken these boundaries into consideration due to the importance of the housing market in regional economies.
3. Median gross weekly earnings (residence and workplace). These two indicators are used together to provide an understanding of wealth generation within the region. While residence based weekly earnings provide context for wealth where people live, workplace based weekly earnings identify the core areas of the region where wealth is generated. By looking at the two together it is possible to understand the relationship between the location of individual wealth and where the people that generate that wealth go to work in the region. It is important in delineating a boundary that areas of high workplace wealth are included within a strategic planning area as well as between residential wealth and areas where earnings are lower to provide balance to the strategic planning area.
4. Transport infrastructure. Connectivity is important to ensuring economic competitiveness and quality of life within a region. This data is used to understand the extent of and variety of transport infrastructure within a region. Boundaries are delineated by comparing commuting patterns with the location of various forms of transportation infrastructure. It is important to understand whether one of the goals of the strategic planning area is to extend or improve transport connections, and if so take this into consideration when defining the areas to be included in the strategic planning area.
5. Workday population by industry. Agglomeration economies form a key aspect of region competitiveness due to the impacts of industry clustering. Unlike other indicators, due to clustering effects many of these industries are concentrated in small areas rather than dispersed throughout a region. The object here is not to use the data to identify a broad sphere of influence, but rather to ensure that such concentrations are appropriately identified and included in a strategic planning area. A series of industries are identified in Table 6.1 and weighted based on importance to an information focused economy. These same industries may be weighted differently and new ones selected if the objective of the strategic planning area is to promote a different type of regional economy.

6. Workday and resident population. Understanding the day and night time populations of a region ensures that the region encompasses a balance of residential and workplace activities. This indicator compares the two population datasets together to capture the daytime population centres and night time residential areas.
7. Resident population density. This indicator allows the identification of highly populated areas within a region. These more urban centres are often individually important locations for the provision of services to surrounding areas in the strategic planning area and therefore should be included in the strategic planning area.
8. Wales index of multiple deprivation. The index of multiple deprivation provides a useful means of identifying areas of stress within a region based on a range of domain factors. Regions are identified here in such a way as to ensure that they include a balance between those areas ranked high on the index and those ranked lower to ensure equal opportunity and the inclusion of areas in need of integration into the wider region.
9. Job seekers allowance claimants. This data measures the number of individuals claiming job seekers allowance and is useful proxy for employment. It is used here for identifying those areas within a region that are economically struggling and which are potentially more economically prosperous allowing for a balance of areas to be included in a region.
10. VAT and/or PAYE based enterprise counts. This indicator provides an indication of the number of businesses within a region. Areas were selected based on balancing those areas in the region with high business counts with areas where business counts were lower to ensure equality of access to potential jobs. Commuting flow data was used to help provide context to ensure potential residential/employment interaction effects were taken into account in the selection of areas.
11. Median house sale price. This indicator provides an indication of housing purchase options within a region. It is used in boundary definition to ensure that an appropriate mix of housing purchase prices are included in a strategic planning area. A variety of house prices is useful to ensure housing choice and availability for a random of incomes. Emphasis was not placed on a higher price bracket but rather ensuring a mix of housing, with reference given to commuting flows and housing market areas noted previously to help in determining the extent of boundaries to be used.
12. Comparable data sets for retail catchment areas (or travel-to-shop-areas) was not available to this study and so is not included. However, it is an important potential dimension to proposed strategic planning areas, and data is available to unitary authorities via commercial providers. We provide a possible method of approach to deriving such data in Annex 1, as provided by one commercial provider. Other approaches would be possible.



Table 6.1 summarises the relative importance and sources of the data layers used in the assessment.

*Table 6.1: The relative importance of the economic factors considered in delineating strategic planning areas.*

<b>Layers</b>	<b>Relative importance</b>	<b>Data source</b>
Commuting Flow (2011)	High	Open Government Licence, Census 2011
Housing Market Areas	High	Communities and Local Government (2010) Geography of Housing Market Areas. London, Stationary Office; Centre for Urban Policy Studies, University of Manchester.
Rental Market Areas	High	Open Government Licence, Rent Officers Wales (part of the Housing Division of the Welsh Government)
Median Gross Weekly Earnings (residence) (2014)	High	Open Government License, Annual Population Survey 2014
Median Gross Weekly Earnings (workplace) (2014)	High	Open Government License, Annual Population Survey 2014
Transport Infrastructure (2015)	High	OS Open Data, Meridian 2
Workday Population by Industry: J – Information and Communication (2011)	High	Open Government Licence, Census 2011
Workday Population by Industry: K – Financial and Insurance Activities (2011)	High	Open Government Licence, Census 2011
Workday Population by Industry: M – Professional, Scientific and Technical Activities (2011)	High	Open Government Licence, Census 2011
Workday Population by Industry: C – Manufacturing (2011)	Medium	Open Government Licence, Census 2011
Workday Population by Industry: O – Public Administration and Defence (2011)	Medium	Open Government Licence, Census 2011
Workday and Resident Population (2011)	Medium	Open Government Licence, Census 2011
Resident Population Density	Medium	Open Government Licence, Census 2011
Wales Index of Multiple Deprivation (2014)	Medium	Open Government License, ONS
Job Seekers Allowance Claimants (2015)	Medium	Open Government License, NOMIS
VAT and/or PAYE Based Enterprise Counts	Medium	Open Government License, Inter Departmental Business Register (IDBR)
Median House Sale Price (2013)	Low	Open Government License, Land Registry
Workday Population by Industry: RS – Arts, Entertainment and Recreation (2011)	Low	Open Government Licence, Census 2011

Base map layers (OA, LSOA, MSOA, UA, Country)	-	Open Government License, All maps contain National Statistics data © Crown copyright and database right 2012 & contain Ordnance Survey data © Crown copyright and database right 2012
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### *Data processing*

The data processing to identify potential strategic planning areas (North Wales Region, Cardiff Capital Region and Swansea Bay City Region) involved the following steps:

1. Selection of the MSOA for inclusion in strategic planning areas. This was done in order to present the economic characteristics at the level of census units that were of a neighbourhood scale. This allowed for the identification of lower than ward or unitary authority level patterns. Some datasets utilised other scales as a test in order to understand the pros and cons of the MSOA scale. LSOA data was used for density and the index of multiple deprivation. The LSOA scale, while allowing for a more granular scale of analysis proved more difficult in determining patterns at the regional scale. The unitary authority level was used for median gross weekly earnings data, in part due to the scale of data availability. This level is not ideal as the scale is too large to understand the more nuanced dynamics that exist within a region and it tends to reinforce existing administrative boundaries. Additionally other uniquely defined boundary sets were used, including housing and rental market areas, and line and point data for transport infrastructure.

In determining how to analyse the data, four varied concepts were utilised depending on the data being used:

**Balance.** For datasets where issues of equality were a matter of concern, such as wealth or deprivation, the boundaries were drawn to encapsulate balance within the city region. This ensures that strategic planning areas are not drawn in such a way as to disadvantage those areas of a region that are struggling by purposefully excluding them from the boundary. Commuting data was often used as a means of checking the potential extent of these areas when patterns were not obvious.

**Concentrations.** Datasets representing agglomeration economies were analysed based on the clustering or concentrations of activities. This often meant that boundaries were quite tightly defined. The objective here is that during the final delineation of the strategic planning area boundary that the importance of these concentrations are noted and included rather than excluded from the final strategic planning area boundary.

**Functionality.** Network and flow data, such as commuting data, was analysed based on the extent and intensity of the interactions derived from the accepted 'core' of the city region, such as Cardiff or Swansea, along with additional nearby locations where interactions were high. The fewer the interactions with neighbouring areas, the less likely the area would be included in the boundary.

Predefined boundaries. Datasets with predefined boundaries, such as housing market areas, were also overlaid and used to inform the final strategic planning area boundary.

2. Layering analysis of the data based on boundary weightings. Utilising the assigned weightings, those with higher weights were initially overlaid, first with those based on balance. Concentrations were then overlaid to determine if any areas fell outside those defined by balance, then functionality layers were overlaid and points of boundary similarity and dis-similarity noted. Finally predefined boundaries were overlaid. The additional two levels of weighted boundaries were then overlaid following this same process until areas of commonality and areas of contention were determined.
3. Generalisation of the data to the ward level. Since ward emerged from the qualitative data analysis as the most appropriate spatial unit for the analysis, the boundaries based on MSOAs were generalised to ward level. After this process if areas of contention still did not align the pros and cons of inclusion of each boundary extent were debated and a decision taken to include or exclude the boundary. Additionally, unitary authority boundaries were considered to avoid 'orphan' wards, i.e. individual wards outside the local authorities as well as gaps, i.e. situations where only one or two wards of a given unitary authority were not included in the proposed boundary.

The relative importance of the strategic planning area boundaries delineated using different economic factors was presented on maps for the three individual strategic planning areas.

### *Environmental Factors*

The criteria used in the identification of strategic planning areas based on the environmental factors included as follows:

1. Topography and elevation above the sea level. These are the most stable environmental factors, which dictate the spatial extent and shape of watersheds and have an impact on a variety of human activities, from the generic land use (slopes and altitude precluding settlements or intensive agriculture; identification of nature designation sites and tourism destinations due to presence of unusual habitats and landscapes), to more specific issues such as transport (again, slope and altitude affecting the location of roads as well as the commuting patterns).
2. Water Framework Directive River Basins. The EU Water Framework Directive (WFD) requires Member States to establish river basin districts and for each of these a river basin management plan. The WFD River Basins are drawn based on watersheds, which can be considered as separate, almost independent entities in terms of the water cycle. Therefore, strategic planning areas contained within river basins may support effective water pollution and flood risk management.

As watersheds are largely defined by topography, layers 1 and 2 were considered together.

3. Catchment Abstraction Management Strategies (CAMS). CAMS assess the amount of water available in each river catchment; therefore, the data helps to identify smaller than river basins river catchments. They can be used for consideration in strategic planning as separate entities. Under the changing climate, the risk of

drought and self-sufficiency of regions in terms of water supply should be considered as important factors in delineating strategic planning areas.

4. Nature and landscape designation sites and important recreation areas. European and national legislation protects the designated sites and dictates the types of development and other activities that can or cannot occur within and in the direct vicinity of the sites. National Parks are separate planning entities, thus they represent crucial stakeholders in strategic planning. Designated sites and country parks offer an important recreational resource crucial for the well-being of the population in strategic planning areas.
5. Air quality, based on air pollution. Air pollution is ephemeral and characterised by temporal fluctuations associated e.g. with the volume of traffic or intensity of industrial activities. Air pollution usually dissipates quickly when the source is removed. Nonetheless, it should be taken into consideration, especially in areas where the topography precludes quick air exchange. Some cities, such as Stuttgart, provide development regulations using a zoning approach based on the climatic characteristics of different areas, in order to maximise air exchange and minimise the negative effect of pollutants on people (Kazmierczak and Carter, 2010).
6. Finally, Land cover (based on Land Cover Map 2007) was considered for inclusion in the environmental factors, but rejected due to high granularity and lack of clear spatial patterns.

The relative importance and sources of the data layers used in the assessment are summarised in Table 6.3.

*Table 6.2: The relative importance of the environmental factors considered in delineating strategic planning areas*

<b>Layers</b>	<b>Relative importance</b>	<b>Data source</b>
Topography / elevation	High	Open Government Licence, Edina Digimap.
Water Framework Directive River Basin Districts	High	Open Government Licence, Environment Agency
Catchment Abstraction Management Strategy (Reference) Boundaries	Medium	Open Government Licence, Environment Agency,
Nature protection and recreation: <ul style="list-style-type: none"> <li>• Special Conservation Areas</li> <li>• Ramsar Wetlands</li> <li>• Sites of Special Scientific Interest (SSSIs)</li> <li>• National Parks</li> <li>• AONBs</li> <li>• Heritage Coast</li> <li>• Country Parks</li> </ul>	Medium	Open Government Licence, Natural Resources Wales,

Air pollution (t/km <sup>2</sup> ): <ul style="list-style-type: none"> <li>• NO<sub>x</sub></li> <li>• SO<sub>2</sub></li> <li>• PM<sub>10</sub></li> <li>• CO<sub>2</sub></li> </ul>	Low	DEFRA (2012) <a href="http://naei.defra.gov.uk/data/map-uk-das">http://naei.defra.gov.uk/data/map-uk-das</a> All maps © Crown Copyright. All rights reserved Defra. Licence Number 100022861 2014
Land Cover	Not used	Centre for Ecology and Hydrology (2011) Morton, D., Rowland, C., Wood, C., Meek, L., Marston, C., Smith, G. and Simpson, I.C. (2011) Final report for LCM2007 – the new UK land cover map. CS Technical Report No 11/07 NERC/Centre for Ecology & Hydrology (CEH project number: C03259).
Base map layers (OA, LSOA, MSOA, UA, Country)	-	Open Government License, All maps contain National Statistics data © Crown copyright and database right 2012 & contain Ordnance Survey data © Crown copyright and database right 2012

### *Data processing*

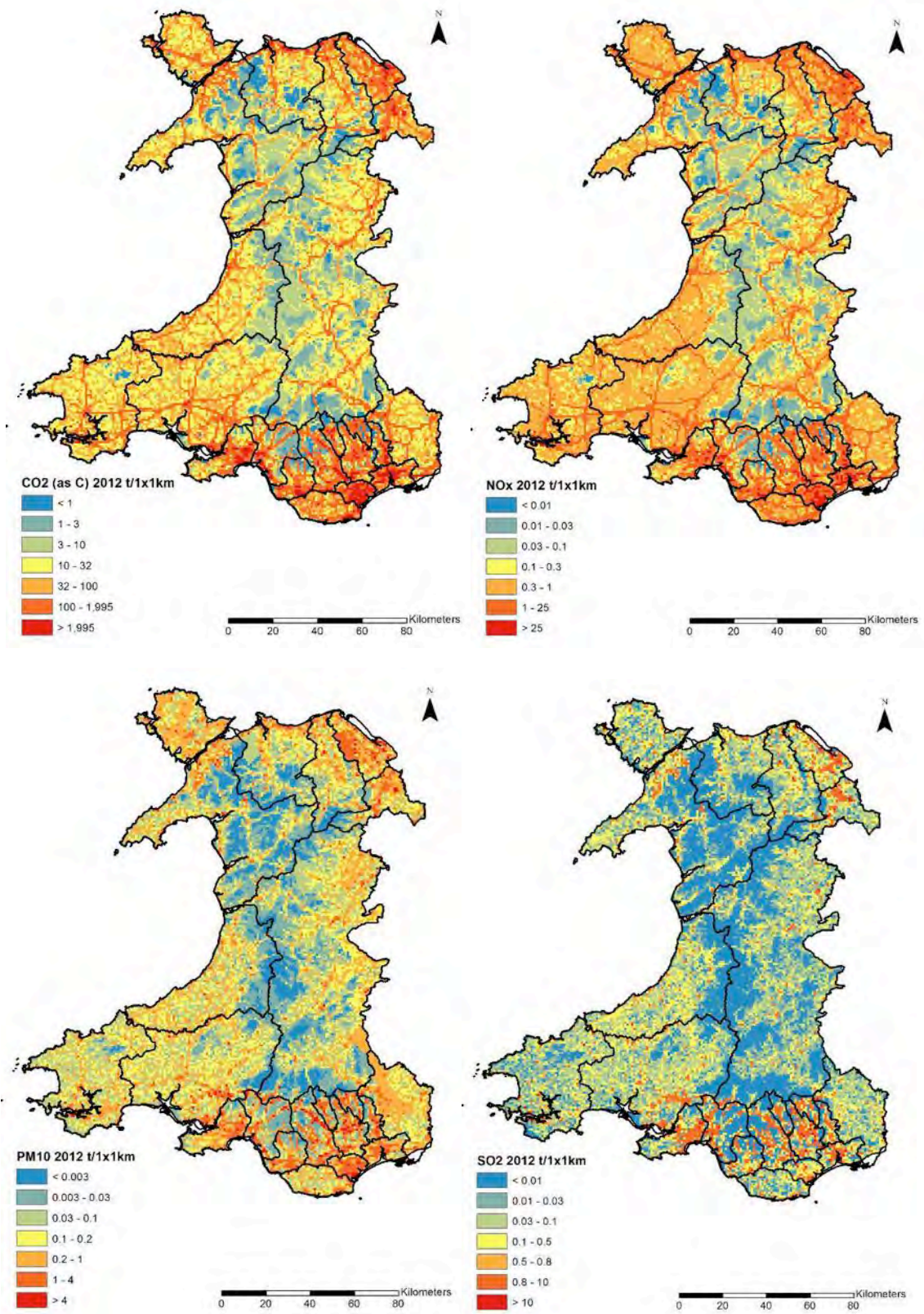
The data processing to identify the strategic planning areas (North Wales Region, Cardiff Capital Region and Swansea Bay City Region) involved the following steps:

1. Selection of the MSOA for inclusion in strategic planning areas. This was done in order to present the environmental characteristics at the level of census units, to allow combining them with the well-being factors and economic factors (see discussion of economic factor).
2. Analysing jointly topography and WFD River Basins. MSOAs falling into the boundaries of WFD River Basins were selected. As these cover quite large areas, they were spatially limited by the highest peaks delineating the smaller river catchments. Therefore, the functionality principle was applied here in an attempt to identify semi-independent in terms of water cycle units. Since MSOAs are population based, in sparsely populated areas they can be quite large and in some instances there was an uncertainty whether the MSOA should be included within the strategic planning area, if it was crossing a watershed. In these cases the decision was based on the location of population-weighted centroid (a summary single reference point which represents how the population at census time was spatially distributed and grouped within the census unit). The same principle was followed for points 1.2 – 1.5.
3. Selecting MSOAs falling into the CAMS spatially relevant to the regions in terms of the water supply for a given strategic planning area, again following the functionality principle.
4. Analysing the spatial distribution of nature protection sites. The national parks, AONBs and country parks that may provide recreational benefits for the population, as well as the nature protection sites that may give the strategic planning area

uniqueness in terms of scientific interest and/or tourism were included within the planned boundaries. Inclusion of the entire national parks and other designated sites allows their coherent protection, therefore the predefined boundaries rule was followed, following the extent of MSOAs with their centroids within the park boundaries.

5. Air pollution. All air pollution maps considered (see Table 6.2) were characterised by very similar spatial distribution, associated with the presence of roads, population and industry (Figure 6.1). The delineation of strategic planning areas (at the MSOA level) was carried out for the map presenting the distribution of PM<sub>10</sub> emissions. In this case, the underlying principle for delineating strategic planning areas was balance, i.e. the aim was to include both areas with high air pollution (indicative of high traffic and industry – possibly economically important areas) as well as areas with low air pollution, as the clean air reservoirs that should be considered and protected in strategic planning with the health and well-being of the strategic planning area population in mind.
6. Adjustment of the boundaries to wards following the predefined boundaries principle. Since wards emerged from the qualitative data analysis as the most appropriate spatial unit for the analysis, the boundaries based on MSOAs were adjusted where necessary to ward boundaries. In the process of drawing the boundaries based on individual environmental factors, unitary authority boundaries were considered to avoid 'orphan' wards. If individual wards representing a given unitary authority were outside the strategic planning area (with the majority of the unitary authority within it), the spatial extent of strategic planning area would be increased to include them. Similarly, if individual wards within a unitary authority were inside the strategic planning area, and the majority of that unitary authority was outside strategic planning area, the spatial extent of strategic planning area would be decreased to ensure that the wards are outside the strategic planning area.
7. The relative importance of the strategic planning area boundaries delineated using different environmental factors (see Table 6.1) was presented on maps for the three individual strategic planning areas.

Figure 6.1: Spatial distribution of different types of air pollution in Wales (Source: DEFRA, 2012)



## Well-being factors

Well-being is an important consideration for a region that aims to improve the quality of life of its residents and attract new talent to an area. The selection of indicators and definition of a boundary for this theme is predicated on ensuring a balance between economic, social, and environmental considerations within the strategic planning area.

The criteria used in the identification of strategic planning areas for each region based on the well-being factors included as follows:

Local health board areas. These administrative areas have been utilised to ensure that health delivery and coordination is considered as a factor in the delineation of a strategic planning area. Health service provision is increasingly regional in nature due to specialised facilities and the strategic planning area should ensure weight is given to such areas for the health of the regional population.

Welsh police areas. As an administrative unit that delivers and coordinates policing services, the boundaries of the Welsh police areas are considered as a factor related to health and safety of the population.

Additionally, several of the economic and environmental factors previously noted have been included in the identification of the boundaries for a strategic planning area focused on well-being, but often with different weight given to each dataset as noted in Table 6.3. This is useful as it demonstrates how similar boundaries can be weighted differently and when combined can produce different strategic planning area boundaries.

*Table 6.3: The relative importance of the well-being factors considered in delineating strategic planning areas.*

<b>Layers</b>	<b>Relative importance</b>	<b>Data source</b>
National Parks	High	Open Government Licence, Natural Resources Wales
Local Health Board Areas	High	Open Government License, ONS
Median Gross Weekly Earnings (residence) (2014)	High	Open Government License, Annual Population Survey 2014
Transport Infrastructure (2015)	High	OS Open Data, Meridian 2
Wales Index of Multiple Deprivation (2014)	High	Open Government License, ONS
Job Seekers Allowance Claimants (2015)	High	Open Government License, NOMIS
Resident Population Density	Medium	Open Government Licence, Census 2011
Commuting Flow (2011)	Medium	Open Government Licence, Census
VAT and/or PAYE Based Enterprise Counts	Medium	Open Government License, Inter Departmental Business Register (IDBR)
Median House Sale Price (2013)	Medium	Open Government License, Land Registry
Workday and Resident Population (2011)	Medium	Open Government Licence, Census 2011



Housing Market Areas	Low	Communities and Local Government (2010) Geography of Housing Market Areas. London, Stationary Office; Centre for Urban Policy Studies, University of Manchester.
Rental Market Areas	Low	Open Government Licence, Rent Officers Wales (part of the Housing Division of the Welsh Government)
Workday Population by Industry: RS – Arts, Entertainment and Recreation (2011)	Low	Open Government Licence, Census 2011
Welsh Police Areas (2010)	Low	Edina, ShareGEO Open
Base map layers (OA, LSOA, MSOA, UA, Country)	-	Open Government License, All maps contain National Statistics data © Crown copyright and database right 2012 & contain Ordnance Survey data © Crown copyright and database right 2012

### *Data processing*

The data processing to identify the strategic planning areas (North Wales Region, Cardiff Capital Region and Swansea Bay City Region) involved the same steps as for the well-being factors:

1. Selection of the MSOA for inclusion in strategic planning areas. This was done in order to present the well-being characteristics at the level of census units that were of a neighbourhood scale. This allowed for the identification of lower than ward or unitary authority level patterns. Some datasets utilised other scales as a test in order to understand the pros and cons of the MSOA scale. LSOA data was used for density and the index of multiple deprivation. The LSOA scale, while allowing for a more granular scale of analysis proved more difficult in determining patterns at the regional scale. The unitary authority level was used for median gross weekly earnings data, in part due to the scale of data availability. This level is not ideal as the scale is too large to understand the more nuanced dynamics that exist within a region and it tends to reinforce existing administrative boundaries. Additionally other uniquely defined boundary sets were used, including housing and rental market areas, and line and point data for transport infrastructure.

In determining how to analyse the data, four varied concepts were utilised depending on the data being used:

**Functionality.** Network and flow data, such as commuting data, was analysed based on the extent and intensity of the interactions derived from the accepted 'core' of the city region, such as Cardiff or Swansea, along with additional nearby locations where interactions were high. The fewer the interactions with neighbouring areas, the less likely the area would be included in the boundary.

**Balance.** For datasets where issues of equality were a matter of concern, such as wealth or deprivation, the boundaries were drawn to encapsulate balance within the city region. This ensures that strategic planning areas are not drawn in such a way as to disadvantage those areas of a region that are struggling by purposefully

excluding them from the boundary. Commuting data was often used as a means of checking the potential extent of these areas when patterns were not obvious.

**Concentrations.** Datasets representing agglomeration economies were analysed based on the clustering or concentrations of activities. This often meant that boundaries were quite tightly defined. The objective here is that during the final delineation of the strategic planning area boundary that the importance of these concentrations are noted and included rather than excluded from the final strategic planning area boundary.

**Predefined boundaries.** Datasets with predefined boundaries, such as National Parks or Local Health Board Areas, were also overlaid and used to inform the final strategic planning area boundary.

2. Layering analysis of the data based on boundary weightings. Utilising the assigned weightings, those with higher weights were initially overlaid, first functionality layers were overlaid and points of boundary similarity and dis-similarity noted. These were followed by overlaying those based on balance. Concentrations were then overlaid to determine if any areas fell outside those defined by balance. Finally predefined boundaries were overlaid. The additional two levels of weighted boundaries were then overlaid following this same process until areas of commonality and areas of contention were determined.
3. Generalisation of the data to the ward level. Since ward emerged from the qualitative data analysis as the most appropriate spatial unit for the analysis, the boundaries based on MSOAs were generalised to ward level. After this process if areas of contention still did not align the pros and cons of inclusion of each boundary extent were debated and a decision taken to include or exclude the boundary. Additionally, unitary authority boundaries were considered to avoid 'orphan' wards, i.e. individual wards outside the Las, as well as gaps, i.e. situations where only one or two wards of a given unitary authority were not included in the proposed boundary.
4. The relative importance of the strategic planning area boundaries delineated using different well-being factors was presented on maps for the three individual strategic planning areas.

## *Part 2: Case study application*

The three areas identified in Positive Planning (Welsh Government, 2013) as potentially developing strategic development plans were used to test the proposed strategic planning area delineation method. Each area provides a summary of the approach taken in defining individual boundaries through the use of a series of examples to demonstrate how some of the principles have been applied. All themes provide the entire collection of boundary overlays and proposed boundaries based on those overlays. The Cardiff Capital Region provides two examples of how the final thematic boundaries might be combined depending on the weight attached to the Economic, Environment, and Well-being boundaries.

## *Cardiff Capital Region (CCR)*

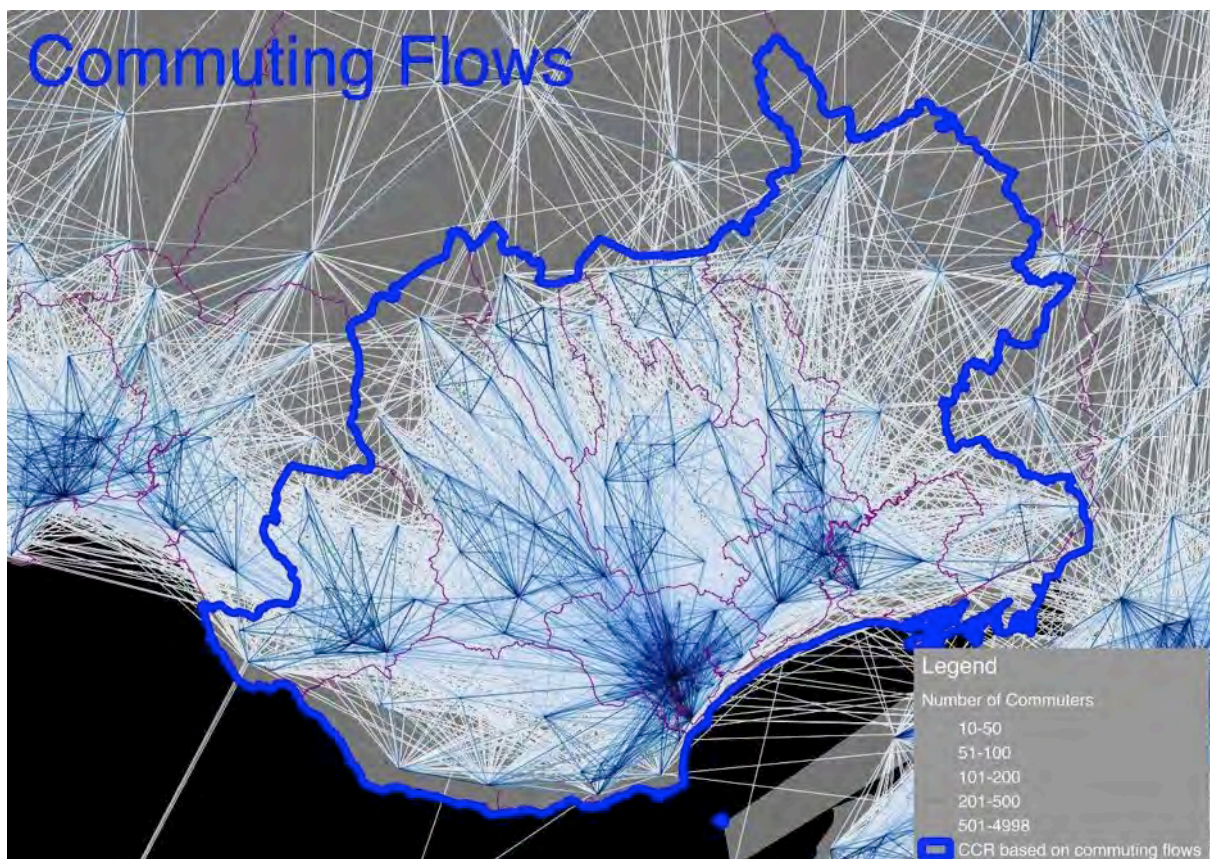
The datasets and weightings discussed for economy, environment, and well-being in the previous section were applied to the CCR, boundary lines drawn for each, a single thematic boundary detailed, and two scenarios for a final strategic planning area defined as follows:

### *Economy*

Indicators related to the economy were mapped and boundaries determined based on four general principles of analysis: functionality, creating a balanced city-region, the concentration of activity, and the consideration of relevant pre-existing boundaries. Examples of each are provided over the next few pages for illustration purposes, along with a short discussion of how the boundary was determined.

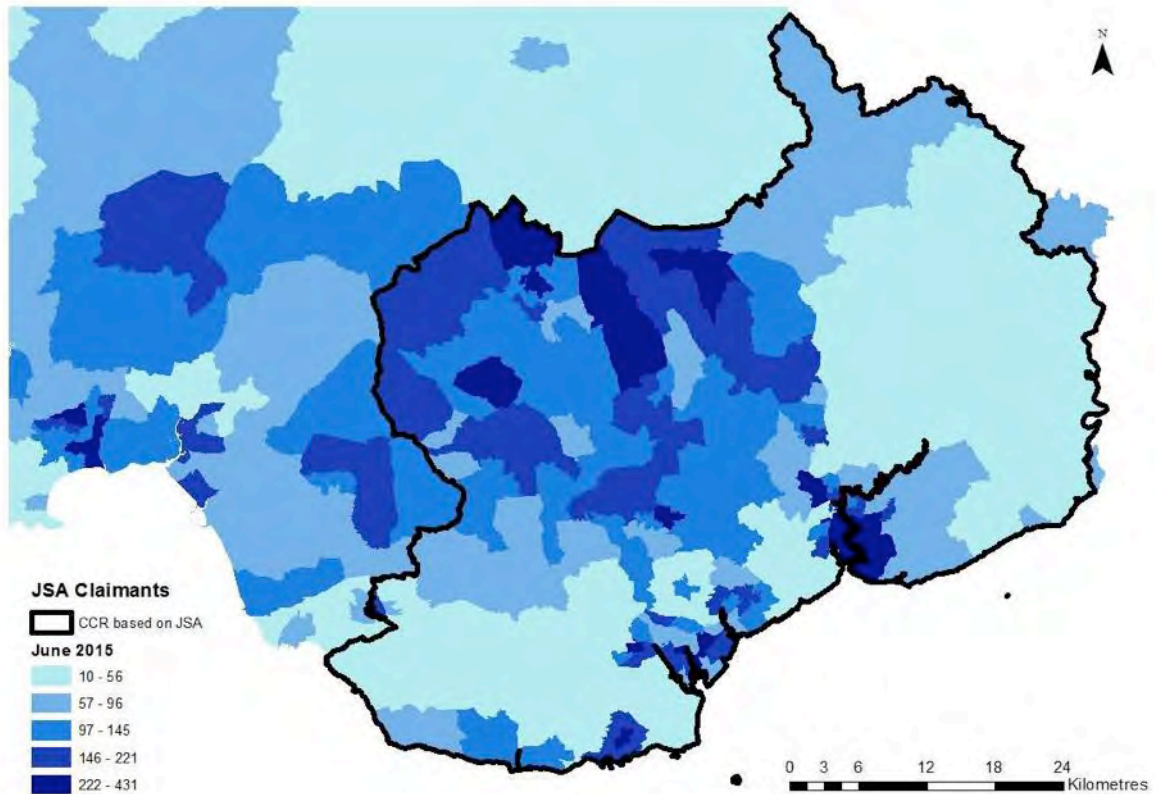
*Functionality example.* Commuting flows were mapped and a boundary defined based on the level of interaction between places. Dense interactions were seen from surrounding local authorities into Cardiff as well as a range of sub-geographies, such as around Bridgend, Newport, and Caerphilly. The less clearly connected geographies existed in Monmouthshire where some more easterly areas had greater interactions across to England leading to some MSOAs being excluded. In the west in Bridgend some interactions also existed across towards Swansea however the western boundary was drawn to include Bridgend due to the more extensive commuting flow levels compared to those to the west. Heavier commuting flows west in areas of Neath Port Talbot to Swansea suggested a stronger orientation towards Swansea and were therefore not included. Further north, interactions with areas of the Brecon Beacons were not as intense, however this may be a reflection of the smaller populations in those areas. Ultimately the northern boundary edge did not include the Brecon Beacons due to the lack of concentration of flows south.

Figure 6.2: Commuting Flows



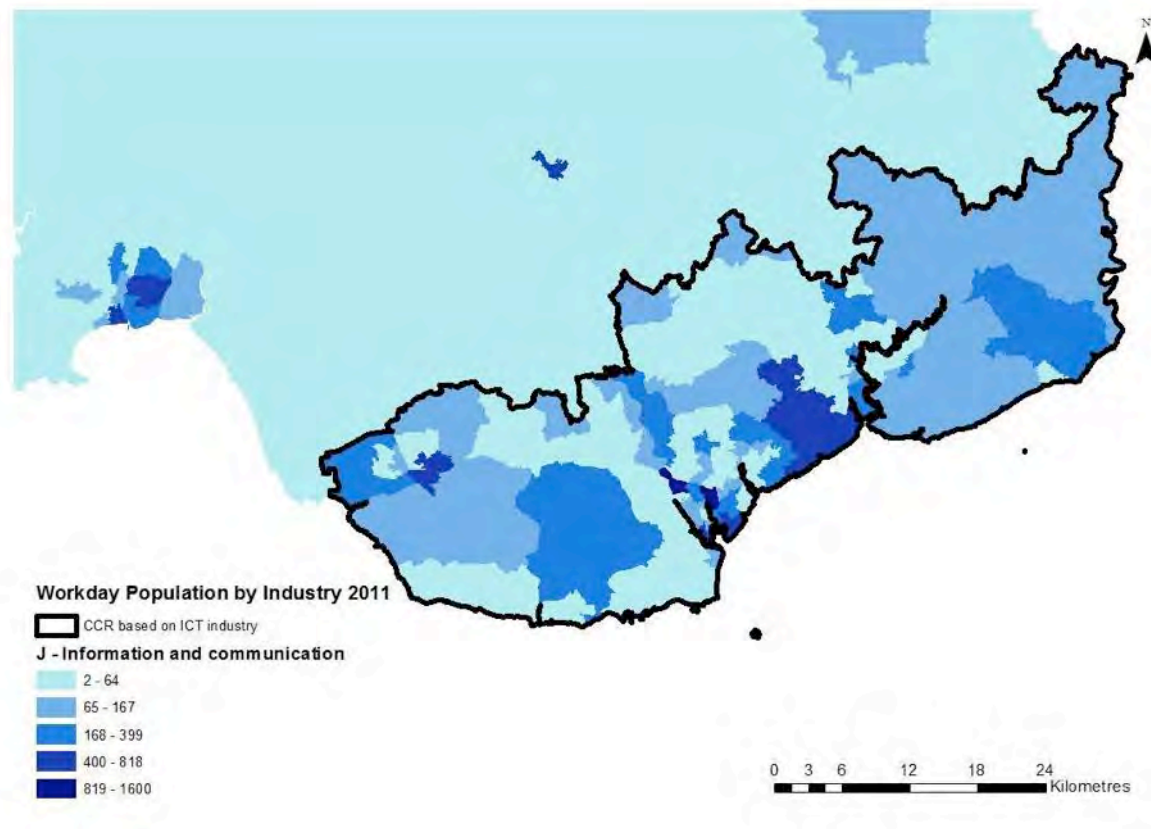
*Balance example.* The principle utilised for JSA claimants was to ensure that the region included areas with both high and low numbers of claimants. There was no easily defined edge however, as the pattern was highly variable throughout. In determining the boundaries, commuting data was therefore used to help align the boundary, especially on the western edges. This ensured that interactions of individuals were taken into account while also making sure that areas of lower and higher claimants were included in any proposed strategic planning area.

Figure 6.3: Balance example



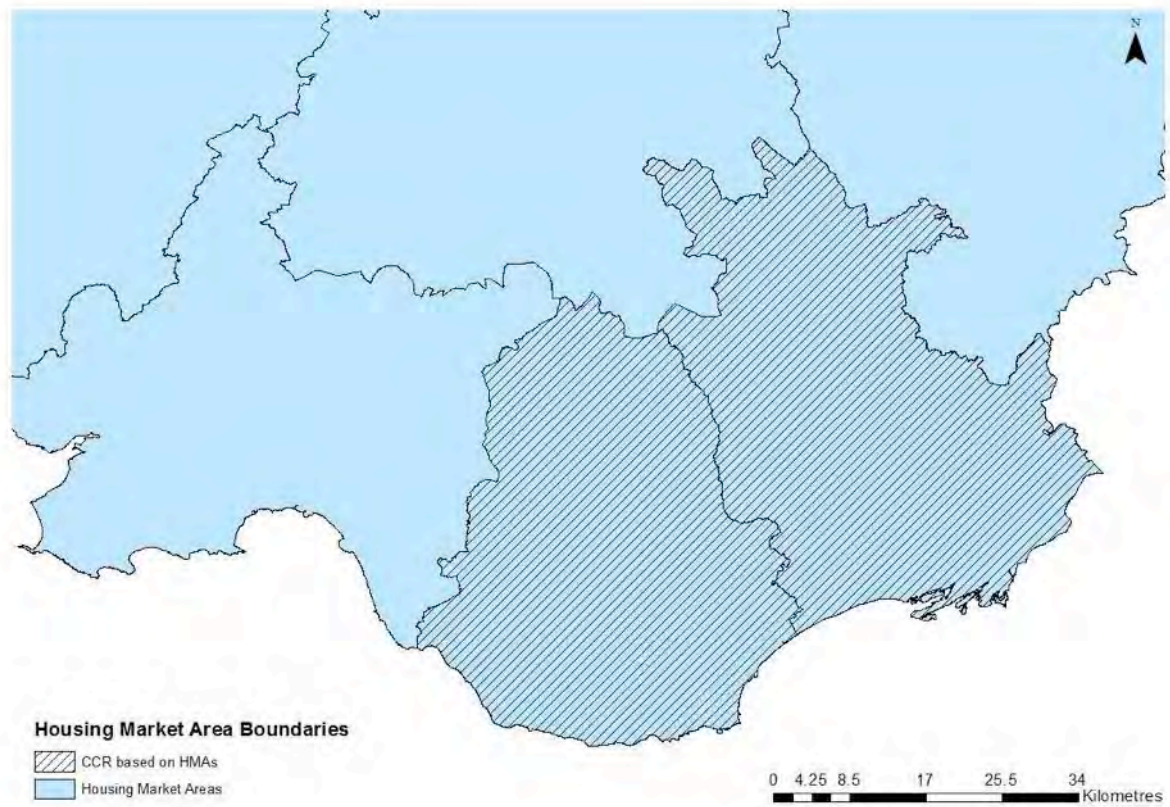
*Concentrations example.* Based on agglomeration economies, areas of high concentrations of ICT professionals were selected and a boundary generated. The vast majority of workday population was located in the southern portion of the region in The Vale of Glamorgan, Cardiff, Newport and Monmouthshire. A strong concentration of ICT professionals was located in Merthyr Tydfil however given its isolation and distance from other concentrations it was decided to not include it in the boundary.

*Figure 6.4: Concentrations example*



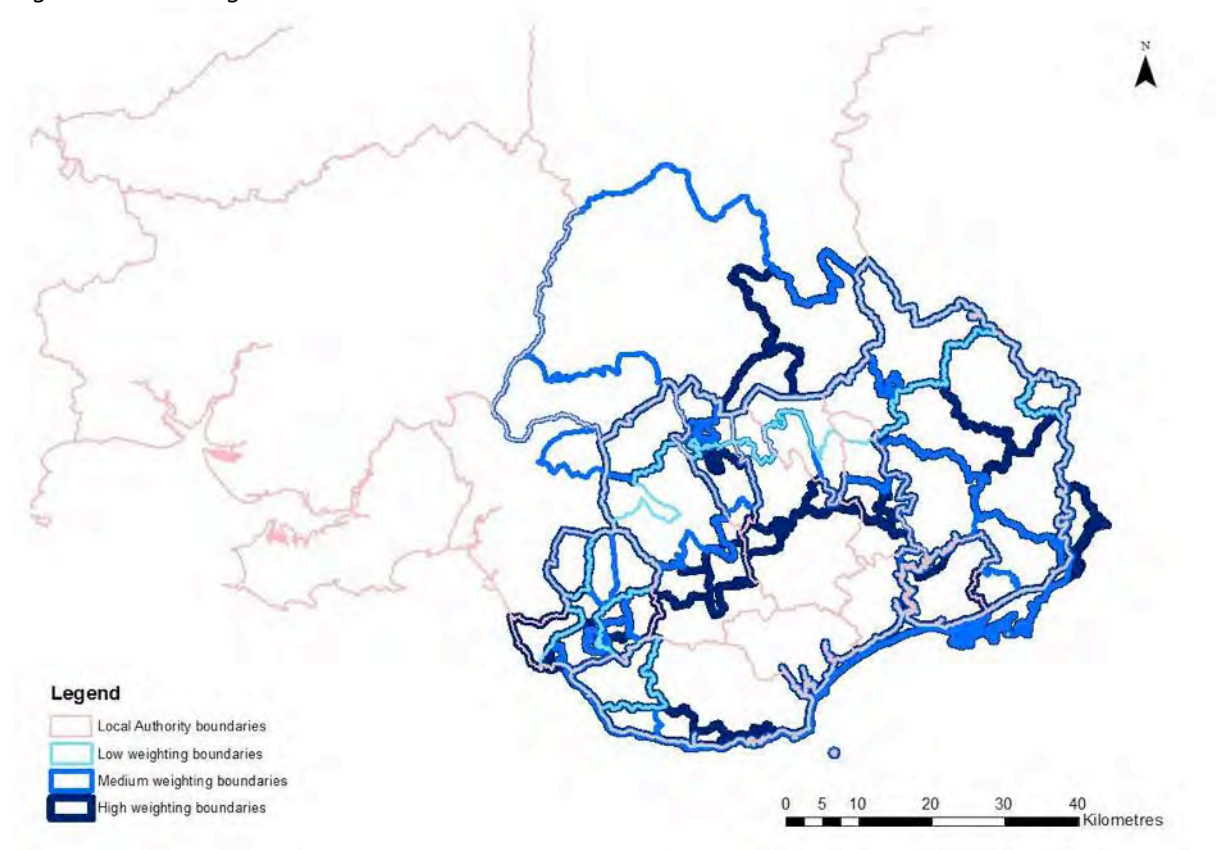
*Predefined boundaries example.* Existing defined Housing Market Areas were overlaid onto the city region and the two main areas that largely encompass the Local Authorities of the emerging region were selected and boundaries extracted. Additional Housing Market Areas were not selected due to their size and distance away from the core Local Authorities of the region.

*Figure 6.5: Predefined boundaries*



*All weighted boundaries.* Boundaries for all datasets were created and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. Boundaries with high weightings were first overlaid and those boundaries related to concentrations compared to functional boundaries. Concentration boundaries were found to not extend beyond functional boundaries. The more contested areas were therefore the balanced areas and the predefined boundaries.

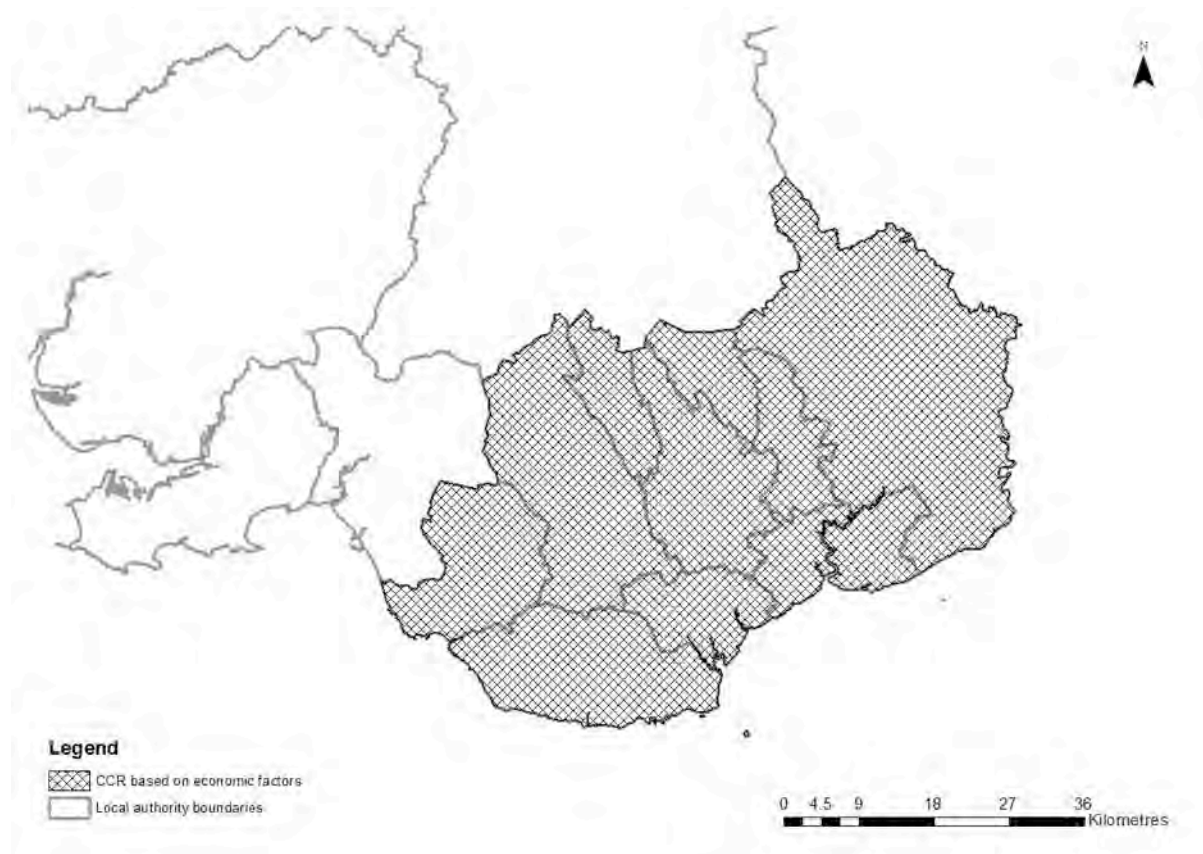
*Figure 6.6: All-weighted boundaries*





*Strategic planning area boundary.* Contested areas existed around the eastern and north-eastern edges of Monmouthshire, parts of the Brecon Beacons and multiple areas around Bridgend for the more heavily weighted datasets. Medium weighted datasets saw contested areas focused more around the north western edges of the proposed strategic planning area while the low weighted boundaries aligned with or within the more heavily weighted boundaries. Monmouthshire had multiple boundaries that encompassed or nearly encompassed the whole of the unitary authority, however some additional boundaries did not entirely include the unitary authority. Given that a number of heavily weighted boundaries included most of Monmouthshire and the edges of contestation were some of the lower weighted boundaries, it was determined that all of Monmouthshire should be included in the strategic planning area rather than leave some eastern wards as orphans. The Brecon Beacons were excluded from the strategic planning area as the majority of boundaries did not extend into enough northerly wards to warrant inclusion. Bridgend included a number of contested boundaries of varying weights and was included due in part to the qualitative research which suggested stakeholders saw the area's orientation more towards Cardiff than Swansea.

*Figure 6.7: Economic theme strategic planning area*



## Environment

Indicators related to the environment were mapped and boundaries determined based on four general principles of analysis: functionality in terms of water management, creating balanced environmental conditions in the city-region, the concentration of nature protection and recreation sites, and the consideration of relevant pre-existing boundaries.

The identification of CCR based on topography initially involved drawing a boundary alongside the Severn WFD River Basin (CCR is entirely contained within it). The strategic planning area was limited to the north by following the highest peaks of Brecon Beacons, including parts of Powys. This was done in order to follow the watershed boundary, with the exception of cutting across the Usk valley (Figure 6.8).

Figure 6.9 shows the extent of CCR if CAMS were used to delineate it; the area is more extensive as it includes the Usk river CAMS area as well as Upper Wye and Swansea Bay-Kenfig and Ogmore CAMS area as a potential water source for Cardiff and surrounding areas. However, in this way eastern parts of Monmouthshire are excluded whilst Vale of Glamorgan, Bridgend and more extensive parts of Powys are within the CCR.

Figure 6.8: Cardiff Capital Region identified based on topography and river basins

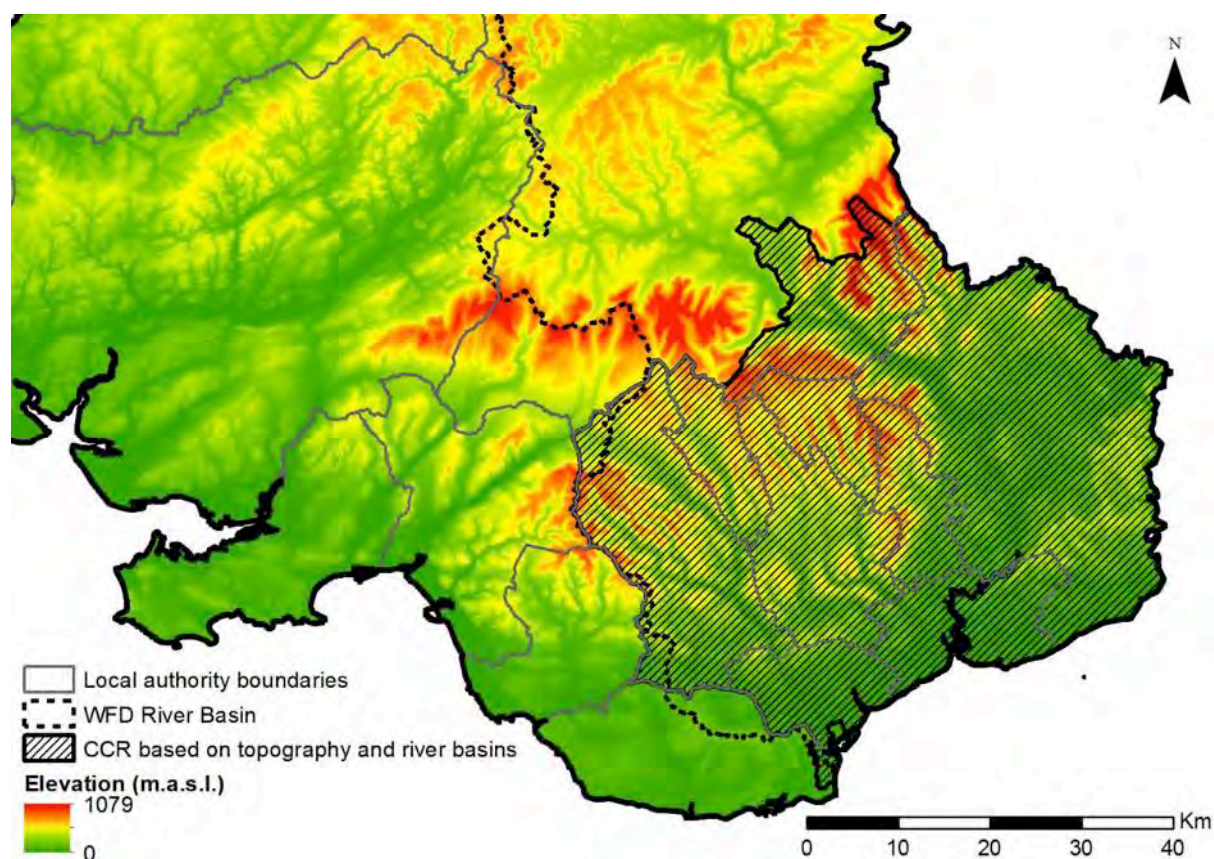
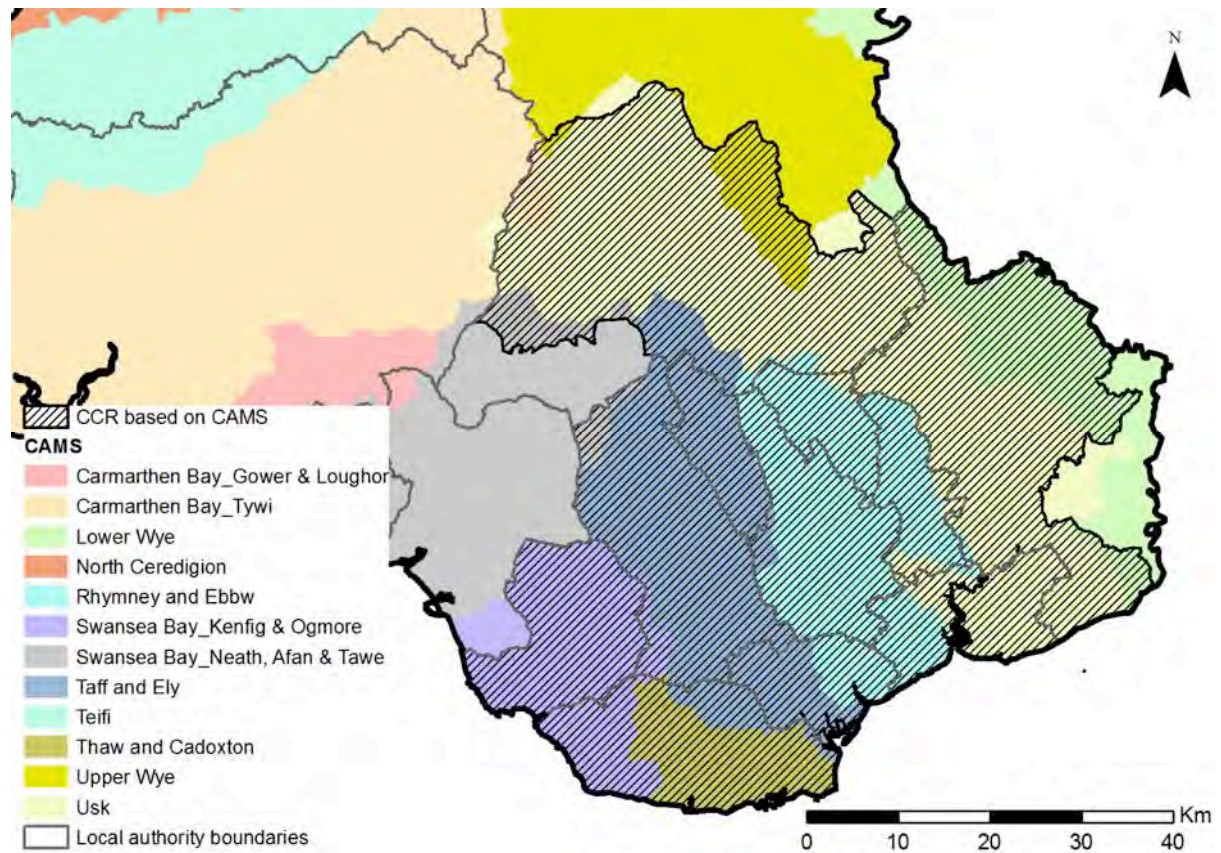


Figure 6.9: Cardiff Capital Region identified based on CAMS areas.



The delineation of CCR based on the nature conservation and recreation sites was largely based on the predefined boundaries rule, in particular in relation to national parks as separate planning entities. If the entire Brecon Beacons National Park is included within the CCR, the area of strategic planning area is quite extensive, stretching to the west to include east Carmarthenshire. The CCR then also extends to the SW to include the entire heritage coast area (Figure 6.10).

In contrast, the CCR area based on air quality, and following the balance principle, is much tighter around Cardiff, excluding most of Monmouthshire and including only half of Bridgend and to the north stopping at Powys boundary (Figure 6.11).

Figure 6.10: Cardiff Capital Region identified based on designated nature conservation and recreation areas.

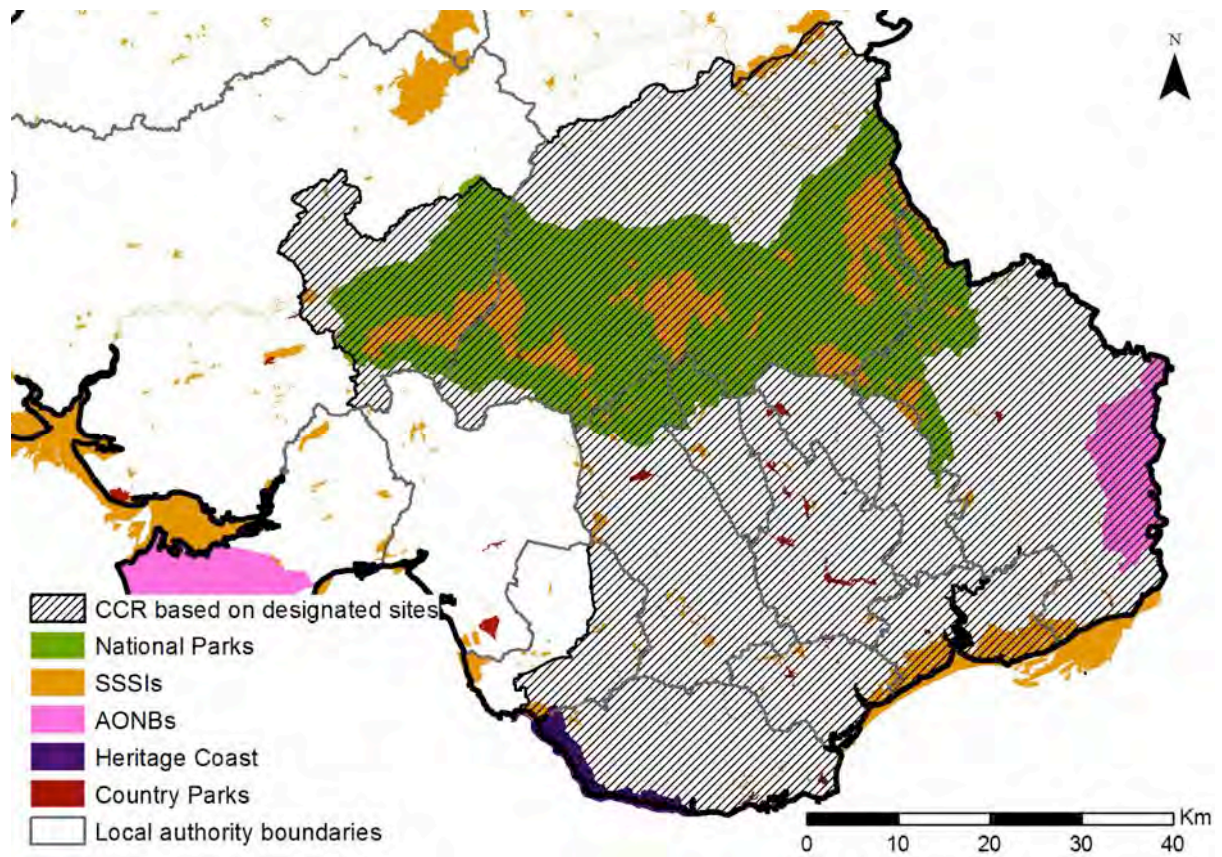


Figure 6.11: Cardiff Capital Region identified as based on air quality (balance principle).

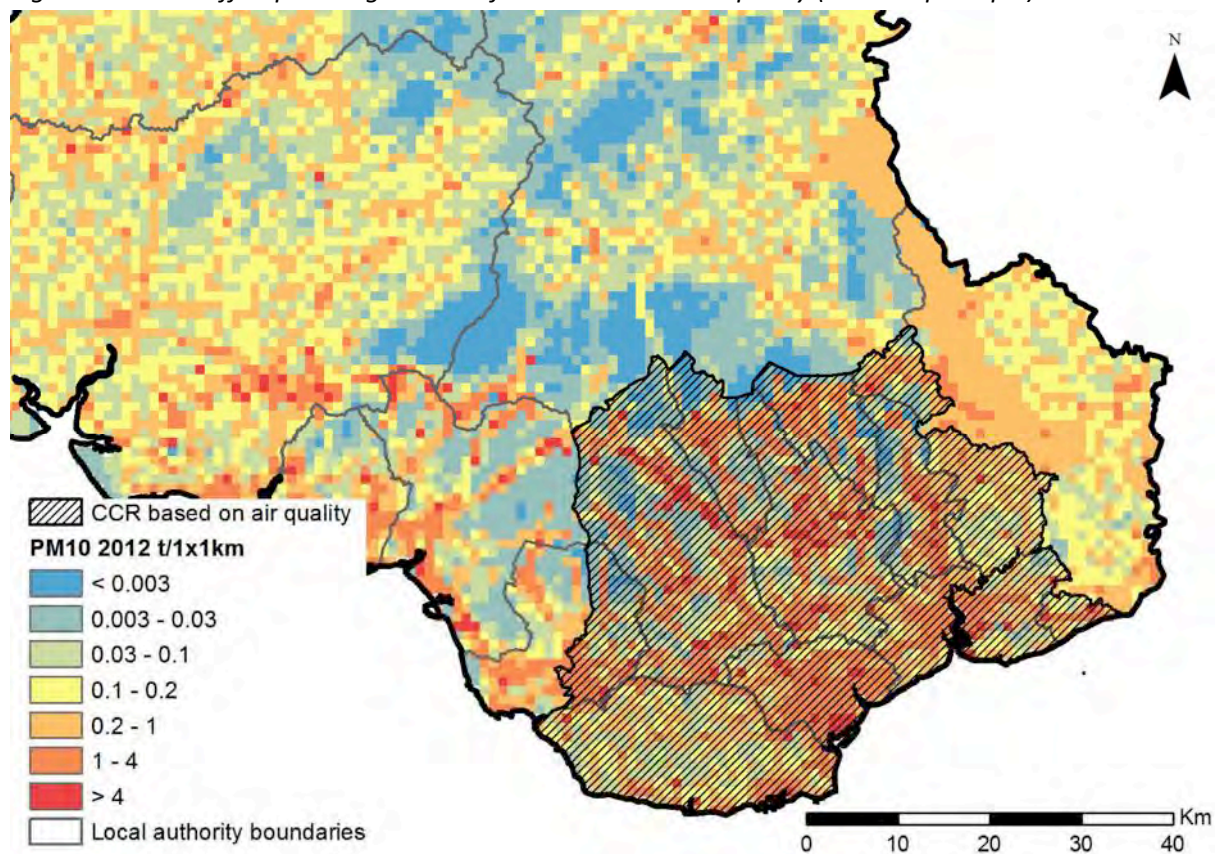


Figure 6.12 presents the outlines of these four proposed strategic planning areas together, with the thickness of the boundary reflecting the relative importance of a given environmental factor (see Table 6.1). The contested areas in terms of environmental factors are south Powys, east Monmouthshire, Bridgend and Vale of Glamorgan.

The final shape of CCR identified in Figure 6.13 is a compromise between a) following the watershed boundaries to create a functional unit and including the Brecon Beacons National Park to follow predefined boundaries, and b) reducing the size of the area to follow the boundaries of local authorities. Therefore, the smaller catchment areas (Upper and Lower Wye) were excluded, and the areas was aligned to unitary authority boundaries.

Figure 6.12: Comparison of CCR propositions based on four environmental factors

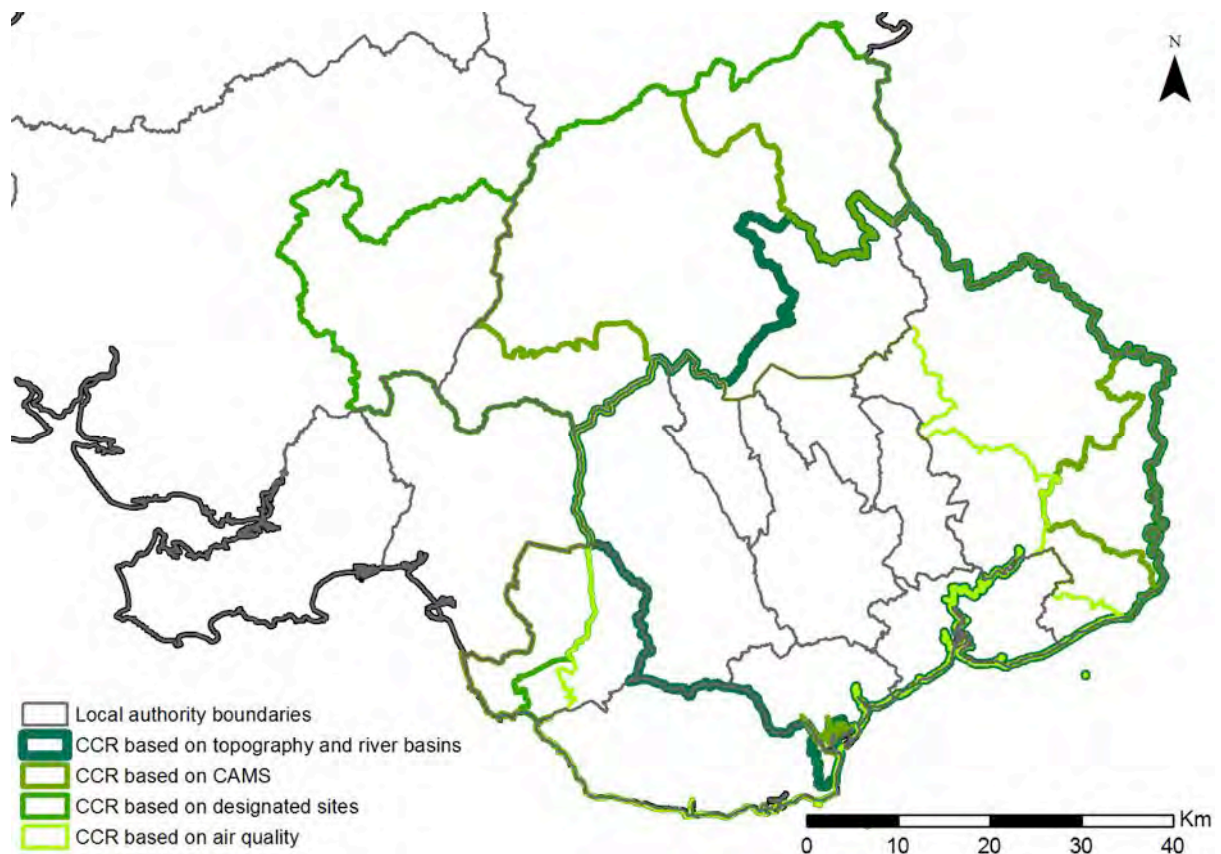
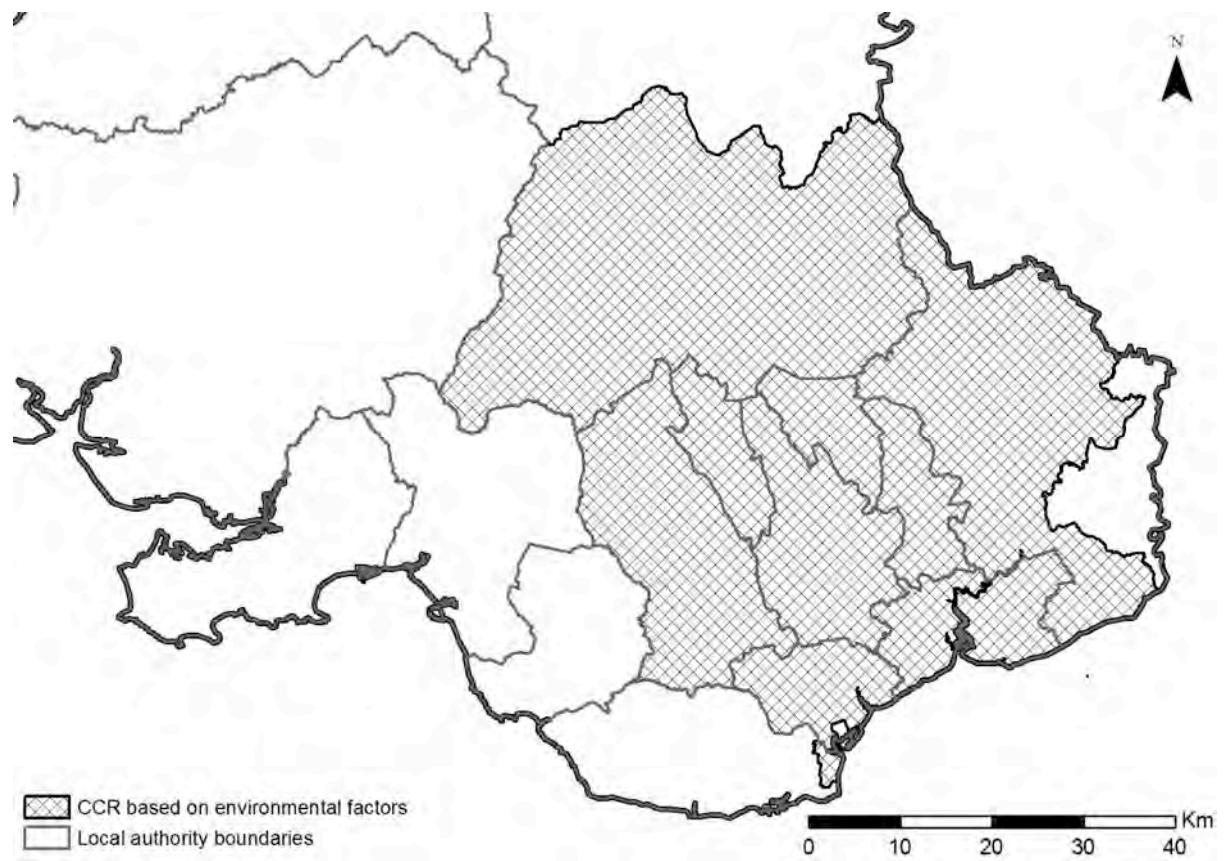


Figure 6.13: The final shape of CCR based on environmental factors

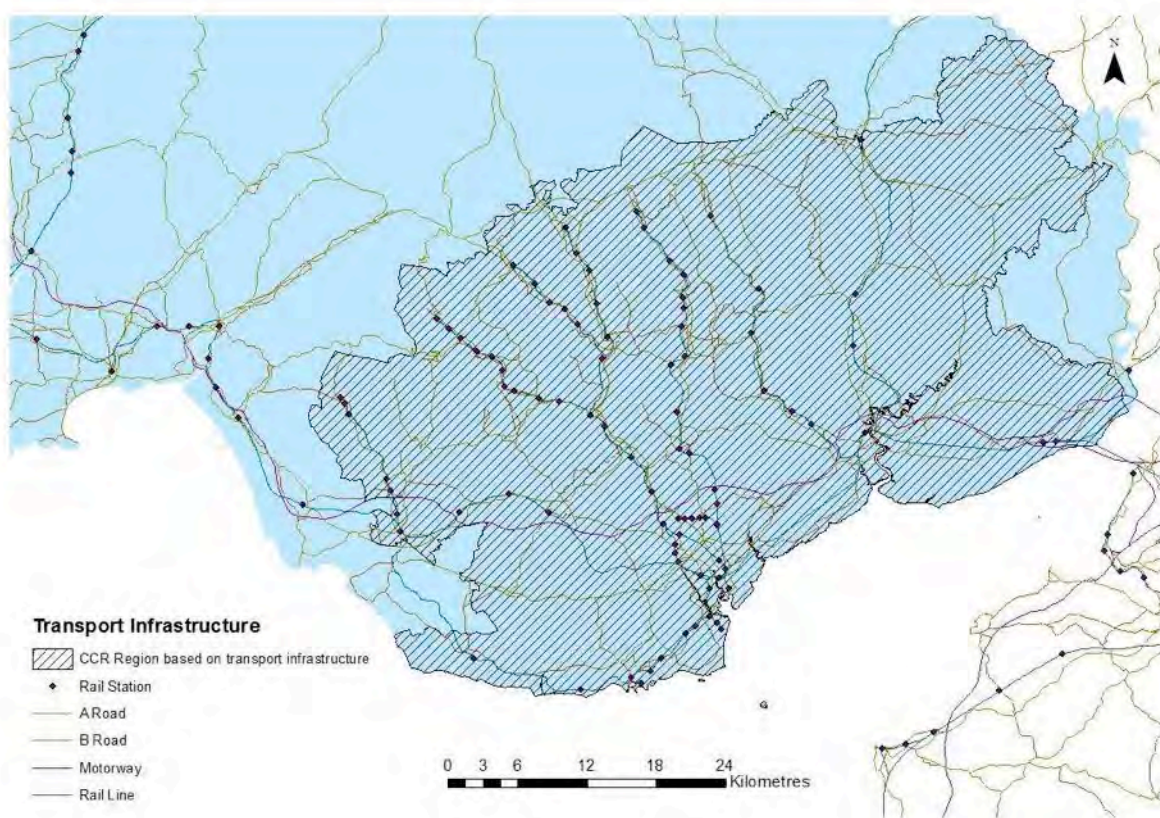


## Well-being

Indicators related to well-being were mapped and boundaries determined based on functionality, creating a balanced city-region, the concentration of activity, and the consideration of relevant pre-existing boundaries. Examples of each activity are provided for illustration purposes.

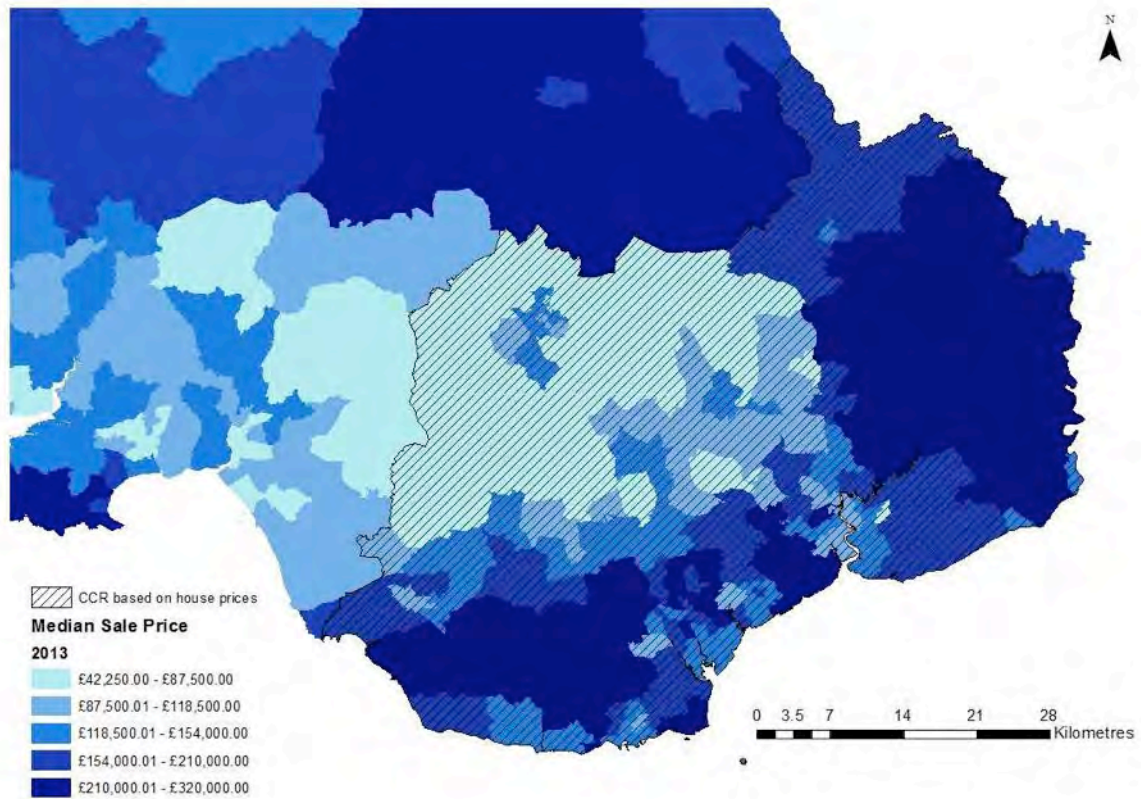
*Functionality example.* Transport infrastructure was utilised to define a boundary based on the potential connections between places. A key consideration here was the extent of rail stations and the orientation of major roads. The northern boundary was drawn along the edge of the main east-west roadways and the terminal points of the rail stations, while the rail stations to the west provided another boundary. Portions of The Vale of Glamorgan and all of Neath Port Talbot were not included due to the distance between rail stations. Roadways oriented towards England in Monmouthshire resulted in some areas being excluded.

Figure 6.14: Transport infrastructure



*Balance example.* A range of house prices was viewed as important to ensure access to home ownership, therefore areas with higher and lower prices were selected. Housing Market Areas were also used as a check to ensure appropriate coverage. Higher house prices in the east and south of the region were balanced with those in the centre and to the north. The Brecon Beacons was not included due to it being outside the two main Housing Market Areas of the region.

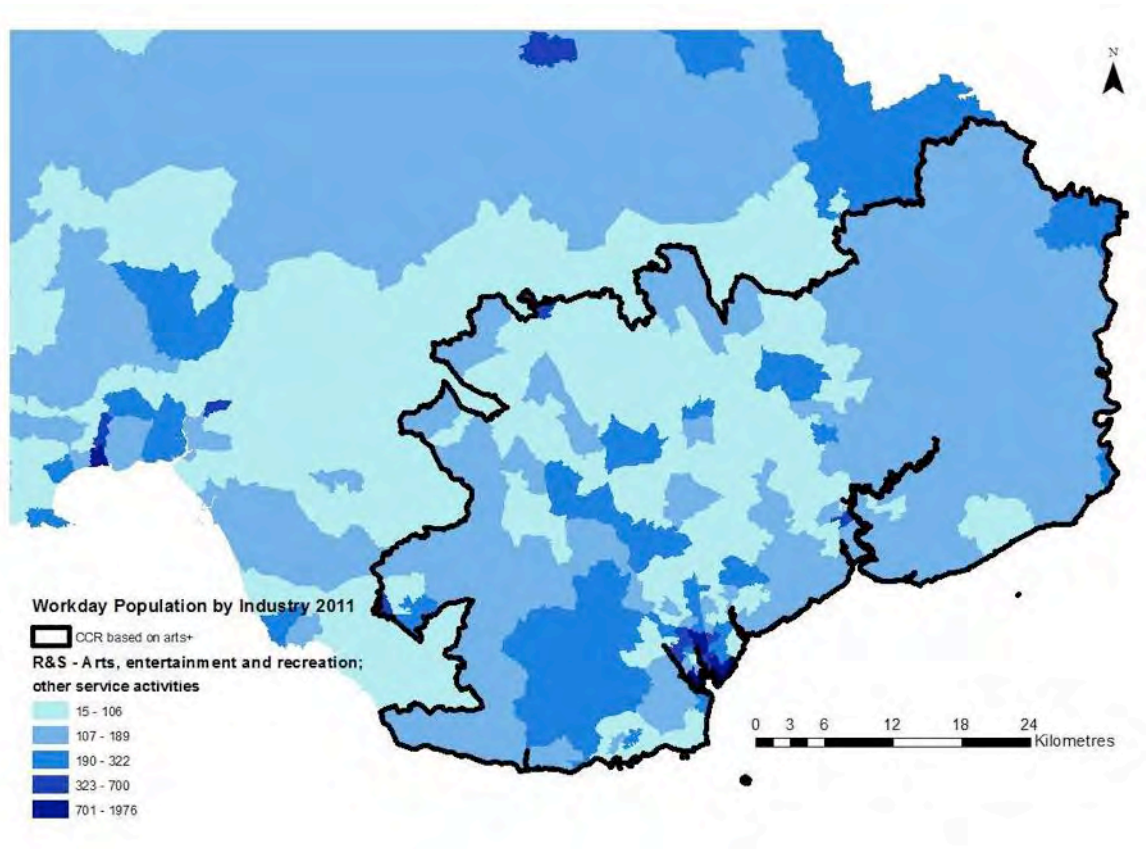
Figure 6.15: Balance example





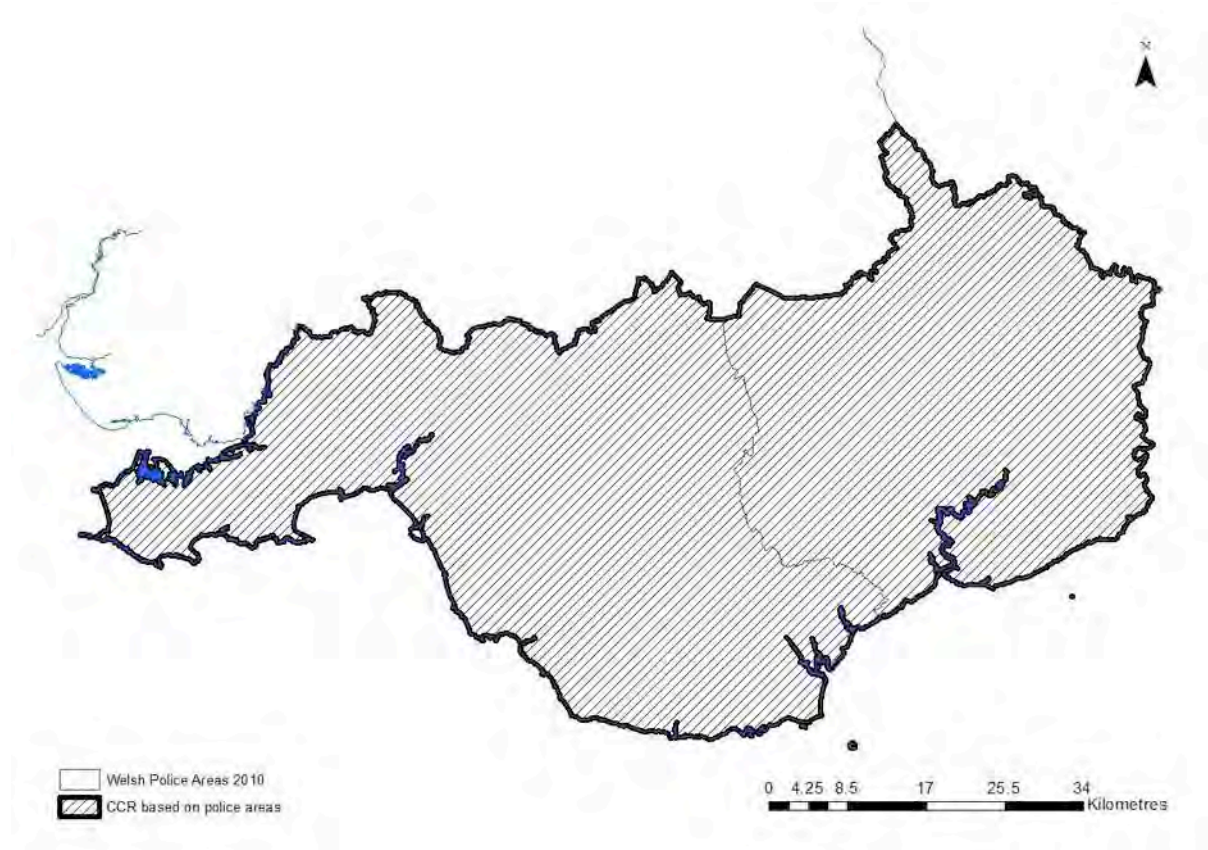
*Concentrations example.* Arts, entertainment and recreation industry population was heavily concentrated in Cardiff, however also relatively evenly spread throughout the rest of the city region. As such boundaries were extended to ensure higher concentrations on the northern and western edges were included. There was debate as to whether to include high concentrations on the north-eastern edge however due to the extensive coverage of the concentration further north coupled with the relatively strong pervasiveness of the industry in Monmouthshire it was decided to keep the boundary slightly more contained. A useful exercise in practice in a case like this would be to engage stakeholders in order to determine the potential importance of extending the boundary and whether it was appropriate or not.

Figure 6.16: Concentration example



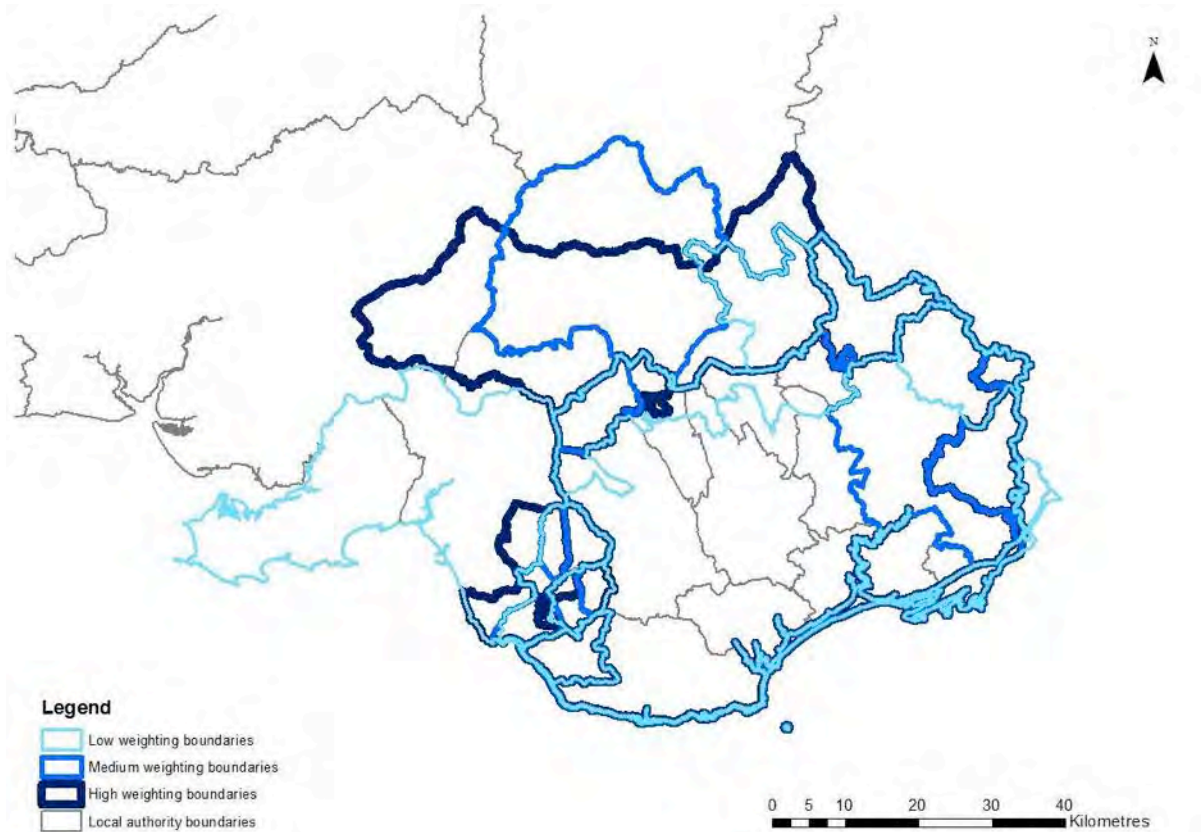
*Predefined boundaries example.* Police areas were overlaid on the region and two predefined areas were selected to ensure appropriate coverage. The scale of the coverage is quite large due to one of the areas extending much further west than the traditional boundaries of the region. It was necessary to at least consider this wider area given the potential need to coordinate police services within the strategic planning area in the context of a well-being objective.

*Figure 6.17: Predefined boundaries*



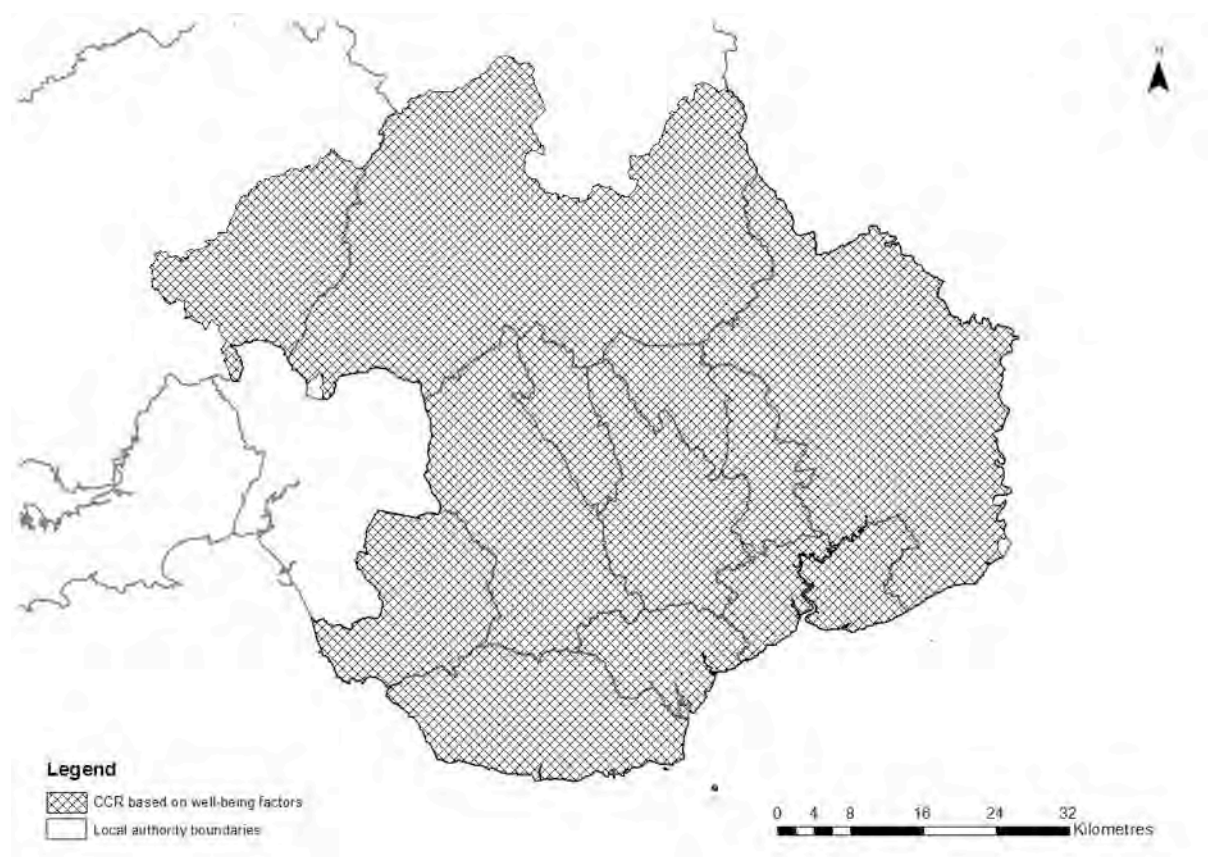
*All weighted boundaries.* Boundaries for all datasets were created and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. Heavily weighted boundaries closely aligned with each other. There were some edges of Monmouthshire where medium weighted boundaries suggested a tighter rather than more expansive boundary and Bridgend again saw multiple overlapping boundaries. A more extensive boundary to the north was apparent though as several boundaries of varying weights suggested the inclusion of parts of the Brecon Beacons.

Figure 6.18: All-weighted boundaries



*Strategic planning area boundary.* Similar to economic factors contested areas existed around the eastern and north-eastern edges of Monmouthshire, parts of the Brecon Beacons and multiple areas around Bridgend for the more heavily weighted datasets. Medium weighted datasets saw contested areas focused mostly around the Brecon Beacons and Bridgend as well as the low weighted boundaries, although some lower boundaries suggested the boundary should not extend to the Brecon Beacons. Given the edges of contestation involved more medium to minor weightings, it was determined that all of Monmouthshire should be included in the strategic planning area rather than leave some eastern wards as orphans. Unlike the economic strategic planning area, the Brecon Beacons were included in the strategic planning area as several heavily weighted boundaries suggested it should be included. Bridgend included a number of contested boundaries and was included due in part to the qualitative data which suggested its orientation towards Cardiff more so than Swansea.

Figure 6.19: Well-being strategic planning area

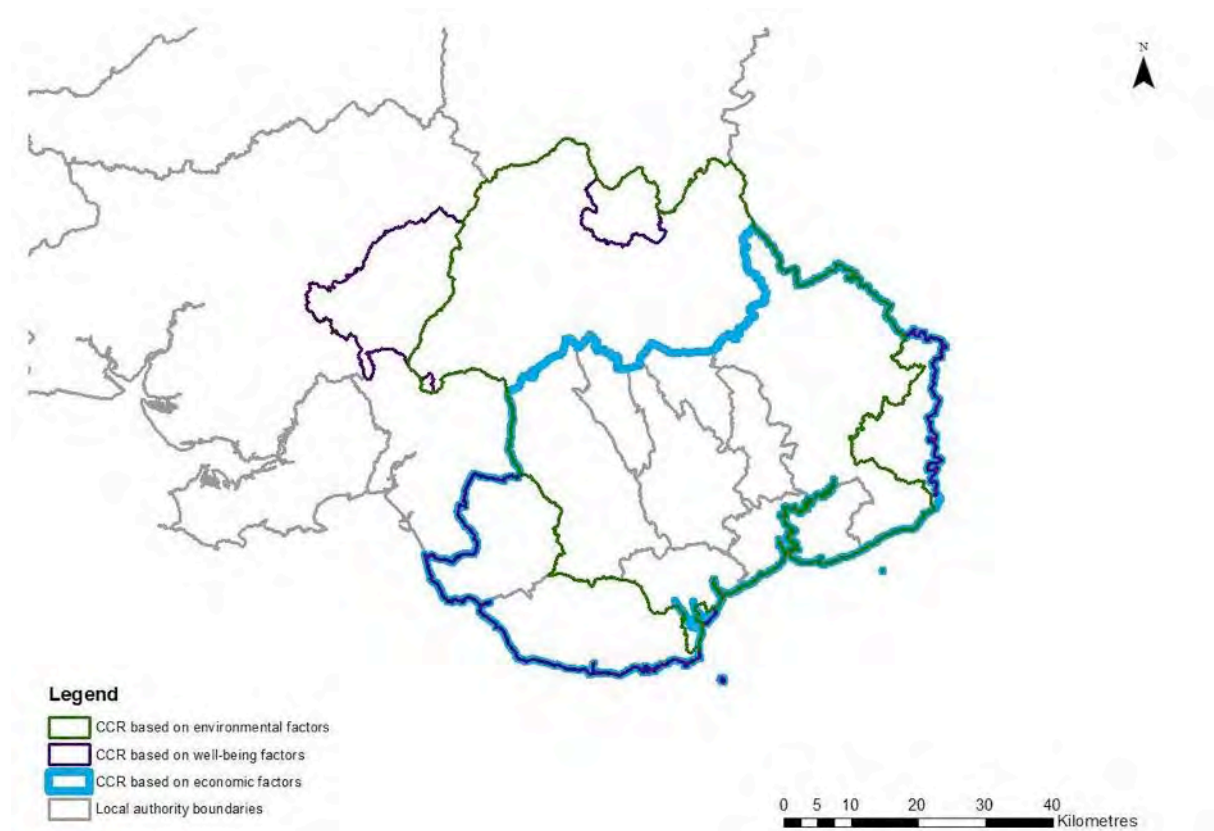


### *Weighting Final Thematic Boundaries*

Having determined the thematic boundaries for each objective, a final step involves combining the various objectives together to produce a final map. Two scenarios are provided below to demonstrate how different weightings, applied to each thematic boundary, can produce diverse final strategic planning area boundaries. The weightings of each objective should be decided through a process of consultation with stakeholders in order to understand what is of greatest value and in line with the overall vision of the future strategic development plan.

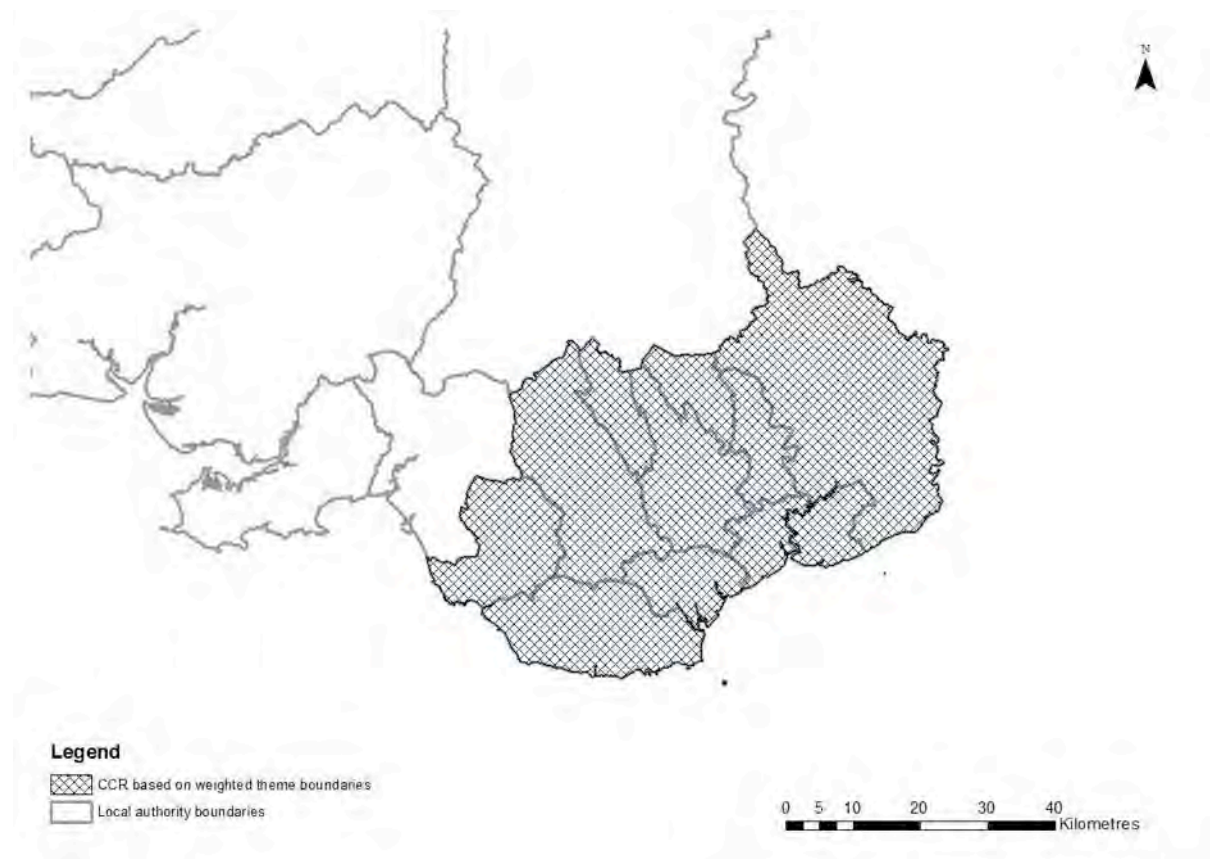
*Scenario 1: Greater emphasis is placed on the economic objective compared to the environmental and well-being objective.*

*Figure 6.20: Emphasising the economic*



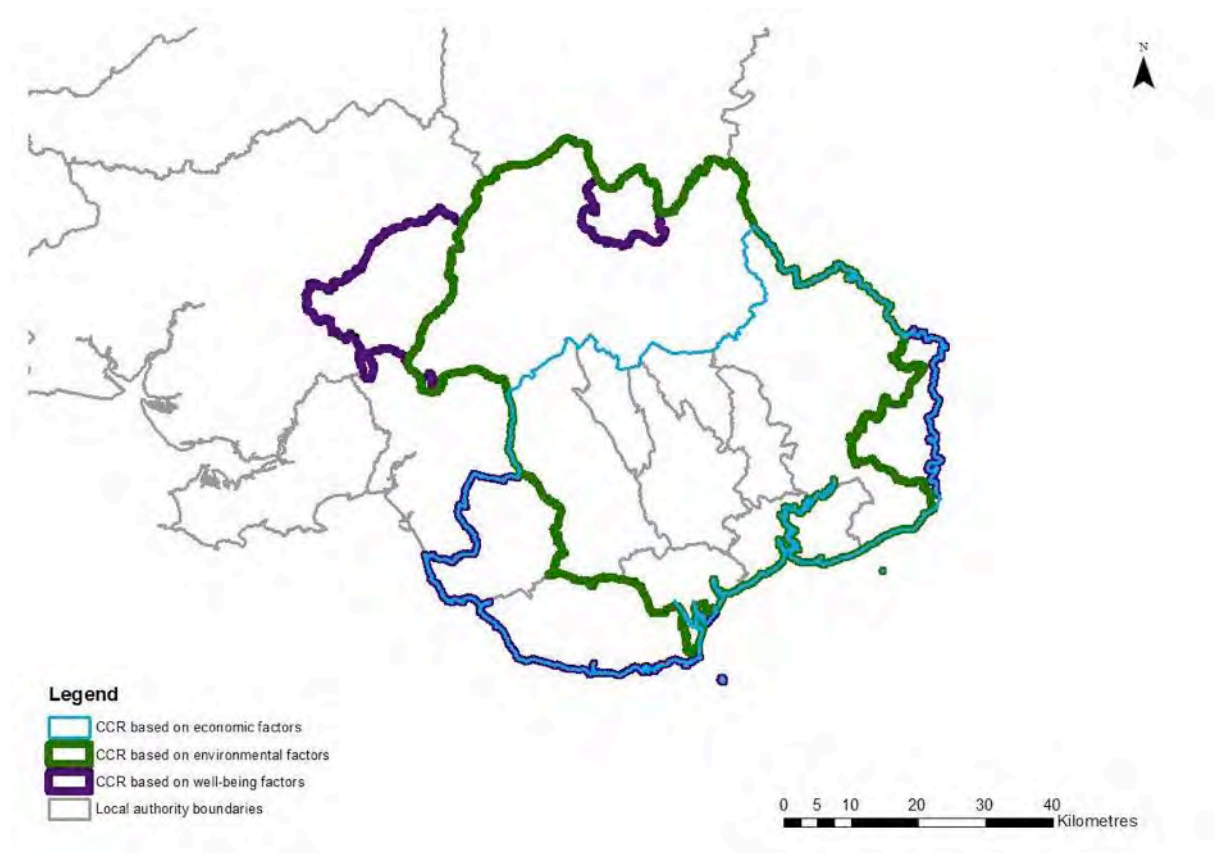
In this scenario the economic objective is weighted the highest. The boundary is co-terminus with the well-being boundary apart from the northern portion of the region, where it does not extend into the Brecon Beacons. The environmental boundary covers a large portion of the economic boundary, apart from portions of Monmouthshire, the majority of the Vale of Glamorgan and all of Bridgend. Given that the majority of the environment and well-being boundaries are located inside the economic boundary, and that the economic boundary is weighted more heavily, the final boundary for the economic scenario suggests the final strategic planning area not include the Brecon Beacons but given the similarity of the economic boundary with the well-being boundary on the east and west, that all of Monmouthshire, the Vale of Glamorgan, and Bridgend be included in the final strategic planning area boundary, producing the boundary shown below.

Figure 6.21: Economic strategic planning area for CCR



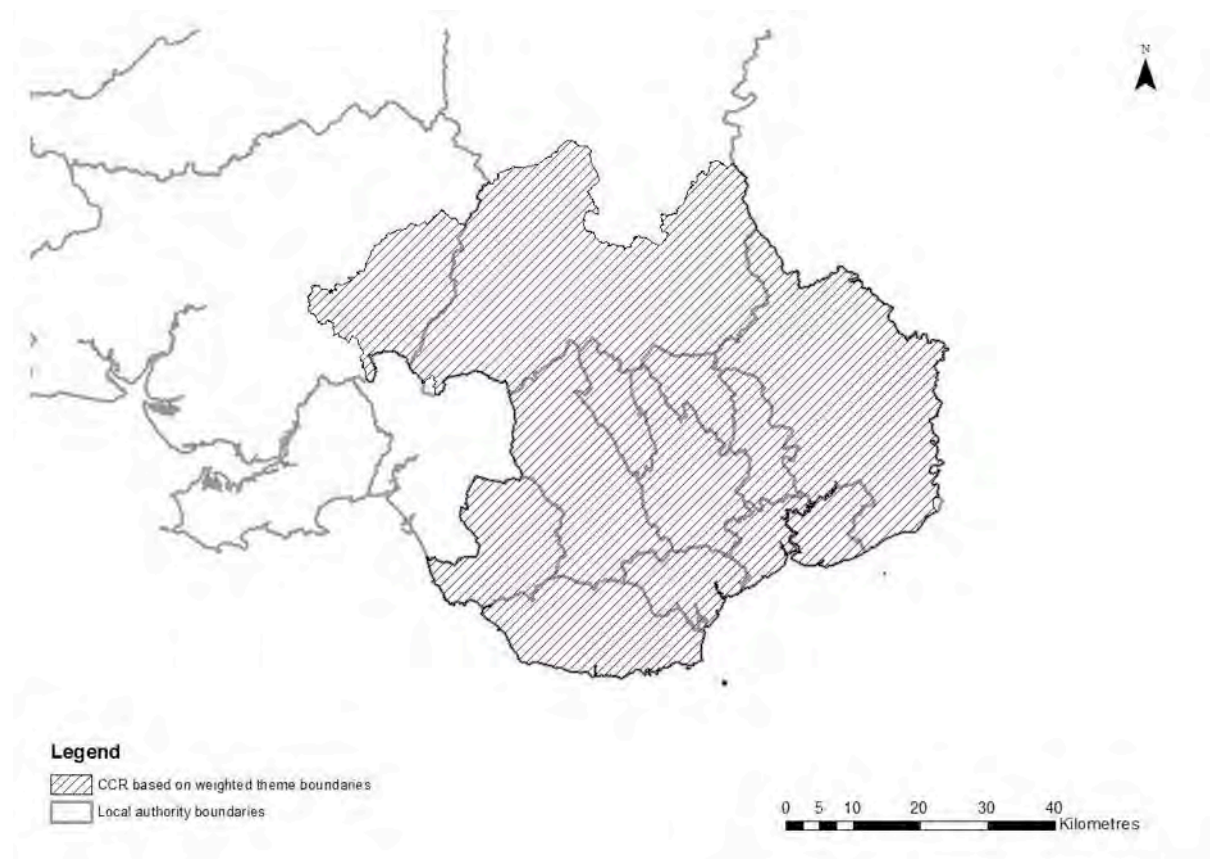
Scenario 2: Environmental and well-being factors are considered of equal weighting and economic is of a lower weighting.

Figure 6.22: emphasising environmental and well-being



This scenario privileges environmental and well-being factors while providing less emphasis on the economic theme. Overlaps of boundaries are seen in the central portions of the region. On the eastern edge, well-being and economic boundaries align while environmental slightly excludes parts of Monmouthshire. To the west well-being and economic boundaries align while the environmental boundary excludes Bridgend and most of the Vale of Glamorgan. The northern boundary aligns in parts, with most of the environmental boundary included in the well-being boundary, while the economic boundary does not extend into the Brecon Beacons. Given the well-being and economic overlaps on the east and western edges and the fact that the environmental boundary is included within those boundaries, it is suggested that the boundary extend to cover all of Monmouthshire in the east as well as all of the Vale of Glamorgan and Bridgend. To the north the boundary is suggested to include the Brecon Beacons National Park given the well-being and environmental overlaps. While the environmental boundary extends slightly outside the National Park, it is suggested for administrative efficiency to align the boundaries with the wards that encompass the National Park given its planning mandate. This scenario produces a final strategic planning area boundary as below.

Figure 6.23: Environmental and well-being focused strategic planning area for CCR





## Swansea Bay City Region (SBCR)

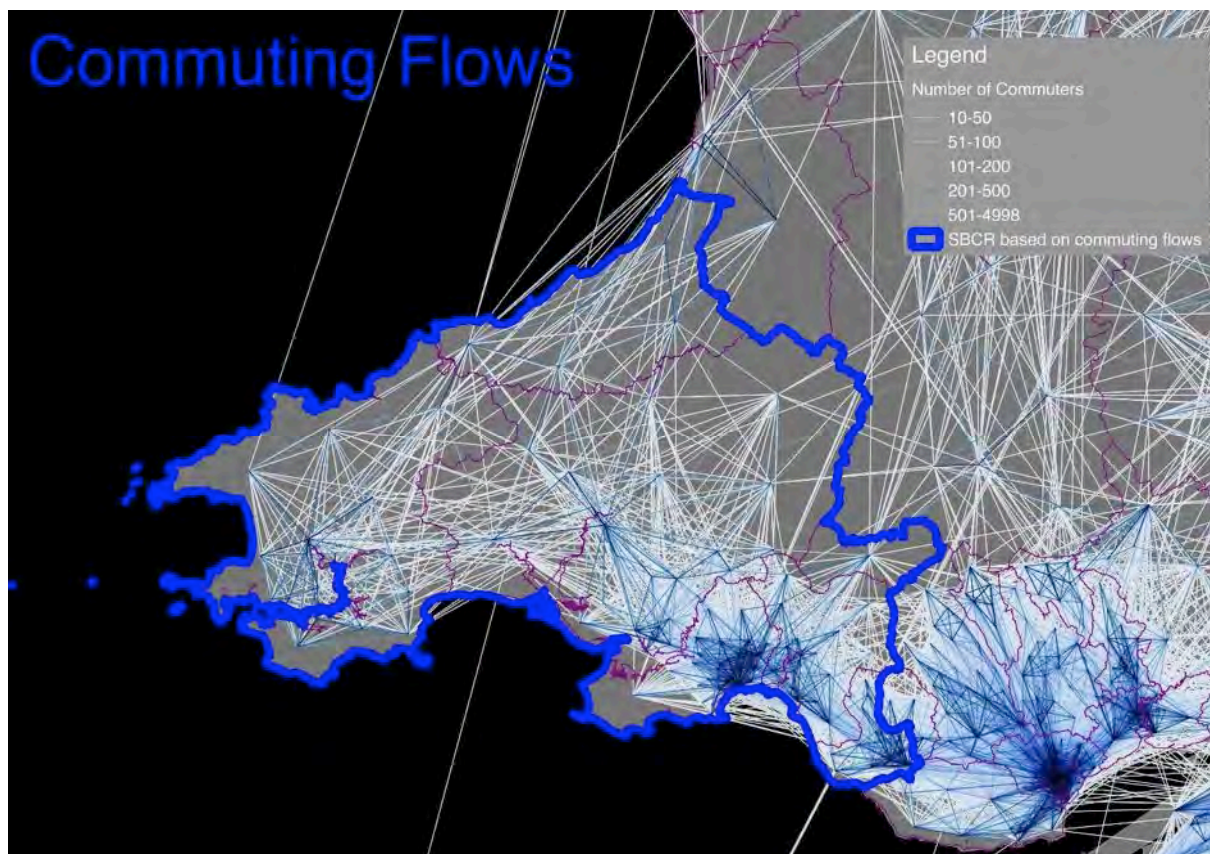
The datasets and weightings discussed for Economy, Environment, and Well-being have also been applied to the SBCR, boundary lines drawn for each, and a single thematic boundary detailed. Final scenarios for SBCR were not within the scope of work however a similar process could be undertaken in the future to define a final strategic planning area boundary.

### Economic

Indicators related to the economy were mapped and boundaries determined based on functionality, creating a balanced city-region, the concentration of activity, and the consideration of relevant pre-existing boundaries. Examples of each activity are provided for illustration purposes.

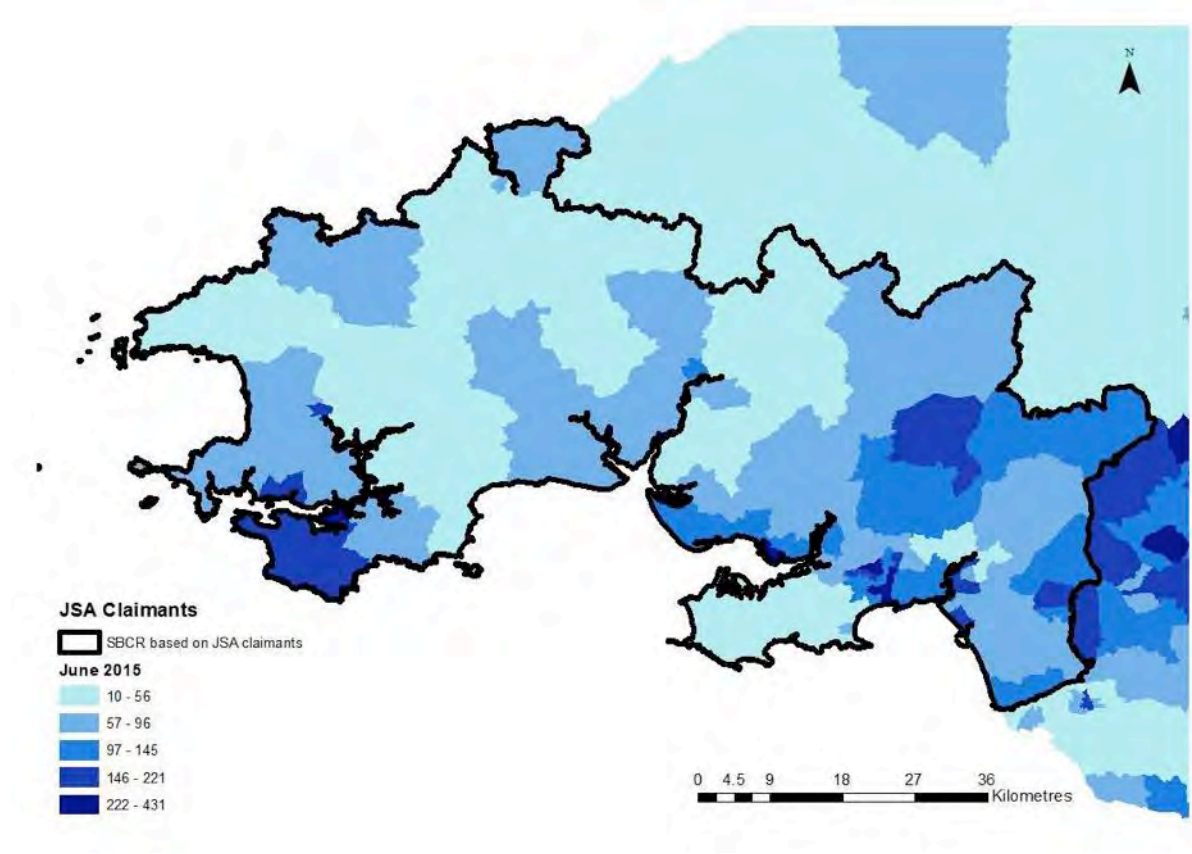
*Functionality example.* Commuting flows in the Swansea Bay City Region were largely concentrated around Swansea, however due to the more rural nature of other areas in the region it was understood that interactions may not be as dense as those in urban areas. The relative orientation of the flows therefore played a key role in determining the boundary, with the boundary to the north drawn to encompass those areas with a more southerly orientation. Parts of Bridgend were included due to the intensity of some of the flows to Swansea despite its more general orientation towards Cardiff.

Figure 6.24: Commuting Flows



*Balance example.* JSA claimants within the broad region are concentrated largely around Swansea, with the more rural areas having fewer claimants. The boundary was extended west to ensure the higher concentrations in southern Pembrokeshire were included in the boundary. The northern boundary was defined based on the consistency of low claimants further north. The eastern boundary utilised the commuting flow data to help define a cut off given the lack of homogeneity on this edge of the region in terms of claimants.

Figure 6.25: Balance example



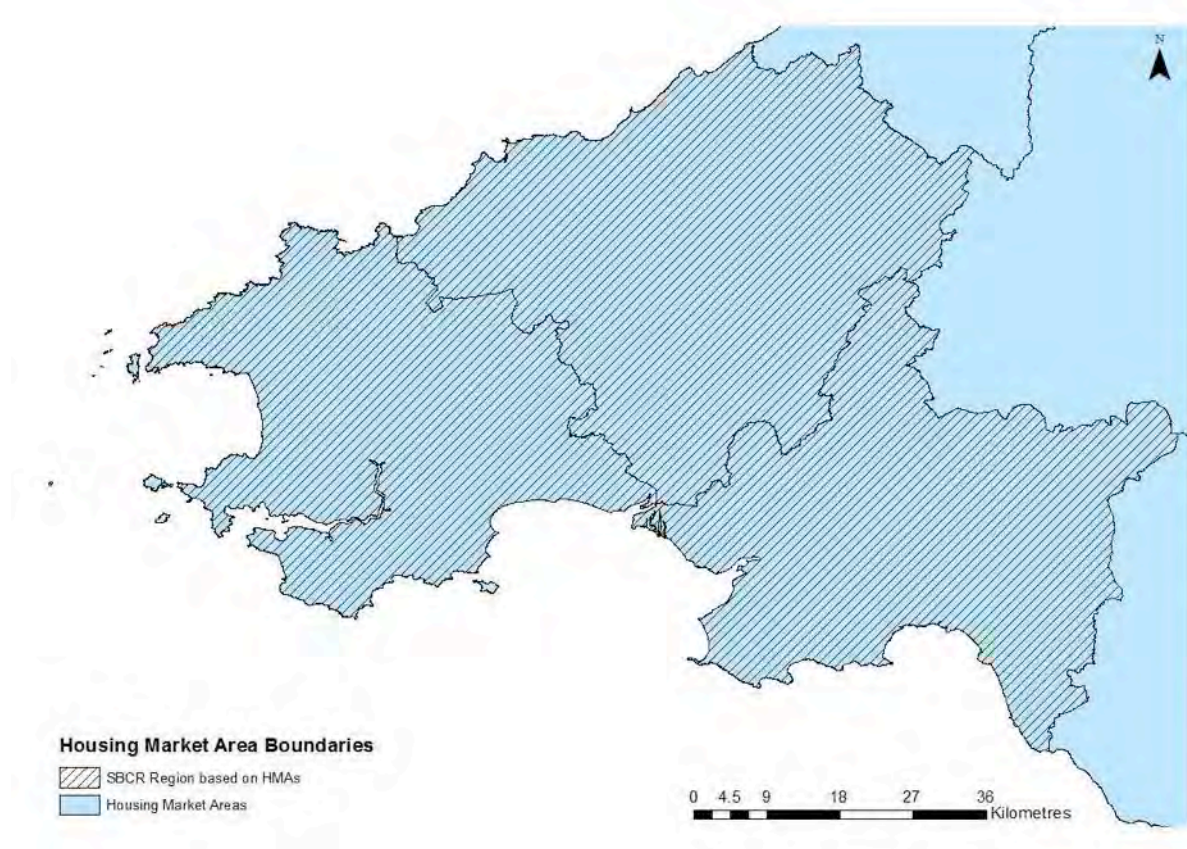
*Concentrations example.* High levels of ICT were largely concentrated around Swansea, with the boundary drawn exclusively there for this reason. While some portions of the wider region had more limited concentrations, the large distance between the more intense concentration and the other concentrations provided grounds for not including it in the boundary.

Figure 6.26: Concentration example



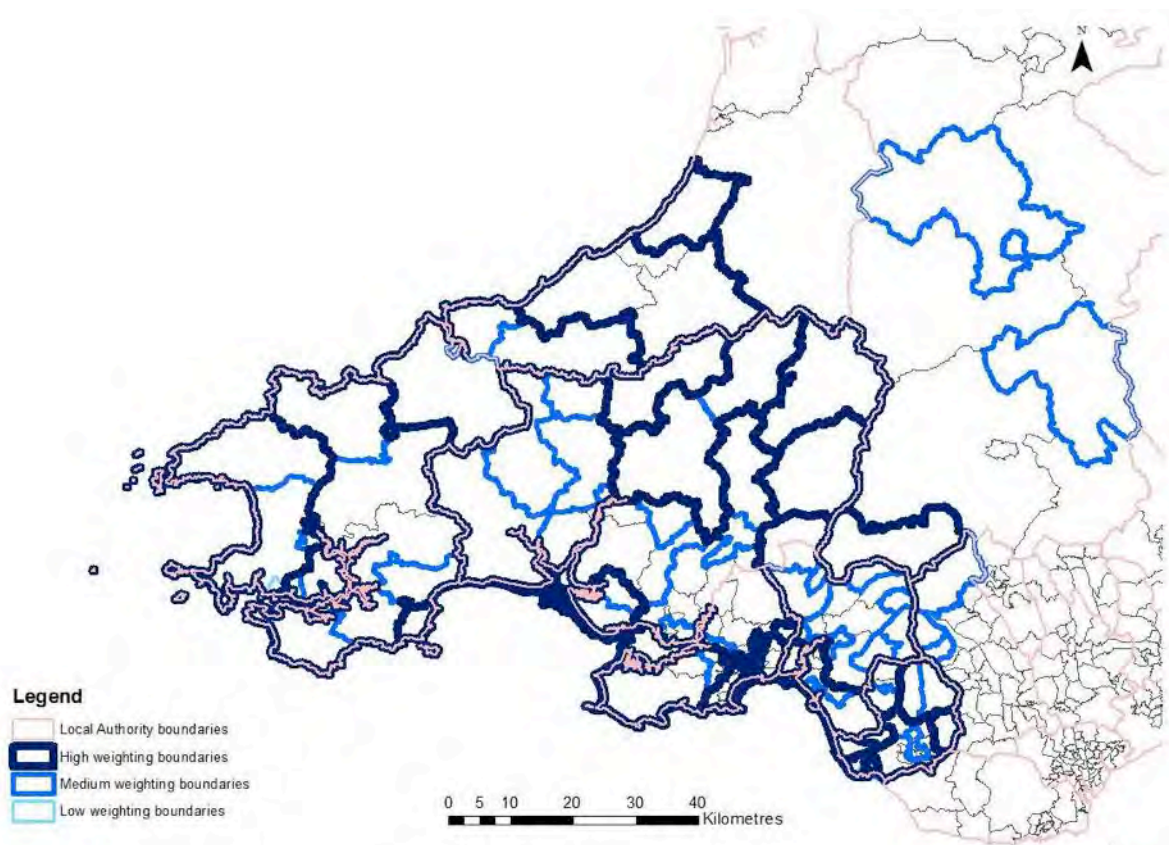
*Predefined boundaries example.* Three predefined housing market areas broadly cover the region. Portions of all of three boundaries overlap with commuting interactions providing a check as to the potential suitability of the three to be included in the boundary. The three broadly include Swansea, Neath Port Talbot, Carmarthenshire, Pembrokeshire and a northerly boundary into parts of Ceredigion. The limited commuting interaction to parts of Powys resulted in that housing market area being excluded.

Figure 6.27: Predefined boundaries



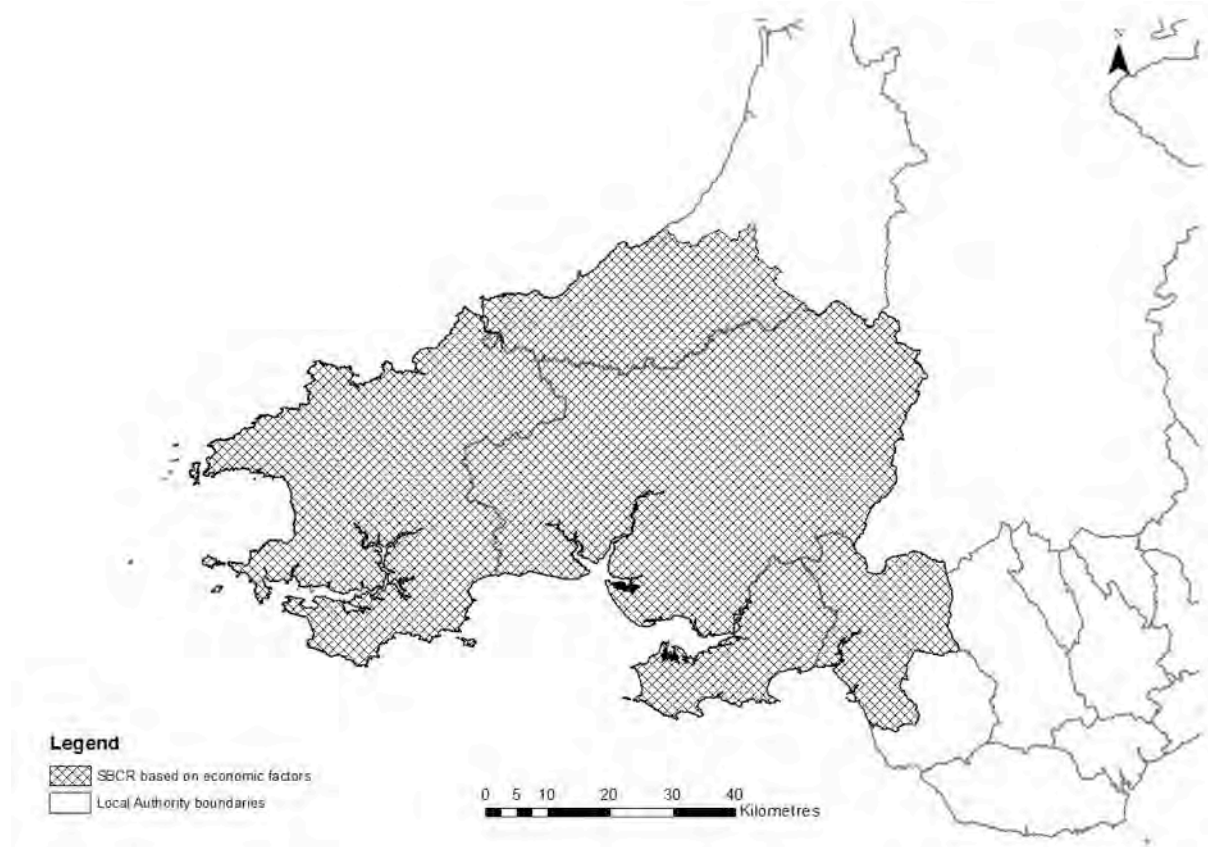
*All weighted boundaries.* Boundaries for all datasets were created following a similar process and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. Boundaries with high weightings were first overlaid and those boundaries related to concentrations compared to functional boundaries. Concentration boundaries were found to not extend beyond functional boundaries. The more contested areas were therefore the balanced areas and the predefined boundaries.

*Figure 6.28: All weighted boundaries*



Strategic planning area boundary. The heavily weighted boundaries saw some contested areas near the western and eastern ends of the SBCR. In the west, all of the wards of Pembrokeshire were included due to range of overlaps which suggested that on the whole, the unitary authority was part of the broader region. To the east, Bridgend contained a number of contested wards, however it was excluded due to the qualitative data suggesting its orientation to towards Cardiff. To the north, the southern parts of Ceredigion had a number of boundaries suggesting partial inclusion into the strategic planning area. Due to the strong weightings attached to these areas, parts of Ceredigion were included in the final strategic planning area.

Figure 6.29: Economic strategic planning area



## Environment

The identification of SBCR started from delineating the watershed boundaries in order to contain the city region within the Western Wales WFD River Basin and follow the functionality principle. This means that the strategic planning area proposed based on topography and WFD basins extends far to the east and includes the entire Vale of Glamorgan (Figure 6.30). In contrast to Cardiff Capital Region, the SBCR proposed based on CAMS is smaller than topography would dictate: only three CAMS areas were selected as those relevant to Swansea city (Figure 6.31). This results in exclusion of most of Carmarthenshire from the SBCR; however, Bridgend and parts of Vale of Glamorgan still fall within the functional unit of three CAMS areas.

If the proposed SBCR is aiming to include a national park as a nature resource and an important recreation area for the population (following the predefined boundaries rule to include the entire national park area), the SBCR stretches to the west and includes the entire Carmarthenshire and nearly whole Pembrokeshire (Figure 6.32). In contrast, delineating the area based on air quality results in a much smaller area (Figure 6.33). Nonetheless, in order to include clean air reservoirs (following the balance principle), south-west parts of Powys and north parts of Rhonda Cynon Taf are included in this scenario

Figure 6.30: Swansea Bay City Region – proposition based on topography and river basins.

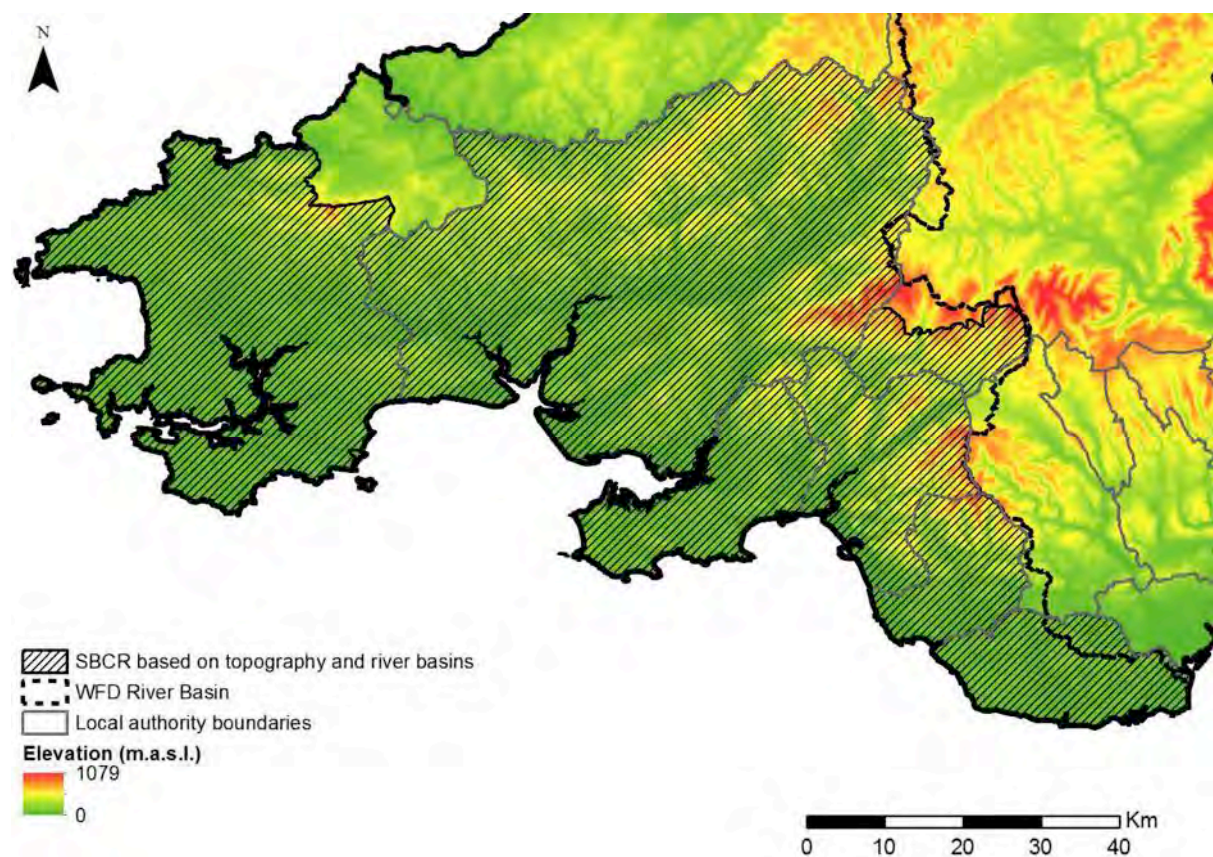


Figure 6.31: Swansea Bay City Region – proposition based on CAMS.

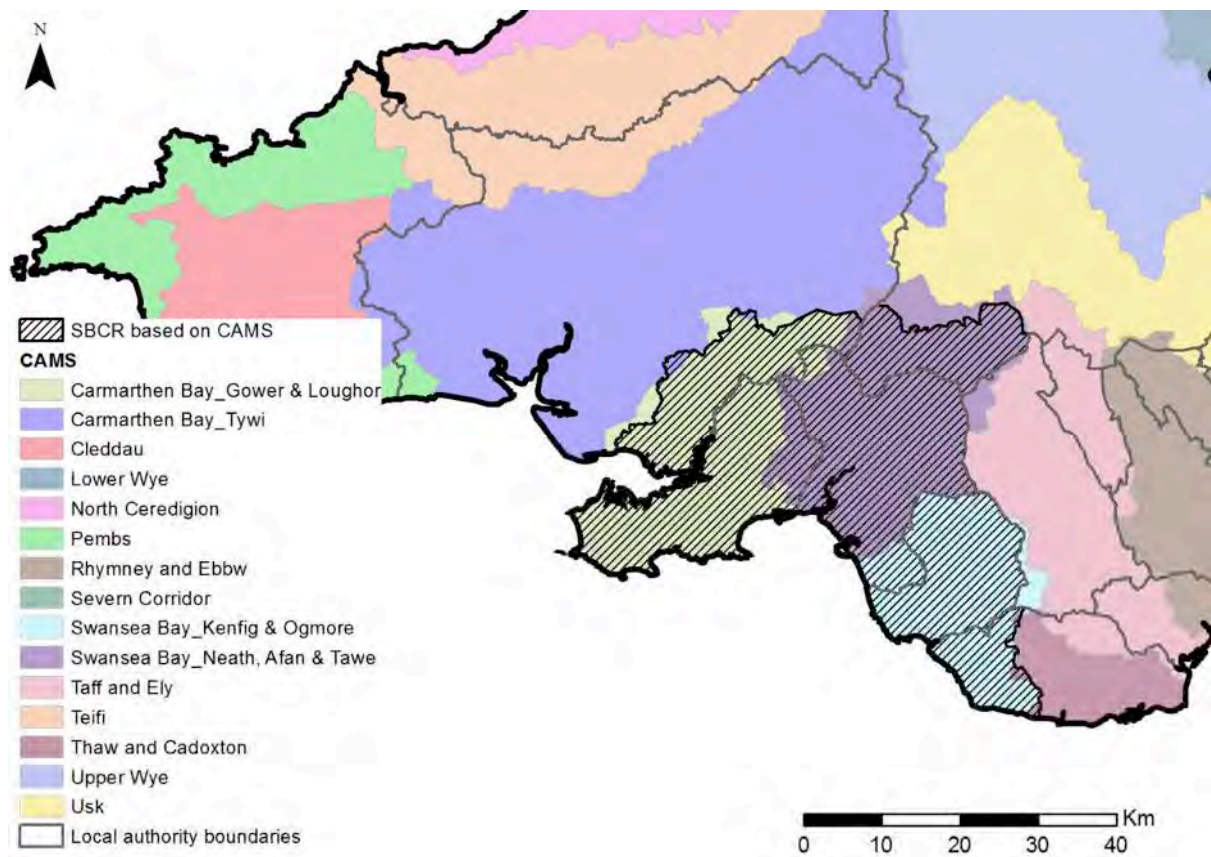




Figure 6.32: Swansea Bay City Region – proposition based on designated areas.

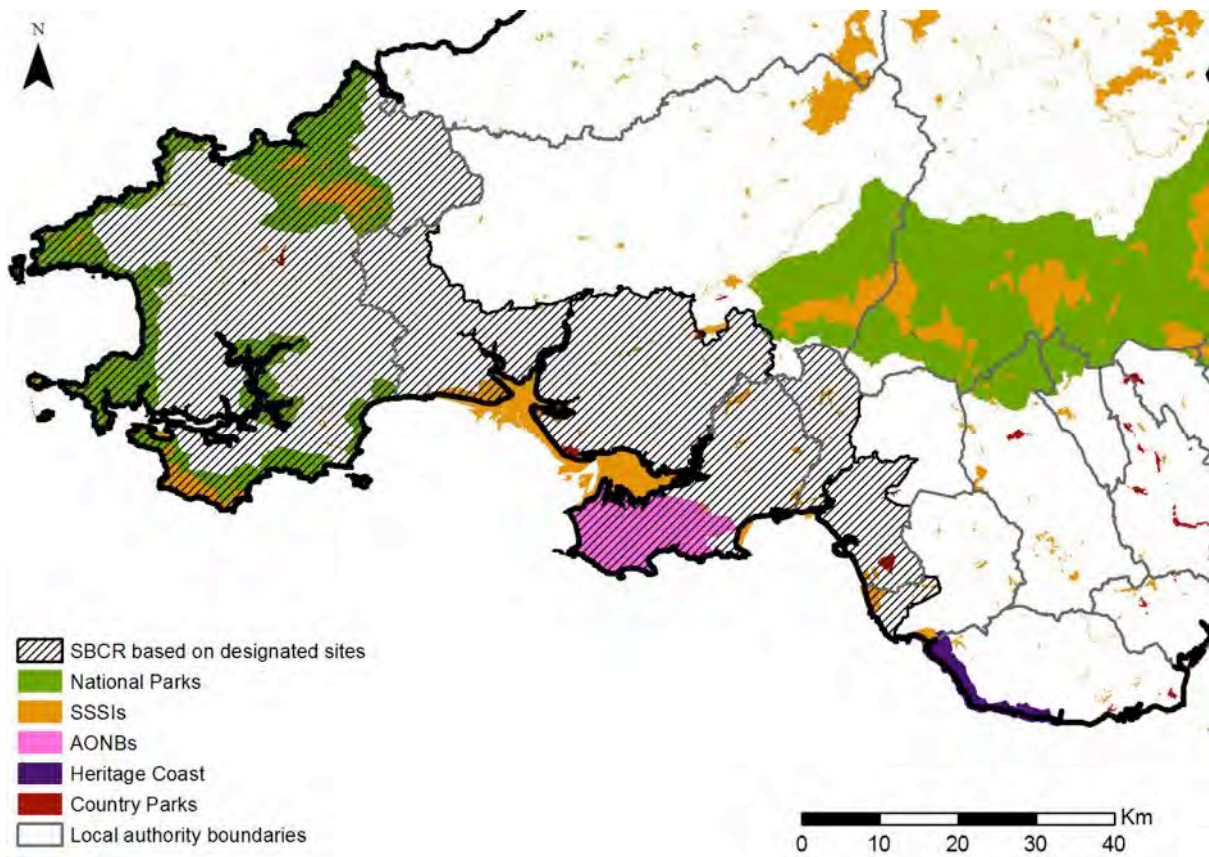
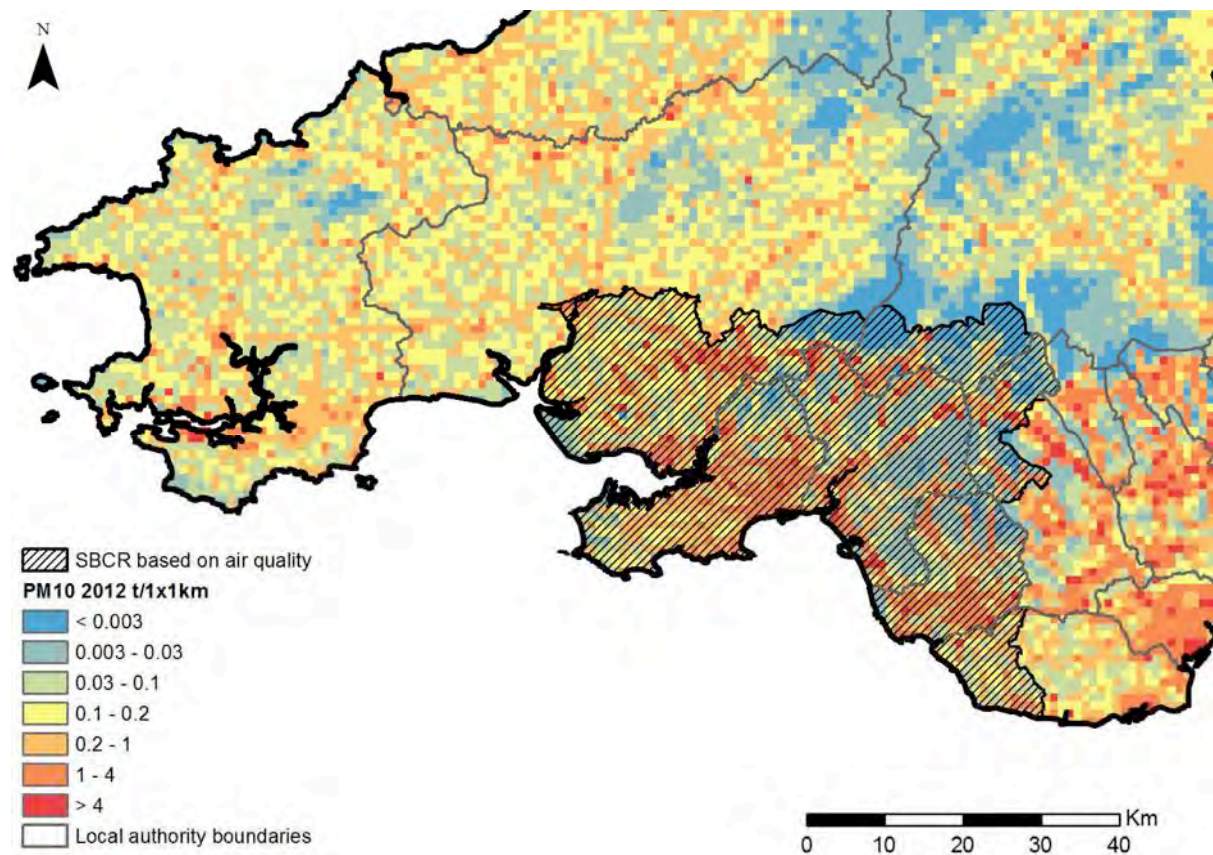


Figure 6.33: Swansea Bay City Region – proposition based on air quality.



The four proposed SBCR outlines are compared in Figure 6.34, with the thicker lines outlining the SBCR identified based on the more important environmental factors. From the environmental issues perspective, the contested areas are to the north (Carmarthenshire) and the east of the proposed SBCR (Vale of Glamorgan and Bridgend).

The final outline of SBCR based on environmental factors (Figure 13) follows largely the extents based on watershed and nature designation sites (thus prioritising the functionality and predefined boundaries principle). The boundary of the SBCR has been adjusted to unitary authority boundaries where possible (to avoid 'orphan' wards). To the east, it includes Bridgend and cuts across the Vale of Glamorgan.

Figure 6.34: Comparison of SBCR propositions based on four environmental factors

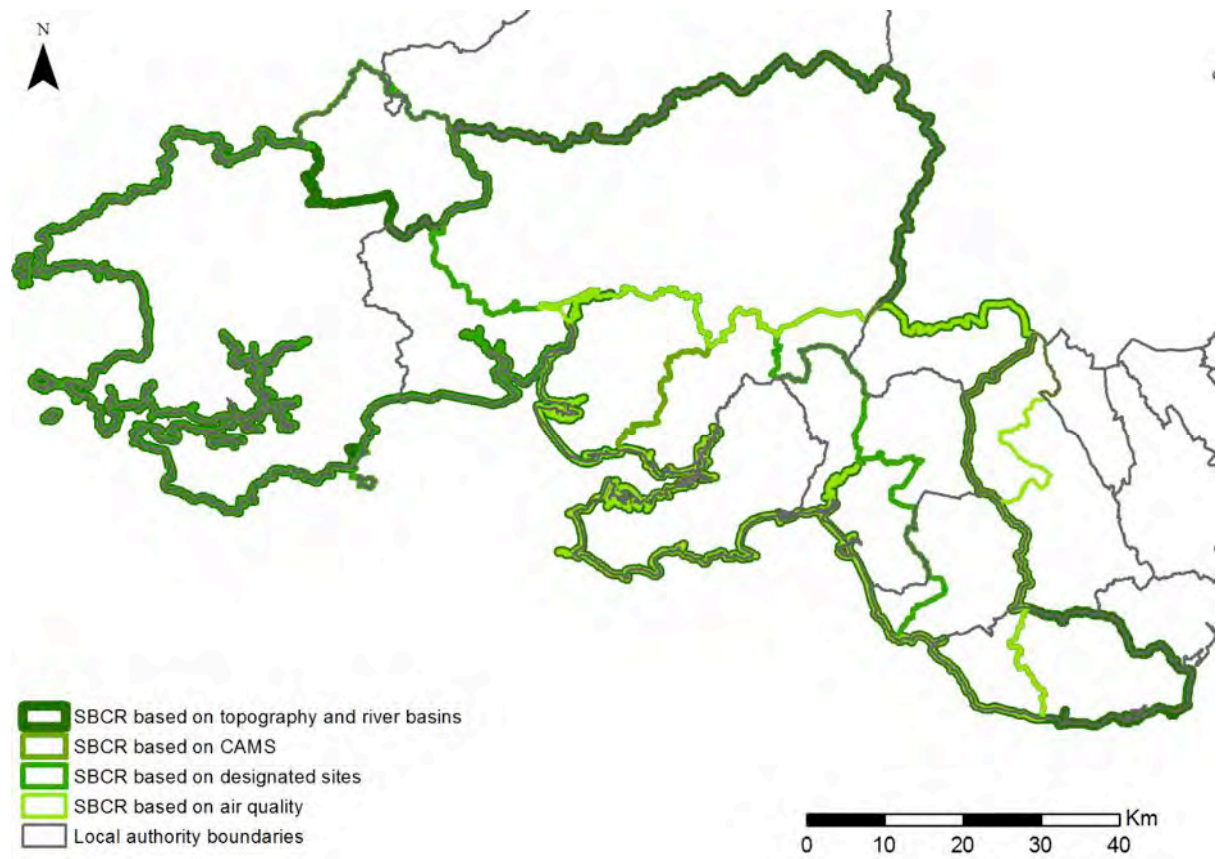
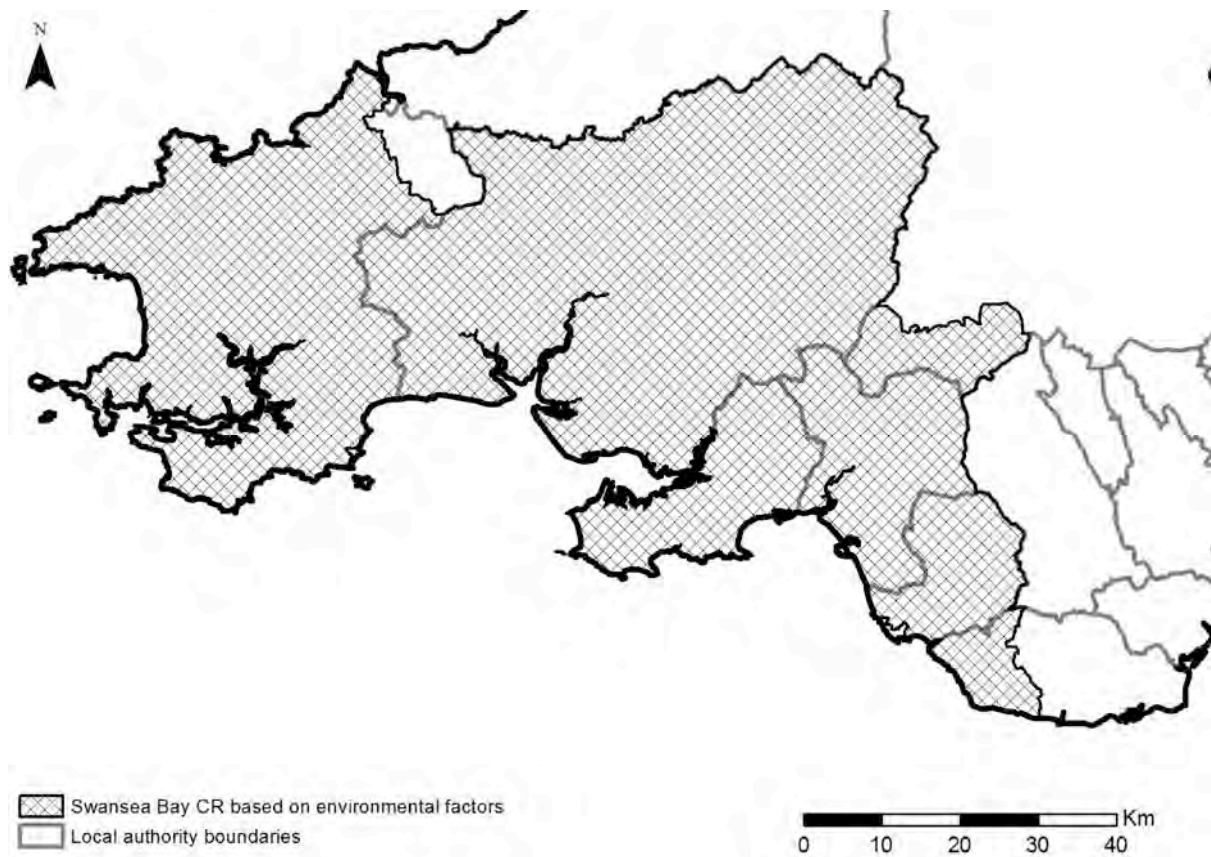


Figure 6.35: The final shape of SBCR based on environmental factors

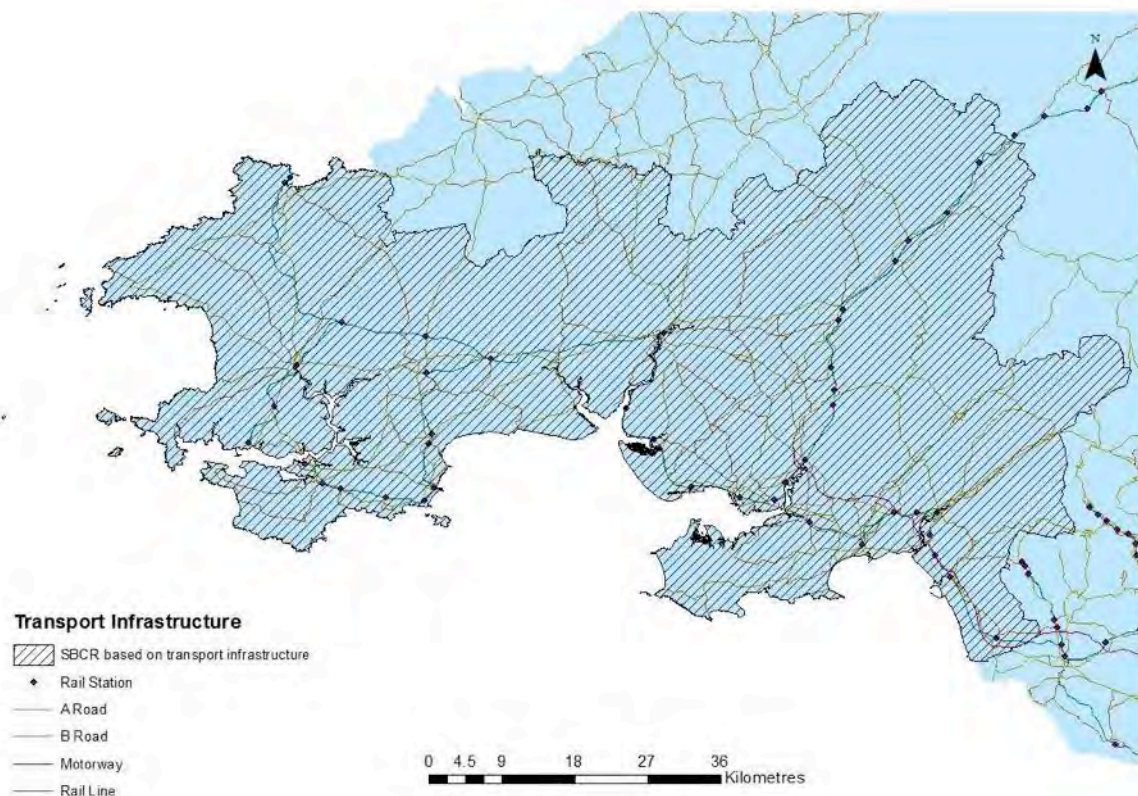


## Well-being

Indicators related to well-being were mapped and boundaries determined based on functionality, creating a balanced city-region, the concentration of activity, and the consideration of relevant pre-existing boundaries. Examples of each activity are provided for illustration purposes.

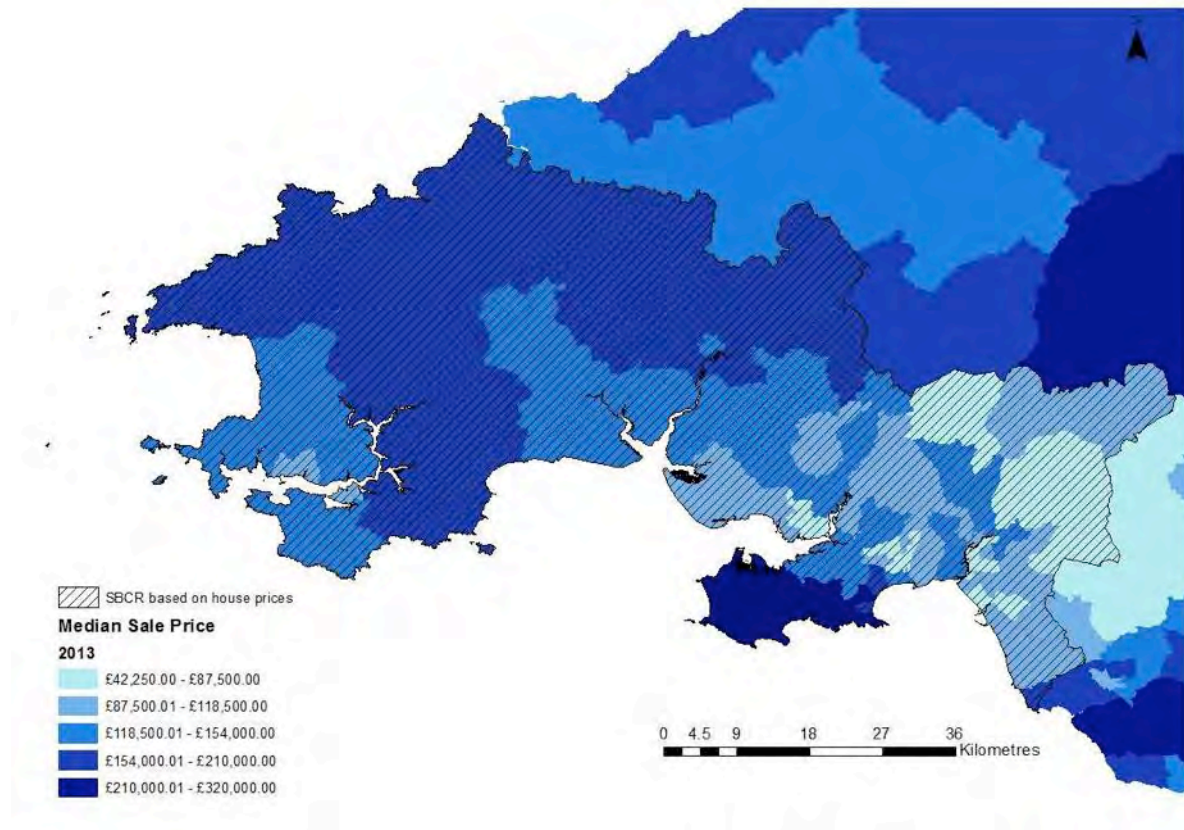
*Functionality example.* Rail stations influenced the boundary for transport infrastructure in the region, with the northern boundaries encompassing the rail lines and stopping before the greater motorway concentrations in Ceredigion. To the west, the boundary extended throughout the majority of Pembrokeshire. To the east, the orientation of rail lines and motorways into Cardiff rather than Swansea resulted in the boundary being drawn on the edge of Neath Port Talbot.

Figure 6.36: Functionality



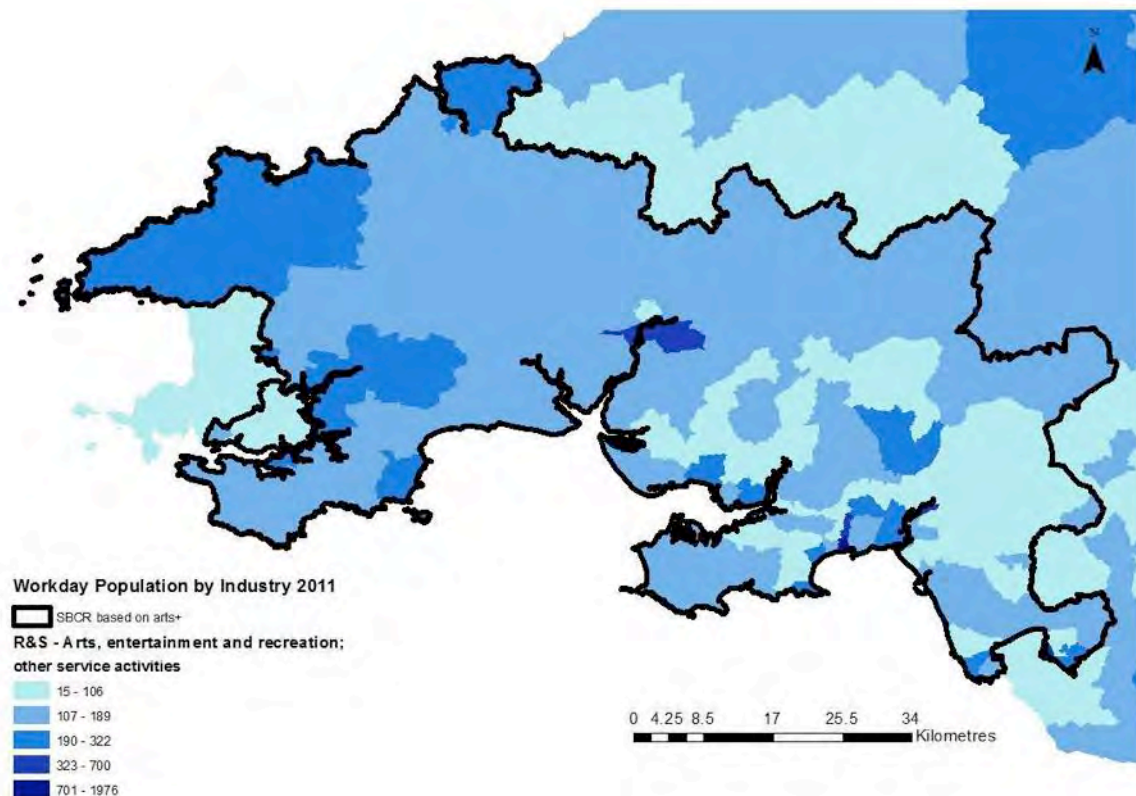
*Balance example.* Lower house prices to the east of Swansea were included to ensure housing options are available in the region while also stretching west to Pembrokeshire to encompass the relatively lower house prices in the south-west. The northern boundary was stopped due to the large area of homogeneity and lower commuting interactions while the north-eastern boundary was drawn closer in due also to the lower commuting interactions to the rest of the proposed area.

Figure 6.37: Balance



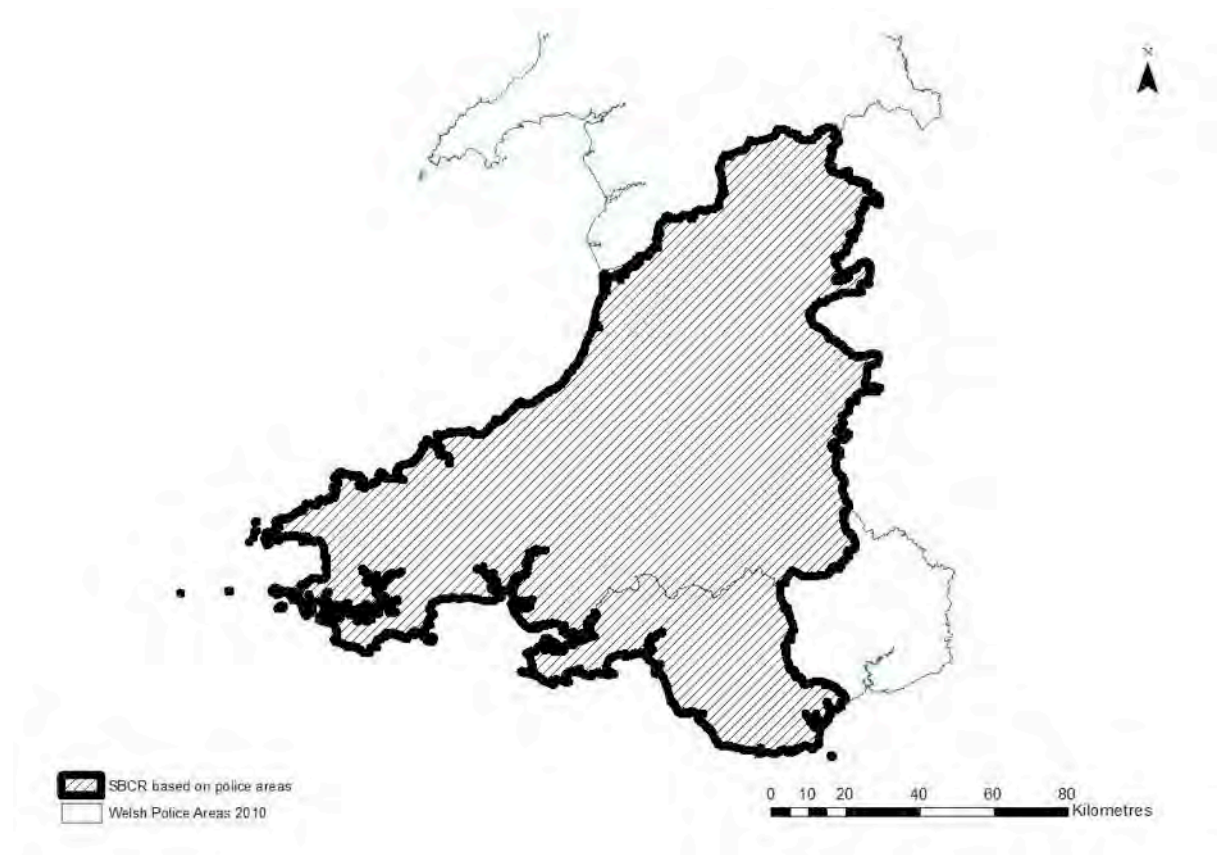
*Concentrations example.* The arts, entertainment and recreation industries are largely spread out in the region, leading to quite wide boundaries, with concentrations along the edges included in the boundary. Concentrations were particularly notable along the south-eastern edge, leading to the inclusion of parts of Bridgend. To the north-west, the southern part of Ceredigion was included due to the higher concentration and its proximity to similar high areas in Pembrokeshire.

Figure 6.38: Concentration



*Predefined boundaries example.* The inclusion of Welsh Police Areas that include Pembrokeshire and Carmarthenshire resulted in a large northern extension of the boundary. This boundary was included as it was seen to be important to ensure the strategic development plans included coordination of both police areas for the improvement of well-being.

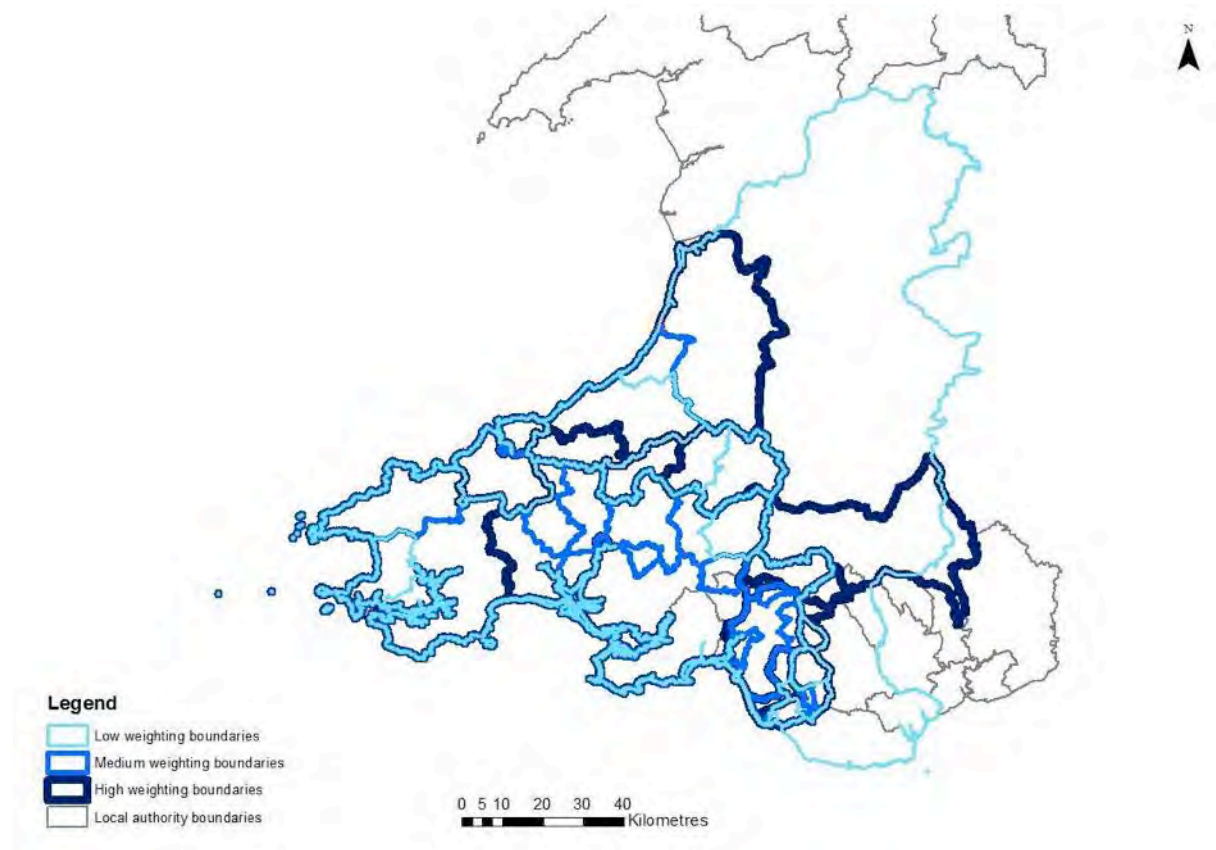
*Figure 6.39: Predefined boundaries*





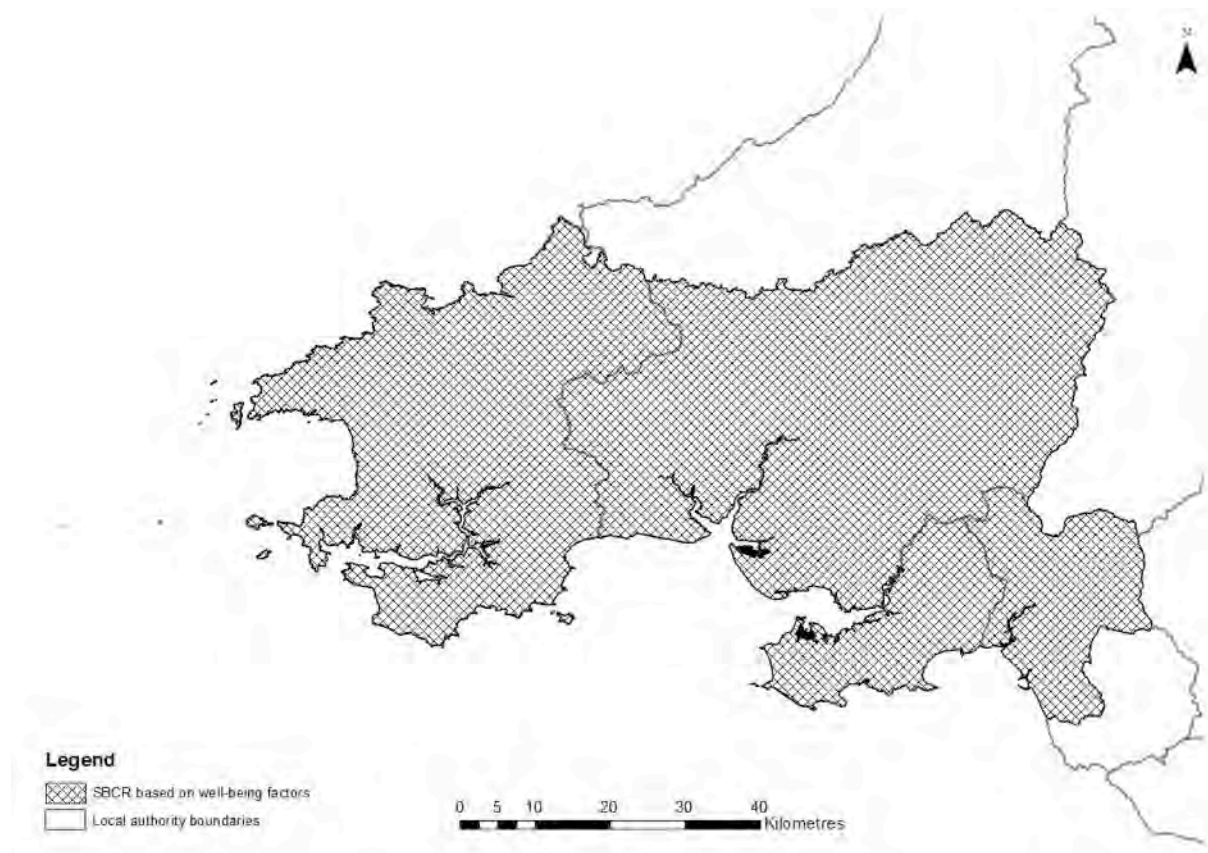
*All weighted boundaries.* Boundaries for all datasets were created and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. There was a fair bit of overlap for the more heavily weighted boundaries, suggesting the inclusion of Swansea, Carmarthenshire, Pembrokeshire, and Neath Port Talbot. Some additional heavily weighted boundaries suggested rather large extensions north into Ceredigion and further east towards the Brecon Beacons. There was additional contestation around whether parts of Bridgend should also be included.

Figure 6.40: All weighted boundaries



*Strategic planning area boundary.* The heavily weighted boundaries for well-being saw the edges largely following unitary authority boundaries apart from some minor contested areas near Bridgend and the north portions of the region. The Local Health Board area suggested an extension north to Ceredigion, however the vast majority of the other boundaries suggested the strategic planning area should not include Ceredigion. The inclusion of the Brecon Beacons into the strategic planning area was considered given its proximity to several Local Authorities suggested for inclusion, however it was ultimately excluded due a potential overlap with Cardiff Capital Region. Overlaps in strategic planning area areas must be carefully considered. Discussion and coordination with neighbouring areas should be undertaken in advance to ensure that boundaries do not overlap, or if they do overlap how conflicts between boundaries might be resolved.

*Figure 6.41: Well-being strategic planning area*



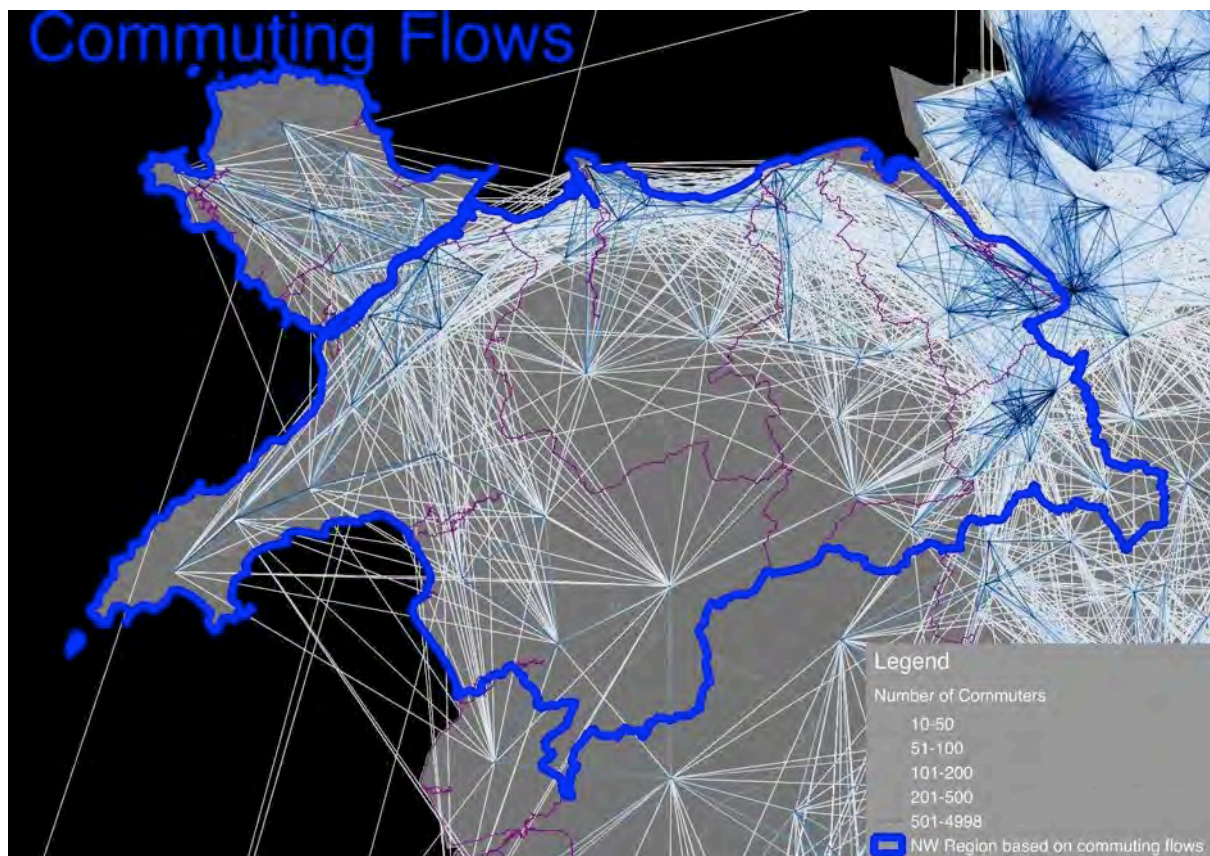
## North Wales Region

The datasets and weightings discussed for Economy, Environment, and Well-being have also been applied to the North Wales Region, boundary lines drawn for each, and a single thematic boundary detailed. Final scenarios for North Wales Region were not within the scope of work however a similar process could be undertaken in the future to define a final strategic planning area boundary.

### Economy

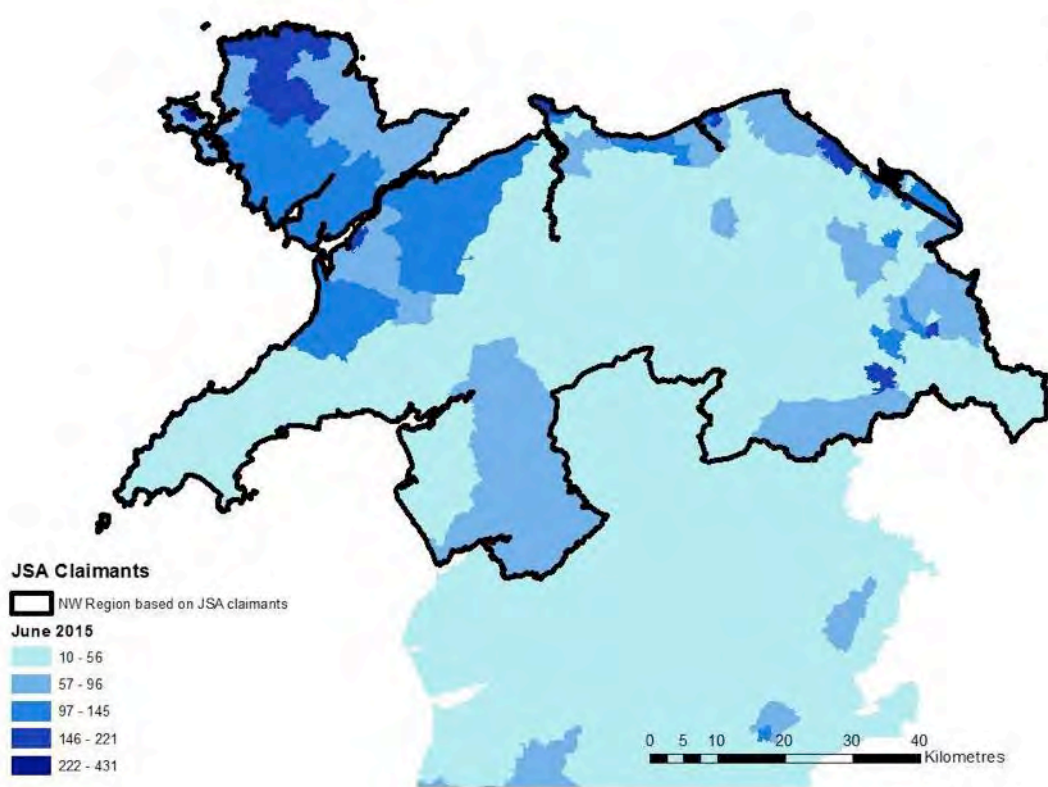
*Functionality example.* Strong commuting interactions were seen along the length of the A55, between the Isle of Anglesey and the north part of Gwynedd as well as across the border to England from Flintshire and Wrexham. While not as intense, interactions were also visible from the more rural, central parts of the region orientated towards some of the more urban centres. The northern portions of Powys were not included in the boundary given the predominant orientation of flows southwards.

Figure 6.42: Commuting Flows



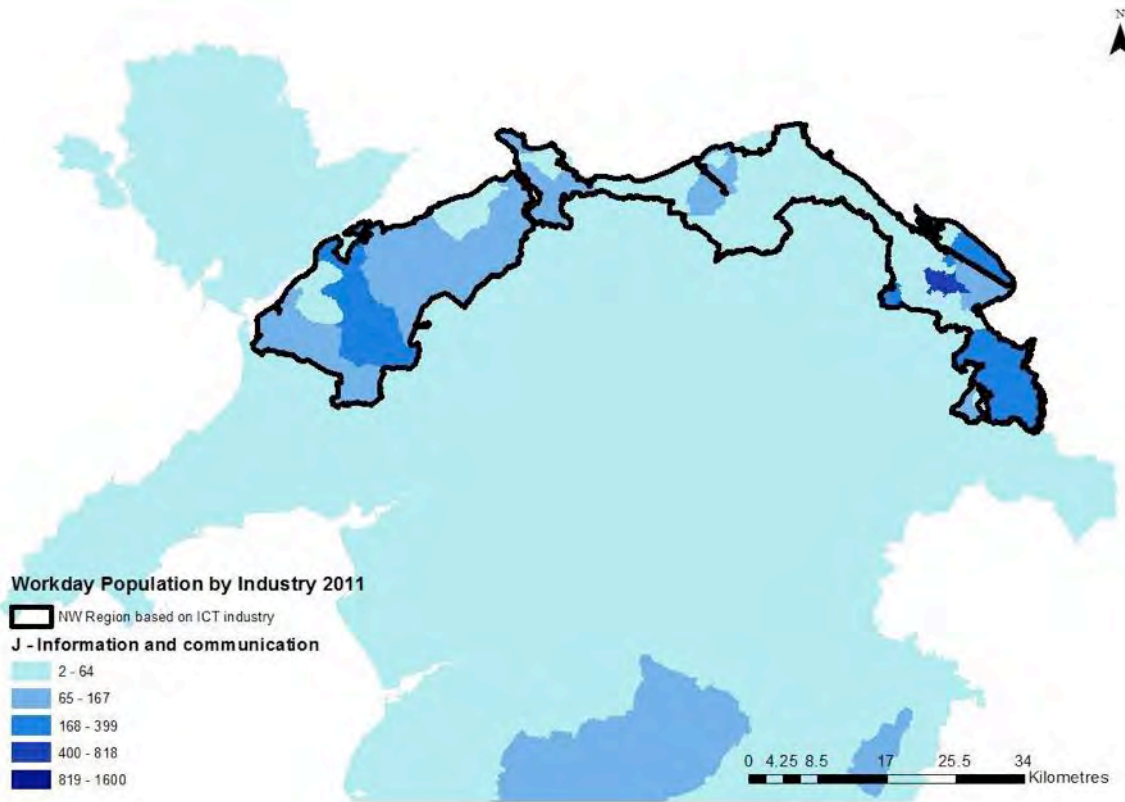
*Balance example.* Strong concentrations of JSA claimants included parts of the Isle of Anglesey, the north portion of Gwynedd and along parts of the A55 as well as some parts of Wrexham. These concentrations were balanced with fewer claimants in the central part of the region as well as the eastern and western edges of the region. The southern boundary was drawn to include moderate concentrations of claimants.

Figure 6.43: Balance



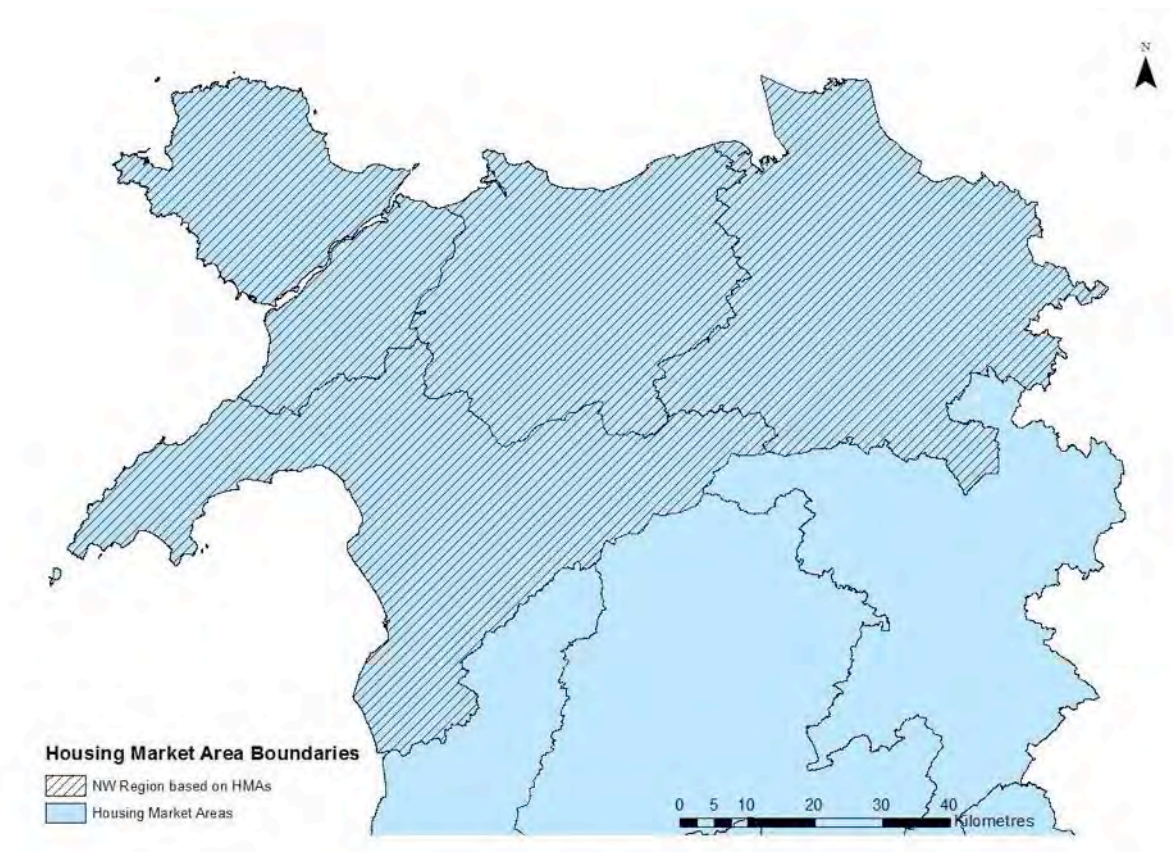
*Concentrations example.* ICT concentrations were seen running along the northern boundary of the region, with stronger concentrations on eastern edge as well as the northern portion of Gwynedd. While portions of the boundary drawn do not include strong concentrations of ICT workers, the boundary was drawn in order to ensure a single continuous region was defined.

Figure 6.44: Concentration



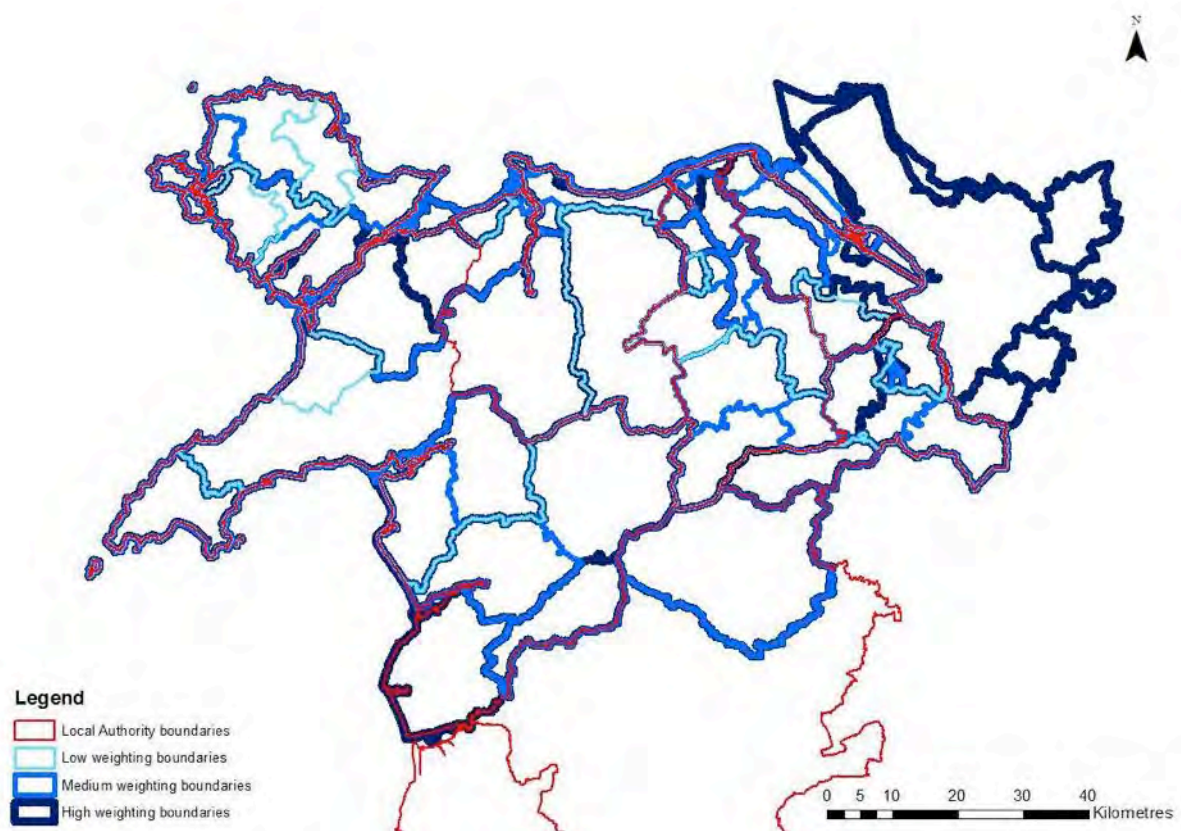
*Predefined boundaries example.* Four predefined housing market areas make up the region. These four were selected to include the major urban settlements and to take into account the major commuting flows within the region. This has resulted in all of Gwynedd being included in this boundary.

*Figure 6.45: Predefined boundaries*



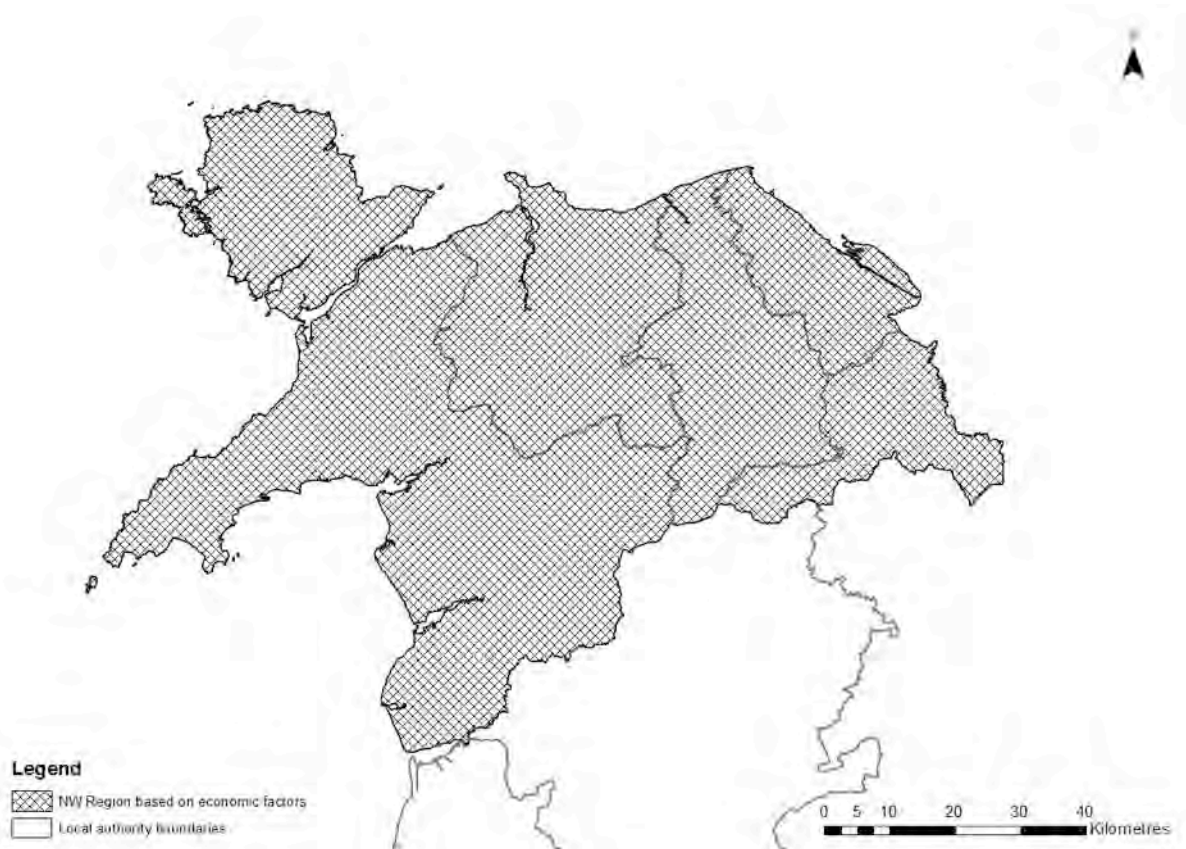
*All weighted boundaries.* Boundaries for all datasets were created and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. Several heavily weighted boundaries extended into England due to the functional connections between the north-eastern part of Wales and the north west of England. The more contested areas related to the central-southern boundary, with some heavily weighted boundaries suggesting the boundary extend to the border with Powys and others suggesting a tighter more northerly boundary.

Figure 6.46: All weighted boundaries



*Strategic planning area boundary.* Heavily weighted boundaries for North Wales suggest a consistent boundary along the northern Local Authorities, with some contested boundaries within Anglesey and the Western edges of Snowdonia. The more contested boundaries are further south, along the southern edges of Snowdonia and the northern tip of Powys. While some heavily weighted boundaries suggest that the southern end of Snowdonia not be included, functional boundaries such as the HMA, rental market, and commuting boundaries suggest otherwise, leading to its inclusion. The northern portion of Powys was not included as not enough cross-over was seen to justify the inclusion of a portion of a unitary authority into the strategic planning area. It should be noted that strong linkages were also seen into England.

*Figure 6.47: Economic strategic planning area*

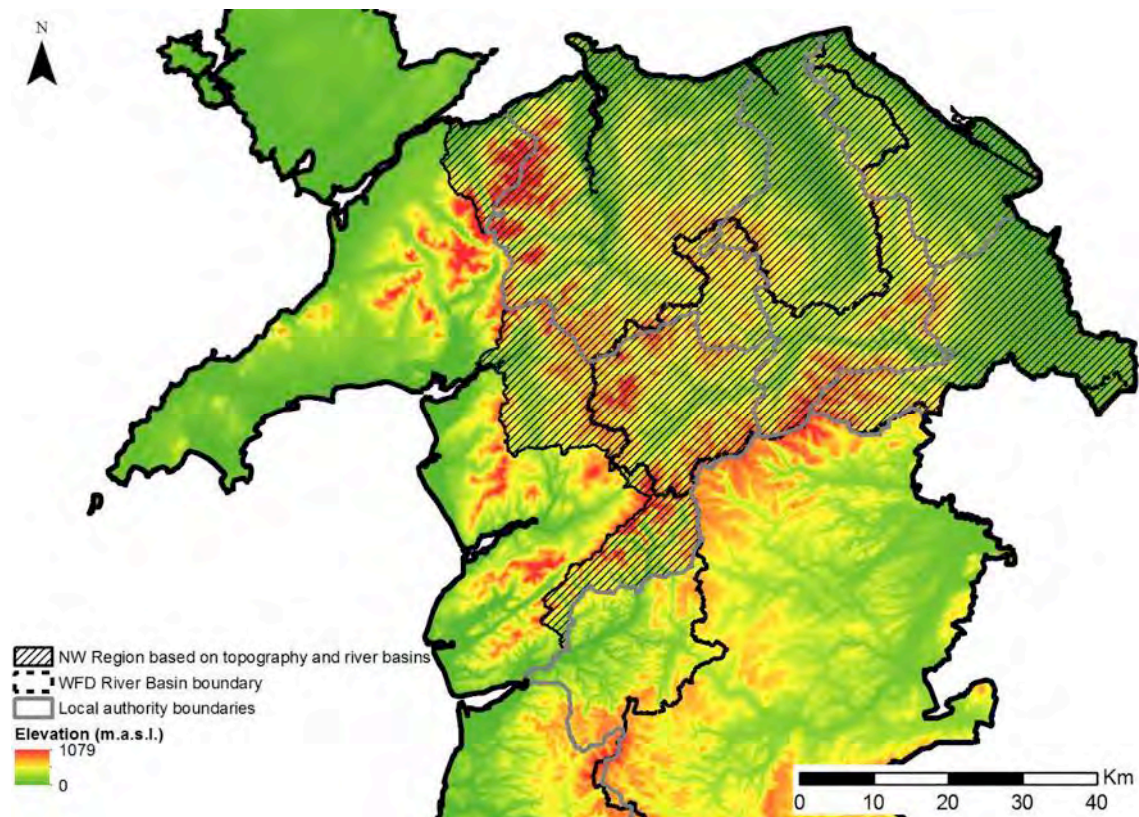




## Environment

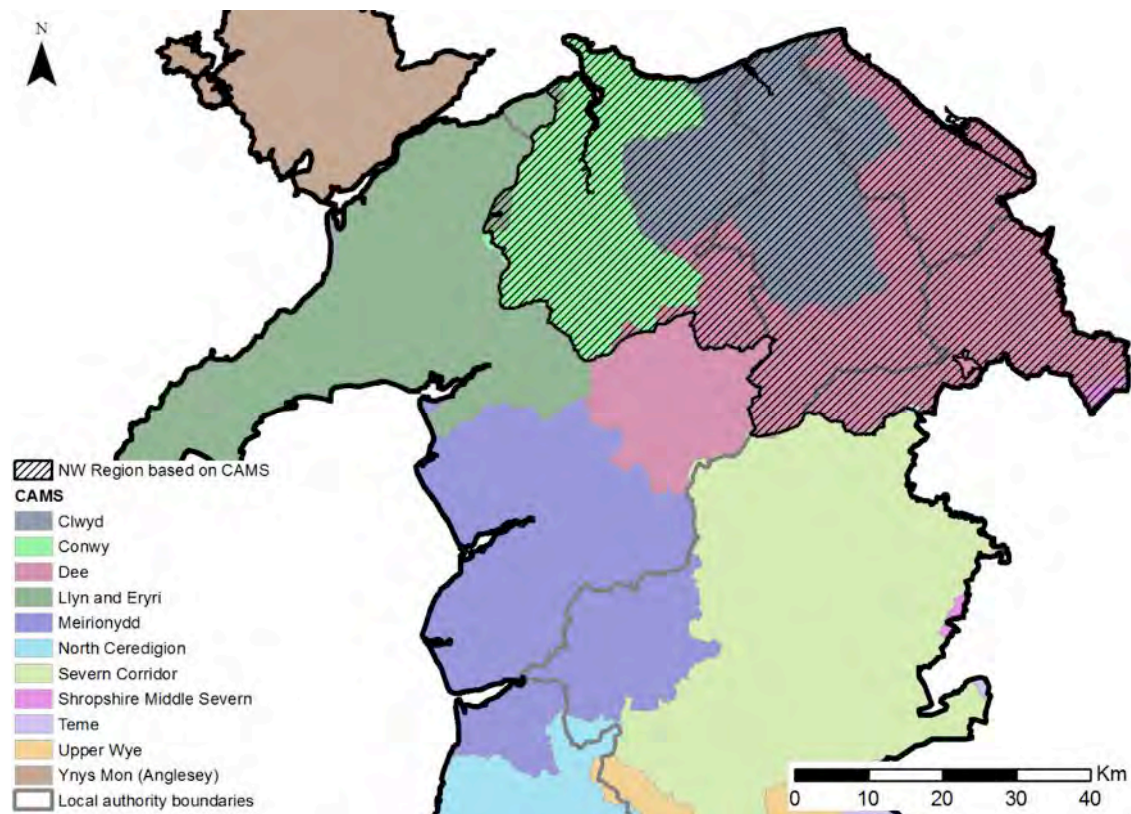
Functionality principle has been applied to delineate the North Wales strategic planning area based on topography and WFD river basins (Figure 6.48). The strategic planning area identified based on these factors includes parts of Gwynedd. The narrow 'tail' extending to the south beyond the peaks of Snowdonia is associated with the shape of the MSOAs in Gwynedd and the fact that this particular MSOA's population weighted centroid was located north of the mountains and therefore ought to be included within the strategic planning area.

Figure 6.48: North Wales Region – proposition based on topography and river basins.



The North Wales boundary delineated based on CAMS areas is another example of applying functionality principle in relation to water extraction and availability. In this example, the strategic planning area is contained within four local authorities: Conwy (excluding small parts), Denbighshire, Flintshire and Wrexham (Figure 6.49).

Figure 6.49: North Wales Region – proposition based on CAMS.



The predefined boundaries principle, applied to the identification of the North Wales strategic planning area based on the nature conservation sites and recreation areas resulted in the inclusion of the entire Snowdonia National Park. The outcome is a strategic planning area including most of Gwynedd (excluding Llŷn Peninsula). In addition, North Powys has been included in order to contain the entire Berwyn SSSI. However, east Wrexham has been excluded due to limited nature conservation value (Figure 6.50).

The balance principle was used in delineating the extent of North Wales strategic planning area based on the air quality: both areas of high air pollution and good air quality have been included in the extent of the strategic planning area in order to include both areas of transport and economic activity as well as reservoirs of clean air providing respite for the North Wales population. The area identified based on this principle (Figure 6.51) is very similar to the strategic planning area outlined using the CAMS area data and covers four local authorities: Conwy, Denbighshire, Flintshire and Wrexham.

Figure 6.50: North Wales Region: – proposition based on nature conservation sites.

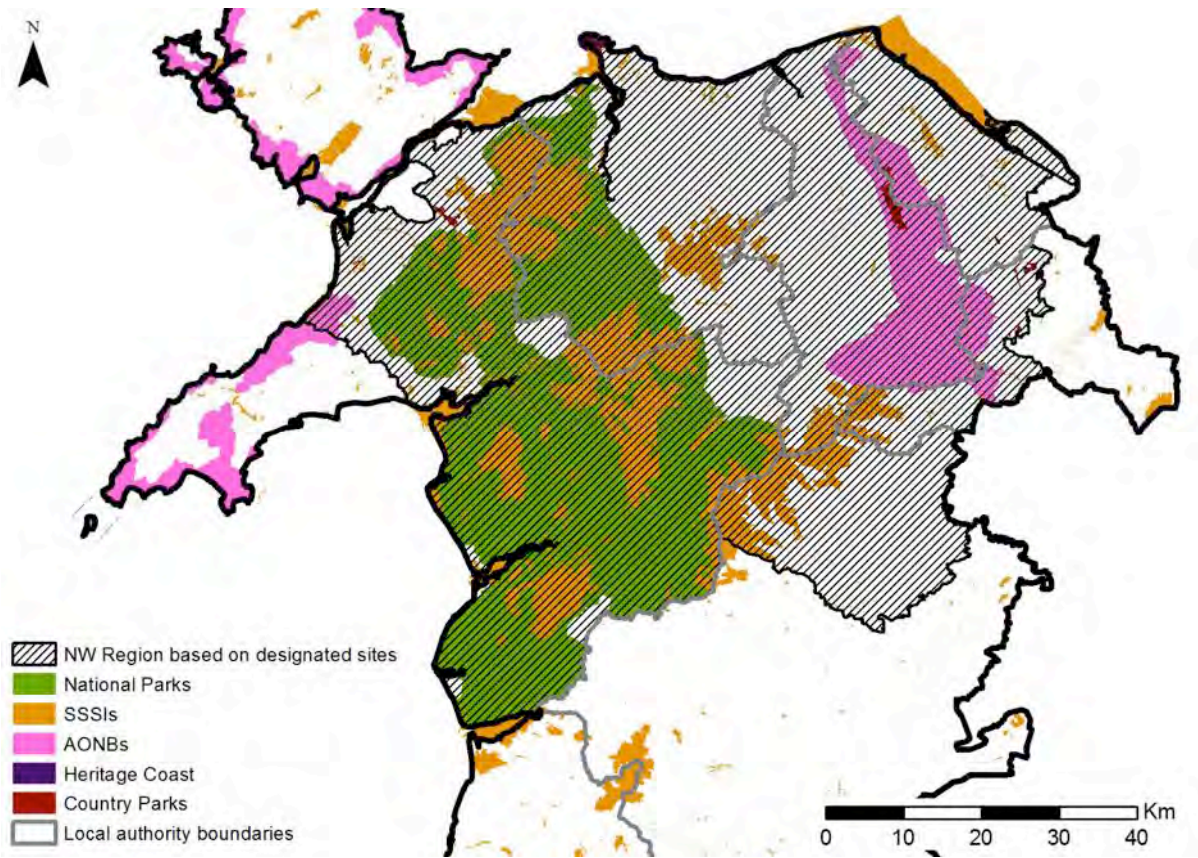
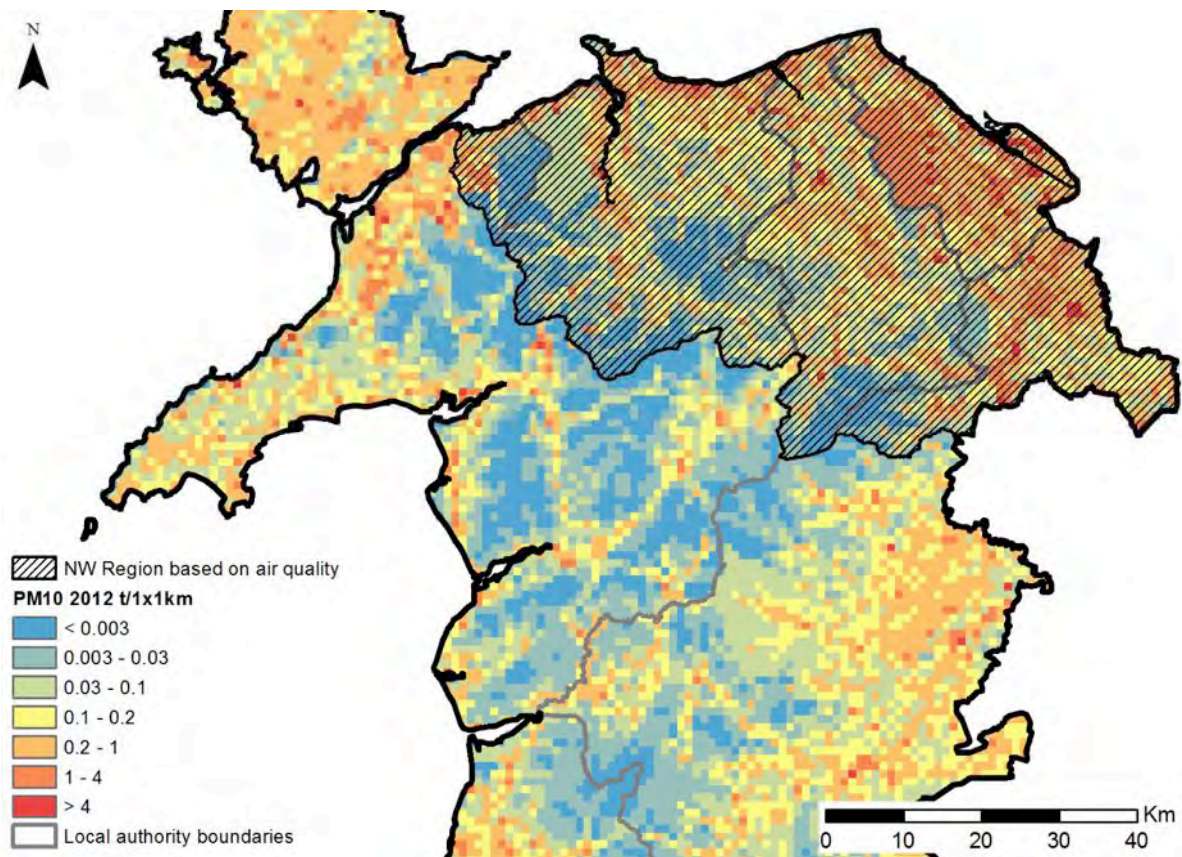


Figure 6.51: North Wales Region – proposition based on air pollution.



The four North Wales strategic planning area extents drawn on different environmental factors are presented together in Figure 6.52, where the thickest lines represent the areas outlined based on the environmental factors considered to be the most important. The contested parts include west Gwynedd and, to the east, inclusion of parts of Wrexham and north Powys. Starting from the strategic planning area outlined using the factor of the highest importance (topography and river basins), and using the predefined boundaries principle, the final strategic planning area based on environmental factors includes the entire Snowdonia, and thus covers most of Gwynedd, and contains the whole of Wrexham (Figure 6.53). However, it excludes north Powys which may have implications for the consistent management of the Berwyn SSSI sitting at the boundary of Powys, Gwynedd, Denbighshire and Wrexham.

Figure 6.52: Comparison of North Wales Region propositions based on four environmental factors

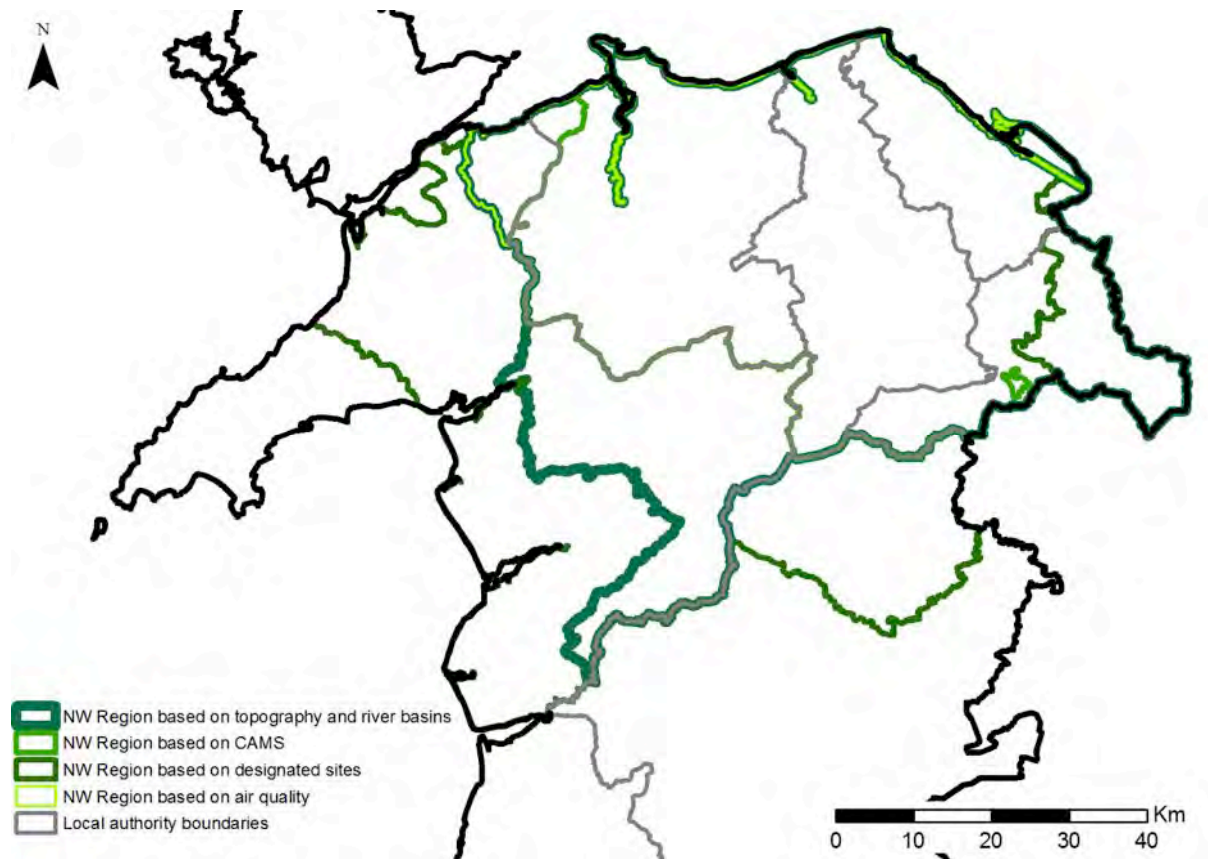
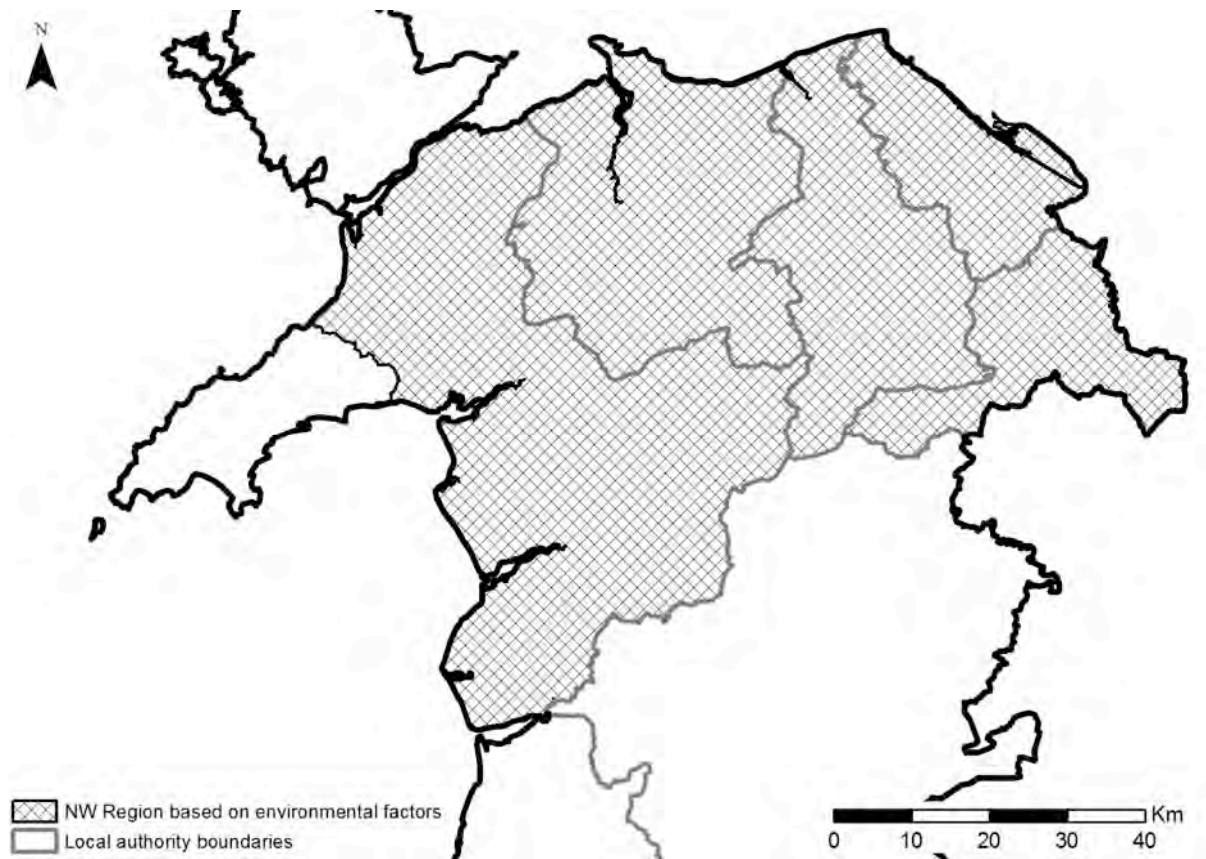


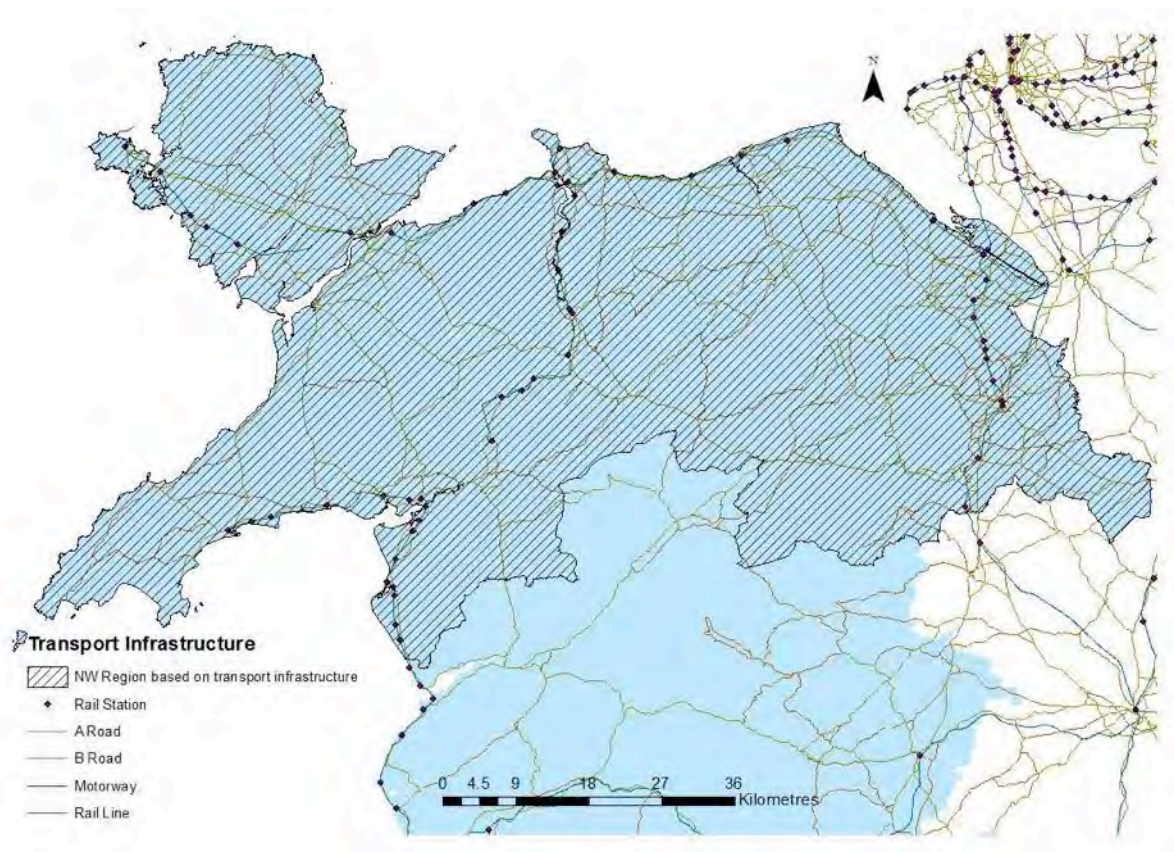
Figure 6.53: The final shape of North Wales region based on environmental factors.



## Well-being

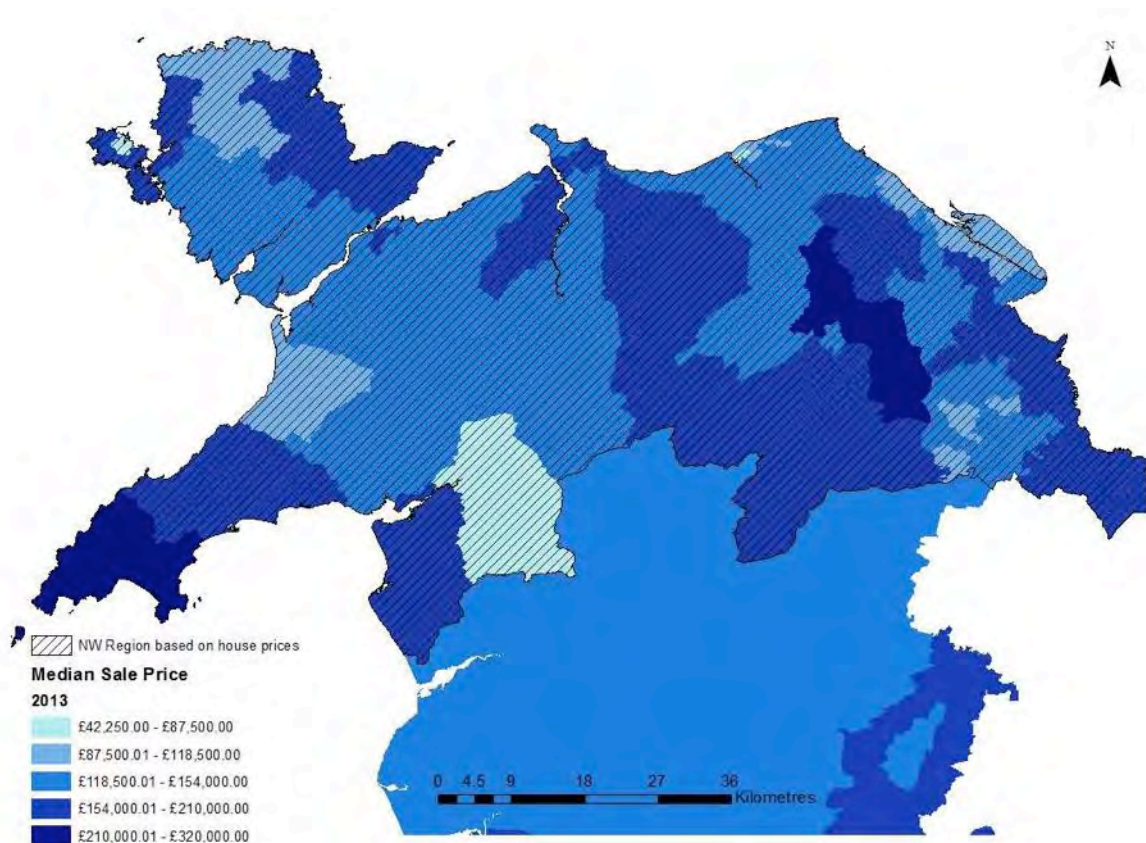
*Functionality example.* The boundary encompasses the main rail lines and stations throughout the region, including those running south through Wrexham to the English border. To the south-west the boundary was drawn to include the south-westerly rail line towards Ceredigion however stopped at the boundary with Gwynedd due to the lack of commuting interactions orientated in that direction. The remainder of the southern edge was defined based on commuting interactions and the increasing lack of road connections northwards towards the more urban areas.

Figure 6.54: Functionality



*Balance example.* In order to produce housing purchase options, the boundaries were delineated to take into account higher priced areas on the eastern and western edges of the region as well as lower cost areas in some of the urban areas around the A55, parts of Wrexham and one area of Gwynedd as well as the mix of properties in the Isle of Anglesey.

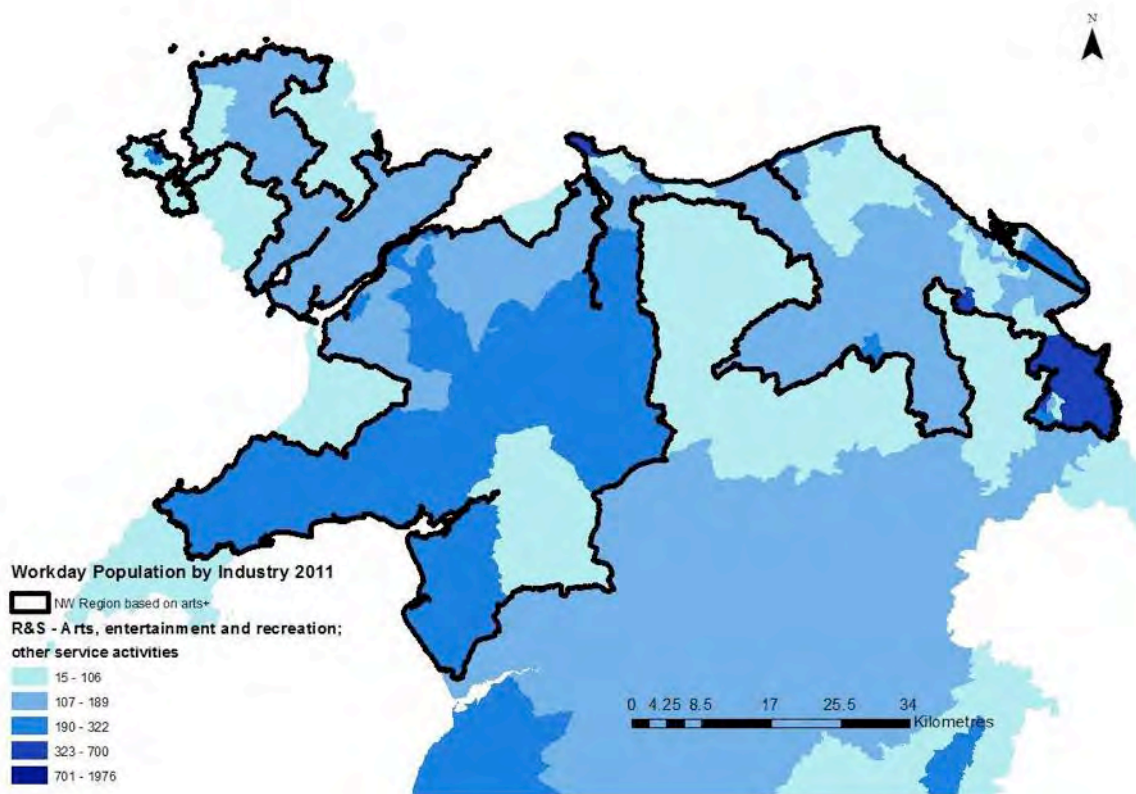
Figure 6.55: Balance





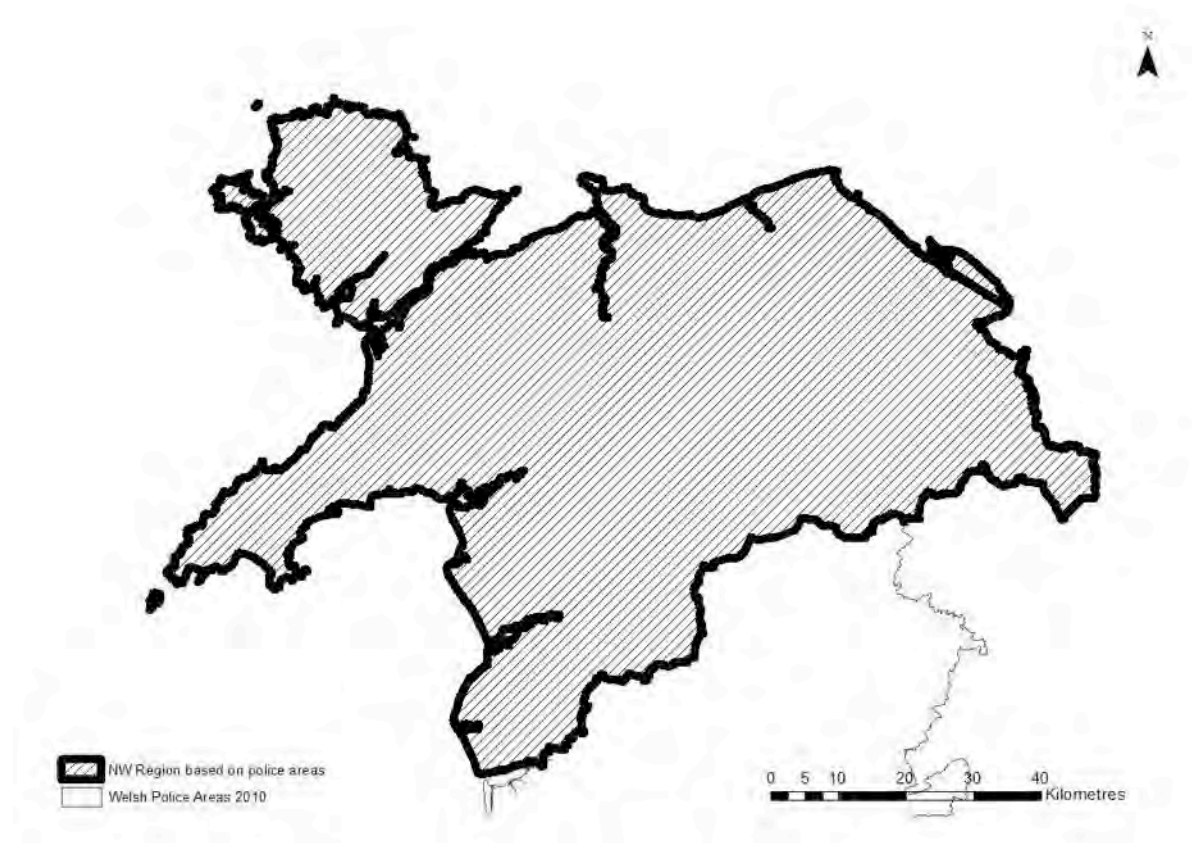
*Concentrations example.* Arts, entertainment and recreation professionals were largely concentrated in Wrexham however more broad concentrations were seen throughout the region. This led the boundary being drawn around large portions of Conwy and Gwynedd as well as parts of the Isle of Anglesey and eastward to parts of Flintshire and into Wrexham in order to maintain a fully contiguous region. Had the intention not been to maintain a contiguous region, the less concentrated parts in Flintshire and the Isle of Anglesey may not have been included.

Figure 6.56: Concentrations



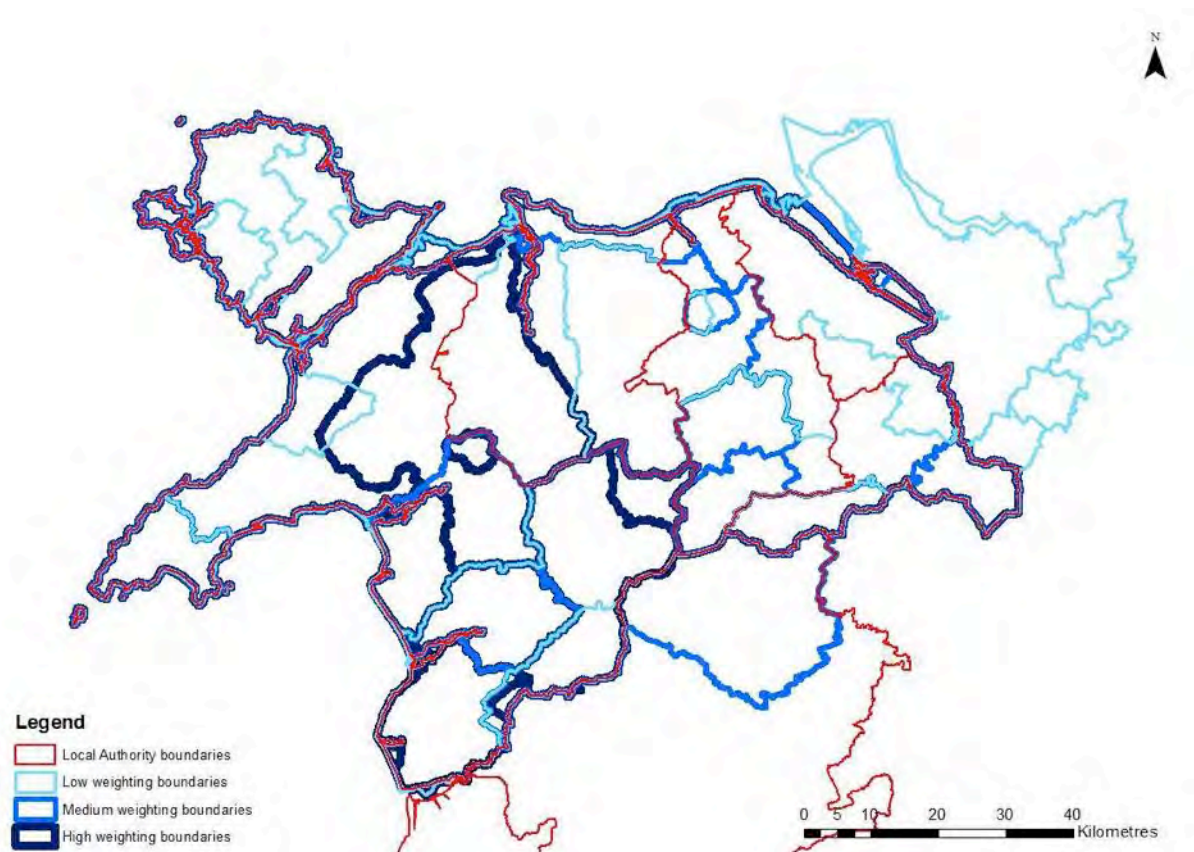
*Predefined boundaries.* A single police region covers the entirety of the region. It encompasses the Local Authorities with the major urban centres as well as more rural locations south in Gwynedd. The south-eastern boundary ends along Denbighshire and Wrexham and does not include Powys.

*Figure 6.57: Predefined boundaries*



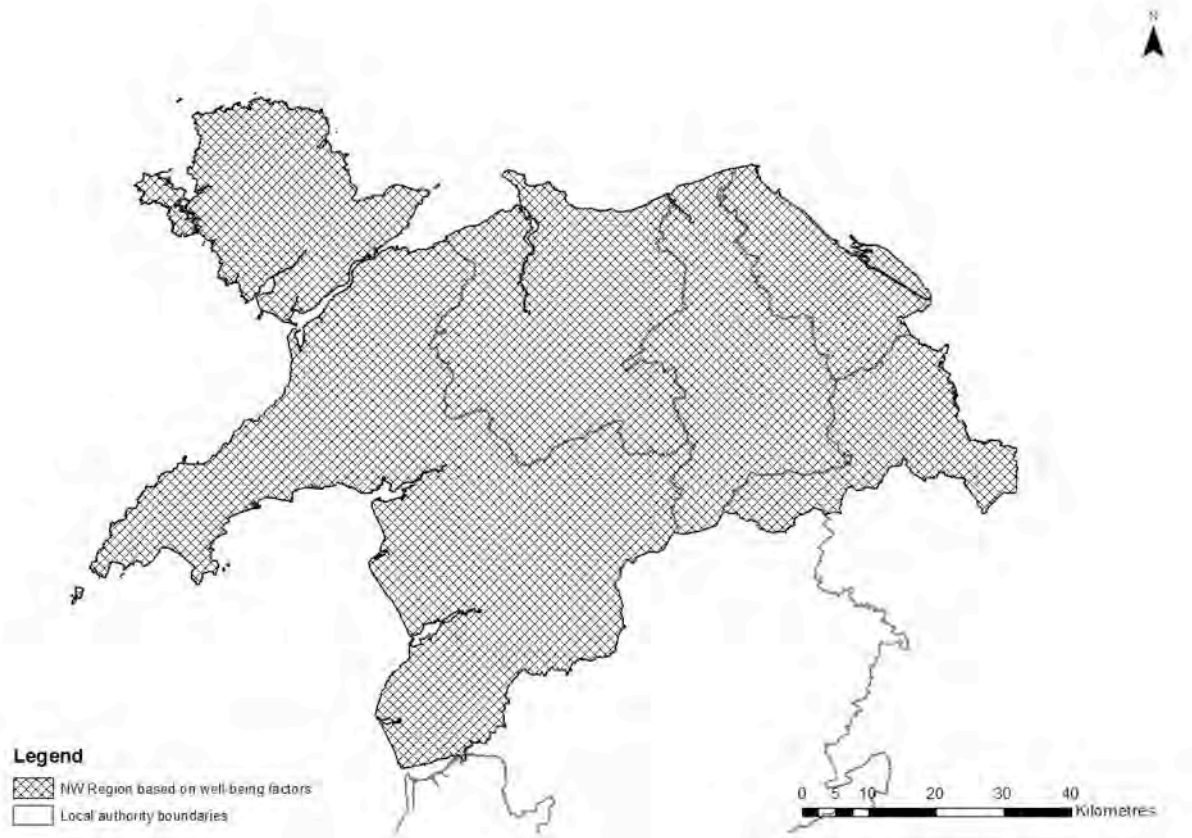
*All weighted boundaries.* Boundaries for all datasets were created and weighted as previously noted. These were then overlaid to understand the extent of the potential strategic planning area boundary. Heavily weighted boundaries largely followed the eastern edge of the Welsh border and along the coastline, apart from some contested boundaries around the more westerly edges.

*Figure 6.58: All weighted boundaries*



*Strategic planning area boundary.* Similar boundary contestations to the economic factors were visible with the well-being factors. Slightly more contested boundaries were seen around the Isle of Anglesey and the western portions of Snowdonia however. Less evidence existed for the strategic planning area boundary to include Powys in this case. The southern portion of Snowdonia was again included due to the strength of weighting suggesting the boundary being aligned with the entire unitary authority. Again strong connections to England were seen.

*Figure 6.59: Well-being strategic planning area*



## Conclusions

The provision in the Planning (Wales) Act 2015 for Welsh Ministers to designate an area in Wales as a strategic planning area raises a number of significant research questions. Not least of these relate to the means of deciding on the appropriate boundaries of the proposed strategic planning areas. In order to explore these questions this study set out to address three inter-related objectives:

- To explore the qualitative and quantitative evidence that may be drawn upon in order to construct strategic planning areas.
- Through exploration of different options, develop a method of using this evidence to generate different options for identifying a strategic planning area.
- To assess the appropriateness and usability of the methods by (a) exploring how they might be applied in the Cardiff Capital Region and (b) test the robustness and sensitivity of the outcomes of this by testing them in the Swansea Bay City Region and North Wales region.

Traditionally, the boundaries for local and strategic planning have typically been based on one of three geographies: a defined administrative unit; functional features of an area, or the physical characteristics of an area. In exploring the evidence that might be used to derive boundaries for strategic planning areas we suggest that it is important to move beyond this and to consider first the purpose(s) for which a strategic planning area is being proposed.

We also find that six concepts should be explicitly considered when developing proposals for a strategic planning area. These are often implicit in mapping exercises and should be drawn to the forefront in order to justify the approach taken. In no particular order of significance, the six concepts are:

- Positionality – the starting point for our understanding of what is initially included (or initially excluded)
- Time – the extent to which we are mapping the past or developing areas for the future
- Territory – the broad area that is under consideration
- Places – the areas that people perceive they are connected with
- Networks – the interconnections between different places
- Scale – the geographical scale at which to focus

Each of these concepts is the subject of diverse, complex and often contested academic debate. This does not ease the task of those whose responsibility it is to develop meaningful proposals for strategic planning areas. As our work demonstrates though, each of these concepts is significant in practice when determining boundaries.

In the case of positionality, the decision to focus on a key urban area, such as Swansea, or to take the area of Swansea Bay City Region as the focus can have implications for how the evidence is

assessed. This is apparent for both commuting patterns and for housing market areas, to take just two examples from our work.

In the case of time, an approach that privileges existing patterns of activity will lead to boundaries that are embedded in existing practices. An alternative approach examining potential relations might provide a different geography. Equally, when interpreting data it is useful to take into consideration how patterns change over time, and whether patterns are daily, nightly, weekly or some other temporal period.

The significance of territory is partly covered by the concept of positionality but is also demonstrated by our decision to focus on the two city-regions of Cardiff Capital Region and Swansea Bay City Region alongside the A55 corridor. This immediately begins to privilege boundaries that reflect this geography.

In the case of place, our evidence strongly suggests that there are widely varying perceptions of where people belong to and are connected to. This gives strong variations in what is defined as 'local' and how there may be different perspectives on what constitutes a greater than local approach.

The role of Networks is increasingly important in determining functional areas, particularly as people travel further for work and leisure. Our family and social connections are also now more dispersed, in general, although this is not true for all. Determining the thresholds at which network links are no longer important is a challenge. As our work demonstrates, this may vary by place but also by function – as some networks cover daily activities and other, more distant activities, occur monthly or more infrequently.

Decisions on scale can also be significant. Data drawn at different scales will give different results. Deciding that 'local' is determined at the level of a unitary authority may lead to a different outcome than if it was determined at the ward or neighbourhood level. We have elected to use MSOA data where available for reasons of granularity, but to then generalise this to the ward level in order to achieve a recognition value amongst councillors and members of the public. Similarly, decisions may need to be taken on what might be regarded as 'too far' – this is particularly important with respect to some network effects, such as retail patterns.

These six conceptual considerations, together with the identification of the underpinning objectives, underpin the initial stage of the framework for determining the potential boundaries for a proposed strategic planning area.

Stages 2 and 3 relate to the analytical structuring within which data is to be collected and the identification of potential datasets. For our structure, we have taken three broad themes as illustrative examples. Others could be chosen. We have drawn together a number of potential datasets and suggest that, in general, fewer datasets are to be preferred to many. The definitional benefits of multiple datasets are far outweighed by the additional 'noise' that these bring to the analysis. Rather than seeking to measure everything it is preferable to identify how different datasets complement each other and relate to the underpinning objectives identified for the strategic planning area, with each dataset weighted accordingly.

During stage 4 the datasets are mapped to give different alternative boundaries. Whilst this may appear to be a largely technical exercise, our work has again demonstrated the choices that have to be made in this process. Should boundaries be drawn to reflect concentrations of activity, for example, or to develop a more balanced pattern of activity? This will have significant implications for the boundaries that are drawn on the basis of the data available. Once again, the ability to justify

the choices made is an important element in the development of proposals for a strategic planning area. As data mapping progresses, there may be ambiguity about where best to draw the boundary. In these instances targeted qualitative data collection (e.g. community focus groups; interviews with business leaders; interviews with stakeholders) could help clarify where the line should be drawn. In our work we also privilege the role of the ward boundary over statistical boundaries.

Stage 5 refers to the point at which boundary choices are finalised. At this point consideration also has to be given to the influence of working practices on the final shape of the strategic planning area. Will the area have recognition-value for those who live or work within it, or have to implement it? Is the area covered efficient from an administrative perspective and what of those areas left out? This is the stage at which to decide whether boundaries should be bent inwards or pushed outwards. Choices that, again, will need a justification.

In all our work, the importance of consultation with different stakeholder groups was emphasised. This is provided for in the Planning (Wales) Act. However, what is clear from our work is the different perspectives that diverse groups provide. This varies by geography, demography and income (amongst other features). It may be that consultation will need to take into consideration a diverse range of perspectives in drawing up proposals for strategic planning areas. This is particularly significant in those areas that may form the borders of strategic planning areas.

Our qualitative work also highlighted the significance of existing administrative boundaries when developing proposals for strategic planning areas. This was particularly so for those working in public policy or practice. Whilst we acknowledge the power that these existing boundaries exert, and agree that this should be taken into consideration, we are wary of suggestions that strategic planning areas should simply default to existing unitary authority boundaries, to take one example. Doing so should be justified on the basis of administrative efficiency rather than simply existing practice.

In testing our approach against Cardiff Capital Region we demonstrate how the method might be applied. Not unexpectedly this highlights how particular objectives influence the potential boundary of a strategic planning area, with environmental or well-being objectives giving a different area to one which emphasises economic considerations. Where economic objectives are most strongly weighted the proposed strategic planning area is coterminous with the defined area of the Cardiff Capital Region. However, when environmental and well-being considerations are given a stronger weighting the geography extends to include the Brecon Beacons National Park. This illustrates the significance of identifying the reasons underlying the decision to propose a strategic planning area at the outset of the process.

We then consider our approach in the context of the Swansea Bay City Region and the A55 corridor. This acts as a sensitivity test for the proposed approach. In the case of Swansea Bay City Region, the approach provides a broadly comparable outcome. It does, though, highlight the importance of the assumed starting point for the analysis. A different geography may have been realised if the case of Swansea itself had been considered.

The neighbouring cases of Swansea Bay City Region and Cardiff Capital Region also highlight a question that this study could not adequately address. How to deal with areas that might legitimately be included in more than one strategic planning area. The case of Bridgend provided one example of this, and the Brecon Beacons a second. Some resolution to this might be provided by qualitative consultation, as was undertaken in our work for Bridgend, but this may artificially limit proposals for strategic planning areas.

The case of the A55 corridor has proven more challenging for our proposed approach. Whilst the approach can be applied, the boundaries of the proposed strategic planning area are significantly more extensive than the corridor itself. This owes much to the weight attached to existing administrative boundaries and to the role of environmental and well-being considerations. It also reflects the weighting attached to 'balance' over 'concentration' effects in the analysis of the data.

One of the conclusions to be drawn from this is that an approach that was developed for one area (Cardiff Capital Region in this instance) cannot simply be transplanted to other parts of Wales. Whilst the overall framework and method may be robust, the importance lies in how this is applied, particularly the underlying objectives and weight attached to different assumptions. The approach developed as part of this work is a model not a template. Again, this highlights the significance of the first stage of the five-step process.

Our consideration of the A55 corridor also highlighted the significance of cross-border linkages with England. This was also a feature of our analysis of the Cardiff Capital Region, but it was less significant there. As strategic planning areas are defined as areas in Wales, it not clear how these cross-border relationships can best be incorporated in any proposals. If they are to be incorporated in the analysis, this could have an impact on the centering of a proposed strategic planning area.

In conclusion, this study has highlighted the considerations that will need to be taken into account in order to propose, and justify, a strategic planning area. It has tested the proposed approach against three potential strategic planning areas in Wales and found that whilst the common method is appropriate, it is dependent on the objectives and weightings that may be applied in different contexts. In particular, the significance attached to existing administrative boundaries has an important role to play.

Our qualitative work added value to our understanding of the significance of different elements of the approach, highlighting the need to consider a range of perspectives rather than focusing on traditional stakeholder groups. This also suggested the need to carefully consider the meaning of local (and strategic) in different contexts. In applying the approach, the value is in combining quantitative data with qualitative understanding, rather than seeing them as separate exercises in a process.

Whilst for some, the drawing of a proposal for a strategic planning area with a defined boundary is simply about drawing a line on a map, we demonstrate that in doing so regard has to be given to political, social and technical criteria. Boundaries have power, symbolism and shape development patterns for long periods. Whilst proposals for strategic planning areas may reflect currently embedded geographies, they offer an opportunity to reframe the geography of strategic planning in Wales around identified long-term objectives. This offers an opportunity to move beyond existing administrative geographies if we so wish. However, in doing so we must be aware of the durability of existing working practices and ensure that the gains outweigh the costs.



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## **Annex 1: Retail study methodology**

Cardiff University

# A Methodology for Defining Retail Hierarchy and Retail Catchments

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## Introduction

- 1) This note has been prepared by Bilfinger GVA for Cardiff University's School of Planning and Geography ('the University') in relation to the University's current research project for the Welsh Government to prepare a methodology for the delineation of Strategic Planning Area ('SPA') boundaries.
  - 1.1 The University's project had three inter-related research objectives:
    - (a) Explore the qualitative and quantitative evidence that may be drawn upon in order to construct strategic planning areas.
    - (b) Through exploration of different options, develop a method of using this evidence to generate different options for identifying a strategic planning area.
    - (c) Assess the appropriateness and usability of the methods by (a) exploring how they might be applied in the Cardiff Capital Region and (b) test the robustness and sensitivity of the outcomes of this by testing them in the Swansea Bay City Region and North Wales region.
- 2) During the course of completing this research project, stakeholders have recommended to the University that the definition of retail catchments and the retail hierarchy would provide a useful contribution to the delineation of SPA boundaries. Retailing is a key part of the UK economy and provides an important influence on the performance of local and sub-regional economic areas. Indeed, not only does it provide a key source of economic productivity, but it also provides a key source of employment and has also been the traditional 'anchor' to the vitality and viability of town and city centres. As a consequence, retailing is likely, in a number of instances, to provide a key influence on the nature and extent of SPAs and therefore should be included in the boundary definition process.
- 3) As a consequence, Bilfinger GVA has been asked to prepare this note which highlights the areas in relation to retail which may be considered as part of the

boundary definition process. We suggest that the key topics for consideration are as follows:

- o Formal retail hierarchy and other retail provision – in order to understand the influence of shopping within particular sub-regions, a useful starting point will be to understand and confirm the existing retail shopping centre hierarchy in a particular area. This will require examination of existing development plan documents in the relevant local planning authority areas. In addition to the formal hierarchy, shopping patterns in most areas of Wales are also influenced by out of centre retail provision and this should be defined at an early stage of the process.
- o Scale of retail provision – once the identity and location of existing provision has been set, the next stage will be to understand the scale and type of provision.
- o Shopping patterns – one of the most important pieces of information for the delineation of SPAs will be information on shopping patterns. This will provide a valuable and instructive guide to the geographical extent of influence of key centres/facilities and can be used to define their food and non-food shopping catchments.
- o Financial information – at the start of the definition process the SPA authorities may not have decided what weight to place on retail and town centre issues when delineating SPA boundaries. Therefore, a useful exercise may be to understand the financial contribution of retailing to local economies.
- o Commitments/proposals – in addition to the examination of existing shopping patterns, it may in some instances be salient to understand whether current proposals and commitments for new retail (and related) floorspace could change the influence of retailing in certain SPAs.
- o Relationship with other key land uses – finally, given that the SPAs will be based upon a suite of different land uses and socio-economic factors, there may also be a need to consider the relationship of retailing with other land uses, in order to understand whether there are valuable combined in-direct impacts associated with retailing. These could include economic uses (i.e. workforce spending), tourism expenditure and contribution of growth in residential development.

- 4) The key tasks for the SPA boundaries, insofar as the retail to retail land uses, are outlined below.

### Defining Existing Provision and Working Towards the Definition of a Retail Hierarchy

- 5) Whilst the key focus of the retail analysis is to understand the retail shopping catchment of particular towns and cities in order to delineate the SPA boundaries, an important starting point is the clarification of existing retail provision across a city-region and to define an appropriate retail hierarchy. This exercise should gather and collate data on retail provision within existing 'town centres' and out-of-centre retail provision and will help to define the different retail catchments within the SPA.
- 6) Data on existing 'town centre' provision and other retail facilities in the wider area is generally available, via local authority retail and town centre studies and other data providers. This data is commonly used in studies which examine provision in a particular local authority area although the gap which currently exists is in relation to bringing this information together to form a wider sub-regional or city-region hierarchy.
- 7) Therefore, as a starting point, the existing local authority retail hierarchies should be brought together in an assessment which seeks to merge them into one single hierarchy. Many hierarchies will have a common format, comprising city, town, district and local centres, although there is a need to consider the relative performance and influence of each centre in order to define the wider hierarchy. Whilst the shopping pattern survey data will help to define the scope of influence of each major centre, the starting point should be to confirm the scale of each centre and its comparative ranking. Data on both of these factors may well be available from local authority retail and town centre studies and these should be the first port of call. However, the data may not be consistent and may differ in age and therefore we recommend that the following data sources are interrogated:
  - o Floorspace. Experian provide comprehensive data for most town and city centres in Wales and will be able to provide data on the total number of retail units and floorspace levels in each relevant centre.

- o City / Town centre rankings. A number of different companies, such as the Javelin Group (Venuescore), provide rankings of town and city centres across the UK, including Wales. Rankings are provided based upon a basket of different indicators and this data can help to influence the retail hierarchy based upon the presence of different types of retailers in town and city centres.
- 8) Alongside this information on town and city centres, a similar exercise should be undertaken for retail floorspace outside of the existing defined retail hierarchy. Over a number of years, out of centre retail floorspace has become increasingly important to food and non-food shopping patterns and, as a consequence, will have an importance influence on retail catchment areas. The definition process should seek to clarify the scale and type of out-of-centre provision in terms of supermarkets and shopping/retail warehouse parks and useful sources of information for this exercise will be local authority retail studies, Experian and the Trevor Wood database of retail warehouse provision.
  - 9) In addition to the examination of existing provision, this process should be extended to include committed retail floorspace within and surrounding the likely SPA area. Committed retail floorspace has the potential to influence and change existing shopping patterns and therefore should be recorded at this part of the definition process.
  - 10) Once the data has been collected, it should be mapped in order to show the distribution of defined centres and other retail provision. This process could usefully include a pictorial system for indicating the scale of existing and committed provision which will enable an easy to read visual guide to be provided which identifies key centres/facilities and also potential gaps in provision in relation to existing and local communities.
  - 11) In order to set a hierarchy of centres, the information on the scale, distribution and ranking of floorspace will need to be considered alongside the role and function of centres and other retail provision. This will require examination of the catchment areas of existing facilities and their market share, which is discussed in the next section of this note.
  - 12) An example of a retail hierarchy assessment is contained at Appendix A to this note.

## Defining Retail Catchments and the Contribution of Retailing to SPAs

### Retail Catchments

- 13) The key area of data which is relevant to the definition of SPA boundaries is information on shopping patterns. This information can explain the catchment areas and areas of influence for key in-centre and out-of-centre retail facilities for both food and non-food shopping. It will show the distances that existing residents are currently prepared to travel to visit shopping facilities and this in turn will explain the area of influence of particular settlements. This data can then be used alongside information for other land uses to define SPA boundaries.
- 14) Data on shopping patterns is already commonly collected by local planning authorities and developers/retailers in order to inform the development plan-making process and planning applications. Therefore, a useful starting point will be to undertake research to establish the level and quality of existing evidence base information. The first port of call should be development plan evidence base studies as these are most likely to offer the best quality information on shopping patterns. The studies themselves will be available via local planning authority web-sites and will provide either a summary of the shopping patterns data collected for the study or a copy of the raw survey data results. Obtaining a copy of the raw survey results will be required if the shopping catchment assessment is to be based on the best quality information. As a second stage, discussions should take place with local authority officers to understand whether there is any further available survey information, which may have been commissioned by developers and retailers in support of planning applications for retail development.
- 15) Shopping patterns survey information usually comes in two forms: a telephone survey of household shopping patterns and in-street surveys which interview visitors to particular town, city, district and local centres. The household survey information provides the most valuable contribution to the definition of catchment areas as it surveys local residents, with the questioning targeted to cover a specific sample of residents in a particular geographic area. In this way, a robust sample of local shopping patterns can be obtained, helping to build up the shopping profile of a particular area (broken down into sub-groups where necessary). By way of example, the household survey area, including the constituent sub-zones, for the Neath Port

Talbot Retail Study is contained at Appendix B to this note. Appendix C contains an extract from the NPT household survey results.

- 16) Other information on shopping patterns is also available, via research organisations who utilise socio-economic data although this tends to provide a lower level of detail than bespoke household surveys. Specifically-commissioned surveys of household shopping patterns (supported by in-street surveys) should always be preferred.
- 17) The most valuable household survey data is that which breaks survey areas down into separate sub-zones. An example of this is the NPT household survey area shown at Appendix B, which provides separate data for different parts of the NPT administrative area – i.e. separate data for Neath and separate data for Port Talbot. This format of data can then be used to ‘build up’ the primary, secondary and tertiary catchments of a particular centre. An example of this is shown at Appendix D, which contains catchment area plans from the Wiltshire Retail Study which show the shopping catchments of the main settlements in Wiltshire (and the surrounding area) in terms of different types of shopping. As can be seen, the catchment areas are based upon the market share of a particular store or centre within the study area. This market share data will be available from the household survey results.
- 18) In order to supplement household survey data, a number of local authority retail studies also commission in-street surveys. These surveys interview visitors to a particular town, city, district or local centre, asking a basket of standard questions regarding shopping behaviour and attitudes towards specific centres and shopping destinations. Whilst respondents to these surveys may reside in the same area as covered by the household survey, the value of an in-street survey is to obtain data from visitors who may live further afield outside of the household survey area. For example, the in-street survey data can show the proportion of visitors to a particular ‘town centre’ who may live outside of a local authority’s administrative area and/or the natural primary shopping catchment of the centre (i.e. tourists).
- 19) If undertaken correctly, household surveys will cover the majority of the catchment of a particular centre, rather than be limited to local authority administrative areas. In this way, a single survey can be used to assess the retail capacity and catchment of a particular settlement, town centre or local authority area. However, given that such studies tend to concentrate upon a particular local authority area rather than a



city-region, their shopping patterns data may not provide sufficient information to understand the wider shopping patterns associated with a city region and/or the overlapping catchments of key settlements. As a consequence, unless a new survey is to be commissioned (see below), research undertaken for the SPA may need to examine multiple retail studies and household survey data. Such a process will require the research to piece together the survey information to understand the wider shopping catchment areas.

- 20) Whilst it is eminently sensible to examine existing evidence base data as a first step towards the defining of shopping catchments, there are some potential limitations associated with the use of existing surveys. First, the surveys have to exist in the first place and there may be some limited instances where such data does not exist (because a local authority has felt no need to undertake a retail study and/or there is no suitable planning application material). Second, the available data may be a number of years old and may not be reflection of current shopping patterns because (A) there may have been the effects of natural changes in shopping patterns – i.e. the increasing influence of internet shopping and (B) changes in retail provision in a local area which may have had an influence on local shopping patterns. Third, there may be instances where it is difficult to piece together the available survey data because of the geographies used in the surveys<sup>1</sup> and the questions asked<sup>2</sup>.
- 21) In such instances, whilst the available survey data may well provide a starting point, there may be a need to commission new survey data on the basis that (A) part of the area to be considered for the SPA possesses sub-standard shopping patterns data and/or (B) there is a need for a new comprehensive survey which obtains new bespoke and up-to-date information across the whole of the city-region area. Such a course of action has the potential to provide the best quality data for the definition of the SPA area as it will be: up-to-date, based upon a bespoke single survey area design to encompass the full extent of the city-region's zone of influence and incorporate questions on shopping patterns and related activities which are relevant to the SPA area. However, the costs associated with the gathering of such data are significant, which is a factor which those undertaking the research will need to investigate and estimate prior to making the decision on the source of data to be used to establish the SPA boundary.

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<sup>1</sup> For example, one survey may use postcode sector geography and another may use local authority ward boundaries. Alternatively, both surveys may use the same geography (i.e. postcode sectors), but some of the zones overlap leading to the double-counting of certain areas.

<sup>2</sup> Whilst all retail studies should try and obtain data on food and non-food shopping patterns, there may be instances where data on certain types of goods is missing.

- 22) If a new survey is to be undertaken then we would recommend that the following data is gathered:
- Main and top-up food shopping patterns
  - Individual types of comparison goods shopping
  - Linkages between food shopping and other shopping and leisure trips
  - Linkages between non-food shopping and other shopping and leisure trips
  - Leisure usage patterns (including cinema, food & drink, galleries, theatre etc)
  - Frequency of visits to centres, mode of travel and spending profiles
- 23) Whichever route is followed in terms of the source of the shopping patterns data, it is recommended that the data is presented via a series of catchment areas (for different types of shopping and centres) as this provides the most accessible method of defining and explaining retail catchments. The plans contained at Appendix D to this note give an example of the presentation methods, including the ability to show the extent of primary and secondary catchment areas in relation to existing retail centres and their competitors. We consider that catchment area plans should be provided for both food and non-food shopping trips, although it is likely that the wider catchment of the larger settlements in Wales, such as Cardiff and Swansea, will be based upon non-food goods shopping. In addition, it would also be helpful for the catchment plans to show the zones of influence of the major competitors to the key centres, in order to establish the outer boundary of the catchment (i.e. catchment plans showing the core catchments of different key retail centres and the areas where they may overlap).
- 24) In order to prepare the catchment plans, the statistical information contained within the household survey data will need to be interrogated and which can then be used to explain in more detail the market penetration of key retail centres, including their market share for different types of shopping. For example, within the overall catchment which defines the non-food retail catchment of a key centre, the accompanying statistical information can explain which categories of non-food goods are particularly important to the nature and extent of the catchment.
- 25) The statistical information will help to define the primary, secondary and (where applicable) tertiary catchments for each centre. There will not be a set threshold for the definition of these types of catchment for each centre as the characteristics of

each centre will be different in terms of its retail shopping function. However, it is likely that the primary catchment for each centre will be influenced by the area which contributes the most amounts of expenditure for food and non-food shopping (see next section for further information). This will need to be determined on a zone-by-zone basis for food and non-food goods shopping and clearly justified in each instance. Once a primary catchment area has been set, then the definition of secondary and (where applicable) tertiary catchments can follow, based upon the relative characteristics of the remaining parts of the catchment.

- 26) Once completed, the catchment plans (and accompanying statistical information, supported by the retail hierarchy plans/information which will have been prepared at the start of this exercise) will show the area of influence of existing retail facilities within a city-region area. These catchment areas can then be used alongside the information on other land uses and other socio-economic factors to determine SPA boundaries and an interesting part of this process will be to examine whether the retail catchments have any geographical relationship with other factors such as housing market areas and travel to work areas.

#### *Financial Performance*

- 27) As outlined in the previous section, the calculation of retail expenditure levels flowing to a particular centre or settlement are important in the definition of primary and secondary catchment areas. In addition, the calculation of financial performance is also important in assessing the contribution of the retail sector to the local economy in a particular city-region.
- 28) In the same way that survey information may well be available via local authority retail studies then the financial performance of centres/settlements may also be available. The two datasets are likely to go hand-in-hand and a decision to adopt the survey evidence from a particular study will also mean that it can also form the basis for financial performance calculations. Likewise, a decision not to use a particular set of survey data will mean that it is unlikely to be appropriate for the calculation of store/centre/settlement turnover levels.
- 29) On the basis that existing survey data can be used to define catchment areas, the starting point for turnover/financial performance data will be to use the calculations within the corresponding local authority retail study. However, it should be noted that the calculations performance in these studies are a 'point in time' and retail

expenditure levels may have changed since the completion of the study. Whilst this is unlikely to significantly alter the proportions of expenditure drawn from different parts of the catchment area, the assessment may need to be updated (with new population and per capita retail expenditure data) should the SPA assessment require an up-to-date assessment of the retail turnover of a particular centre or settlement.

#### *The wider or indirect benefits of retailing*

- 30) One further aspect to consider whether analysing the retail catchment of a particular town, city or city-region is whether the retail sector is able to offer wider benefits to the local area. For example, through spin-off benefits to other parts of a town or city centre, or via increased expenditure from the day-time workforce, or through the attraction of a large amount of visitors and tourists. This information may be available via the household and in-street survey data compiled for a particular retail study although there is no formal planning policy requirement for the gathering of such data for development plans. Therefore the availability of this type of data may be inconsistent and those SPAs seeking robust data on this aspect may need to commission new survey data.
- 31) A combination of household and in-street survey data is likely to be useful in this regard and the collection of data on: purpose of visits to town/city centres (i.e. single or multi-purpose trips), length of stay, spending per visit and attitudes towards the centre will be particularly important.

#### Other Uses for this Methodology

- 32) Whilst the focus of this note has been on retailing and the contribution that retail uses can make towards the influence of city-regions, the recommended methodology can also be applied to other similar 'main town centre uses' such as leisure uses. Given the existence of many public and commercial leisure uses in town centres, along with the promotion of such uses in centres by national planning policy, it is entirely possible that the analysis and collection of survey data in local authority retail studies will also be able to provide valuable data on the contribution of leisure to the performance and influence of city-regions. Therefore, from the outset of the delineation exercise, it is possible to decide whether to incorporate the 'leisure'

category and we would recommend that this is actively considered given the growing influence of leisure as a key attractor to town and city centres.

GVA

18.09.15

Appendix A  
Example of Retail Hierarchy Definition Process

# RETAIL HIERARCHY ASSESSMENT

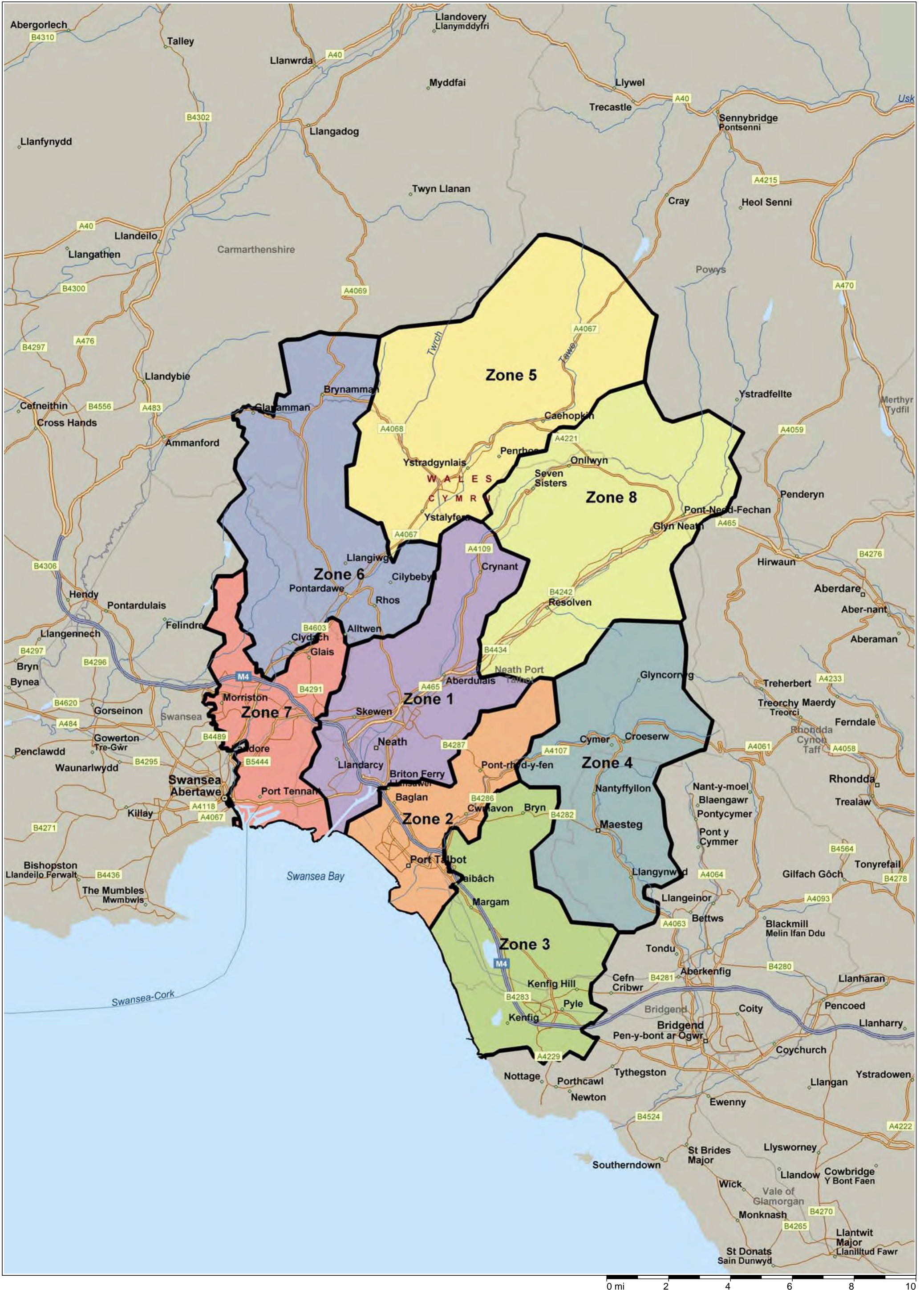
SETTLEMENT	TOWN CENTRE UNITS					FLOORSPACE (sq ft)							TURNOVER (£m)			RANKING	MARKET SHARE (%)		
	FOOD	NON-FOOD	SERVICE	VACANT	TOTAL	TOWN CENTRE				TOTAL	OUT OF CENTRE		FOOD	NON-FOOD	TOTAL		FOOD	NON-FOOD	
						FOOD	NON-FOOD	SERVICE	VACANT		SUPERMARKETS	RETAIL WAREHOUSES							
Salisbury	29	226	148	45	448	103,300	502,800	235,900	60,800	902,800	117,042	416,929	2,339,571	£168.0	£389.0	£557.0	88	6.7%	10.1%
Trowbridge	21	102	87	53	263	163,200	267,500	106,600	90,700	628,000	148,520	268,596	1,673,116	£125.7	£196.9	£322.6	329	5.0%	5.1%
Chippenham	14	117	92	28	251	71,400	306,600	127,200	33,800	539,000	131,686	179,280	1,388,966	£159.6	£208.5	£368.1	367	6.4%	5.4%
Amesbury	5	30	32	11	78	28,400	37,400	38,100	31,500	135,400	42,797	24,964	338,561	£43.6	£23.9	£67.5	2775	1.7%	0.6%
Bradford on Avon	10	36	29	13	88	17,800	32,100	26,000	10,100	86,000	23,530	0	195,530	£22.5	£4.2	£26.7	n/a	0.9%	0.1%
Calne	8	30	37	14	89	58,300	40,100	50,900	20,100	169,400	19,935	0	358,735	£52.9	£7.4	£60.3	2306	2.1%	0.2%
Corsham	8	36	31	3	78	13,500	50,100	41,400	4,600	109,600	0	0	219,200	£11.4	£6.9	£18.3	n/a	0.5%	0.2%
Devizes	17	111	71	19	218	92,400	152,200	88,500	23,100	356,200	18,019	21,889	752,308	£62.1	£40.5	£102.6	422	2.5%	1.1%
Malmesbury	6	36	26	17	85	6,700	44,700	27,400	17,800	96,600	23,907	0	217,107	£19.4	£8.0	£27.4	2146	0.8%	0.2%
Marlborough	11	86	50	13	160	38,300	110,900	58,900	12,600	220,700	11,625	0	453,025	£36.8	£23.6	£60.4	569	1.5%	0.6%
Melksham	11	51	51	17	130	58,600	101,300	64,700	20,900	245,500	51,452	0	542,452	£49.5	£27.5	£77.0	768	2.0%	0.7%
Tidworth*	8	14	21	10	53	42390^	5700^	n/a	n/a	n/a	0	0	0	£18.9	£0.9	£19.8	2010	0.8%	0.0%
Warminster	12	81	68	26	187	73,400	154,600	92,100	68,900	389,000	12,346	49,235	839,581	£48.9	£39.3	£88.2	494	2.0%	1.0%
Westbury	8	34	37	12	91	19,900	47,900	39,000	14,300	121,100	21,420	0	263,620	£19.4	£6.7	£26.1	2146	0.8%	0.2%
Wootton Bassett	12	46	43	7	108	41,700	51,800	44,500	6,000	144,000	0	0	288,000	£10.0	£4.6	£14.6	1096	0.4%	0.1%
Cricklade*	5	10	18	1	34	3,000	3,430	n/a	n/a	n/a	0	0	6,430	£3.9	£0.8	£4.7	n/a	0.2%	0.0%
Downton*	3	6	10	1	20	4,560	1,938	n/a	n/a	n/a	0	0	6,498	n/a	n/a	n/a	n/a	n/a	n/a
Ludgershall*	5	4	17	4	30	8,040	1,040	n/a	n/a	n/a	0	0	9,080	£5.9	n/a	£5.9	n/a	0.2%	n/a
Mere*	3	8	16	3	30	2,500	5,282	n/a	n/a	n/a	0	0	7,782	n/a	n/a	n/a	n/a	n/a	n/a
Pewsey*	6	19	23	5	53	12,620	10,230	n/a	n/a	n/a	0	0	22,850	n/a	n/a	n/a	n/a	n/a	n/a
Market Lavington*	3	0	7	0	10	n/a	n/a	n/a	n/a	n/a	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a
Tisbury*	4	12	8	2	26	2,900	4,230	n/a	n/a	n/a	0	0	7,130	n/a	n/a	n/a	n/a	n/a	n/a
Wilton*	6	21	15	3	45	2,246	8,574	n/a	n/a	n/a	0	0	10,820	n/a	n/a	n/a	n/a	n/a	n/a

Notes: town centre unit and floorspace data provided by Experian GOAD, unless indicated by a \* when data is provided by Wiltshire Council.  
out of centre floorspace data, turnover and market share data taken from GVA Wiltshire Retail Study Review.  
Centre rankings data provided by VenueScore (2014)  
^ incomplete data

Appendix B  
Example of Retail Study and Shopping Patterns Survey Area (Neath  
Port Talbot)



# Survey Zones



## Appendix C

### Extract from Neath Port Talbot Shopping Patterns Survey

**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone											
	Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area		5 – Ystradgynlais / Ystalyfera	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Base: All respondents	800	100.0%	100	100.0%	100	100.0%	100	100.0%	100	100.0%	100	100.0%
Aldi, Maesteg	15	1.9%	0	.0%	0	.0%	1	1.0%	14	14.0%	0	.0%
Aldi, Neath Road, Swansea	3	.4%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
Asda, Coychurch Road, Bridgend	5	.6%	0	.0%	0	.0%	4	4.0%	1	1.0%	0	.0%
Asda, Llanelli	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Asda, Swansea	54	6.8%	3	3.0%	5	5.0%	1	1.0%	0	.0%	8	8.0%
Asda, Colliers Way, Bridgend	7	.9%	0	.0%	0	.0%	5	5.0%	2	2.0%	0	.0%
Asda, Gorseinon	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Asda, Aberdare	3	.4%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Asda, Morriston	23	2.9%	3	3.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Co-op, Pyle	11	1.4%	0	.0%	0	.0%	11	11.0%	0	.0%	0	.0%
Co-op, Glynneath	7	.9%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Co-op, Ystradgynlais	21	2.6%	0	.0%	0	.0%	0	.0%	0	.0%	19	19.0%
Co-op, Pontycymmer	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Costcutters, Glynneath	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Farmfoods, Bridgend	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Filco, Taibach, Port Talbot	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
Iceland, Neath	2	.3%	1	1.0%	0	.0%	0	.0%	0	.0%	0	.0%
Iceland, Aberfan Centre, Port Talbot	1	.1%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
Iceland, Aberdare	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Iceland, Bridgend	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
Iceland, Maesteg	2	.3%	0	.0%	0	.0%	0	.0%	2	2.0%	0	.0%
Iceland, Morriston	4	.5%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone					
	6 – Pontardawe / Gwaun-Cae-Gurwen		7 – Swansea East		8 – Glynneath / Seven Sisters	
	Num	%	Num	%	Num	%
Base: All respondents	100	100.0%	100	100.0%	100	100.0%
Aldi, Maesteg	0	.0%	0	.0%	0	.0%
Aldi, Neath Road, Swansea	0	.0%	2	2.0%	0	.0%
Asda, Coychurch Road, Bridgend	0	.0%	0	.0%	0	.0%
Asda, Llanelli	0	.0%	0	.0%	1	1.0%
Asda, Swansea	14	14.0%	20	20.0%	3	3.0%
Asda, Colliers Way, Bridgend	0	.0%	0	.0%	0	.0%
Asda, Gorseinon	0	.0%	2	2.0%	0	.0%
Asda, Aberdare	0	.0%	0	.0%	3	3.0%
Asda, Morriston	4	4.0%	14	14.0%	1	1.0%
Co-op, Pyle	0	.0%	0	.0%	0	.0%
Co-op, Glynneath	0	.0%	0	.0%	7	7.0%
Co-op, Ystradgynlais	0	.0%	0	.0%	2	2.0%
Co-op, Pontycymmer	1	1.0%	0	.0%	0	.0%
Costcutters, Glynneath	0	.0%	0	.0%	2	2.0%
Farmfoods, Bridgend	1	1.0%	0	.0%	0	.0%
Filco, Taibach, Port Talbot	0	.0%	0	.0%	0	.0%
Iceland, Neath	0	.0%	0	.0%	1	1.0%
Iceland, Aberfan Centre, Port Talbot	0	.0%	0	.0%	0	.0%
Iceland, Aberdare	0	.0%	0	.0%	1	1.0%
Iceland, Bridgend	0	.0%	0	.0%	0	.0%
Iceland, Maesteg	0	.0%	0	.0%	0	.0%
Iceland, Morriston	1	1.0%	3	3.0%	0	.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone											
	Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area		5 – Ystradgynlais / Ystalyfera	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Lidl, Melyn Parc / Castle Park, Neath	6	.8%	4	4.0%	0	.0%	0	.0%	0	.0%	0	.0%
Lidl, Vale of Neath Retail Park, Neath	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Lidl, Pontardawe	8	1.0%	0	.0%	0	.0%	0	.0%	0	.0%	4	4.0%
Lidl, Baglan Bay Retail Park, Port Talbot	1	.1%	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
Lidl, Trallwn, Swansea	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Marks & Spencer, Fforestfach, Swansea	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Marks & Spencer, Swansea	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Marks & Spencer, Neath	2	.3%	1	1.0%	0	.0%	0	.0%	0	.0%	0	.0%
Morrisons, Neath	41	5.1%	18	18.0%	1	1.0%	0	.0%	0	.0%	1	1.0%
Morrisons, Baglan Moor, Port Talbot	53	6.6%	4	4.0%	36	36.0%	9	9.0%	1	1.0%	0	.0%
Morrisons, Pemberton Retail Park, Trostre, Llanelli	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Morrisons, Morfa Shopping Centre, Swansea	23	2.9%	4	4.0%	0	.0%	0	.0%	0	.0%	3	3.0%
Sainsbury's, Swansea	13	1.6%	2	2.0%	3	3.0%	0	.0%	0	.0%	0	.0%
Sainsbury's, Bridgend	13	1.6%	0	.0%	0	.0%	3	3.0%	10	10.0%	0	.0%
Somerfield, Porthcawl	1	.1%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
Somerfield, Main Road, Bridgend	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Tesco, Neath Abbey Road, Neath	58	7.2%	34	34.0%	1	1.0%	0	.0%	0	.0%	0	.0%
Tesco Metro, Water Street, Neath	6	.8%	4	4.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Tesco, Aberdare	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Tesco, Brewery Lane, Bridgend	2	.3%	0	.0%	0	.0%	0	.0%	2	2.0%	0	.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone					
	6 – Pontardawe / Gwaun-Cae-Gurwen		7 – Swansea East		8 – Glynneath / Seven Sisters	
	Num	%	Num	%	Num	%
Lidl, Melyn Parc / Castle Park, Neath	0	.0%	0	.0%	2	2.0%
Lidl, Vale of Neath Retail Park, Neath	0	.0%	0	.0%	2	2.0%
Lidl, Pontardawe	4	4.0%	0	.0%	0	.0%
Lidl, Baglan Bay Retail Park, Port Talbot	0	.0%	0	.0%	0	.0%
Lidl, Trallwn, Swansea	0	.0%	2	2.0%	0	.0%
Marks & Spencer, Fforestfach, Swansea	1	1.0%	0	.0%	0	.0%
Marks & Spencer, Swansea	0	.0%	2	2.0%	0	.0%
Marks & Spencer, Neath	0	.0%	0	.0%	1	1.0%
Morrisons, Neath	2	2.0%	1	1.0%	18	18.0%
Morrisons, Baglan Moor, Port Talbot	0	.0%	1	1.0%	2	2.0%
Morrisons, Pemberton Retail Park, Trostre, Llanelli	0	.0%	0	.0%	0	.0%
Morrisons, Morfa Shopping Centre, Swansea	2	2.0%	13	13.0%	1	1.0%
Sainsbury's, Swansea	0	.0%	8	8.0%	0	.0%
Sainsbury's, Bridgend	0	.0%	0	.0%	0	.0%
Somerfield, Porthcawl	0	.0%	0	.0%	0	.0%
Somerfield, Main Road, Bridgend	0	.0%	0	.0%	0	.0%
Tesco, Neath Abbey Road, Neath	1	1.0%	0	.0%	22	22.0%
Tesco Metro, Water Street, Neath	0	.0%	0	.0%	1	1.0%
Tesco, Aberdare	0	.0%	0	.0%	1	1.0%
Tesco, Brewery Lane, Bridgend	0	.0%	0	.0%	0	.0%

(c...

**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone											
	Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area		5 – Ystradgynlais / Ystalyfera	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Tesco, Ammanford	14	1.8%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Tesco, Bridgend	18	2.3%	0	.0%	1	1.0%	13	13.0%	4	4.0%	0	.0%
Tesco, Llanelli	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Tesco, Pontardawe	45	5.6%	0	.0%	0	.0%	0	.0%	0	.0%	10	10.0%
Tesco, Prior Street, Port Talbot	65	8.1%	2	2.0%	33	33.0%	24	24.0%	6	6.0%	0	.0%
Tesco, Swansea Marina, Swansea	10	1.3%	1	1.0%	0	.0%	0	.0%	0	.0%	0	.0%
Tesco Extra, Fforestfach, Swansea	8	1.0%	0	.0%	1	1.0%	0	.0%	1	1.0%	0	.0%
Tesco Extra, Llansamlet, Swansea	38	4.8%	5	5.0%	4	4.0%	1	1.0%	2	2.0%	5	5.0%
Tesco, Maesteg	44	5.5%	0	.0%	1	1.0%	1	1.0%	41	41.0%	0	.0%
Tesco Extra, Bridgend	5	.6%	0	.0%	0	.0%	4	4.0%	1	1.0%	0	.0%
Tesco Express, Waunceirch, Neath Abbey	21	2.6%	10	10.0%	0	.0%	0	.0%	0	.0%	1	1.0%
Tesco Express, Glynneath	3	.4%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Tesco, Talbot Green Retail Park, Llantrisant	1	.1%	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
Welcome, Pontardawe	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Internet / home delivery	21	2.6%	2	2.0%	1	1.0%	5	5.0%	1	1.0%	3	3.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

	Zone					
	6 – Pontardawe / Gwaun-Cae-Gurwen		7 – Swansea East		8 – Glynneath / Seven Sisters	
	Num	%	Num	%	Num	%
Tesco, Ammanford	13	13.0%	0	.0%	0	.0%
Tesco, Bridgend	0	.0%	0	.0%	0	.0%
Tesco, Llanelli	1	1.0%	0	.0%	0	.0%
Tesco, Pontardawe	32	32.0%	2	2.0%	1	1.0%
Tesco, Prior Street, Port Talbot	0	.0%	0	.0%	0	.0%
Tesco, Swansea Marina, Swansea	1	1.0%	8	8.0%	0	.0%
Tesco Extra, Fforestfach, Swansea	2	2.0%	4	4.0%	0	.0%
Tesco Extra, Llansamlet, Swansea	3	3.0%	17	17.0%	1	1.0%
Tesco, Maesteg	0	.0%	0	.0%	1	1.0%
Tesco Extra, Bridgend	0	.0%	0	.0%	0	.0%
Tesco Express, Waunceirch, Neath Abbey	1	1.0%	0	.0%	9	9.0%
Tesco Express, Glynneath	0	.0%	0	.0%	3	3.0%
Tesco, Talbot Green Retail Park, Llantrisant	0	.0%	0	.0%	0	.0%
Welcome, Pontardawe	1	1.0%	0	.0%	0	.0%
Internet / home delivery	4	4.0%	1	1.0%	4	4.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

		Zone											
		Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area		5 – Ystradgynlais / Ystalyfera	
		Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Other	Aldi, Merthyr Tydfil	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Aldi, Brackla Street, Bridgend	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
	Aldi, Commercial Road, Taibach	23	2.9%	0	.0%	10	10.0%	11	11.0%	1	1.0%	0	.0%
	Asda, Capital Retail Park, Leckwith Road, Cardiff	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
	Asda, Castle Street, Maesteg	3	.4%	0	.0%	0	.0%	0	.0%	3	3.0%	0	.0%
	Asda, Merthyr Tydfil	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Co-op, College Street, Ammanford	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Co-op, Cwm Twrch	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
	Co-op, Jubilee Road, Cwamavon	1	.1%	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
	Co-op, Lowercolumywrch	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
	Co-op, Blanedwynfi	1	.1%	1	1.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Co-op, College Street, Ammanford	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Co-op, High Street, Clydach	3	.4%	1	1.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Co-op, Kenfighill, Bridgend	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
	Costcutter, High Street, Neath	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Iceland, Barry	1	.1%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%	

(c...

**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

		Zone					
		6 – Pontardawe / Gwaun-Cae-Gurwen		7 – Swansea East		8 – Glynneath / Seven Sisters	
		Num	%	Num	%	Num	%
Other	Aldi, Merthyr Tydfil	0	.0%	0	.0%	1	1.0%
	Aldi, Brackla Street, Bridgend	0	.0%	0	.0%	0	.0%
	Aldi, Commercial Road, Taibach	1	1.0%	0	.0%	0	.0%
	Asda, Capital Retail Park, Leckwith Road, Cardiff	0	.0%	0	.0%	0	.0%
	Asda, Castle Street, Maesteg	0	.0%	0	.0%	0	.0%
	Asda, Merthyr Tydfil	0	.0%	0	.0%	1	1.0%
	Co-op, College Street, Ammanford	1	1.0%	0	.0%	0	.0%
	Co-op, Cwm Twrch	0	.0%	0	.0%	0	.0%
	Co-op, Jubilee Road, Cwamavon	0	.0%	0	.0%	0	.0%
	Co-op, Lowercolumywrch	0	.0%	0	.0%	0	.0%
	Co-op, Blanedwynfi	0	.0%	0	.0%	0	.0%
	Co-op, College Street, Ammanford	1	1.0%	0	.0%	0	.0%
	Co-op, High Street, Clydach	2	2.0%	0	.0%	0	.0%
	Co-op, Kenfighill, Bridgend	0	.0%	0	.0%	0	.0%
	Costcutter, High Street, Neath	0	.0%	0	.0%	1	1.0%
	Iceland, Barry	0	.0%	0	.0%	0	.0%

(c...

**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

		Zone											
		Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area		5 – Ystradgynlais / Ystalyfera	
		Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Other	Iceland, Quay Street, Ammanford	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Lidl, Foundry Road, Ammanford	3	.4%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
	Lidl, Maesteg Road (Tondu), Bridgend	3	.4%	0	.0%	0	.0%	0	.0%	3	3.0%	0	.0%
	Morrisons, Free Street, Brecon	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
	Sainsbury's, Colchester Avenue, Penylan, Cardiff	1	.1%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
	Spar, Bridge Street, Bridgend	1	.1%	0	.0%	0	.0%	1	1.0%	0	.0%	0	.0%
	Tesco Extra, Beacons Place, Victoria Street, Merthyr Tydfil	1	.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Tesco, Wind Road, Ystradgynlais	47	5.9%	0	.0%	0	.0%	0	.0%	0	.0%	38	38.0%

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**Q1. In which shop or shopping centre do you do most of your household's main food shopping?**

		Zone					
		6 – Pontardawe / Gwaun-Cae-Gurwen		7 – Swansea East		8 – Glynneath / Seven Sisters	
		Num	%	Num	%	Num	%
Other	Iceland, Quay Street, Ammanford	1	1.0%	0	.0%	0	.0%
	Lidl, Foundry Road, Ammanford	2	2.0%	0	.0%	0	.0%
	Lidl, Maesteg Road (Tondu), Bridgend	0	.0%	0	.0%	0	.0%
	Morrisons, Free Street, Brecon	0	.0%	0	.0%	0	.0%
	Sainsbury's, Colchester Avenue, Penylan, Cardiff	0	.0%	0	.0%	0	.0%
	Spar, Bridge Street, Bridgend	0	.0%	0	.0%	0	.0%
	Tesco Extra, Beacons Place, Victoria Street, Merthyr Tydfil	0	.0%	0	.0%	1	1.0%
	Tesco, Wind Road, Ystradgynlais	3	3.0%	0	.0%	6	6.0%

**Q2. How often do you visit Q1 for your main food and grocery shopping?**

	Zone									
	Base: All respondents		1 – Neath area		2 – Port Talbot area		3 – Pyle and rural area south of Port Talbot		4 - Maesteg area	
	Num	%	Num	%	Num	%	Num	%	Num	%
Base: All respondents	800	100.0%	100	100.0%	100	100.0%	100	100.0%	100	100.0%
More than once a week	235	29.4%	33	33.0%	32	32.0%	27	27.0%	30	30.0%
Once a week	442	55.3%	57	57.0%	59	59.0%	56	56.0%	58	58.0%
Once a fortnight	85	10.6%	7	7.0%	6	6.0%	10	10.0%	8	8.0%
Once every three weeks	7	.9%	0	.0%	2	2.0%	1	1.0%	1	1.0%
Once a month	24	3.0%	2	2.0%	1	1.0%	6	6.0%	3	3.0%
Less often	5	.6%	1	1.0%	0	.0%	0	.0%	0	.0%
Varies	2	.3%	0	.0%	0	.0%	0	.0%	0	.0%

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## Appendix D

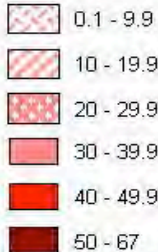
### Example of Retail Catchment Plans (Wiltshire Retail Study)

# WILTSHIRE RETAIL STUDY 2010

## Trowbridge SSCT Comparison Goods Market Share

### KEY

Comparison Goods  
Market Share (%)

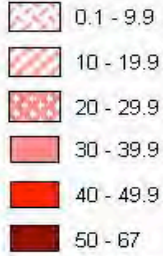


# WILTSHIRE RETAIL STUDY 2010

## Chippenham SSCT Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



Central London →



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# WILTSHIRE RETAIL STUDY 2010

## Andover Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)

- 0.1 - 9.9
- 10 - 19.9
- 20 - 29.9
- 30 - 39.9
- 40 - 49.9
- 50 - 67



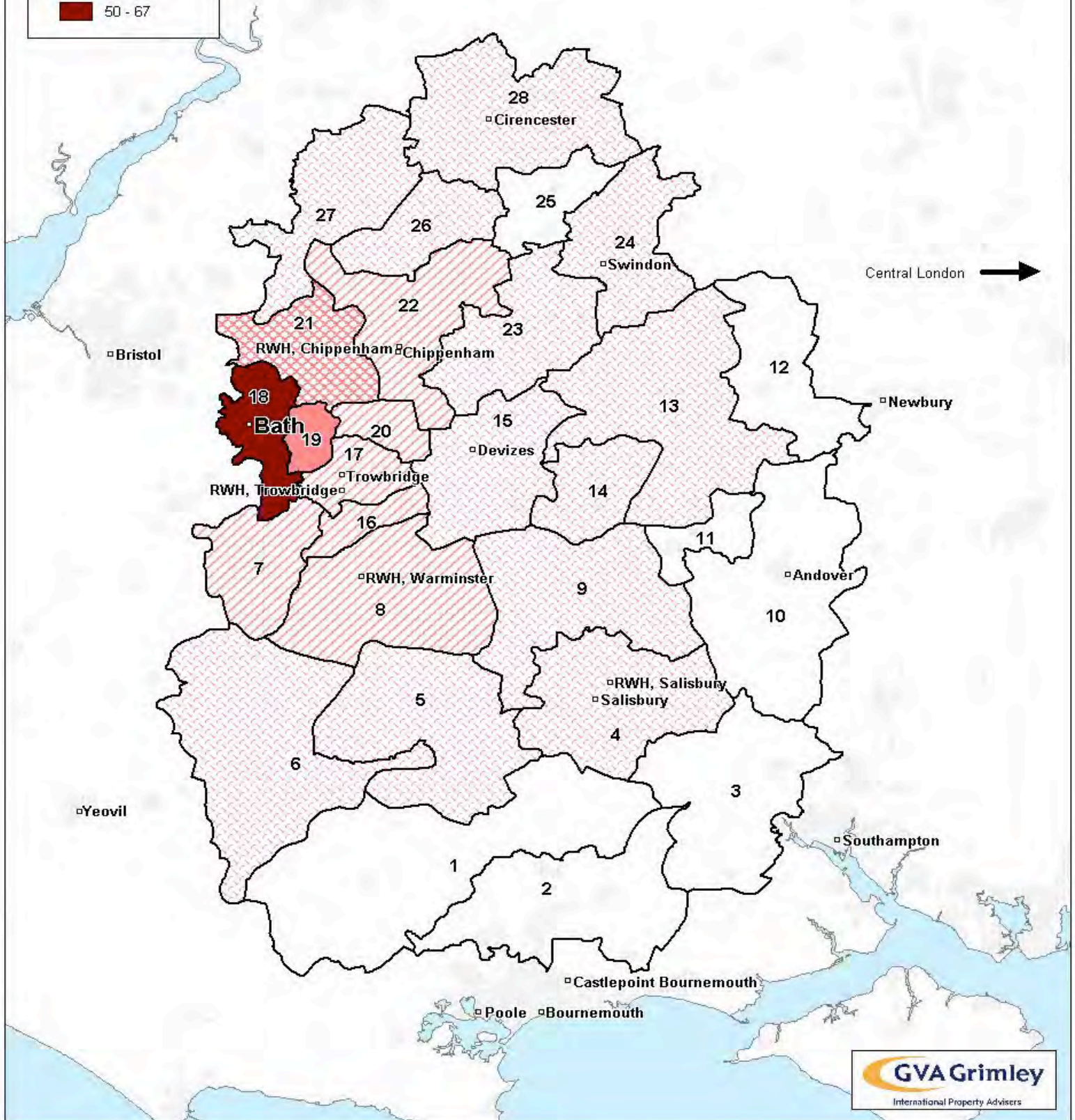


# WILTSHIRE RETAIL STUDY 2010

## Bath Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



# WILTSHIRE RETAIL STUDY 2010

## Bristol Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



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# WILTSHIRE RETAIL STUDY 2010

## Cirencester Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)

- 0.1 - 9.9
- 10 - 19.9
- 20 - 29.9
- 30 - 39.9
- 40 - 49.9
- 50 - 67



# WILTSHIRE RETAIL STUDY 2010

## Newbury Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)

- 0.1 - 9.9
- 10 - 19.9
- 20 - 29.9
- 30 - 39.9
- 40 - 49.9
- 50 - 67

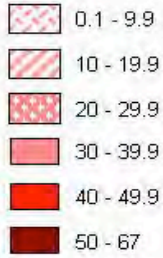


# WILTSHIRE RETAIL STUDY 2010

## Bournemouth Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



**WILTSHIRE RETAIL STUDY 2010**

**Pooler Comparison Goods Market Share**

**KEY**

Comparison Goods Market Share (%)

- 0.1 - 9.9
- 10 - 19.9
- 20 - 29.9
- 30 - 39.9
- 40 - 49.9
- 50 - 67



Central London →



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# WILTSHIRE RETAIL STUDY 2010

## Southampton Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



Map reproduced from GBPro 200 GB (2005 edition). © Colins Bartholomew Ltd (2005).

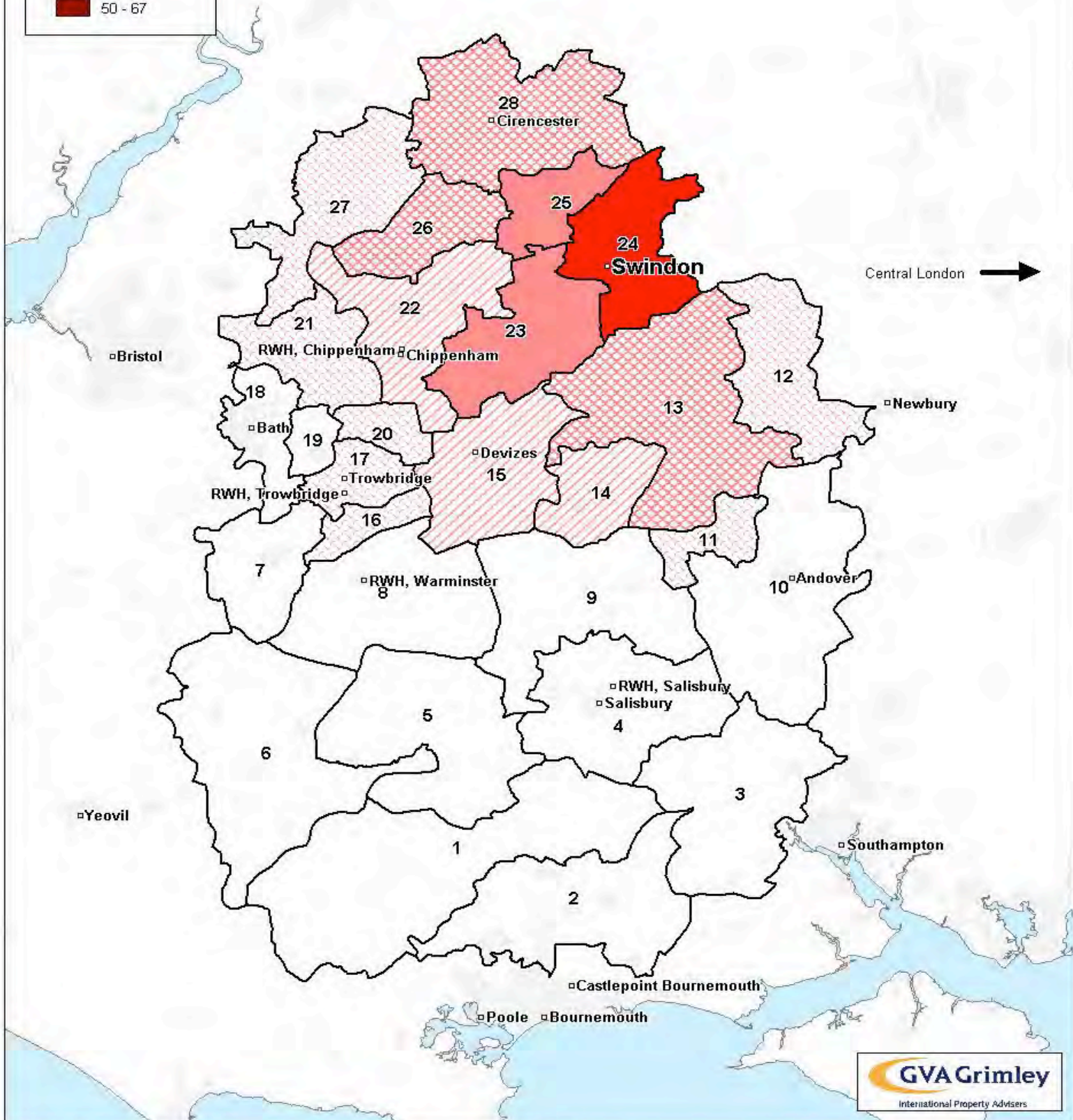
**WILTSHIRE RETAIL STUDY 2010**

**Swindon Comparison Goods Market Share**

**KEY**

Comparison Goods Market Share (%)

- 0.1 - 9.9
- 10 - 19.9
- 20 - 29.9
- 30 - 39.9
- 40 - 49.9
- 50 - 67



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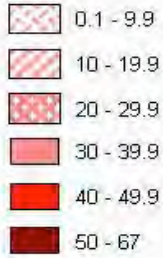


# WILTSHIRE RETAIL STUDY 2010

## Yeovil Comparison Goods Market Share

### KEY

Comparison Goods Market Share (%)



Central London →

