



MAKING THE CONNECTION

Guide to assessing the housing related needs of older and disabled households

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1. INTRODUCTION

Who is the guide primarily for?

- 1.1 This guide has been developed as a companion to and not a replacement for the Scottish Government (2014) Housing Need and Demand Assessment (HNDA): A Practitioner's Guide.
- 1.2 It offers non prescriptive advice to help strategic planners engaged in the HNDA and the Joint Strategic Needs Assessment (JSNA) process to work together to develop a shared perspective of the needs and demands of older households and households that contain someone with a physical disability, learning disability, and/or a mental health problem. For ease of reference, the generic term of older and disabled households is used in this document.
- 1.3 It is still early days and this guide will be modified and added to as learning and experience builds. We would therefore welcome feedback on how this guide might be improved plus illustrative examples of analysis that could be shared through the JIT or CHMA website.

Policy context

- 1.4 High quality places, homes and housing related services enhance the living conditions, health and wellbeing of individuals and the communities in which they live. The Scottish Government has therefore stressed the vital role of housing and planning in creating well-designed, high quality and sustainable homes and places that are accessible to people regardless of age or ability¹.
- 1.5 The incorporation of Housing Contribution Statements into the Joint Strategic Commissioning Plan has been an important step towards better engagement. The Scottish Government's ambitious programme to integrate health and social care, however, creates further possibilities for those involved in planning for housing, places, health and social care to collaborate².
- 1.6 The Public Bodies (Joint Working) (Scotland) Act 2014 is pivotal to the Scottish Government's ambitions to integrate health and social care, to alleviate health inequalities and to achieve better outcomes for individuals. Integration is expected to shift the balance of care from acute to community-based settings and to ensure that resources, services and preventative measures meet the needs and preferences of individuals and local communities.

1 See: Scottish Government (2011) *Age, Home and Community: A Strategy for Housing for Scotland's Older People: 2012-2021* and Scottish Government (2014) *Ambition, Opportunity, Place Scotland's Third National Planning Framework*.

2 For further information on health and social care integration see:
<http://www.scotland.gov.uk/Topics/Health/Policy/Adult-Health-SocialCare-Integration>

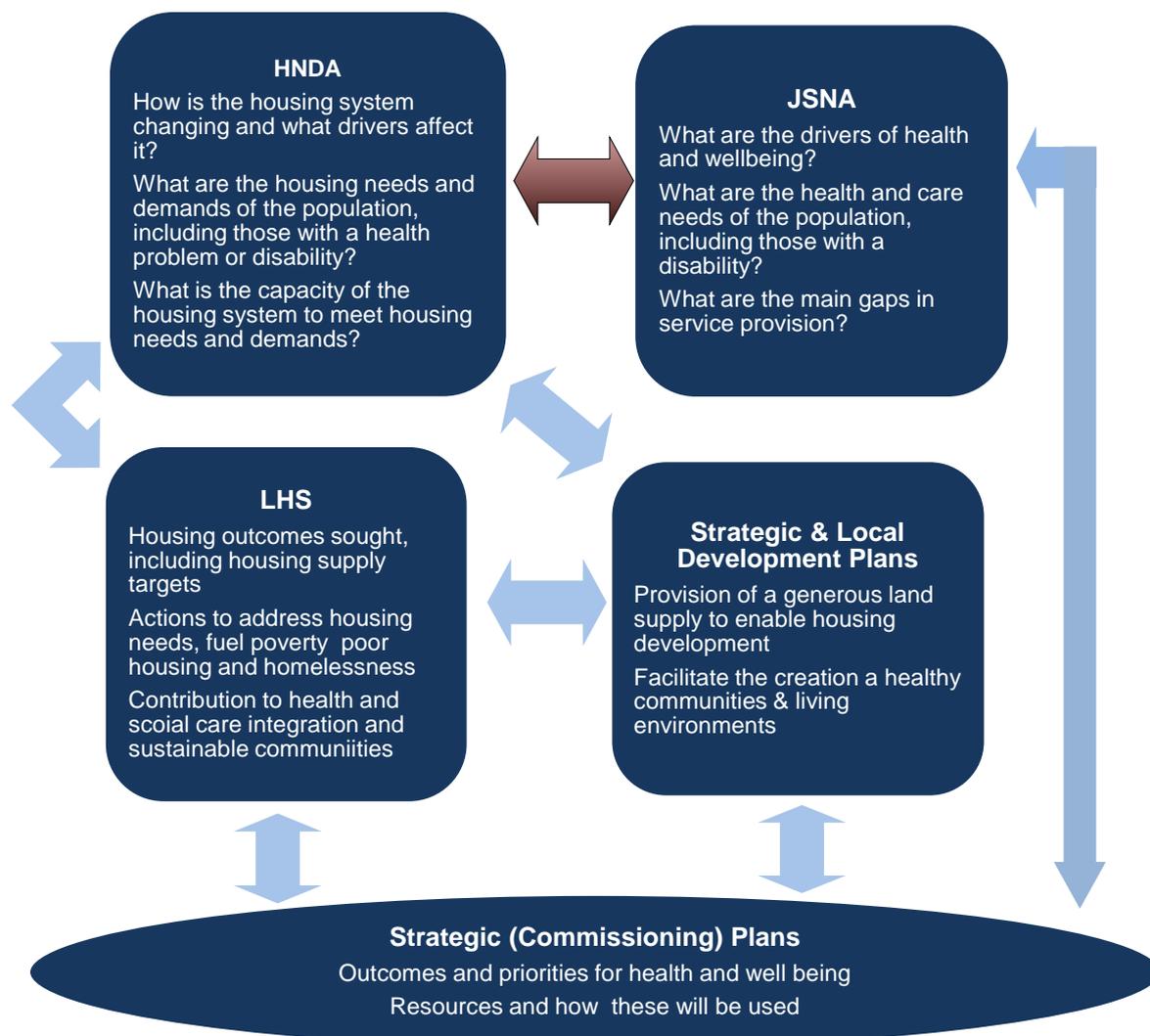
- 1.7 Integration began to go live in April 2015. The new Integration Authorities have responsibility for planning, resourcing and co-ordinating community based health and social care services. These new bodies are required to prepare a Strategic Commissioning Plan (SCP) by April 2016 and to:
- Establish a Strategic Planning Group that includes housing representation, to oversee the development and implementation of the SCP.
 - Establish two or more locality planning arrangements that to enable health and care professionals, service providers, service users and others to shape the planning and delivery of services to reflect local needs.
 - Ensure that their SCP priorities are aligned with those of the Community Plan and other local strategies, such as the Local Housing Strategy (LHS) and Strategic and/or Local Development Plans (SLDP).
 - Secure a diversity of services to facilitate Self Directed Support (SDS) and give individuals real choice and control over the content and, if desired, the purchase of their personal care and support packages.
- 1.8 Scottish Government guidance confirms that each SCP will be underpinned by an assessment of the health and care needs of the population. The new style JSNA will have to look beyond measures of mortality, morbidity and service utilisation in order to:
- Establish how many people have care and support needs and the types of services they might require.
 - Develop a deeper understanding of the supply and demand for services as well as gaps in service delivery, including preventative services.
- 1.9 Spatial planning and housing planners are well placed to collaborate with health and social care planners to meet these new demands. They have access to a wealth of data and practice based knowledge about local communities and the factors that make dwellings, neighbourhoods and local services work (or not work) for older and disabled households.

Making connections

- 1.10 As figure 1.1 illustrates, there are connections between the new style JSNA and HNDA at the analytical level and between the SCP, the LHS and the SLDP at the strategic and operational level. The new health and social care planning framework offers a springboard for those engaged in these analytical and strategic processes to come together to:
- Develop a deeper shared understanding of local population dynamics and communities, the services and assets that exist and how these are distributed across the local area.
 - Broaden understanding of the structure and features and of local housing systems and neighbourhoods and how these facilitate or hinder individuals to live independently for as long as possible.

- Assess the potential role of specialist housing and well-designed mainstream housing for older and disabled households.
- Consider ways in which housing providers could reach people before they require more costly interventions and contribute to the Integration Authority’s goal to deliver preventative and earlier intervention.

Figure 1.1: Links between Housing, Strategic Development and Strategic Commissioning



Purpose and structure of guide

1.11 As stated at the outset, this guide is focused on the connections between the HNDA and the JSNA process, which is shown by the red arrow in figure 1.1. It offers suggestions about how the local HNDA and JSNA processes could develop a common evidence base and pool resources to:

- Undertake a more comprehensive needs assessment that looks at care, support and housing needs and minimises the risk of duplication of effort.
 - Examine other issues of common concern that reflect local circumstances, and the priorities of Integration Authorities and LHS Partnerships.
- 1.12 This guide consists of 4 main sections, including this introduction (section 1). Thereafter:
- Section 2 provides an overview of issues that those engaged in preparing the HNDA and the JSNA may want to consider in framing and organising collaborative work.
 - Section 3 offers suggestions on analysing a number of topics that could be brought together to develop a fuller picture of the needs and wants of older and disabled households and to address the key lines of enquiry set out in table 1.2 below.
 - Section 4 offers some concluding observations.
- 1.13 The guide also includes a series of appendices:
- Appendix 1 contains references and websites to alert readers to useful material above and beyond the extensive listing prepared by the Centre for Housing Market Analysis (CHMA) to accompany the HNDA Practitioners Guide and the ISD Scotland Guide to Data to Support Joint Strategic Needs Assessment.
 - Appendix 2 sets out a glossary of terms whilst appendix 3 provides an overview of the issues relating to the assembly, processing and analysis of secondary data sources.
 - Appendices 4 to 7 contains further details in relation to issues discussed in section 3.
- 1.14 Whilst various data sources are referred to, this guide does not recommend any specific datasets or indicators. Aside from the fact that CHMA and ISD Scotland have already produced extensive listings, the evidence used to inform local analysis will depend on local circumstances, and the topics that matter most in each local authority area.

What this guide is not?

- 1.15 Housing and planning will want to forge better strategic and operational links with the Integration Authority and ensure that the desired outcomes set out in the SCP support investment in places, housing and housing services. Joint analysis to develop a better understanding of issues of common concern should provide a better foundation for agreeing desired outcomes and priorities for investment. However, as neither the HNDA nor JSNA are directly concerned with strategy formulation, this is not a guide to the development of policies and preventative services that will achieve healthier individuals and communities.

- 1.16 This guide does not consider the housing related needs of individuals at risk of homelessness, ex-offenders, those with addictions and Gypsy/Travellers. However, it is hoped that issues discussed in section two will be of assistance in thinking about how to organise analysis for these population sub-groups.
- 1.17 This guide does not offer step by step advice on how to complete the HNDA Practitioners Guide specialist provision templates. Nonetheless, it is hoped that joint working to prepare the HNDA and JSNA will go a long way to securing the evidence required to achieve the third of the four core HNDA outputs, which the Scottish Government define as:

"Specialist Provision: Identifies the contribution that Specialist Provision plays in enabling people to live well, with dignity and independently for as long as possible. Identifies any gap(s)/ shortfall(s) in that provision and the future level and type of provision required. Considers evidence regarding property needs, care and support needs and locational needs. Gives due consideration to the provisions of the Equality Act (2010)" Scottish Government (2014) HNDA Practitioners Guide, p 37.

Key terms

- 1.18 The definition of specialist provision adopted in the HNDA Practitioners Guide is wide ranging and encompasses everything from care homes to peripatetic support. This reinforces the inter-relationship between housing, health and social care but it can create terminological tangles. For ease of reference this document therefore uses the terms set out in table 1.1.

Table 1.1: Specialist provision- summary definition of terms

Term	Definition
Specialist housing provision	Specially designed housing, including wheelchair accessible housing: Purpose built, remodelled or substantially adapted dwellings that include special design features that are suitable for a household that contains someone with mobility, sensory and/or cognitive impairment. Amenity housing and retirement housing (which is the term private providers prefer) can fall into this category.
	Supported housing: Generally self-contained units clustered together on a single site or dispersed across a neighbourhood, where housing support, and occasionally care, is an integral part of the accommodation package. Dwellings often include special design features for people with mobility, sensory and/or cognitive impairments. Private providers tend to use the term assisted living.
Care homes	Care Homes: Provide a residential setting where older and disabled individuals (rather than households) live, usually in single room with on-site care and support.
Ordinary housing	Ordinary housing: Also referred to as general needs and mainstream housing. Includes accessible homes, such as bungalows and ground floor flats that comply with the enhanced accessibility and adaptability standards embedded in Building Regulations from 2007 and more

Term	Definition
	especially from 2010 onwards.
Formal care and support (community based)	Community health services: Covers a range of services including GPs, community pharmacists and community nursing.
	Social care: This term covers a diverse range of services such as: personal and home care services to assist with daily activities such as washing, dressing, getting in/ out of bed; reablement services to assist people to carry out daily activities without support; respite care, and other support to carers.
	Telecare: Community alarms and various remote facilities to monitor and detect risks, such as falls, fire or when person with dementia leaves their home or a defined area. Although some social landlords provide these services, telecare services are increasing provided or funded by social care.
Housing related services	Housing support: Services to assist people to sustain independent living such as budgeting, welfare benefit claims and debt management advice and general counselling.
	Equipment and adaptations: Provision and installation of handrails, walk-in showers and other aids to help carry out bathing, other everyday tasks and moving around the home.
	Property related services: Services such as Care and Repair, that assist people maintain, repair and adapt their home so that they can live in safely and in comfort.
Upstream health and wellbeing promotion and preventative interventions	Wider role services: Social landlord activities to make communities safer, healthier, more vibrant and better places to live. This can include actions to reduce antisocial behaviour and fear of crime, to promote healthier living and to boost access to training and employment.
	Planning policies: Work of strategic and local development planners to ensure the built environment and public spaces are arranged in a way that facilitates access by individuals with reduced physical and sensory abilities and to ensure neighbourhoods are conducive to walking, cycling, socialising etc.
	Information and advice: Independent service to help people to review their housing, support and care options, taking into account their individual preferences as well as their health and financial circumstances.

Key lines of enquiry

1.19 Table 1.2 outlines a set of key lines of enquiry and associated supplementary questions. The key lines of enquiry cover a lot of ground and it is not expected that planners will address each and every issue simultaneously. Instead it is hoped that this table will guide discussions about:

- The most pressing local issues where analytical efforts should be focused.
- The scale and scope of analysis for the coming months and elements of existing analysis that will need to be updated or enhanced.

- Core issues to be addressed over a longer timeframe and the actions to be pursued to ensure that the necessary resources, capabilities and evidence base are put in place to support such analysis.

Table 1.2: Suggested key lines of enquiry

Key issue	Supplementary questions planners may wish to explore
<p>How are the numbers of older and disabled households changing?</p>	<ul style="list-style-type: none"> • How many individuals with a long term health problem or disability live in the community in their own home as distinct from an institutional setting? • What proportion of all older and disabled households, such as those in receipt of disability benefits, form the “population at risk” for whom some form of specialist housing or housing related service may be potentially appropriate? • How might these numbers change in the decade ahead?
<p>What are the housing arrangements of older and disabled households, including those in receipt of social care?</p>	<ul style="list-style-type: none"> • What is the profile of housing occupied by older and disabled households (provision type, receipt of care, tenure etc) and how has this profile changed in recent years? • Have the numbers of older and disabled households living in the privately owned and/or rented housing increased? Have market forces been the main driver of change or have other factors, such as housing allocation policies, played a role? • Does the tenure profile of households in their 50s suggest that the proportions of older households that are homeowners will continue to increase or stabilise over the next decade and beyond? • Are there marked variations in the patterns of formal care and housing related services delivered to older and disabled households in each tenure? Are these patterns consistent with variations in health and disability or are other factors at play? • Are there local communities with high concentrations of older and disabled households in receipt of disability benefits but relatively few people in receipt of formal care or housing related services? If so, what factors might explain this?
<p>How is the structure and shape of care home and specialist housing market changing?</p>	<ul style="list-style-type: none"> • Have the numbers of care homes places, specialist housing units and ordinary dwellings of an accessible design changed in recent years? How does the rate of provision compare with national rates per 1,000 people in the client group? • What is the balance of provision between care homes and specialist housing provision in terms of both the total number of places and the annual flow of places that become available for let or purchase each year? • Are vacancies in some developments more difficult to fill, and if so why? • What provision is there for short-term alternatives to in-patient care and for respite care? Is it judged to be adequate? • Is the specialist housing and care home market stable or are providers looking to change their model of provision, upgrade provision or exit the sector altogether? • Are providers interested in developing alternative models of specialist housing provision such as equity based housing models or mutual housing where people can provide support for each other? • What is happening in terms of the market for adaptations and other housing related services? • What factors are shaping the responses and forward plans of providers?

Key issue	Supplementary questions planners may wish to explore
<p>In what ways does the operation of the housing system create barriers for older and disabled households?</p>	<ul style="list-style-type: none"> • What challenges do older and disabled households face in securing suitable specialist or ordinary housing or in accessing advice and information on housing options, formal care and housing related services? • How do the consumer costs of different forms of provision compare? Is there a large gap between the price of specialist housing or suitably designed ordinary housing and the price of homes older and disabled homeowners typically occupy? • What factors discourage people from moving to a more suitable home or accessing formal care or housing related services? Is price a factor in influencing consumer take-up of the available options? • What do these patterns suggest in terms of the potential for options such as trading down, specialist housing and raising equity to fund repairs, housing adaptations and other services? • Is there a potential untapped market for well designed, ordinary housing for older and disabled households, especially those in their 50s to 70s? • Is there a sufficient range of trusted and reliable local services and products to give older and disabled households the confidence to use their own resources in ways that support their independence and improve their quality of life? • Do local communities with a concentration of older and disabled households contain features that promote wellbeing such as attractive and walkable public spaces and provide easy access to GPs, other services and public transport?
<p>What volume of care homes, specialist and suitably designed ordinary housing might be needed?</p>	<ul style="list-style-type: none"> • How many older and disabled households are estimated to live in unsuitable housing that makes it difficult or impossible to carry out one or more daily activities within the home? • What proportion of older and disabled households with unmet need may be able to have their needs resolved through some form of in-situ solution or through using their own resources to secure a suitable home? • What is the estimated shortfall in the volume and type of provision for older and disabled and where might it be located? • What risks are associated with the shift to SDS and greater consumer choice and how will they be monitored?
<p>What overall conclusions can be reached?</p>	<ul style="list-style-type: none"> • How well suited is the supply of care homes and housing to the needs and wants of older and disabled households? What are the main mismatches between the options that are available and the tenure profile, financial resources and expectations of older and disabled households? • Is there a broad consensus that there is substantial shortfall in the supply of care homes and/or specialist housing provision in one or more tenures? What 'hard' evidence is there to support perceptions? • What are the key challenges that will have to be addressed if the housing stock, formal care, housing related services and upstream services are to better meet the needs and preferences of older and disabled households in all tenures? • What further analysis is required to better understand, and if necessary, quantify issues of local concern? When and how will the most critical gaps in the evidence base be addressed?

2. PLANNING AND MANAGING THE PROCESS

Introduction

- 2.1 This section aims to assist housing and SLDP planners think about how they might collaborate with health and social care planners to develop a better understanding of the needs and preferences of older and disabled households.

Discussions on how to organise and knit analysis together

- 2.2 Resources, effort and time involved in managing, preparing and updating the HNDA and the JSNA have to be proportionate. Problems that have typically beset both the HNDA and JSNA processes include data overload, overly ambitious agendas and reliance on staff 'borrowed' from their full-time job.
- 2.3 As there is no single best way to organise joint analysis, discussions should explore how best to ensure the approach adopted:
- Will focus on preparing evidence that will assist Integration Authorities and LHS Partnerships set priorities, especially for the next 3-5 years.
 - Is tailored to local circumstances. Some local authority areas have well established arrangements for joint working whilst others have still to develop such arrangements. Likewise the capacity, knowledge and skills of staff differ from one local authority area to another.
 - Is flexible enough to change and adapt as the Integration Authorities 'find their feet' and greater numbers of service users adopt SDS.
- 2.4 Discussions on how to organise and structure joint analysis on issues of common concern may find it useful to work through the following questions:
- **What are the most important questions that the assessment should address?** Discussions with Integration Authorities, LHS partnerships and Housing Market Partnerships about their intelligence needs should help to establish a manageable number of analytical priorities to inform policy and avoid analysis becoming an inventory of facts.
 - **What resources are available?** Discussions should consider available staff resources, taking into account the other workloads. They should also consider what evidence is currently available, whether it will have to be updated or revised, and the preparatory work that will be required before statistical data can be analysed and interpreted.
 - **What can be realistically aimed for within timescale?** The HNDA and JSNA are both ongoing and iterative processes. As resources are often scarce, the work may have to be phased and structured in a way that works locally. One option may be to conduct broad brush analysis and then agree priorities for future analysis. Another option may be to conduct in-depth analysis of around a client group or specific issue. In practice, a combination of broad brush and more in-depth analysis may be apt, but the appropriate balance will depend on local circumstances.

- **How will joint analysis be managed?** It will be important to agree project management arrangements and responsibilities, the role of any advisory group to oversee and quality assure outputs and the geography at which data will be collected and analysed.
- **How will you communicate and engage with partners?** HNDA and JSNA reports are not necessarily the best vehicles for sharing evidence with Integration Authorities, elected members and other stakeholders. Organisations and individuals asked to comment and discuss emerging findings may find newsletters, briefing papers, issues papers, structured meetings and workshops more effective.
- **How will particular client groups be defined?** For instance, would analysis of people with physical disabilities include those with sensory disabilities? Would it be restricted to those aged 18-64? Would analysis of people with learning disabilities include people on the autism spectrum or only people with learning disabilities who also have autism? Would analysis of older people include those aged 50+ to gain an insight into how the profile and preferences of older people may change as this group move into old age?

Possible division of responsibilities

- 2.5 Project management arrangements will need to be clear about the division of responsibilities and the issues where HNDA planners will have the lead role in collating and analysing evidence, issues where health and social care planners will have the lead role and how these different components will be drawn together.
- 2.6 Examples where housing and/or SLDP planners could take a lead role, include:
- Analysis of current and future demographic trends and projections analysis. This is a core component of the HNDA and it will be important to ensure that the HNDA and the JSNA are based on the same assumptions about the direction of future demographic trends.
 - A review of the quality, condition and affordability of specialist and ordinary housing in all tenures and commentary on how well the housing system is suited to enabling older and disabled households to live independently across the local area.
 - Use of resident engagement networks such as tenant groups and residents' panels to allow communities to input their voice into the JSNA process and the SCP process. This could include more marginalised groups such as tenants leaving prison that have health and care needs, people with mental health issues known to homeless services and private renters known to housing, homeless and environmental service teams.
 - Liaison with housing providers to use their frontline knowledge and presence in local communities to add to local intelligence.

Upstream interventions

- 2.7 In terms of agreeing issues for analysis, planners may wish to look beyond the confines of the main HNDA requirements and identify issues of interest to the Integration Authority that should be fed into the JSNA process. Possible examples include the role of social landlords' and the role of strategic development in tackling health related inequalities and promoting wellbeing.
- 2.8 Social landlords assist tenants to sustain their tenancy and to live independently in a variety of ways, some of which are listed in the table 2.1. A succinct paper detailing the diverse ways social landlords promote health and wellbeing in the local authority area, how these activities fit with the priorities of the Integration Authority and evidence of their efficacy and impact may assist the Integration Authority to better understand the role of social landlords and their ability to:
- Combine packages of preventative solutions that draw in funding from other sources.
 - Harness volunteers and create a strong sense of place and community.
 - Play a strong part in delivering more effective local services for older and disabled households.

Table 2.1: Social landlord wider activities that have positive upstream health and wellbeing impacts

<ul style="list-style-type: none"> • Welfare advice • Housing information and advice • Advocacy • Peer support or befriending • Support for carers • Home safety and energy efficiency • Social events and outings • Communal stair cleaning • Shopping services 	<ul style="list-style-type: none"> • Handy person /small repairs • Community alarms/ telecare • Lunch clubs • Craft and other activity clubs • Exercise classes • Gardening (including grass cutting) • Transport • Snow and ice clearing • Supporting Credit Unions
Source: Adapted from ODS (2012). Supporting Older People to Live at Home	

- 2.9 The new arrangements also offer opportunities to communicate the role of strategic development in helping to develop environments that work for older and disabled households and what is can do to promote:
- The widest choice of housing suitable for older and disabled households, including Lifetime Homes.
 - The provision of health facilities and the development of amenities and services within walking distance of where people live.
 - Good street design with well-lit and maintained pavements, places to sit down and access to toilet facilities, and level access to commercial and public buildings.

- Improve access to good quality green and open spaces.
- Measures to reduce the risk of traffic accidents and reduce pollution and other environmental hazards.

A matter of geography

Local authority and sub-area level analysis

- 2.10 Local housing systems are multi-layered. Local authorities often supplement the HNDA report with local analysis, for instance to better understand the housing related pressures that urban and rural communities' face. Some local authorities carry out this analysis as part of their HNDA process whilst others carry out such analysis as part of the LHS process. However, the important point is that housing frictions and problems that confront older and disabled households can be difficult to discern unless more finely grained analysis at the local authority level and below are undertaken.
- 2.11 ISD Guidance suggests the JSNA should look at the socio-economic profile of neighbourhoods and local communities. This opens up possibilities, such as:
- The preparation of joint community profiles that include some assessment of how housing and place influence health and wellbeing and how well housing, public spaces, public transport and other aspects of 'place' work for older and disabled households.
 - Joint neighbourhood walkabouts with residents to explore the ways in which local housing and place factors contribute or detract from good health and wellbeing and to identify opportunities for improvement.
 - Greater use of Health Impact Assessments (HIAs) tools to appraise the health impacts of proposed developments or local development and housing policies.

Cross-boundary working

- 2.12 SCP Guidance confirms that Integration Authorities that share resources or services must take account of their respective Strategic Plans. Whilst local authorities in each SDP area (SDPA) already work together to prepare their HNDA, all councils may want to re-visit the scope for cross-border working.
- 2.13 Cross-border analysis of the needs of numerically small population sub-groups may help to establish if provision located in one authority might serve the needs of people from neighbouring areas. For example, aggregating 'out of local authority' placement numbers for neighbouring local authorities may point to a 'regional' shortage of specialist provision for those with complex needs. This would give policy makers a platform for jointly discussing whether the commissioning 'regional' provision warrants further investigation.
- 2.14 Councils could perhaps jointly investigate the potential demand for new care ready and easy to adapt homes and how households nearing retirement could

be assisted to plan for their future housing. As housing choices in early old age influence the intensity of care and support required in the latter stages of life, an increase in such housing in locations attractive to older homeowners may help to curtail future demand for health and social care services.

- 2.15 Planners could perhaps collaborate on assembling evidence of common interest. Private developers, specialist housing associations and service providers often work across Scotland. Cross-border arrangements to collect data may reduce costs for all.

Strategic Development Plan Areas

- 2.16 The HNDA practitioners guide is clear that local authorities in each SDPA will have to decide whether analysis of specialist provision is conducted at "*constituent local authority or at SDPA level*" (p.40). This advice:
- Is consistent with the lack of a widely accepted and standardised approach for assessing the requirement for specialist provision and persistent deficiencies in the evidence base.
 - Reflects the reality that estimates for specialist provision and the balance sought between community based and residential care models are very sensitive to policy choices and value judgements of local partnerships.
- 2.17 Although the process is still unfolding, we expect analysis will, for the most part, be carried out at constituent local authority level. SCP priorities to integrate health and social care will have a strong focus of reconfiguring the health and social care market and making better use of existing resources, including the housing stock. Analysis to inform the setting of these priorities will require a strong focus of the quality and accessibility of houses and places, allocations and the role of housing in care pathways. The main issue for local authorities in SDP areas will therefore be to agree how best to approach the difficult task of providing some estimate of the possible additional requirement for specialist provision.

Striking a balance between SDPA and local estimates

- 2.18 We believe that the HNDA report should provide a starting point from which constituent local authorities can work with local partners to explore in more detail the likely future structure and makeup of the health and social care market, how this might impact on consumer needs and preferences and the implications of this for any additional specialist housing.
- 2.19 The HNDA report for each SDPA should therefore provide the 'big picture' and set out high level estimates for the provision of specialist housing and/or care home provision. These should clarify the future direction of change and provide a basis against which local authorities can triangulate and 'sense check' subsequent local estimates. As such, the HNDA report for each SDPA should:
- Synthesise trends and projections in relation to the pace of change in the numbers and tenure profile of older and disabled household numbers.

- Summarise key trends in the stock and turnover of social and private sector specialist housing and care home provision. As CHMA note, the HNDA should differentiate between specially designed/ adapted units and supported housing. If data permits, the HNDA could also refer to ordinary housing that is suitable for older and disabled households.
- Summarise trends in the numbers of people in receipt of formal care and housing related services and the extent to which any increase or decrease in numbers reflects changes in demand as opposed to policy drivers or other factors.
- Set out high level estimates for the future provision of specialist housing at strategic and local authority level. These estimates, as CHMA suggest, should be expressed as a percent of the total estimated number of additional homes required. If desired, estimates for care home places could also be reported.
- Clarify that the commissioning plans of Integration Authorities will reshape future supply of specialist provision and community based health and care services and the importance of more localised analysis to refine the initial set of high level estimates of to reflect this.
- Note the possible implications of available evidence for the design and location of the supply of mainstream housing, again noting the importance of more localised analysis to inform local policy.

2.20 In an ideal world, high level estimates should be derived from comparable sources of evidence supplied by constituent local authorities. As this is likely to be lacking for some time, planners may have to draw on national evidence or prevalence rates. Alternatively, planners could estimate future provision based on the assumption that the current rate of provision for every 1,000 older and disabled households (or individuals in receipt of disability benefits³) remained constant.

2.21 Whichever option is adopted, planners should stress that these figures may over-estimate the level of provision required due to possible improvements in health and an increase in the proportions of individuals supported to live at home for longer.

Other potential SDPA cross-boundary issues

2.22 SDPA spatial and housing planners may also want to think about other issues that might benefit from cross-border working, such as actions to:

- Raise awareness of the role of the Strategic Development Plans in setting the policy framework to ensure housing and place-shaping policies keep

³ The Scottish Government has used the numbers of people in receipt of disability benefits to approximate the numbers that may require specialist housing or a housing related service.

pace with demographic changes and the growing numbers of older and disabled households.

- Support the Integration Authorities take a strategic overview how their plans align and impact on neighbouring partnerships.
- Co-ordinate arrangements with Home2Fit to collect and share consistent data on the location and key features of specialist housing provision.

Assembling the evidence base

A need to make use of different sources of evidence

2.23 Different research tools are required to analyse housing system dynamics at different spatial levels. Analysis at the HMA and local authority level typically make extensive use of statistical data but there is a paucity of such data in respect of older and disabled households relative to those for the general household population. The HNDA Practitioners Guide therefore clarifies that other sources of evidence have an important role.

2.24 Analyses at spatial levels below local authority level will tend to require a mix of hard and soft data. Statistical data often contains too few records to provide a reliable indication of local trends. Rapid changes in local circumstances can also be easily missed. The knowledge of local health, social care and housing professionals alongside the perceptions of service providers, service users and the wider community will therefore be vital and should help to:

- Enhance understanding of what is happening on the ground and why.
- Identify the factors that are contributing to problems experienced by older and disabled households.
- Establish key issues that might warrant further detailed investigation.

2.25 Possible qualitative tools that could be used include networking, interviewing and focus groups. Well organised visits can be an effective way to gather information and build shared understanding. Case studies of facilities, services and individuals can also be a powerful way of communicating the need for change and the benefits of change.

Scottish Government data developments

2.26 There are, two major Scottish Government sponsored developments that, in time, should provide better evidence to support housing and SLDP planners to assess the implications of the health and care needs of the local population for the local housing system.

2.27 The Health and Social Care Data Integration and Intelligence Project (HSCDIIP) will link health and social care data at the level of the individual. This will make it possible to track and analyse patterns of service use by individual persons. This should make it possible to produce aggregate analysis

at different spatial levels for specific population sub-groups, such as older people with dementia. Early priorities of the HSCDIIP have been to:

- Develop arrangements to collate consistent social care data for individuals in terms of the services they access, SDS payments and social care eligibility criteria. It also records each person's IoRN (Indicator of Relative Need), which is a standardised measure of functional dependency.
- Develop proposals to amend the National Health Service Central Register (Scotland) Regulations 2006 to allow this data to be shared with certain named bodies.
- Link the Integrated Resource Framework (IRF) to the HSCDIIP platform. The IRF records NHS and social care cost and activity data at the individual level. Initiatives to capture data on GP, district nurse and other community health services will feed into the IRF and HSCDIIP platforms.

2.28 The intention is to add housing and other data at a later date, although some inter-tenure comparisons should be possible once the Health and Care Experience Survey is linked up.

2.29 The second development is the implementation of the strategy for national surveys. As discussed in appendix 4, an important strand of this strategy has been the development of common questions to permit data to be pooled from two or more national surveys to produce more robust estimates for disability and other key topics at national and local level.

Data gathering and collation

2.30 National developments will gradually improve data availability but planners will continue to draw on administrative data from local social care and housing systems. Planners will therefore need to know what data is recorded on these systems and the ease with which it can be extracted in order to work out how this will affect what analysis can be undertaken for the foreseeable future.

2.31 Gathering evidence is resource intensive, particularly if historic administrative data from several disparate sources is to be collated for the first time, new processes have to be established or primary data collection is to be undertaken. If capacity is limited, data collection plans should be kept as simple as possible. Before pressing ahead with more resource intensive data collection it may be sensible to:

- Undertake an initial analysis of readily available information. Such analysis may help to clarify what hard data is really needed to help inform policy.
- Talk to colleagues in other local authorities to explore the potential to replicate approaches that have been tried and tested elsewhere.

3. PREPARING THE EVIDENCE BASE

Introduction

- 3.1 The HNDA, like the JSNA, is a continuous process. Each local authority will want to tailor their approach according to local analytical priorities identified through discussions with key stakeholders and local circumstances, such as competing work pressures, staff resources and data availability. To assist planners think about what analysis might be possible in the short and longer term, this section is centred on several themes. Where possible, discussion of each theme differentiates between broad brush and more in-depth analysis. However, planners will need to think about the connections between these themes and how the different strands of analysis, when knitted together will provide a fuller understanding.
- 3.2 As most national sources are detailed in guidance prepared by the CHMA or ISD Scotland guidance or listed in appendix 1, the following paragraphs discuss only the most pertinent data sources.

How are the numbers of older and disabled households changing?

- 3.3 A useful place to start is to have a clear picture of the numbers of older and disabled individuals, how this translates into household numbers and how the numbers of older and disabled individuals and households will change in the coming years. This analysis could be subsequently extended to explore the kinds of daily activities individuals' struggle with.
- 3.4 The JSNA has overall responsibility for assessing health and care needs but those engaged in HNDA analysis should seek to ensure:
- Demographic figures that underpin JSNA estimates of the numbers of individuals with health and care needs are consistent with the core HNDA population and household estimates and projection and the calculation of future housing need and demand.
 - Estimates and subsequent analysis are not restricted to individuals known to councils. Whilst those unknown to councils may not necessarily have care needs, they may be vulnerable when it comes to housing, health and wellbeing and may benefit from one or more housing related service or upstream preventative interventions.

Data considerations

- 3.5 The 2011 Census provides the most comprehensive count of the numbers of individuals with a long term health problem or disability that limits daily activities as well as the numbers of households that contain someone with a health problem or disability. It also provides some breakdown by type of disability. For example, table DC3407SC reports the tenure profile for households that contain individuals with one or more of the following self-defined disabilities:

- Deafness or partial hearing loss
 - Blindness or partial sight loss
 - Learning disability such as down's syndrome
 - Learning difficulty such as dyslexia and dyscalculia
 - Developmental disorder
 - Physical disability
 - Mental health condition
- 3.6 As noted in section 2, pooled data from national surveys will enable planners to update Census estimates of the total numbers of individuals with a long term health problem or disability in the not too distant future. Likewise it should be possible to update estimates of the numbers of older and disabled households. However, sample sizes may limit analysis in terms of individuals and/or households that contain someone with a specific disability.
- 3.7 The Scottish Household Survey (SHCS module) provides some insight into the numbers and types of daily activities individuals struggle with, such as washing, dressing and so on (see appendix 5).
- 3.8 DWP data on non means tested disability benefits is another important data source. Older people with a health problem or disability can claim two benefits. Attendance Allowance (AA) is paid to those who applied for disability benefits after retirement age and do not live in a care home. Disability Living Allowance (DLA) is paid to those who first claimed disability benefit before retirement age. Prior to April 2013 people aged 16-64 with a disability could claim DLA but since then Personal Independence Payment (PIP) has began to replace DLA.
- 3.9 In terms of analysing disability benefit data it is worth noting that:
- There is some variation in the rate of people across Scotland with long term health problems or disabilities that are in receipt of disability benefits. Some of the difference will reflect benefit take up rates but more significant factors are local variations in rates of deprivation and the proportion of the population aged over 80 years.
 - As a rule of thumb, around half of all people that self-report a long term health problem or disability claim a disability benefit, suggesting many may have minimal need for formal social care or support. On the other hand, upstream preventative interventions may be especially beneficial those not in receipt of disability benefits.
 - The reach of disability benefits is greater than local authority social care. The reasons for this are varied. Many older and disabled people, for instance, rely on their family or informal carers or use their private resources. Nonetheless, a proportion are likely to have unmet needs. This is a matter that might warrant discussion with health and social care colleagues.

- In the absence of alternatives, the Scottish Government's Analytical Services (2010) and other researchers have used receipt of disability related benefits as a 'proxy' for the size of the 'population at risk' of a potential requirement for specialist housing and housing related services.

Wheelchair users

- 3.10 The Census 2011 does not record information on wheelchair use but the Scottish Household Survey does ask whether households contain one or more persons that use a self-propelled or powered wheelchair within the house (see question CC3). It also includes data on whether the homes of wheelchair users have been adapted, require adaptations and whether wheelchair users feel their home is suitable for their needs (see questions CC8-CC9). The main limitation is that the numbers of wheelchair users that participate in the SHS are too small to produce statistically valid numbers for most local authority areas, even if data for several years are combined. However, it may provide valid statistics for SDP areas that could be used to cross-check estimates derived from other sources.
- 3.11 The numbers of people in receipt of the higher DLA mobility rate could be used to approximate the numbers of people likely to require wheelchair accessible housing. Small proportions of claimants have profound sensory impairment and/or learning disabilities but most people that claim the higher DLA mobility rate have physical disabilities and are unable to walk or are virtually unable to walk without severe discomfort or the risk of endangering themselves.

Projecting future numbers: the use of prevalence rates

- 3.12 NRS produce local authority population and household projections broken down by age. If planners want to project the numbers of individuals with a disability or the numbers of disabled households, it may be necessary to use of prevalence rates, in this specific instance derived from Census 2011 figures. The uses and limitations of prevalence rates are discussed in appendix 6 but the main point is that prevalence rates cannot be used indiscriminately. Planners may therefore want to invite representative agencies to indicate if prevalence based estimates are of the right order of magnitude.

The stock of specialist and accessible housing

- 3.13 An understanding of the volume, range and spatial distribution of the stock of care homes, supported housing, specially designed housing (including adapted dwellings) and other housing of an accessible design is a core HNSA requirement. Housing and SLDP planners should therefore lead on collation and analysis of data on this topic, including information about who are the main providers of specialist housing provision and care homes, recent supply trends and what new provision is in the planning pipeline.
- 3.14 Analysis of the stock of care home and specialist housing provision should differentiate between units and bedspaces that are intended for long term

places and short term places that are used to relieve hospital pressure, provides respite care or offer temporary accommodation to prevent crisis arising.

Developing a more comprehensive picture on supply

- 3.15 Where basic stock numbers have been established, further analysis could be undertaken to deepen understanding of trends in relation to:
- Changes in the profile and supply of care homes and specialist housing provision and the extent to which these reflect changes in demand for different forms of specialist provision as opposed to other drivers.
 - Whether current provision is well placed to meet the needs and aspirations of older and disabled households now and in the future.
- 3.16 Issues that planners might wish to explore include one or more of the following:
- **The physical quality of provision:** Planners could look at the proportions of care homes and specialist housing that meets modern quality and space standards. They could also look at whether the interior and exterior of such developments are suitable for people with reduced mobility and/or with sensory or cognitive disabilities.
 - **The quality of service:** Information on the quality of services delivered to residents can be drawn from Care Inspectorate reports and follow up discussions with social care staff and service providers.
 - **Turnover and void rates:** The numbers of long stay units that fall vacant each year is a key input into assessment of mismatches between supply and demand. Where resources permit, planners may also want to explore signals of falling demand (length of time taken to fill vacancy, units let to people not in the client group to fill voids etc.) and whether less popular development share common features (bedsits, poor location etc.).
 - **Duration of stay and reasons for vacancies:** Changes in the average length of completed stay of long stay care home residents will provide a basis for clarifying who is entering care homes with social care planners. Establishing why vacancies arise in supported housing should also provide some insight into the extent to which developments offer a home for life. Substantial differences between developments in terms of the proportions of tenants moving to institutional care could then be discussed with providers and social care planners.
 - **The business plans of providers:** Discussions with providers should ascertain what their plans are for the future, if they plan to decommission or refurbish units, whether there are looking to stay or exit the sector and the factors, including public sector purchasing decisions, which are shaping their forward strategy and business plans.
 - **Comparison of the cost to the consumer and to the public purse:** Comprehensive and comparable cost data is notoriously difficult to obtain. In the first instance planners may want to focus on consumer costs in order to look at the affordability of existing options for older and disabled

households and whether price is a factor that is likely to influence consumer take up of available options, particularly for self-funders.

Data considerations

- 3.17 The ISD Scottish Care Home Census is the most authoritative source on care homes and includes data on the profile of residents and length of completed stay. Care Inspectorate reports are a useful source of evidence on quality issues relating to care homes. They are less useful for accommodation based and floating housing support, which tend to be registered on a local authority or region wide basis rather than on a development basis.
- 3.18 Scottish Government housing statistics report on the numbers of social rented specialist housing, which includes supported housing such as sheltered provision, amenity housing, wheelchair accessible units and other units built/adapted for people with other disabilities. However, if the aim is to look at the spatial distribution, quality, consumer cost or turnover of this stock, local data will be required. Some data may be available to local authorities from landlord systems, Common Housing Registers or other data supplied by RSLs.
- 3.19 Data on private sector retirement and extra care housing is limited but basic stock details can be found on the Elderly Accommodation Counsel website. There is also a small market of privately let retirement housing. The main provider is Girlings Retirement Rentals, which lets properties, mainly on an assured tenancy basis, in central Scotland, Ayrshire and Perth.
- 3.20 Data on private homes of a specialist design are piecemeal. The Homes2fit register of adapted properties will gradually improve matters. In the interim, planning/development control may hold some data on custom built units from and PSHG and OT teams may hold some data on private dwellings that have had substantive adaptations, such as an extension.
- 3.21 Estimating the numbers of ordinary housing of an accessible design is problematic due to data gaps and differing interpretations of what constitutes an accessible design. Although not ideal, one way forward may be to use Census and Assessor data to try and estimate the proportion of bungalows and ground floor flats broken down by tenure. If data permits, other flats with lift access could be included. Comparisons between local and national rates should provide some insight into how well suited the generality of the ordinary housing stock is for those with reduced mobility abilities.
- 3.22 Where hard evidence is lacking, discussions with providers and other local experts should help to establish a clear picture, if not precise numbers, on the composition, quality and popularity of the stock and how demand and supply are changing. Discussions should also clarify issues that warrant further investigation and local data that might assist.

The housing, care & support arrangements of older and disabled households

- 3.23 An important step should be for HNDA and JSNA planners to bring the household and stock data together to map the living arrangements of older and disabled households and to establish how many receive formal social care, including housing support. This would provide a platform for subsequent investigation of mismatches between patterns of accommodation and service provision and the needs and wants of older and disabled households.
- 3.24 Given the challenges of data linking, JSNA and HNDA planners may want to look at local authority wide trends in the first instance. However, as data improves, planners could use of GIS to overlay data from different sources could be used to identify:
- Any substantial differences in the patterns of social care delivered to those in ordinary housing in each of the main tenures and whether these are consistent with variations in the health and disability profile of households in the different tenures or whether other factors are at play.
 - Neighbourhoods with a high concentration of older and disabled households in receipt of disability benefits but comparatively few social care clients. Local professionals could then be asked why this might be the case.
 - Neighbourhoods that contain supported housing development as well as high concentrations of older households in ordinary housing in receipt of disability benefits and/or social care. This analysis could then be used to open discussions about the potential to restructure services such as some form of hub and spoke arrangement.

Suggested typology

- 3.25 Data constraints inevitably mean that the picture will be far more complete for older households than for other client groups. Nonetheless, a useful organising framework that could be used to establish how much of the picture can be pulled together would be to seek to estimate the numbers that:
- **Live in care homes and other institutions:** Estimates should focus on long stay residents. If possible, planners should establish how many people have been placed outside the local area, why this was necessary and how many wish to return to the local area. This would shed light on demand pressures and provide a platform for discussing the potential for a 'regional' facility with neighbouring authorities.
 - **Live in specialist (supported) housing:** Depending on client group, it may be useful to look at provision type (extra care, sheltered, shared housing etc.). It may also be useful to establish the numbers of occupants who are in receipt of formal social care over and above the housing support - and any care - included in their accommodation package.
 - **Live in specially designed or adapted dwellings:** Again, it may be useful to try to establish the proportion in receipt of formal social care. If

possible, this should differentiate between those solely in receipt of housing support, those in receipt of formal care and those in receipt of housing support plus one or more formal care services. If possible, figures should include individuals that procure services through SDS.

- **Live in ordinary homes:** If possible this should be broken down by tenure, and include an estimate of the proportions that receive formal care and housing support along the lines outlined above. Some estimate of the numbers living in units that have had one or more housing adaptations may also be of interest.
- **Currently occupy temporary accommodation:** This would include older and disabled individuals who are (or at risk of) homeless, including those whose current housing arrangements are unknown. Again, if possible this should include an estimate of those known to and/or in receipt of housing support and/or formal care services.

Data considerations

Data on housing arrangements

- 3.26 The 2011 Census will make it easier to build up some picture of the housing arrangements of older and disabled households than would otherwise be the case. It contains a wealth of information on the numbers and profile of people living in care homes and other communal establishments as well as those that live in the community in their own homes, albeit some key data is not reported at small area level.
- 3.27 In terms of updating Census estimates, one approach would be to conduct a household survey but this would be expensive and require difficult practical and ethical matters to be resolved. The resulting snapshot data would also have a very short lifespan. A long term but more cost effective strategy would be to put in place a plans to improve the data captured through social care, community health (such as GP records) and housing administrative systems to address gaps in the evidence base of most concern to local partners.

Data on social care and support

- 3.28 The Social Care Census is the most comprehensive and accessible data source for mapping social care. It records information for each person who has had a needs assessment and is in receipt of social care services secured by the local authority at March each year. Social care services include housing support and services purchased through SDS payments.

The Social Care Census

This Social Care Census contains a wealth of data such as:

- The socio-demographic data such as age, gender, ethnicity and client group.
- Accommodation related data such as postcode, person lives alone and type of housing provision (ordinary housing, amenity, sheltered, etc.)
- Needs data such as eligibility criteria category (low to critical risk) and IoRN, but the latter is voluntary
- The package of services a person receives (home care, housing support, etc.)
- The time and cost input for each service, and who makes a financial contribution (social work, health, housing, client etc.)

- 3.29 Housing and SLDP planners may find it useful to familiarise themselves with the Social Care Census excel template and accompanying guidance notes⁴ prior to talking to colleagues about the most useful information to use.
- 3.30 Discussions should explore recent care and support service trends and the potential to add variables to the Social Care Census. In some areas, it might be possible to derive tenure by cross referencing address data with Assessor and/or Council Tax Register data. Other possibilities might be to include a variable to indicate if a home has been adapted and/or is wheelchair accessible and the unique reference number of social tenants and/or applicants to permit subsequent data linkage.

A word on informal care and self-funders

- 3.31 The above paragraphs focus of individuals in receipt of formal social care. However, as note earlier, many rely on informal care from families and carers and there is an upward trend in the numbers of people purchasing home care using their own private resources. National surveys may provide an indication of the numbers that receive informal care but there is no known data source on privately purchased care.
- 3.32 Some individuals that purchase care with their own resources may have previously been eligible for social care or have opted not to receive formal social care because of the cost. There is also likely to be some overlap between privately purchased home care and the privately purchased home help style services. These are matters that JSNA and HNDA planners may want to explore with older and disabled households and local professionals once initial analysis has been completed.

Housing adaptations and other property related services

- 3.33 Understanding trends in the provision of housing adaptations and other property related services and the changing market for such services is an important input into the HNDA as well as the JSNA.
- 3.34 Analysis of housing adaptations should look to estimate the current level of unmet need for housing adaptations. This should broken down by tenure and be accompanied by some assessment of the volume of houses that have been adapted but are not occupied by older and disabled households. Analysis should also review trends in the rates of housing adaptations and whether these are sufficient to meet identifiable need.
- 3.35 More detailed analysis could explore how well the housing adaptations system is delivering positive outcomes and minimising the difficulties customers face in

⁴ These can be found at:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/HomeCareCensus>

navigating their way through the process. This analysis could draw on the views of staff and service users as well as trends in relation to:

- The age, health, disability status and housing arrangements of applicants seeking and/or in receipt of housing adaptations.
- Applicant numbers, approvals and withdrawals, broken down by tenure and in the proportions routed through Care and Repair.
- Completion rates and timescales, noting any marked and sustained differences by tenure.
- The main forms of housing adaptations completed, differentiating between minor fittings, such as handrails, and more major works, such as the installation of wet floors and structural works.

3.36 In terms of other property related services, HNDA planners may want to clarify:

- What other services operate in the local authority area, such as Care and Repair and handyperson services.
- What these services offer and their relevance for the Integration Authority's preventative and early intervention agenda.
- How these services are funded, the typical numbers of households they assist each year together with evidence on customer impacts.

Data considerations

3.37 The SHS (SHCS module) provides a snapshot estimate of the numbers of homes that have been adapted, the numbers of households that state their home requires an adaptation and the most common adaptations sought. There can be substantial differences in published estimates for some local authorities from one reporting period to another. Planners should therefore compare estimates for two or three reporting periods rather than simply rely on the latest published estimate. If there is a lot of inexplicable variability, planners should seek Scottish Government advice about the possibility of producing a more stable estimate by combining survey data from a number of years.

3.38 Social landlords, OTs and PSHG teams all maintain housing adaptation records but can require a lot of preparatory work to ensure the data is comparable. For instance, OT records may capture applicant level data but landlord systems may record adaptation requests and contain multiple records for applicants that require two or more adaptations.

3.39 Trends in housing adaptations and property related services are susceptible to formal and informal policy adjustments. Changes in applicant numbers may reflect changes in eligibility criteria to manage demand. Increases or decreases in funding for adaptations, especially in the housing association sector, can result in large fluctuations in the annual backlog of unmet need. Planners should therefore liaise with OT and housing staff to find out what impact policy and resource (budgets and staffing) decisions have had.

- 3.40 Some service providers hold good data on the profile of, and outcomes achieved for service users. Where local evidence is limited, planners could draw on national studies that document the benefits of such services, including reduced demand for more costly services (see appendix 1).

The responsiveness of the housing system to older and disabled households

- 3.41 The shift towards prevention and early intervention means that it will be important to think about:
- The ways that the socioeconomic circumstances of households, the housing system and health and social care system might interact.
 - How these interactions may shape the choices available to older and disabled households and facilitate or hinder independent living.
- 3.42 Table 3.1 therefore illustrates potential local imbalances (mismatches) that planners may want to think about. Investigating the existence of these potential imbalances would be demanding and planners will need to think carefully about which issues are most pertinent to explore.
- 3.43 In areas experiencing high and/or rapid growth in the projected numbers of older and disabled households, housing and spatial planners may want to think about how the potential implications of:
- A sharp downturn the proportions of older and disabled households on that move to an institutional setting.
 - A potential upturn in multi-generational or extended family households.
 - The relative demand for different types of housing and locations.

Data considerations

- 3.44 The Census and the SHS contains data on a mix of health, disability, housing and socio-economic indicators. The Health and Care Experience Survey, whilst less detailed than the SHS, is another useful source. It has a larger sample and includes some key variables, including tenure. Further advice on both surveys is set out in appendix 5 but in general sample size will constrain analysis for most specific client groups other than older households.
- 3.45 Changes in housing systems partly depend on the understanding and actions of different housing market professionals. Discussions with local professionals and with older and disabled households are therefore likely to play a big role in helping to understand local housing system dynamics and how these shape the choices open to older and disabled households in different tenures.

Table 3.1: Housing issues and their relevance for older and disabled households

Topic	Ways topic may shape housing choices and system imbalances
Tenure	<ul style="list-style-type: none"> • Housing and associated services that do not reflect tenure and health patterns will be less effective in preventing problems from escalating. • Lack of ownership options for older and disabled households with the financial ability to purchase limits choice and adds to pressure for social housing. • Mortality is greater among those who rent and has the effect of increasing the proportion of those in late old age that are homeowners. • Increases in older tenants have contributed to the reduction in turnover rates and thus supply in the social rented sector and a similar trend could occur in the private sector.
Household composition, age, LGBT, ethnicity, etc.	<ul style="list-style-type: none"> • Living alone is linked to the need for services and a higher risk of entering care home, especially for people aged 80+ years. • Individuals with learning disabilities could face a crisis if in the foreseeable future if the parent dies or becomes too frail to provide care. • Upward trend in older couples may reduce demand pressures for social care but may have implications for specialist housing and housing related services that are not well understood. • Culturally insensitive services can contribute to over-representation of individuals from an ethnic background in care homes.
Income and wealth and affordability	<ul style="list-style-type: none"> • Lack of alternative affordable housing options to facilitate a move to suitable housing in earlier old age may increase the risk of entering a care home following a crisis. • Welfare reforms may be limiting the ability of younger disabled to maintain/secure the housing that they need. • The consumer cost of specialist provision (including associated service charges) can be prohibitive for most households not in receipt of housing benefit.
House design and physical condition	<ul style="list-style-type: none"> • Good design that facilitates ease of movement within and around the property and use of facilities (kitchens and bathroom) can reduce the need for care and support. • Poor design, disrepair and lack of adaptations heighten risk of people being admitted to hospital as a result of a fall or other accident • Poor design etc., can make it more difficult for people with physical, sensory and cognitive disabilities to return home after a period in hospital.
Living arrangements and accessible design	<ul style="list-style-type: none"> • Living in unsuitable housing can escalate care needs (e.g. a disabled person trapped in a flat can become isolated and depressed, which can trigger care home admission). • Families with disabled children are more likely to live in overcrowded housing, which can exacerbate ill health of children and increase anxiety amongst parents. • Overcrowding, multi-occupancy and insecure accommodation can exacerbate ill health, impede access to treatment and hinder recovery from mental and physical illness. • Under-occupation contributes to fuel poverty.
Fuel poverty	<ul style="list-style-type: none"> • Thermally inefficient dwellings contribute to comparatively high numbers of older and disabled people admitted to hospital with COPD or a stroke plus excess winter deaths.

3.46 Some issues such discussions might explore are listed in the box opposite.

3.47 Discussions could also seek views about how well placed the market is to respond to any increase in the numbers of households that reach retirement that want to move to a property that is easier to manage, cheaper to heat and offers better access to public transport and services.

Issues for discussion

- What are the main drivers (consumer choice, barriers to accessing specific tenure etc.) of tenure change?
- Do homeless presentations suggest more older and disabled households are struggling to secure housing?
- How might recent building standards shape the ability of older & disabled households to secure suitable housing?
- Who do estate agents, landlords, developers and other housing service providers see as their main customers?
 - What are their views on current and future demand for accessible homes?
 - Do adaptations make it harder to sell or relet a property or reduce the value or vice versa?
 - Are lifetime homes and neighbourhoods still seen as being outside the mainstream?
- What impedes older and disabled households from taking action to improve their housing circumstances?
- What impacts are welfare reforms having on older and disabled households?
- Are there affordability or other issues that need closer scrutiny? Can partners share data that would assist?

Older and disabled households expectations and concerns

3.48 Plans to improve the housing choices must have an understanding of the forms of accommodation households would prefer and the services that households believe would assist them to enjoy life more fully. Local authorities have become more adept at engaging with residents and in using surveys and qualitative research tools to gather residents' views and perceptions. In the case of older and disabled households, including those approaching retirement, these tools could be used to find out more about:

- Future housing plans, the push and pull factors that are shaping these plans (see table 3.2)
- The sorts of housing and locational attributes desired by older and disabled households that are considering a move.
- Anxieties about their ability to live independently (costs, falls, other accidents inability to carry out daily activities etc.).
- Perceptions about different forms of specialist housing provision and whether it is something they would want for themselves.
- Whether services are delivering the outcomes older and disabled households expect or desire.
- Whether demand for social care and other services are depressed because people do not know about the services, do not know where to get information and advice or judge them not to be affordable.
- Perceptions of perceived gaps in housing options and services.

Table 3.2: Pull and push factors that shape residential mobility of older households

Positive pull factors to stay put	Positive pull factors to move
<ul style="list-style-type: none"> • Retain control and independence • Strong emotional ties to home and community • Proximity of family • Good neighbourhood • Home can be adapted to meet needs as reasonable cost 	<ul style="list-style-type: none"> • Wants to move to more suitable property which is easier to maintain and cheaper to heat • Want location that offers good access to facilities • Able to move within tenure or happy to transfer from owning to social renting • Suitable options available in desired locations
Negative 'push factors to stay put	Negative push factors to move
<ul style="list-style-type: none"> • Lack of information about alternatives • No realistic local alternatives available • Unwilling to tolerate upheaval • Does not want to move from owning to renting • Concerns about the affordability of other options • Price of bungalows/ other dwellings suitable for older households exceed value of present home 	<ul style="list-style-type: none"> • Home in extensive disrepair and unable to repair • Home is unsuitable but unable to fund adaptations • Lives alone following death or partner • Concerns about safety within and around home • Fear of crime in neighbourhood etc. • Crisis and rapid deterioration in health • Fuel poverty &/or making ends meet in current
<p>Source: Scottish Executive (2006) Time to Move? A Literature Review of Housing for Older People and Institute Of Public Care (2011) Strategic Housing For Older People</p>	

Data considerations

3.49 Qualitative research with older and disabled households and their families can be expensive, especially if the intended to engage with people with more complex or challenging needs or require the assistance of interpreters. This may therefore be an area where neighbouring authorities could join forces.

3.50 Local authority, private and voluntary front line staff can also offer important insights consumer perceptions as well as service inadequacies. Discussions with staff may be a particularly useful starting point for gaining some insight into the expectations and concerns of older and disabled households that are more difficult to reach.

Estimating needs

3.51 Integration Authorities, through their JSNA, have overall responsibility for assessing the needs of older and disabled households. Local authorities, through their HNDA, have responsibility for estimating specialist provision to meet these needs.

3.52 So far, JSNA outputs have typically focused on establishing the big picture in terms of inequalities in health and the numbers of people using different

services. Few JSNA examine evidence of need and demand in a systematic way to estimate the current numbers of older and disabled households that have unmet needs or could move from an institutional setting to a community setting if appropriate housing and assistance was available.

- 3.53 Moving forward, a priority for planners engaged in the HNDA and JSNA process will be to improve the evidence base for estimating need and the possible requirement for specialist provision. Plans to improve this evidence base are likely to coalesce around:
- Further development of the HSCDIIP platform and what additional information would permit the strategic need assessment to take better account of a person's housing circumstances and whether this aggravates or creates avoidable care and support needs and costs.
 - Greater shared understanding of who care homes, sheltered housing and other forms of specialist housing provision should cater for and what data would therefore be required to analyse the gap between need and supply.
 - Arrangements to ensure the JSNA outputs enable housing and SLDP planners to assess their housing implications and to estimate the requirement for specialist housing provision at the local authority and wider housing market area level.

Estimating specialist provision to meet needs

- 3.54 There are well-rehearsed arguments in Housing Contribution Statements about the role of housing in contributing to better health and wellbeing outcomes and the need to boost the provision of specialist housing, to increase the volume of accessible ordinary housing and to sustain investment in housing adaptations and housing support. On the other hand, local authorities continue to struggle to quantify gaps or shortfalls in specialist provision.
- 3.55 There are no easy or quick solutions for overcoming the major challenges to estimating future specialist provision, such as those highlighted in paragraph 2.16. The following paragraphs do, however, set out a framework to bring available demand and supply material together to estimate potential shortfalls in the provision of specially designed and supported housing. The framework assumes that planners will want to look at current gaps in provision and possible developments in the next three to five years.
- 3.56 The framework does not extend to estimates of home care and support services as this is primarily a matter for the Integration Authorities to appraise. However, HNDA planners should be aware that some JSNA reports use measures of 'service supply' as surrogates for need. This is problematic as the reach of social care services has been curtailed by policy choices to deal with budget constraints, including the tightening of eligibility criteria for care and support. Furthermore, data on ineligible or unmet need is often lacking as not all local authorities maintain waiting lists for social care services.

Potential shortfalls in specially designed or adapted housing

Accessible/adapted housing

- 3.57 As discussed earlier, published SHS statistics provide estimates of the numbers of homes with adaptations in the social or private sector and the numbers of households that state their home requires an adaptation. Comparisons of these two figures will provide some estimate of the potential shortfall in accessible adapted homes.
- 3.58 Depending on sample size, it might be possible to analyse SHS data to look at some associated mismatches, such as the numbers of 'adapted' homes occupied by non-disabled households or the numbers of older and disabled households that state their home has been adapted but also report that further adaptations are required.
- 3.59 Local authorities may also want to assess whether SHS estimates of accessible and/or adapted housing in the social sector are broadly consistent with landlord records or if some adjustment to the SHS figure is warranted. This assessment should be underpinned by agreement on whether amenity (medium dependency) housing should be included in the count of accessible social rented housing.

Wheelchair accessible housing

- 3.60 The higher DLA mobility rate can be used to approximate the numbers of people most likely to require a wheelchair accessible home. This count could be compared against the numbers of known wheelchair accessible properties to estimate the potential shortfall in such provision.
- 3.61 DWP benefit data is based on claimants not households. A few households may contain two or more claimants, but for planning purposes the simplest solution is to assume that there is only one claimant in each household.
- 3.62 The Scottish Government publish local authority level estimates of wheelchair accessible housing units in the social but not the private sector. If there is also a lack of local data, some estimate of wheelchair accessible homes in the private sector could perhaps be derived from SHS data. This would result in some overlap between estimates of the shortfall in wheelchair and other accessible housing, which should be made clear.

Short-run projections for specially designed/ adapted homes

- 3.63 To project potential shortfalls in wheelchair accessible and other adapted and/or purpose built accessible housing, local authorities could assume that the rate of 'households in need' will remain constant.
- 3.64 For example, let us assume that SHS derived estimates, when applied to NRS household estimates for the same year suggest 0.05% of the household population is made up of households that require but do not occupy a

wheelchair accessible dwelling. This rate would be applied to NRS household projections for 2015-2020 to derive an estimate the possible change in the numbers of such households in the period to 2020.

- 3.65 This projected count would provide an indication of the possible change in the potential shortfall of provision in the absence of any supply response. Planners could then look at the possible impact of alternative supply scenarios. For example, they could look at what might happen in the average numbers of housing adaptation completed in each of the last 5 years were to continue. Alternatively, they could look at what might happen if completions were to increase or decrease by 20%. A similar approach could be adopted to look at adjustments resulting from new supply.
- 3.66 Local authorities may also want to make some allowance for families with disabled children that are at high risk of being unsuitably housed in the near future. Advice should be sought from Children's Services about the numbers of possible cases and if any of these families might have the resources to resolve their own need in the market.

Potential shortfalls in supported housing intended for permanent residence

- 3.67 Local authorities will want to consider potential shortfalls (or demand gaps) in the provision of supported housing, which the HNDA Practitioners Guide states this should include sheltered housing, very sheltered housing and care homes.
- 3.68 Simulation models have been developed in England to estimate long range demand for extra care and other forms of supported housing but as discussed in appendix 6 these models are not well suited to the Scottish policy context.
- 3.69 The following paragraphs therefore outline a simple method for modelling the potential shortfall for supported housing. As illustrated in figure 3, this method is adapted from the traditional approach for estimating current (or backlog) need for affordable housing. It assumes that one of the aims of supported housing is to divert need away from care homes and meet household aspirations for independence and does not seek to estimate need demand for care homes. It also does not distinguish between different forms of supported housing as people with similar levels of need for support can live in different types of facility and the services offered in different facilities can be very similar
- 3.70 The approach is intended to provide a first step toward estimating the 'demand gap' rather than provide definitive estimates of the potential shortfall of supported housing. Nonetheless, it is hoped that it will:
- Give local authorities with a clearer picture about the volume of supported housing suitable for older and disabled households that might be needed.
 - Provide a vehicle to think about other factors could affect the 'demand gap' and how they might be further investigated.
 - Help planners better understand local data sources and what adjustments would improve the robustness of the modelled estimates.

Figure 3.1: Basic framework for estimating shortfall in supported housing

$$\text{PPRS} = A + B - Y$$

Where

PPRS = Projected possible requirement for supported housing (PPRS)

A= The current numbers of older and disabled households in housing stress that also have care and/or support needs

B = The average numbers of older and disabled households with care and support needs and that fall into housing stress each year, projected forward 3-5 years

Y = The average annual flow of allocations projected forward 3-5 years

Older and disabled households in current housing stress

- 3.71 The first step is to estimate of the numbers of older and disabled households and what proportion have care and support needs, may be assumed to be in housing stress and would benefit from a move to supported housing.
- 3.72 The Census 2011 can be used to identify the proportion of households that contain someone with a long term health or disability broken down by the age group of the householder (say under 65 years, 65 to 74 and 75 to 84 years and 85+ years). Rates for each age group can be applied to NRS household figures to arrive at an estimate of the total number of older and disabled households for the time period under consideration, such as 2015 to 2020.
- 3.73 In SDP areas where consistent strategic and local authority level figures are desired, SHS data can be used to estimate what proportion of all older and disabled households state their home is not suitable for their needs and that they receive or require informal or formal care. This rate, when applied to older and disabled household numbers, would provide an approximation of the numbers of older and disabled households in housing stress that may benefit from a move to supported housing.
- 3.74 However, it is assumed individual local authorities will want to use local sources of data. These should produce more robust estimates than figures derived from the SHS. Some indicators of 'housing stress' that planners could seek to estimate, preferably broken down by tenure, include:
- The current number of all live housing register applicants (including homeless applicants) assessed to have a need (as distinct from aspiration) to move to specialist provision.
 - The number of housing adaptation applicants that the OT service has assessed to live in unacceptable housing and where a move to supported housing would be the more cost effective response. This estimate should be agreed with OT and social care staff and should, if possible, exclude

households that have also applied for social housing in order to minimise double counting.

- People in care homes and other institutional settings that could live in a community setting if appropriate provision were available. This indicator is of particular significance for adults with learning difficulties and adults with complex needs that have been placed outside the local authority area. Any allowance should also be agreed with social care.
- An allowance for the numbers of households that live in care homes or other institutional settings that at the point of entry could potentially have been diverted into supported housing if a more timely intervention had occurred or a suitable place had been available. This allowance should also be agreed with social care colleagues.

Older and disabled households falling into stress

3.75 Planners will also want to provide some estimate of the number of existing older and disabled households likely to fall into 'housing stress' over each of the next 3-5 years. These estimates should, where possible, be based on trends data for the past 2-3 years to allow for fluctuations from one year to a next and be broken down by tenure. Possible indicators include:

- The average numbers of older and disabled households that join the housing register each year, are assessed to have a need (as distinct from aspiration) to move to specialist provision and are re-housed in supported housing within 12 months.
- The average annual numbers of 'critical' cases referred for rehousing in supported housing by social care. These referrals typically involve people that cannot be discharged from hospital until alternative suitable accommodation is found. Many of these households are rehoused in a very short period of time and do not always get recorded on waiting lists. This estimate should be agreed with social care planners.
- Older and disabled households at high risk of permanent admission to institutional care. These cases often involve households where the service user's health is continuing to decline and where there is already a package on intensive home care, underpinned by informal care. Often the trigger is a deteriorating on the health of the carer. This estimate should be agreed with social care planners.

Average annual flow of allocations

3.76 A core part of the calculation involves adding together the current and projected housing stress and then subtracting this from the known supply of supported housing. In this instance, supply refers to vacancies arising from turnover in the existing supply of supported housing and first lets of newly constructed or converted supported housing units.

3.77 The projected annual flow of relets in social supported housing should be based on the average annual number of vacancies for the last 3-5 years.

Estimates for new provision should only include units for which funds have been secured. Ideally turnover in the private sector should also be taken into account but in most areas such data is unlikely to be available unless those managing retirement and assisting living places are willing to share data.

A word on sensitivity analysis and follow up work

- 3.78 In some local authority areas there are reservations about the sustainability of some sheltered housing developments. Planners may find that the simplest solution is to assume that all existing supported housing provision is fit for purpose and will remain in use over the projected time period. Once initial estimates have been generated, the model could be re-run to look at the potential impact of decommissioning supported housing that is judged to be no longer fit for purpose.
- 3.79 Further sensitivity analysis to look at the impact of different assumptions about the level of existing households falling into housing stress each year may also be of interest.
- 3.80 More generally it will be important to interpret the findings in light of the structure and dynamics of the housing market and the possible impact of other interventions such as home care, telecare and the provision of adaptations. If estimates suggest that high numbers of the households "in stress" currently live in private housing, there may be a good case for follow up work to find out what these households want from accommodation, why they applied for social housing and their knowledge of possible alternatives, including private sector options.

Data considerations

Housing register and lettings data

- 3.81 Housing list and lettings data can provide useful insights about expressed demand for specialist housing in the social rented sector but care is required when analysing data in respect of older and disabled households:
- Some households that apply for sheltered housing and other forms of supported housing apply as an insurance against possible future ill health or want an accessible house rather than because they require specially designed or supported housing. That said, many of these cases tend to have low or no assessed need.
 - The information sought from applicants and/or the way it is recorded means that the numbers of applicants with specific disabilities may be under-reported or not recorded. Arrangements to assess and prioritise housing applicants often give far greater weight to physical disability and overlook the benefit of accessibility and liveability for people with sensory or cognitive disabilities.

Pathways to more intensive home care

- 3.82 In terms of developing indicators non housing register based indicators of housing stress it may be useful to explore the care pathways of individuals that have entered a care home or other institution and/or the care pathways of those that have experienced delayed discharge from hospital and/or have experienced repeated admissions as a result of falls and other accidents in the home.
- 3.83 For example, housing planners could work with colleagues from social care to jointly review a number of cases and come to view on whether it would be reasonable to assume that some form of housing intervention may have produced different outcomes or delayed admission. Depending on the numbers of cases reviewed, questions the analysis might consider include:
- On reflection, did assessment give due consideration to the housing requirements and the potential benefits of exploring mainstream housing options?
 - What housing options could have enabled the person to continue living in their own home or delayed the need to move to an institutional setting for longer?
 - What lessons could be learned for future assessment of needs?

Limitations of long range predictions for specialist housing provision

- 3.84 Integration Authorities will have to move beyond marginal adjustments to existing services and budgets if they are to redirect funding to preventive and early intervention services and to develop a health and social care market that is far more responsive to what service users and their carers want.
- 3.85 The expansion of SDS will also bring about changes in the type of care and support provided in ways that are impossible to predict. The ability of people with SDS payments to shop around, the move away from predictable revenue funding block contracts and the entry of new service providers will generate much change in the mix of services available.
- 3.86 Planners should therefore avoid expending a lot of resources in trying to producing long range projections or forecasts for the provision of specialist housing provision, and more specifically supported housing provision.
- 3.87 Planners should also resist any suggestions that they adopt a 'predict and provide' approach in respect of specialist housing provision. The HNDA Practitioners Guide and the LHS Guidance stress that the Housing Supply Target is a policy choice and should reflect the local authorities understanding of a diverse range of factors likely to impact on the pace and scale of housing. This holds true for both mainstream and specialist provision.

4. CONCLUDING OBSERVATIONS

Bringing it altogether

- 4.1 Older and disabled households will account for upwards of half of future household growth. Developing a deeper understanding of their needs and demands will be pivotal for the development of strategies to shape housing systems and to sustain strong communities as well as the development of plans to integrate health and social care.
- 4.2 Although it will be a gradual and ongoing process, the alignment of HNDA and JSNA analysis offers much potential to:
 - Deepen understanding of the ways in which homes, places and the dynamics of the housing system create frictions and problems for older and disabled households.
 - Offer new insights into where policy interventions to broaden consumer housing choices, reconfigure housing related services and to improve the design of places could reduce pressures on health and care.
- 4.3 The rapidly evolving policy context means that 'predict and provide models' of planning are of scant value. Instead, planners engaged in the HNDA and JSNA process will need to use their joint resources to:
 - Liaise with the Integration Authority, the LHS Partnership and other stakeholders to establish the issues of greatest local concern.
 - Work out the key analytical priorities that stem from these concerns
 - Work out and implement a plan of action to draw on a mix of data and local knowledge to explore these issues.
- 4.4 Whatever joint working arrangements are adopted, planners will need to take care to:
 - Guard against the temptation to produce lots of descriptive statistics.
 - Concentrate on understanding older and disabled households better by actively listening to them and their carers rather than rely solely on statistical data.
 - Engage with a diverse range of organisations in a way that is productive and does not become unwieldy.
 - Take steps to modify local administrative data so that key data gaps are overcome so that a deeper understanding of the issues can be developed over time.
- 4.5 The HNDA Practitioners Guide templates do not require analysis by client group. However, to fit with the SCP planning arrangements, housing and spatial planners may have to be prepared to work with health and social care planners to review the housing related needs of different client groups.

- 4.6 The supply and demand of specialist housing provision and housing related services do not operate in a vacuum. Mismatches in the supply and demand of ordinary housing often spillover into expressed need and demand for specialist housing provision. For example, some older households apply for sheltered housing because they want the benefits of housing support and sense of community. Others apply because they want a particular neighbourhood or because they do not want to be trapped in their own homes because of its design or situation.
- 4.7 Interpretation of trends will therefore need to take account of developments in the wider housing market. Changes in the health and social care market may also need to be taken into account.

Improving evidence

- 4.8 Some Census 2011 small area tables relating to a long term health problem or disability are far less detailed than those published at the local authority level. To make best use of the Census data, some commissioned Census 2011 outputs would be beneficial. This is something that local authorities may want to work with CHMA, the JIT and NRS to progress.
- 4.9 There is limited benchmark data that would assist local authorities to interpret key aspects of the analysis. For instance, there is no routinely updated data on the numbers of people that live in sheltered housing that also receive home care. Likewise, routinely updated information of the support charges local authorities' levy for different forms of housing support in different settings is largely missing. Local authorities may therefore want to work with the Scottish Best Value Network to scope out and put in place arrangements to share pertinent benchmark data.

Learning from good partnerships

- 4.10 Local authorities that have made the most progress towards aligning their housing, planning, health and social care strategies and supporting analysis have invested much time and effort to listen and talk to each other in order to:
- Better understand each other's language, roles, ways of working and the factors that drive or constrain what each partner is doing.
 - Identify issues of common concern and secure support from elected members to champion the role of housing as integral to delivering better health and social outcomes.
- 4.11 They have also provided LHS Partners, other stakeholders and older and disabled households with real opportunities to shape the interpretation of available evidence and contribute to the development of local strategies and plans.

APPENDIX 1: USEFUL REFERENCE MATERIAL

The following documents and websites are intended to supplement the listing of possible sources of data and evidence issued by:

- The CHMA Specialist Provision Evidence Finder to accompany the HNDA Practitioners Guide in 2014, and
- THE ISD Guide to Data to Support Health & Social Care Partnerships in Joint Strategic Commissioning and Joint Strategic Needs Assessment

Useful documents

General

DCLG (2008) *Housing, Care, Support: a guide to integrating housing-related support at a regional level*, Department Communities and Local Government: London

Department of Health (2013) *Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies*, DOH: London

ISD (2014) *Population Needs Assessment for Health and Social Care Partnerships: guidance on the use of data sources*: Edinburgh www.isdscotland.org/Health-Topics/Health-and-Social-Community-Care/docs/HSCP_NA_031014.pdf.

Joint Improvement Team (2008) *Capacity to Change Commissioning Strategy for Learning Disability Services*, JIT: Edinburgh

Joint Improvement Team JIT (2014) *Strategic Planning (Joint Strategic Commissioning) Advice Note* February 2014: Edinburgh

Knapp, Martin, Bauer, Annette, Perkins, Margaret and Snell, Tom (2010) *Building Community Capacity: making an economic case*. PSSRU Discussion Paper DP2772, Personal Social Services Research Unit: London

(The above report demonstrates that the investment in preventative spend has a significant cost saving for public sector health and care services, whilst also improving quality of life)

Northern Housing Consortium (2011) *A Foot in the Door: a guide to engaging housing and health*, NHC: Sunderland

ODS (2012). *Supporting Older People to Live at Home: the contribution of housing associations and cooperatives in Scotland*, SFHA: Glasgow

Adaptations and building design

Audit Commission (2000) *Fully Equipped: the provision of equipment to older people or disabled people*, Audit Commission: London

Foundations (2010) *Adapting for a Lifetime*, Foundations: London

Heywood F, Grisbrooke J., Sheehan, K and Powell, M. (2006) *Minor Adaptations Without Delay: A practical guide and technical specifications for housing associations*, Housing Corporation & College of Occupational Therapists: London

Heywood, FS & Turner, L. (2007) *Better Outcomes, Lower Costs: implications for health and social care budgets of investment in housing adaptations, improvements and equipment - a review of the evidence*, for Office for Disability Issues, Department of Work and Pensions: London

Health and housing

Building Research Establishment (2011) *The Real Cost of Poor Housing*, BRE, London

National Housing Federation (2014) *Connecting Housing and Health*, NHF: London.

Newhaven Research (2012) *Extending Understanding of the Role, Contribution and Benefits of Housing Services*, JIT: Edinburgh

Roys, M. (2012) *Assessing the Health Benefits Of Lifetime Homes*, BRE and DCLG: London

Hunter, J., and Buckley, S (2013) *Mapping Health Toolkit: helping local councils and Environmental Health Officers respond to the new public health agenda*, Chartered Institute Environmental Health: London

Housing, place and neighbourhood and links to health and wellbeing

Ross, A (2011) *Plugging health into planning: evidence and practice: a guide to help practitioners integrate health and spatial planning*, Local Government Association: London

Croucher K., Myers L., Jones R., Ellaway A., Beck S., (2007) *Health and the Physical Characteristics of Urban Neighbourhoods: a critical literature review*, Glasgow Centre for Population Health: Glasgow

Department of Health (2014) *Healthy Urban Planning Checklist*, DOH: London - checklist for appraising the health impacts of new developments of 10+ units

Ross A with Chang M (2013) *Planning for Healthier Places*, TCPA: London

Thomson, H (2003) *Health Impact Assessment of Housing Improvements - A Guide*, Public Health Institute of Scotland and MRC Social and Public Health Sciences Unit: Glasgow

Learning disabilities and housing

Easterbrook, L (2009) *Living on the edge - enabling older owner occupiers with mild learning disabilities*, Care and Repair England: Nottingham

Emerson, E. & Hatton, C. (2008). *Estimating Future Need for Adult Social Care Services for People with Learning Disabilities in England*, Lancaster: Centre for Disability Research: Lancaster University

Scottish Government (2013) *The Keys to Life: Improving quality of life for people with learning disabilities*, Scottish Government: Edinburgh

Mental health and housing

Pearce, N., and Wallace, A. (2011) *Demonstrating the Effectiveness of Housing Support Services for People with Mental Health Problems*, the Centre for Housing Policy York University: York

Housing LIN (June 2012) *Breaking New Ground: The quest for dementia friendly communities*. Housing LIN: London

Older people and housing

Appleton N (2001) *Planning for the Majority: The Needs and Aspirations of Older People in General Housing*. Joseph Rowntree Foundation: York

Bligh, J., and Kerlake A (2011) *Strategic Housing for Older People (SHOP) - Planning, designing and delivering housing that older people want*, Housing Learning and Improvement Network, supported by the Association of Directors of Adult Social Services: London

Housing LIN, The National Housing Federation McCarthy & Stone Tetlow King Planning and Contact Consulting (2012) *Housing in later life-planning ahead for specialist housing for older people*, Housing LIN: London (better known as the Older Persons' Housing Toolkit)

Department of Health (2010) *How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level*, Department of Health: London

Housing for Older People Development Group (2006), *Older People's Housing Strategies: key policy drivers*. DCLG: London

Porteus, J. (2013) *Housing our Ageing Population: Plan for Implementation (HAPPI2)*. All Party Parliamentary Group on Housing and Care for Older People: London

Scottish Government Communities Analytical Services (2010) *The Impact of Population Ageing on Housing in Scotland*, Scottish Government: Edinburgh

Wood, C (2013) *Top of the Ladder*, Demos: London

Physical and sensory disability and housing

Adams L and Oldfield K (2012) *'Opening up work: The views of disabled people and people with long-term health conditions'* Equality and Human Rights Commission Research Report

Hamer, R. (2005) *House Hunting for All: Opening up property search systems to disabled people*. Edinburgh: Ownership Options in Scotland

Joule, N., Levenson R., Brown, D (2014) *Housing for People with Sight Loss: a practical guide to improving existing homes* Thomas Pocklington Trust: London

O'Brien, P. And O'Connor, G (2006) *Wheelchair User Housing Study: An evaluation of users' experience and the evolution of design standards*: Northern Ireland Housing Executive: Belfast

Thomas, P. (2004) *The Experience of Disabled People as Customers in the Owner Occupation Market* Housing Studies, Vol.19, No.5, pp.781-794

Watson, L (2012) *Mind the Step: an estimate of housing need among wheelchair users in Scotland*: (Horizon Housing and CIH Scotland: Edinburgh)

Working with statistics and analysis of evidence

Brown, R and Sanders, M. (2008) *Dealing with Statistics: what you need to know*. Open University Press: Maidenhead: Berkshire.

Government Statistical Service (2009) *National Statistician's Guidance: use of administrative or management information*, ONS: London

HM Treasury (2011) *The Magenta Book Guidance for Evaluation*, HMSO: London

Useful websites

DWP stat-xplore and tabulation tool

<https://sw.stat-xplore.dwp.gov.uk>

<http://tabulation-tool.dwp.gov.uk>

These two sites provide access to data on state benefits and other DWP payments such as cold weather payments and national insurance registration by people coming to a local authority area from overseas. Stat explore includes data on housing benefits data, PIPs and sanctions.

Elderly Accommodation Counsel

<http://www.eac.org.uk>

<http://www.housingcare.org>

The Elderly Accommodation Counsel (EAC) is a national charity to help older people make informed choices about meeting their housing and care needs. It maintains an online searchable database of over 40,000 retirement home and nursing home developments across Britain.

Evolve for Vision

www.housinglin.org/pageFinder.cfm?cid=7997lt

This is a tool for evaluating the design of housing for older people with sight loss and will be of interest to those engaged in commissioning new homes or upgrading existing dwellings. The tool was developed with funding from the Thomas Pocklington Trust.

Foundations

<http://www.foundations.uk.com/resources/toolkits/handyperson-financial-benefits-toolkit/>

This is the English body for Home Improvement Agency and Handyperson Services. It is a good source for practical tools regards home improvements, adaptations and repairs. The Handyperson Financial Benefits Toolkit calculates the cost savings from using Handyperson Services. The latest version of this tool, which was originally developed for DCLG, can be found at the above link.

Girlings Retirement Rentals

<http://www.girlings.co.uk>

Girlings are the main provider of retirement rented housing in Britain. This family firm which offers private properties to rent for the people aged 55 and over. Their website contains a development map that shows that location of their development and where properties are available for let.

HFT Smart House

www.hftsmarthouse.org.uk

This website provides an introduction to personalised technology in the home.

Home2Fit

<http://www.home2fit.org.uk/accessibility.aspx>

Home2Fit is Scotland's Accessible Housing Register is an online system to match accessible properties with people who need them. It is currently being piloted in Aberdeen, Fife and Glasgow. Horizon HA is also now using the register to allocate its wheelchair accessible properties. The Register is being developed by the Glasgow Centre for Inclusive Living's (GCIL)

The Housing Support Enabling Unit

<http://www.ccpScotland.org/hseu>

This is an excellent source of information about housing and housing services to communities including disabled and older people and the potential impact of welfare reform on more vulnerable groups of households and specialist housing provision.

Housing Learning and Improvement Network

<http://www.housinglin.org.uk>

The website is one of the main 'knowledge hub' for housing, health and social care professionals in England involved in planning, commissioning, designing, funding, building and managing housing with care. Although it is primarily focused on older people, the website contains material that is relevant to people with physical disabilities, mental health issues (including dementia) learning disabilities and multiple and complex conditions.

Mental Well-being Impact Assessment Toolkit

<http://www.apho.org.uk/resource/item.aspx?RID=95836>

Although it looks rather daunting on first inspection, this toolkit provides a good overview of the factors that promote and protect positive wellbeing and the ways in which policies, proposals, programmes and projects can influence positive mental health and wellbeing. It sets out participative framework for conducting a structured analysis of the wider determinants of health and positive wellbeing such as housing, education and economic status. The framework has been designed to engage a range of stakeholders, including local communities to increase awareness and understanding of well-being, to identify the potential positive and negative impacts of proposals on well-being and to stimulate discussion about the findings and possible recommendations.

NHS Health Scotland's Virtual Learning Environment

<http://elearning.healthscotland.com>

This on-line interactive learning site is mainly intended for NHS staff but it includes modules on reducing health inequalities and other topics of broad interest. Not every course is open access, but one open access course that is recommended is the short introduction to Health Impact Assessment.

NOMIS

www.nomisweb.co.uk

NOMIS is an ONS service that provides access to labour market statistics but it a good source for DWP benefits data, including some disability benefits and pension credits.

RBIS Sight loss tool

<http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool>

The Royal National Institute of Blind People (RNIB) data tool provides local authority information about blind, partially sighted, and those at risk of sight loss. It is a great tool that includes a lot of useful additional information and is accompanied by guidance for users.

UCL Institute of Health Equity

<http://www.instituteofhealthequity.org/projects/local-action-on-health-inequalities-series-overview>

The Institute was launched in November 2011 and provides access to various evidence reports and briefings about specific health inequality issues such as fuel poverty and the provision of green spaces. These briefings also discuss practical actions to tackle health inequalities.

APPENDIX 2: GLOSSARY OF KEY TERMS

Term or acronym	Definition
Affordability Ratios	This term is generally used to describe the relationship of household income (or earnings) to the price of housing. Affordability can be calculated in a number of ways, including the use of lower quartile incomes (or earnings) to entry level house prices (say lower quartile) or average house prices.
Asset management (housing providers)	Strategies employed by a housing provider to maximise the value of its assets, including (but not limited to) investment, disposal and refinancing of existing housing stock and acquiring new units.
Baseline Data	The state of the social, economic or environmental context at a given time, often at the start of an intervention, against which changes can be tracked.
Benchmark	An externally-agreed comparator to compare performance of the housing system or to look at the performance of organisations and other systems.
Best fit (spatial statistics)	Process for assigning areas to geographies in other hierarchies. 'Best fit' can also refer to statistical techniques that attempt to demonstrate the degree of association between variables.
CAPI (Computer Assisted Personal Interviewing)	IT systems that display the interview schedule (with appropriate filter questions), offer guidance to the interviewer and record the interviewees' responses.
Care in the Community	A term that is used to refer to successive government strategies and policies to assist people avoid moving into or move out of hospitals and other institutions into mainstream or more specialist provision situated in a community setting.
Care hub	Physical building where services can be co-located and accessed by customers or delivered to customers in surrounding area.
Carer	A person, normally a relative or friend, who provides personal care and support to someone.
Cohort	A group of people falling into the same age range. Examples include children (0-15 years), young adults (16-24) and older people (55-64; 65-74; 75-84; 85+)
Commissioning	In health and social care circles this term is used to cover the entire process of assessing, planning specifying, securing and monitoring services to meet people's needs at a strategic level.
Complex needs	Terms used to describe a person that has needs arising from more than one difficulty. For example, a person with learning disabilities may also have a physical impairment or behavioural difficulties.
Composite indicator	An aggregation of numerous indicators which aims to give a one-figure indicator in order to summarise measures, such as the deprivation index
Confidence Interval	The confidence intervals for specific statistics (e.g. means) give a range of values around the statistic where the "true" (population) statistic can be expected to be located (with a given level of certainty e.g. a 95% probability).

Term or acronym	Definition
Counterfactual	Counterfactual: this is a benchmark of what might have happened anyway, without public sector intervention.
Dementia	Dementia is the collection of symptoms including a decline of memory, reasoning and communication skills and a gradual loss of skills needed to carry out daily activities.
Disaggregation	Sub-dividing headline statistics by area, tenure or some other category.
Displacement	Displacement: effect obtained in a project or programme area, or by a project or programme beneficiary, at the expense of another area or beneficiary.
Entry level market housing	This entry-level price refers to the open market purchase price (but can also refer to private rent) at which there is a reasonable supply of dwellings in a reasonable physical condition. The lower quartile resale price is often selected to ensure there is a sufficiency of dwellings for prospective first time buyers (at least in more stable market conditions).
Extra care housing	Term used to describe housing, which is often purpose built to accommodate people with significant physical, sensory or cognitive disabilities and offers a mix of facilities and onsite personal care and support.
Floating support	Support that is provided to a number of tenants and homeowners that are dispersed across an area and typically live in ordinary housing.
General needs housing	Housing that has not had any specialist adaptations or design features made to it. May also be referred to as ordinary housing or mainstream housing.
Gross household formation	This term refers to the number of new households likely to form from the resident population over a period, conventionally one year.
Household space	A household space is the accommodation occupied by an individual household or, if unoccupied, available for an individual household
Household	National Statistics define a household as one person or a group of people who have the accommodation as their only or main residence AND (for a group) share either a living room or at least one meal a day. A person living in a bedsit who does/do not share a sitting or living room with anyone else comprises a single person household.
Household reference person (HRP)	Household Reference Person (HRP) has replaced Head of Household. For a person living alone, it follows that this person is the HRP. If the household contains one family, the HRP is the same as the Family Reference Person (FRP), which is usually selected on the basis of economic activity, then age, then order on the form.
Housing demand	The quantity of a good that households both want and can afford to acquire without some form of public sector intervention. Thus housing demand takes into account both preference and the ability to pay for housing where the purchase price or rent is set at 'open market' value.
Housing need	A household that lacks a home or lives in an unsuitable dwelling and that cannot afford to secure alternative housing in the open market without state assistance of some form.

Term or acronym	Definition
Housing related care	Care received by an individual in their own home. Examples include support to an older person in cooking and a visit from health care providers in one's own home.
Housing requirement	The numbers of dwellings assessed to be necessary to ensure all households have access to suitable housing, irrespective of their ability to pay. It is a generic term used to cover both demand and need.
Joint Strategic Commissioning	In Scotland the term is used for "all the activities involved in assessing and forecasting needs, linking investment to agreed desired outcomes, considering options, planning the nature, range and quality of future services and working in partnership to put these in place."
Joint Strategic Needs Assessment	A continuous process and document that brings together data on the 'big picture' in relation to the factors impacting on health and wellbeing trends of local communities (including housing, employment, and the local environment) to enhance and strengthen the evidence to available to commissioners to inform strategic decision making.
Market failure	Used by economists to refer to a situation where the market fails to function smoothly or effectively (or even exist) because of information deficiencies, externalities, risk aversion, institutional barriers or some other factor. Market failures are one of the reasons for public intervention.
Material consideration	Material considerations are factors considered in the determination of applications for planning permission and other consents. They include Scottish Government policies and guidance as well as SDP and LDP policies.
Market rent	The best rent a vacant property might achieve on the open market assuming consumers are willing to pay.
Mean (average)	The sum of the values for all of cases divided by the number of cases. The average is sensitive to extreme values in the distribution, although this can be partly addressed by setting upper and lower limits on the distribution. It is also sensitive to skewed distributions - for example average house prices are often significantly higher than the median house prices because of the long tail of very expensive properties at the upper end of the house price distribution.
Median	The median is the middle value of the distribution when all values are sorted in ascending (or descending) order. The median is not affected by extreme values.
Mental illness	A mental illness is a diagnosable medical condition that disrupts a person's thinking, feeling, mood, social abilities and daily functioning. Serious mental illnesses include depression, anxiety, schizophrenia, bipolar disorder, obsessive compulsive disorder (OCD), panic disorder, posttraumatic stress disorder (PTSD) and borderline personality disorder.
Mental wellbeing (also positive mental health)	According to Health Scotland, there are many different definitions of mental wellbeing but they generally include areas such as: self-esteem, life satisfaction, optimism, confidence and engagement with the world and a sense of belonging and support and the resilience to cope when times are tougher than usual.

Term or acronym	Definition
Non-sampling error	Errors that arise in a data collection process due to factors other than taking a sample. Examples include low response rates and other instances where high risk that respondents' views differ from the population in general.
Percentiles	Divide a set of cases into a 100 equally sized groups. The first percentile is the value below which 1% of cases values lie, while the 99th percentile is the value below which 99% of cases lie. The 50th percentile is equivalent to the median.
Person centred (personalisation)	An approach to social care that seeks to ensure that individuals that receive support, whether funded by the statutory services or otherwise, has real choice and control over the shape of that support and care they receive irrespective of where they live.
Primary data	Original data that is gathered and evaluated from a bespoke method such as a survey or focus group in order to gather data required for a specific purpose.
Outcome	An outcome is a measurable change in the housing system or a change in the profile and/or health status of a particular population sub-group, sometimes attributable to an intervention.
Qualitative research	A type of research designed to reveal a full range of views and circumstances of the population under study, giving an in-depth picture. Examples include depth interviews and focus groups.
Quantitative research	Research designed to provide statistically reliable numerical data about a topic. It can involve a survey of a sample of the population which has been designed to be representative of the population as a whole.
Quartiles	Divide the set of cases into 4 equally sized groups. The quartiles are the values below which 25%, 50%, 75% and 100% of the areas.
Profound multiple learning disabilities	Individuals diagnosed with profound and multiple learning disabilities (PMLD) have more than one disability, with the main disability usually being learning disabilities. People with PMLD often need carer support to assist with daily functions such as washing, dressing and eating. People with PMLD are generally known to the statutory services and account for 1- 2% of social work caseloads.
Range	This is the difference between the maximum and minimum values but it has nothing to say about the shape of a distribution.
Ranks	<p>This is a measure used in the deprivation index. Values for all areas are ranked in order of magnitude from lowest to highest to permit comparison of the relative position of a given area in the rankings at a given point in time. Care needs to be applied in interpreting rankings:</p> <ul style="list-style-type: none"> • Many areas have very similar profiles which is not always apparent from looking at the banded rankings. • Change in the relative ranking of an area is often due to a change in the underlying data rather than any real change on the ground. Rankings therefore tend to be a poor measure of change over time.
Reablement	Reablement is a terms used to describe a range of services focused on helping a person maximise their independence by learning or re-learning the skills necessary for daily living and the confidence to live at home.

Term or acronym	Definition
Reliability	This is a measure of the consistency with which people give the same response on different occasions assuming no change in the trait being measured.
Secondary data	Data already gathered and processed for one purpose that is then used for another purpose. Common sources of secondary data for HNDA include the Census, Large surveys (such as the House Condition Survey) and administrative records.
Telecare	Telecare covers a range of technology such as community alarms and sensors that provide remote care and offer reassurance older and disabled persons to enable them to remain living in their own homes.
Trajectory	A predicted future direction and rate of change of household growth or another indicator, typically predicted on the basis of underlying trends.
Triangulation	Triangulation is an important feature of HNDA and usually refers to the process of comparing findings from two or more sources of statistical data to ensure that the numbers are of a similar order of magnitude. However, the term can also refer to comparisons between quantitative and qualitative research findings to assess whether generalisations made from statistical analysis take account of the context within which the local housing system is operating.
Time series	A run of data that shows how the value of a variable changes over time.
Shared dwelling	A household's accommodation (a household space) is defined as being in a shared dwelling if not all the rooms (including bathroom and toilet, if any) are behind a door that only that household can use and there is at least one other such household space at the same address.
Straddling	Straddling refers to the phenomenon of unit postcodes overlapping administrative or other geographic) boundaries. This can arise because postcodes are defined for mail delivery and are not specifically designed to align with administrative boundaries.
Strategic planning (integrated health and social care)	In terms of the integration of adult health and social care, the term refers to the process of undertaking a joint strategic needs assessment (see above) and the process of using the output from this assessment for service planning the re-design of services to deliver better personal outcomes and to address key policy priorities.
Supported housing	Accommodation for older and/or disabled people that typically provides onsite support for at least part of the day.
Wider determinants of health	Determinants of health are factors which influence health status of the population and health inequalities within the population. They can include biological factors (e.g. age, gender and ethnicity) behaviour and lifestyle factors (e.g. smoking, alcohol consumption, diet and physical exercise) and environmental factors (e.g. housing quality, the surrounding urban and rural environment, and access to health care).
Wellbeing	The Government Office for Science defines wellbeing as 'a dynamic state, in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community'.

APPENDIX 3: PROCESSING AND INTERROGATING DATA

Introduction

Analysis of secondary data sources is integral to the HNDA and the JSNA. A lot of time and resources can be required to collate and process secondary data in order to extract meaningful evidence. This appendix therefore provides an overview of the main categories of secondary data and the some advice on processing and analysing such data.

Main sources of secondary data

The five broad categories of secondary statistical data that a HNDA can draw on are summarised in table A 3.1. Census, survey and administrative data are often published as single source statistics but Government statisticians also combine them to produce more complex statistics such as labour market statistics and deprivation indices.

Whilst each broad category of data has strengths and limitations, when viewed collectively, there are major advantages to using secondary data. These are that:

- It is more cost-effective. Even if the data must be purchased, the cost is usually much lower than the cost of collecting and processing similar data obtained through a survey or other one-off data gathering exercise.
- It is usually updated at regular intervals which makes it possible to examine changes over time.
- Often the data collection process and processing is carried out by specialist staff with specialist expertise and years of experience working on a particular dataset.
- Good quality, consistently recorded and routinely updated secondary data permits trends at different spatial levels to be monitored and compared.
- Geographic Information Systems (GIS) can also be used to map secondary data to reveal relationships and consider data in new ways.

A growing number of statistics compiled from national surveys and administrative data sources can be accessed through Government websites (often in excel format). Nonetheless, in using this data it is important to be aware that:

- Sample size issues, insufficient spatial markers, and data quality issues can all hinder analysis at sub-national and particularly local levels.
- Compiled statistics must be taken on trust but only up to point. Data collection exercises are often modified over time. For instance, spatial areas used to report outputs and/or the units of measurement may change. If such changes are not recognised erroneous conclusions may be drawn.
- Changes in the boundaries of administrative areas such as wards or statistical geographies such as datazones can pose difficulties for over-time comparisons.

Ideally secondary data should be accompanied by comprehensive and easily accessible metadata - information about the data such as the number of records, the dataset contents and know limitations such as missing data. There is a wealth of metadata for the Census and national surveys but inadequate documentation of administrative data is commonplace.

Table A 3.1: Overview of the main types of existing (secondary) statistical data sources

Source	Strengths	Limitations
Census	<ul style="list-style-type: none"> • Provides most comprehensive picture of people, households and homes. • Available at range of nested spatial scales. • Detailed data on migration and commuting movements. 	<ul style="list-style-type: none"> • Socio-demographic data dates quickly, especially for smaller areas. • Commuting and migration data is complex and out of date by the time it is published. • Data protection measures can invalidate outputs for very small areas. • Changes to questions can prohibit trend analysis.
Government Surveys	<ul style="list-style-type: none"> • High quality as processed by in accord with Code of Practice. • Sometimes possible to include ad-hoc questions for exact purpose. • Sometimes possible to secure customised analysis. 	<ul style="list-style-type: none"> • Achieved sample may be too small to permit findings below HMA or LA level. • Published outputs may not include information want. • Data made available may not include spatial markers to preserve anonymity.
Government derived statistics	<ul style="list-style-type: none"> • High quality: processed by statisticians in accord with Code of Practice. • Outputs updated at least annually. • Metadata explains how data collected and outlines any 'health warnings' regards use. 	<ul style="list-style-type: none"> • Some data, including demographic projections, are not reported below local authority level. • Can take 12+ months before published. Metadata not always comprehensive.
Other administrative data	<ul style="list-style-type: none"> • Greater breadth of coverage. • Possibilities of linkage with other data sources. • Often possible to analyse findings for population subgroups or small areas. 	<ul style="list-style-type: none"> • Access barriers, often linked to privacy or data protection concerns. • Often resource intensive to clean and process prior to analysis, especially to merge data from different partners. • Metadata often lacking in details.
Commercial data	<ul style="list-style-type: none"> • Usually regularly updated. • Can provide evidence on topics for which alternative data is lacking. 	<ul style="list-style-type: none"> • Costly acquisition. • Modelled data for small areas may be less robust than implied. • Technical details not always published and thus unable to appraise methods by which modelled data derived.

It can be daunting to know where to start in terms of becoming familiar with the existing data sources. It is easy to become overwhelmed by the volume of secondary data unless some selectivity is exercised at the outset. It therefore makes sense to conduct a high level data audit prior to analysing the data to appreciate the strengths and weaknesses of existing data and to identify the main sources of evidence that will inform the HNDA and/or JSNA process.

High level auditing of secondary data

In terms of conducting a high-level data audit, table A3.2 outlines some questions that those charged with carrying out any data audit or analysis might want to focus on. It is often straightforward to address these questions and assess the robustness of data by reading the relevant sections of reports and background papers. In other instances the simplest solution is to seek advice from the lead officer.

Table A 3.2: Questions to high-level data audit should consider

Relevance	<ul style="list-style-type: none"> • Does it cover a spatial area or population of interest? • Does the data actually measure the issue you want to investigate and quantify? • If the data is several years old, does it still of value or interest? • If data have been suppressed to protect confidentiality, is there sufficient data to warrant analysis?
Reliability	<ul style="list-style-type: none"> • Does the creator of the data have a good reputation for producing reliable evidence? • Will it produce robust statistics for the area or population of interest? Is the sample size sufficiently large? • Is the risk of bias very high?
Consistency and comparability	<ul style="list-style-type: none"> • Are the data from different years consistent in terms of sampling, data collection procedures and geography? • Has the way data has been released changed over time? • Have there been changes in policy or practice which have resulted in some changes? • If planning to compare with data from another source, will you be comparing like with like?

There is no such thing as perfect evidence, statistical or otherwise. Analysts often use data in spite of known shortcomings. The important thing is to appraise the quality of the data and judge whether that data is good enough for the purpose in hand and whether it is sensible to sacrifice some degree of accuracy in order to shed light on an important and/or topical policy issue. On saying that, to limit the risk of drawing inaccurate inferences from less the precise data, where possible, evidence from different secondary sources of data should be cross-checked to enhance confidence in the findings. This triangulation process is discussed below.

Statistical variability and sampling error

Some of the statistics used to carry out the HNDA and JSNA draw on survey data that are typically subject to two kinds of error; sampling error and non-sampling error.

Sampling error arises because surveys do not directly count events but estimate these from a sample. This introduces uncertainty. For example, in one sample of 1000 people, 30 might state that a household member is a wheelchair user, which would equate to 3% but in another sample of 1000 people, 40 might state this is the case, leading to a 4% rate. Uncertainty is usually documented by reporting confidence intervals (usually 95%) and margins of error (say 5%). For example, if 1,000 service users were asked to rate their satisfaction with the service on a scale

from 0-10. If the average score was 8.6, then we can be 95% certain that if we surveyed another 1000 service users that the average score would fall between 8.1 and 9.1.

In analysing sub-groups of the populations it is especially important to look at confidence intervals and margins of error because indicators which are robust at the national level can be unreliable at local authority level, which prohibits local analysis of sub-groups of the population. Few reliable estimates for working age people with a disability, for instance, can be derived from the Scottish Household Survey at local authority level. It is also important to avoid making the common mistake of ascribing change from one year to another when in fact the two counts or two percentage figures are not 'significantly' different.

Non-sampling errors arise from other aspects of the survey other than sampling. Examples include sample design/frame errors; non-response and low response rates; interviewer bias; respondent errors (especially in relation to income and receipt of benefits); measurement errors and data handling and processing errors. Not all non-sampling errors are due to avoidable mistakes. They can often occur because of the need to balance the need to gather data with the need to obtain data at an acceptable or low cost. This is particularly common in surveys commissioned by local authorities.

It is not possible to eliminate non-sampling errors from secondary data. Still, it is important to be aware of these errors and, if undertaking analysis of the dataset rather than relying on published outputs, take steps to ensure these errors do not adversely affect analysis.

Working with larger and more complex secondary datasets

Secondary datasets always contains errors in spite of the best efforts of even the most meticulous researchers and statisticians. In survey data, variables that record information not central to the objectives of the original data collection exercise are most prone to error. Frustratingly, these can be the variables that of interest in terms of exploring the profile and needs of older and disabled households. It is beyond the scope of this Guide to offer detailed advice about handling large complex datasets but it is possible to offer some basic advice.

Cleaning and processing

It is good practice to conduct some basic analysis to gain a feel for the dataset and to check for errors. The following bullet points provide a checklist of the things to look for in order to decide if there are any serious anomalies in the data that need to be rectified prior to analysis:

- Missing values and duplicate records: An analysis of frequency distributions and cross tabulations will often reveal duplicate cases or records where data is missing. These issues are common in housing registers and other local administrative data.
- Mistaken coding: A simple cross tabulation can reveal potential coding errors. For example, it would reveal instances where housing register applicants have been coded to a social landlord's office rather than the applicant's current town of residence.

- A need to set upper and lower range limits: When using data, it is common to find a small numbers of records that are outliers. In the case of sasines for example, a small proportion of dwellings are sold for exceptionally high or low prices. Often these lower priced records include sales for plots of land rather than dwellings. Likewise, housing register data can include records for people that applied 10+ years ago. In such cases, the general approach is to restrict analysis to records within a pre-defined range.
- Internal consistency: This term refers to the process of making comparisons across variables to see if these reveal inconsistencies between responses. For example, a respondent may say they are retired but then report earnings. Where records cannot be corrected, they should be excluded from the relevant part of analysis.
- Requesting data files: Organisations maintain and download data in a variety of formats. Data processing is usually simpler if data is provided as a system file in excel. Usually the ID number comes first, followed by the set of requested variables. In most instances the number of records is irrelevant as more recent versions of excel can read files containing thousands of rows and columns of data. However, where system files are not feasible, the best option is to secure raw ASCII data.
- Geographic identifiers and data protection: Where possible, even anonymised data should include a geographic identifier to permit data to be aggregated to a spatial area of interest such as the local authority area. Good practice suggests that the preferred option is for data originators to geocode their data (e.g. by adding a suitable spatial marker such as postcode and/or datazone) and then to remove address data and other personal data (name etc.) prior to circulation. In most instances such measures are sufficient to ensure data can be aggregated to a higher level whilst protecting an individual's anonymity. Where there are additional confidentiality concerns, which is often the case for health and social care data, one option would be to try and negotiate access to a version of the anonymised data that retains an agreed higher level geographic marker (such as multi-member ward). Another option would be to ask the data supplier to run specific analysis, although this could have cost implications.
- Weighting: More complex survey data such as the Scottish Household Survey often contain two or more sets of weights and it is important to clarify which weights to apply in which situations. It is also good practice to run weighted and unweighted data to ensure that any reported findings are based on a minimum number of actual responses. As a simple rule of thumb, you should be wary of reporting percentages based on fewer than 25 respondents and any numbers based on fewer than 50 respondents. If in doubt, professional advice should be sought from the data supplier and CHMA.
- Filtering the data to produce a 'subset' of responses: It is essential to check that there are enough responses to ensure the results are statistically meaningful. Drawing conclusions about housing needs based

on a handful of survey respondents is at best foolhardy and at worst deliberately misleading.

- Survey forms: It is good idea to obtain a copy of the questionnaire or other instrument used to collect the data (for example application form) as this will help to orientate around the dataset and to understand the context in which a particular question was asked. With the advent of computer-assisted surveying (such as CAPI) easy to read versions of survey forms are not always readily accessible. Where this is the case, and the survey data is to be interrogated and analysed in depth (i.e. not just run a couple of frequencies and cross-tabs) it can be a good idea to produce an outline of the general questionnaire.
- Metadata and documentation: It is common for there to be a lack of metadata in relation to administrative data. People that routinely use ICT systems have a lot of tacit knowledge and have other things to do besides documenting data. Alternatively the necessary metadata is embedded in the administrative procedural manuals that are hard to figure out. Our advice is to speak to ICT users directly.
- Open-ended questions: It is quite common to find that open-ended questions included in surveys (including Government surveys) have not been coded up. When this is the case, it can be beneficial to read through responses and assess whether it would be worth the effort to construct a coding scheme and code the data. Often simply reading through the written responses it more than sufficient to gain a clear insight into the main issues of interest or concerns to respondents.

Data management and documentation

If a dataset requires extensive cleaning and processing it is a good idea to document:

- How the data has been modified (cleaned) and any additional errors discovered during analysis and how these were handled.
- Any variables constructed or added to the data (and associated script).
- What analysis was undertaken and how such analysis could be updated or replicated.
- Quality limitations so that feedback can be given to the data originator and health warnings for other end-users about what the data can and cannot be used.

Such documentation can be invaluable if a key member of staff leaves, especially if this coincides with renewed interest in the dataset. Where several people are analysing a dataset, multiple versions are often created. In such cases it is a good idea to identify and charge a lead officer with maintaining a master version of the dataset that only can access and adjust. Depending on local working practice, this dataset could be periodically updated to incorporate new variables that have been created on 'working' files and to take account of errors detected during analysis.

Thinking about statistical analysis

Statistical analysis can cover everything from simple counts to statistical inference based models that seek to establish relationships between variables. Aside from the CHMA housing need and demand tool, most analysis required to carry out a HNDA and the JSNA require no specialist training. The [ONS on-line toolkit](#) contains useful briefing papers on the analysis of statistics, especially for small areas but the following paragraphs offer some basic advice.

Comparisons and benchmarking

Simple counts, such as the numbers of disabled households in an area are of value but percentages and other measures that allow for the unequal population size of different areas or sub-groups are generally more useful. For example, they permit comparisons between areas that can help to tease out how an area is performing relative to elsewhere.

Analysing trends over several years will typically provide a more reliable comparison between areas than looking at a single point in time but this requires comparable data for different points in time. So it is important to check what changes have been made to the data (or how the data is reported) over time and judge whether these changes have been sufficient to preclude analysis of trends.

A closely related and persistent problem when analysing data for small groups of the population or for smaller areas is that data contains random fluctuations from one year to a next. There are two main options to reduce the variability of such data and avoid drawing conclusions based on random fluctuations:

- Rolling averages are statistics that are based on a constant number of values, such as 3 years, which updated by including the most recent data and excluding the oldest instalment. This approach is frequently used in the production of health statistics as well as some outputs from the Scottish Household survey.
- Annualised average are more commonly used in housing circles, and effectively means calculating the average from data for a specified period of time such as 2-3 years.

Ecological fallacy

A problem that bedevils local analysis, including the interpretation of the index of multiple deprivation and health statistics, is ecological fallacy. This refers to an error made in reasoning about differing units of analysis. Specifically, ecological fallacy is the error of using data generated from groups of the population and attempting to draw conclusions about individuals.

Comparisons between local areas often make the mistake of assuming 'you are where you live' and infer significant information about an individuals and households from neighbourhood conditions. For example, the average life expectancy for an area might be 70 years but it would be wrong to assume any or all individuals in this neighbourhood have a life expectancy of 70 years.

Numerous research studies report that neighbourhoods with high levels of social renting have higher levels of long term limiting illness and that individuals in

neighbourhoods with high levels of social renting are more likely to suffer from poor health. Nevertheless, these two facts are not necessarily strongly associated.

Neighbourhood effects have some influence on health and wellbeing. However most researchers have found that their influence is modest relative to the effect of individual and household characteristics - and in particular lack of employment or low pay - that contributed to their lack of choice to rent or buy a home in a more affluent areas in the first place.

Triangulation

The Scottish Government HNDA Practitioners Guide stresses the importance of checking whether alternative sources of evidence paint a broadly comparable picture. This process of crosschecking evidence from one source with evidence from one or more other sources is known as triangulation. It is a good way to boost confidence in the validity of findings. There are two important forms of triangulation.

Data triangulation: This involves comparing statistical data from different sources. It is typically used in instances where the core dataset may be somewhat out of date and/or there is a perceived risk that it may not be fully comprehensive.

Multi-method triangulation: A single indicator seldom tells the whole story. For example, sheltered pressure ratios that measure the number of applicants seeking to be rehoused in sheltered accommodation for every let that becomes available can pinpoint areas where the expressed need for sheltered housing is most severe. On the other hand, such ratios cannot explain why this is the case. For example, they do not shed any light on whether older households are joining the housing register because they want (and prefer) sheltered housing or because of the absence of suitable housing options in the mainstream social rented stock or in other tenures. To address such issues of interpretation, it is common to drawing on a combination of other evidence. This might include statistical data from other sources, published research evidence and qualitative evidence in the form of the expertise of local stakeholders.

Offering some insight to the reasons for trends

If the HNDA and JSNA are to inform planning and policy, both documents must look beyond simply describing trends and seek to explain the factors most likely to have contributed to these changes. For instance, in the case of the annual flow of applicants for sheltered housing and relets of sheltered housing provision:

- Policy initiatives such as reclassifying sheltered as mainstream housing or the demolition of unpopular sheltered housing may have resulted in lower numbers and voids and relets.
- Housing system dynamics, such as the ongoing stagnation of the housing market, may have made it very difficult for older households to sell their home with the result that fewer older homeowners are applying for social renting. Alternatively, older homeowners may be refusing offers of accommodation because they cannot sell or rent out their home.
- There may be a growing mismatch between the areas where older households are concentrated and the location of the stock of sheltered

housing stock. Various research studies have shown that older households tend not apply for sheltered housing if they know that this would mean being rehoused in another town or village.

It is often a combination of two or more factors that drive change. The task of the analyst is to think hard and draw on local expert and consumer knowledge to arrive at a plausible story about what is driving change, and if possible, the relative importance of these different factors.

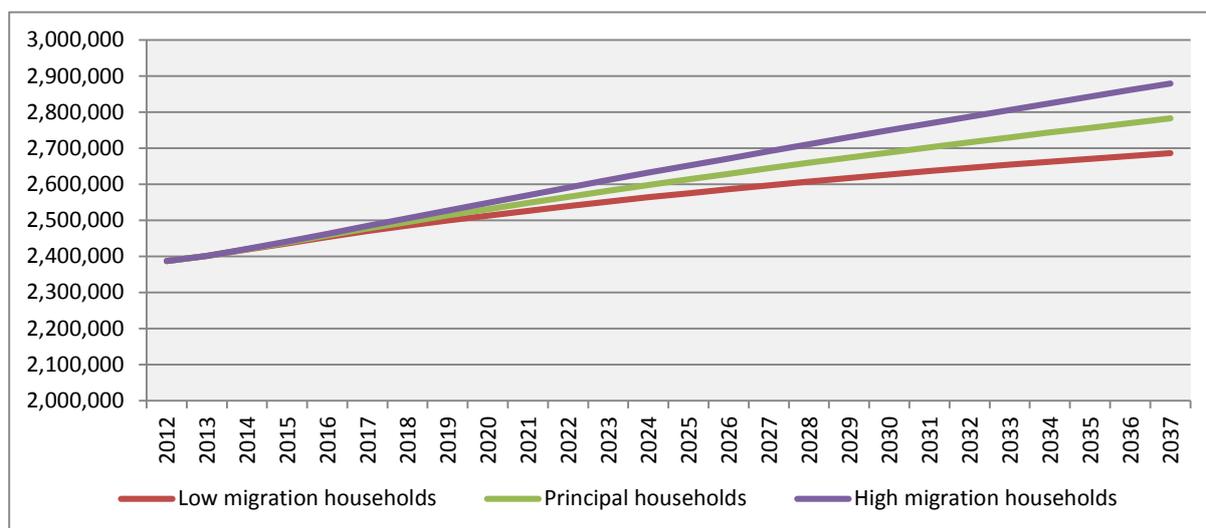
A word on interpreting soft evidence

Qualitative evidence can be influenced by various factors. People in focus groups can sometimes try to help by giving information that they think the analyst is seeking. Local experts' views are shaped by both their expertise and the values they hold. People and community groups asked about local needs and aspirations tend to express their views in terms of options they are already familiar with. As with quantitative data, it is important to assess the relative weight to place on qualitative evidence from different sources.

Projections, forecasts and scenarios

Statisticians like to project and economists like to forecast. Projections and forecasts both involve estimating the rate of future occurrence of something - such as the numbers of older people. Essentially, projections are an estimate or the future situation should current trends continue. They are not based on the assumption the underlying historic trends continue and are do not take account of potential changes in economic conditions and policy decisions such as changes in immigration policy. Forecasts reflect the economist's expectations about future events in light of possible economic, demographic and policy developments.

Figure A3.1 Alternative Scotland household projections using migration variants, 2012-2037



Source: NRS (2014) Principal and alternative household projections for Scotland

There is always a strong temptation to take projections and forecasts at face value but it is important to understand underlying assumptions and to consider their potential implications. As events since 2008 demonstrate, the world is complex and

different factors can interact with unpredictable results. In times with their economy is volatile or there is a lot of change in policy, projections and forecasts, especially long range predictions, are often of can be of limited value.

To try to account for uncertainty, statisticians often provide a range of alternative projections. NRS demographic projections, for example, now include variant projections to illustrate a range of projections that make some allowance for uncertainty in underlying trends, such as migration (see figure A3.1). These variant projections mainly allow for statistical margins of error rather than the possibility of changes in behaviour resulting from economic or policy developments.

Scenarios

One way to handle uncertainty caused by periods of economic and policy turbulence is to employ scenarios to illustrate how a range of possible alternative futures might unfold. Scenarios do not have to involve complex simulation models. They can involve the production of simple narrative accounts of the future. What is important is to ensure that each scenario is based on a plausible set of explicit, coherent and internally consistent assumptions about how the housing system is believed to operate.

Some Integration Authorities have made use of 'what if' scenarios to show how alternative futures might unfold to help shape policy discussions and demonstrate the need for change. One popular scenario has been the "business as usual scenario" to show what might happen if the current proportion of older and disabled households in receipt of social care remain constant, and there were no fundamental changes in the current pattern of services and the way they are delivered.

Those engaged in the HNDA and JSNA process may also find it useful to look at the four scenarios that the Institute for Research and Innovation in Social Services (IRISS) have developed as part of their "Imaging the Future" programme⁵.

Be clear about basis of any predictions

Irrespective of whether scenarios, forecasts or projections are employed both analytical documents such as outputs from the HNDA and JSNA process and planning documents should include material to ensure readers understand the basis for the predictions and their uncertainties and risks. It is therefore a good idea to:

- Be explicit about the assumptions and limitations of any prediction.
- Undertake sensitivity analysis (or prepare alternate scenarios) that show what might happen if one or more different assumptions are applied
- Be prepared to revisit and change projections, forecasts and scenarios as new or better information becomes available.

⁵ The scenarios and exhaustive briefing material can be found at:
<http://content.iriss.org.uk/2025/index.html>

APPENDIX 4: CORE AND HARMONISED SURVEY QUESTIONS

In 2012 the Scottish Government has embarked on a programme of work to embed a set of core questions in the Scottish Household Survey, the Scottish Health Survey, the Scottish Crime and Justice Survey and other cross-sectional surveys. This will enable data to be pooled in order to provide more robust estimates for core topics at national and local level. The Scottish Government has also produced a set of harmonised questions to aid comparison between estimates derived from different cross-sectional surveys.

The core topics and harmonised topics are listed below. Full details on the core sets of questions and harmonised questions can be found at:

<http://www.scotland.gov.uk/Topics/Statistics/About/SurveyHarm>

Core topics	
Gender	Religion / Belief
Age / Date of birth	Educational attainment
Legal marital or civil partnership status	Household income
Ethnicity	Economic activity
Disability or long term health	Tenure
Self-assessed health	Car ownership or access
Smoking	Country of birth
Caring	Perception of local crime rate
Mental wellbeing	Perception of local police performance
Sexual orientation	Caring
Harmonised topics	
Disability or long term health - impairments	Mode of transport to work/school
Number of rooms	National identity
Number of bedrooms	Living as a couple
Accommodation type	

Tenure: core question

The core question, like the 2011 Census question, is a two part question. The first question is: In which of these ways do you occupy this accommodation?

- Buying with mortgage/loan
- Own it outright
- Part rent/part mortgage
- Rents (including rents paid by housing benefit)
- Living here rent free

If the respondent rents or lives rent free, they are then asked: Who is your landlord?

- Organisations: the local authority / council / Scottish Homes
- Organisations: housing association, charitable trust or Local Housing Company
- Organisations: employer (organisation) of a household member
- Another organisation

- Individuals: relative/friend (before you lived here) of a household member
- Individuals: employer (individual) of a household member
- Another individual private landlord

Disability: core question

In 2011 ONS devised a set of questions for surveys to use to calculate if an individual is disabled to be in accordance with the Equality Act. The relevant questions, which form part of the Scottish Government's core suite of cross-sectional survey questions, are:

- Do you have any physical or mental health conditions or illness lasting or expected to last 12 months or more? (Yes; No)
- Does your condition or illness / do any of your condition or illnesses reduce your ability to carry-out day-to-day activities? (Yes a lot; Yes a little; No not at all)

If a respondent selects 'yes' to questions 1 and either 'yes a lot' or 'yes a little' to question 2 they are defined as being disabled in accordance with the Equality Act.

Disability or long term health: supplementary harmonised question

For surveys seeking greater detail on the way disability effect respondents, the core question can be followed by a harmonised question on disability. Essentially, the harmonised question means that those who answer 'Yes' to 'do you have a physical or mental health condition or illness lasting or expected to last 12 months or more' are asked: Does this condition or illness affect you in any of the following areas?

Respondents can select one or more of the following pre-defined categories:

- Vision (for example blindness or partial sight)
- Hearing (for example deafness or partial hearing)
- Mobility (for example walking short distances or climbing stairs)
- Dexterity (for example lifting or carrying objects)
- Learning or understanding or concentrating
- Memory loss
- Mental health
- Stamina or breathing or fatigue
- Socially or behaviourally (e.g. autism, attention deficit disorder or Aspergers' syndrome)
- Other (please specify)
- None of the above (spontaneous only)

Other equalities information

Scottish Government guidance on the recommended questions to ask when collecting information on age, ethnic group, gender, religion or belief and sexual orientation can be found at:

<http://www.scotland.gov.uk/Topics/People/Equality/Equalities/EqualFramework/GatherEvidence/CollectEqualInfo>

APPENDIX 5: NATIONAL SURVEYS AND HOUSING DATA

The Health and Care Experience Survey

<http://www.scotland.gov.uk/topics/statistics/browse/health/gppatientexperiencesurvey>

The Health and Care Experience Survey is an annual postal survey that is the successor to the Patient Experience Survey of GP and Local NHS Services, which was last carried out in 2012. The sample is drawn for individuals registered with a Scottish GP and aged 17 years or above, although a few special practices run by NHS Boards to provide primary care services to specific groups of patients, such as homeless people, are excluded from the survey.

The survey asks about a person's experience of accessing their GP, their experience of care and their experiences as carers. The survey also differentiates between people that rely solely on informal care and those that receive formal care. The definition of social care services includes services provided by *"the Council, NHS, voluntary organisations or private agencies - including services you paid for"*. Data in respect of social care users and carers will form a baseline on personal outcomes for the new Integration Authorities from April 2015.

The national report and associated local area reports and excel tables mainly report headline figures, but the survey gathers information about each respondent's socio-economic circumstances. Whilst this information is not strictly consistent with the Scottish Government's new core and harmonised questions (see Appendix 5), variables of interest to housing and SLDP planners include:

- Socio-demographic - Age, gender, ethnicity and sexual orientation, religion, long term limiting illness and self-perception of health (good, fair or bad).
- Tenure - buying with a mortgage or loan, own it outright, part rent and part mortgage, rent from a private landlord, rent from local council/housing association or similar, and supported accommodation (care home, sheltered housing etc.).
- Disability - deafness or severe hearing impairment, blindness or severe vision impairment, a physical disability, a learning disability, a mental-health condition, chronic pain lasting at least 3 months, another long-term condition, and none of the above.
- Employment status - work full time, work part time, in full-time education or training, unemployed / looking for work, don't work due to illness or disability, retired and other.

The 2013-14 survey results are based on 112,970 responses but the achieved sample size varies across Scotland. For instance, there were less than 2,000 responses for East Lothian and over 8,100 responses for the City of Edinburgh. Nonetheless, the survey should provide useful information at local authority level, and in some instances locality planning level, in terms of:

- Cross-checking the numbers of people with physical, sensory, and learning disabilities as well as mental health problems with evidence drawn from administrative systems and local surveys.

- The socioeconomic and tenure profile of people with a long standing health problem or disability.
- Estimating the numbers of people that had adaptations/equipment installed in the past 12 months (see Q34) and variations in the numbers of people benefiting from adaptations and/or equipment by tenure, type of disability, self-funders and other variables of interest.
- Estimating the annual rate of adaptations/equipment per 1,000 older people and per 1,000 disabled people of working age and whether these rates differ from the Scotland wide average.
- Identifying any substantive differences in the experiences of service users, such as involvement in decisions about their care and treatment, by tenure, disability, and other variables of interest.

The Scottish Household Survey (Including the SHCS)

<http://www.scotland.gov.uk/Topics/Statistics/16002>

The Scottish Household Survey is a very useful source of information about broad trends in relation to the numbers of older and disabled households, especially where local administrative and survey data is lacking. However, it remains an underutilised source of data. Key topics covered in the SHS questionnaire for 2013 that are of relevance for analysing the circumstances and needs of older and disabled households are summarised in table A5.1 below.

The 2013 survey questions on disability are not fully consistent with the core and harmonised questions noted in appendix 4 but should provide an indication of the local prevalence of specific disabilities. It may also be possible to analyse SHS data to look at the profile and housing circumstances of households that contain someone with a disability, differentiating between older and younger households.

If the sample size severely limits local authority level analysis, the SHS team can offer advice on the possibility of combing data for several years to permit local authority level analysis. Where local authority level analysis is limited, some local authorities may find it useful to look at city-region trends or urban-rural trends.

Assuming there are sufficient numbers of responses, the SHS could be analysed to explore various issues of potential interest such as:

- The tenure and dwelling type preferences of older and disabled households and the extent to which these vary by age group and other variables of interest.
- The socio-economic and health profile of older homeowners that live in former social rented dwellings. This may be of interest in areas where this population sub-group account for a substantial share of owners seeking adaptations and/or applying for sheltered housing.
- The estimated numbers of sheltered housing units and supported housing units and who occupies them in situations where local data is proving difficult to collate.

- Numbers and proportions of households that contain adults that cannot achieve 1, 2, 3 or 4+ more daily actives without assistance and the extent to which those with most serve problems are claiming disability related benefits or receiving care services etc.
- Variations in the patterns of care service use and self-reported unmet need for care services between older and disabled households that live in the private and social rented sector.
- Variation in provision of adaptations and expressed need for adaptations between older and disabled households that that live in the private and social rented sector or between local authority rate and national rate.

Topic	Issues
Health and disability	<ul style="list-style-type: none"> • General health, disability • Long-standing illness and disability • Difficulties with a range of daily activities such as getting in and out of bed • Property attributes that make it difficult to undertake daily activities • Caring responsibilities
Specialist housing	<ul style="list-style-type: none"> • Whether property is sheltered accommodation or supported accommodation (support or care available as part of housing) • Whether moved from last home was to access sheltered/supported housing • Whether last move was health related, including move to bungalow etc. • Whether preferred dwelling type is sheltered accommodation
Care and support (community services)	<ul style="list-style-type: none"> • Adaptations etc. within dwelling and expressed need for adaptations etc. • Receipt of social care services such as domiciliary care, personal care, night care, attendance at day care centre, respite etc. • Self-reported need for social care services
Accommodation	<ul style="list-style-type: none"> • Dwelling type and number of bedrooms • Condensation and dampness, extensive disrepair and SHQS • Derived bedroom standard(under occupation and overcrowding) • Dwelling suitable for needs
Heating and energy	<ul style="list-style-type: none"> • Heating systems, insulation, smoke alarms and NHER rating • Modelled fuel costs, fuel spend and fuel poverty.
Satisfaction, migration and preferences	<ul style="list-style-type: none"> • Satisfaction with home, neighbourhood, greenspace • Sense of belonging and sense of safety • Previous address, looking to move and preferred dwelling type.
Household income and finances	<ul style="list-style-type: none"> • Net income - by earnings, income from benefits and other sources • Savings (although not considered very robust) • Mortgages and rent • Managing financially

- Extent to which fuel poverty amongst older and disabled households is associated with under-occupation or other factors.

- Estimated numbers of older and disabled households in receipt of disability related benefits that can be triangulated with DWP numbers.
- Estimated numbers of older and disabled households that occupy unsuitable housing, such as upper flats without lift access and those that state 'home is not at all suitable' for their needs etc.

A word about adaptations data

The SHS measurement of adaptations and aids was recently enhanced. The SHCS now asks:

- All householders to indicate if their home has adaptations and aids from a preset list.
- Householders that contain someone with a disability or long-standing illness if they need an adaptation or aid from the same preset list.

The SHS listing of adaptations do not, as sometimes assumed, solely refer to major housing adaptations. A few of the items listed are minor adaptations or aids (e.g. handrails, entry phones and special furniture). As the inclusion of these items can have a distorting affect, it would, where data permits, be worth looking at the numbers inclusive and exclusive of these items.

APPENDIX 6: PREVALENCE RATES

Using prevalence rates

Prevalence rates are typically derived from national data sources such as the Census, survey data, administrative data or some combination of these sources and are usually expressed as a percentage or the rate per 1,000 or 10,000 people depending on how common the disability is in the population. In planning, prevalence rates are most commonly used to provide an indication of:

- The numbers and proportions of people in a given population sub-group for which there is a paucity of reliable local data.
- The possible distribution of the severity of a particular disability.
- How the numbers of people in a given population sub-group might increase in the future, assuming there is no change in diagnosis, life expectancy and so on.

It is important to read the 'small print' and assess whether the prevalence rate is fit for purpose. When selecting prevalence rates, keep in mind:

- Prevalence rates for larger and better researched population sub-groups are more robust than for 'hard to reach' population sub-groups.
- Prevalence rates are generally based on the private household population and exclude people in communal establishments.
- The margins of error associated with the application of prevalence rates at local authority level can be high. Poor health and disabilities are strongly associated with socioeconomic factors that vary from one area to another. That said, spatial variations are less apparent amongst the very old population aged 80 or above.
- Projections derived from prevalence rates may over estimate or under estimate the rate of change. For example, improved survival rates and life expectancy rates suggest growing proportions of adults with a learning disability will live into old age, albeit trying to quantify the impact of this upward trend at local level would be daunting.

Good practice therefore suggests that:

- Estimates derived from national prevalence rates should be 'triangulated' with other data sources and the opinion of local experts.
- Sensitivity analysis should be undertaken to allow for uncertainties. For example, the Wanless Review looked at the potential implications if frailty amongst the older population was 7% lower than current levels by 2021.

Possible prevalence rates of interest

Self-reported disability and longstanding health problem

Poor self-rated health is associated with higher use of health service and social care resources. Looking across the 4 main sources of data:

- The Census 2011 records self-reported general health (very good, good, etc.), long standing health problem or disability, type of impairment (physical disability, learning disability etc.) and the impact on daily activities ('none', 'a little' or a lot).
- The Scottish Household Survey provides local authority wide data about general health and long-standing health problem or disability. It includes some detail on type of impairment. This data will be more comprehensive once the core and harmonised questions have been established.
- The Scottish Health Survey provides Scotland wide estimates of general health, long-standing health problem or disability and the impact on daily activities. This data is generally reported at individual rather than household level.
- The Family Resources Survey (FRS) provides annual estimates of long standing health problem or disability and type of impairment/condition. It is the UK Department of Disability Issues preferred data source for monitoring the prevalence of disability as well as the official source of UK and Scottish Government information on income and poverty. The Scotland wide results are based on 4,500 household surveys.

Table A6.1: Disability prevalence for UK by age and gender: FRS 2012-13 estimates

Age	Gender				All persons	
	Disabled male individuals (%)	Sample size (=100%)	Disabled female individuals (%)	Sample size (=100%)	All disabled individuals (%)	Sample (=100%)
0-4	5	1,645	3	1,578	4	3,223
5-9	9	1,626	6	1,534	7	3,160
10-14	12	1,514	7	1,421	9	2,935
15-19	8	1,348	8	1,283	8	2,631
20-24	8	1,039	9	1,158	8	2,197
25-29	10	1,154	11	1,422	10	2,576
30-34	10	1,291	12	1,629	11	2,920
35-39	12	1,306	12	1,552	12	2,858
40-44	16	1,607	19	1,762	18	3,369
45-49	16	1,551	20	1,666	18	3,217
50-54	20	1,456	25	1,527	22	2,983
55-59	25	1,371	31	1,496	28	2,867
60-64	30	1,359	32	1,482	31	2,841
65-69	30	1,372	34	1,517	32	2,889
70-74	40	995	42	1,088	41	2,083
75-79	45	806	50	937	48	1,743
80+	56	887	61	1,092	59	1,979
All	18	22,327	21	24,144	19	46,471

The Census 2011 reports data on the long standing health problem or disability and impact on daily actives for the private household population and people in communal

establishments (e.g. table DC3304SCca) whereas the SHS and FRS report figures for the private household population only.

Relatively little FRS data is routinely published at the Scotland level and none of the published tables relating to health and disability are broken down by UK region. DWP do, however, publish a useful table that breaks down prevalence by age group, which are reported in table A6.1.

Limited mobility activity within home

As people age they are more likely to be unable to manage at least one mobility related activity on their own such as getting up and down stairs. The Scottish Household Survey (SHCS module) includes a question (see question CC5) to ascertain a person's ability to perform the following range of domestic and self-care activities with some difficulty, great difficulty or not at all:

- Getting in or out of bed
- Getting up and down stairs
- Moving around the house
- Getting in and out of the house
- Cooking
- Using the bathroom/WC

Sample size limits local analysis but Scotland wide rates should be available.

Sensory disability

Local authority estimates in relation to blindness or partial sight loss are available from the Census and from the [RNIB Sight Loss Data Tool](#) noted in appendix 1.

Table A6.3: MRC estimates of the number of adults in Scotland with a hearing loss

Age	Prevalence %		Census numbers		Prevalence estimates count		
	Females	Males	Females	Males	Females	Males	Sum
18–30	0.6	0.1	464,700	456,300	3,000	500	3,000
31–40	1.2	1.7	341,500	327,600	4,000	5,500	9,500
41–50	3.7	4.3	414,300	393,600	15,500	17,000	32,500
51–60	5.3	10.7	352,600	339,300	18,500	36,500	55,000
61–80	13.3	19.7	300,200	278,700	40,000	55,000	95,000
71–80	38.8	41.5	214,700	169,000	83,500	70,000	153,500
Total (Scotland)	7.85	9.39	2,088,000	1,964,400	164,000	184,500	348,500

Source: Akeroyd, J., Foreman, K. and Holman, J. (2014) Estimates of the number of adults in England, Wales and Scotland with a hearing loss, *International Journal of Audiology*: 53(1): 60–61.

In terms of hearing loss, the Scottish section of the MRC Institute of Hearing Research have also produced Scotland wide estimates for the numbers of adults (aged 18–80) with a hearing loss of at least 35 dB in their better ear, which are reported in table A6.3. The figures were derived from the Census 2011 population count and prevalence data from a 1995 National Study on Hearing. The authors caution that prevalence rates may have changed in the intervening period due to the shift from heavy industry and EU noise-at-work regulations. They also note that prevalence data for adults aged 80 or more is absent.

Learning disabilities

The Scottish Consortium for Learning Disability (SCLD) prepare eSAY statistics on the number of people with learning disabilities known to Scottish local authorities but there are currently no regularly updated estimates of the numbers of people with learning disabilities. This should begin to change once harmonised data from the Scottish Household Survey and other major survey is pooled.

Table A6.4: Prevalence rates (%) for people with a learning disability, 2011- 2021

Age range	Mild to severe		moderate or severe	
	2011	2021	2011	2021
15-19	2.77	2.67	0.68	0.68
20-24	2.69	2.71	0.60	0.61
25-29	2.49	2.49	0.53	0.53
30-34	2.49	2.49	0.45	0.54
35-39	2.45	2.46	0.61	0.61
40-44	2.45	2.47	0.62	0.63
45-49	2.28	2.31	0.56	0.57
50-54	2.37	2.39	0.48	0.49
55-59	2.33	2.32	0.55	0.55
60-64	2.20	2.22	0.43	0.43
65-69	2.01	2.02	0.36	0.36
70-74	2.34	2.33	0.34	0.34
75-79	2.07	2.08	0.23	0.23
80+	1.89	1.93	0.18	0.18

Sources: Emerson, E. & Hatton, C. (2008). Estimating Future Need for Adult Social Care Services for People with Learning Disabilities in England.

These prevalence rates are adjusted for ethnicity and will over-estimate the number of people with learning difficulties in areas with a below average South Asian community.

In the interim, the most commonly used prevalence rates for people with a learning disability are prepared by the Centre for Disability Research at Lancaster University (CeDR). They were commissioned by the Department of Health to estimate for the current and future numbers of people with learning disabilities in England. Further details can be found in Emerson and Hatton (2004) *Estimating Future Need/Demand for Supports for Adults with Learning Disabilities in England*. Elements of the original study have been updated by CeDR and IPS Oxford Brooks and the latest age related prevalence rates derived from this research are reported in the table A6.4.

Mental health disorders

The Mental Health Foundations suggest that around one in four people in Britain will experience a diagnosable mental health disorder or condition in any given year, but the numbers of people that experience mental health disorders are extremely difficult to estimate, even at the national level.

Data for Scotland is available from several administrative sources such as hospital admissions, and GP consultations for people known to public services but many people do not seek treatment. The Census and Scottish Health Survey also provide some limited insight into the mental health and wellbeing.

However, the main survey source for prevalence of mental health conditions is the Adult Psychiatric Morbidity Survey. The 2000 survey covered Britain but the most recent 2007 survey covered England only. The 2007 survey had a sample size of 7,461 people aged 16 and upwards. The survey is carried out by the National Centre for Social Research and the University of Leicester on behalf of the NHS Information Centre for Health and Social Care⁶. It reports on the following groups of mental health disorders:

- Common mental disorders (CMDs) cover a wide range of conditions that have very different symptoms and causes. They are grouped together because whilst they can cause much emotional distress and interfere with daily function, they rarely affect cognition. This grouping includes depression, anxiety, obsessive compulsive disorders and phobias.
- Post-traumatic stress is a disabling condition characterised by prolonged flashbacks and nightmares, avoidance and so on as a result of an external, traumatic event.
- Personality disorders are longstanding mental problems that interfere with the ability to make and sustain relationships. In 2007 the survey focused on people with an antisocial personality disorder and people with a borderline personality, which are disorders associated with crime and violence.
- Psychoses disorders, which produce disturbances in thinking and perception severe enough to distort perception of reality, such as schizophrenia and bi-polar disorder.
- Psychiatric co-morbidity, which refers to individuals with two or more psychiatric disorders, and is associated with more severe and prolonged disability and increased use of health services.

Table A6.5: Rates of psychiatric morbidity amongst adults aged 16 years or above, 2007 (England)

	Males (%)	Females (%)	Total (%)
Common mental disorder	11.6	18.4	15.1
Posttraumatic stress disorder (PTSD)	2.6	3.3	3.0
Borderline personality disorder	0.3	0.6	0.4
Antisocial personality disorder	0.6	0.1	0.3
Psychotic disorder	0.3	0.5	0.4
Two or more psychiatric disorders	6.9	7.5	7.2
MacManus, S et al (2009) Adult psychiatric morbidity in England, 2007 - Results of household Survey National Centre for Social Research			

⁶ Further details about the survey can be found at:
http://data.gov.uk/data/resource_cache/b9/b9154a2f-c4f4-47e3-8901-ac2d0609f2f9/psychiatricmorbidity07

The Scottish Health Survey uses the 12-item General Health Questionnaire (GHQ-12), which is well established and widely used survey instrument for measuring psychological distress. It consists of 12 questions on concentration abilities, sleeping patterns, self-esteem, stress, despair, depression and confidence in the previous few weeks. Each item is rated on a four-point scale (less than usual, no more than usual, rather more than usual or much more than usual). The scores from these questions are combined to create an overall score from zero to twelve, with a score of four used here to indicate the presence of a possible psychiatric disorder.

In 2012 the Scottish Health Survey suggested that 15% of the private population of Scotland aged 16 years or above had a GHQ12 score of 4 or more, ranging from 13% for men and 17% for women. As the questionnaire does not detect chronic conditions, this suggests that rates for common mental disorder in Scotland and England (as reported in table A6.5) are broadly consistent.

Prevalence of Dementia

There are two main sources of prevalence rates for people with dementia in Scotland.

The first are published By Alzheimer Scotland. The prevalence rates for people under the age of 60 years are derived from a 1998 study by Imperial College London. The rates for those aged 60+ years are derived from a 2009 study by Alzheimer Europe. The resulting prevalence rates are reported in table A6.6 whilst local authority estimates derived from these can be found on Alzheimer Scotland's website at: <http://www.alzscot.org/campaigning/statistics>.

Table A6.6: Alzheimer Scotland prevalence rates for dementia by gender (%)

Age group	Males	Females
30-34	0.0672	0.0672
35-39	0.0672	0.0672
40-44	0.0672	0.0672
45-49	0.0672	0.0672
50-54	0.0672	0.0672
55-59	0.0672	0.0672
60-64	0.2	0.9
65-69	1.8	1.4
70-74	3.2	3.8
75-79	7.0	7.6
80-84	14.5	16.4
85-89	20.9	28.5
90-94	29.2	44.4
95-99	32.4	48.8
100+	32.4	48.8
Source: Alzheimer's Scotland		

The second source of prevalence rates come from a 2014 report published by the UK Alzheimer's Society and prepared by a study team from King's College London and LSE. It produced Scotland wide rates, which are reported in table A6.7. A

supplementary report setting out prevalence based estimates for each local authority area can be found at: http://www.alzheimers.org.uk/site/scripts/download_info.php?downloadID=1490

Table A6.7: The consensus estimates of the prevalence of dementia, 2014 (%)

Age	Female	Male	Total
30–34	0.010	0.009	0.009
35–39	0.009	0.006	0.008
40–44	0.020	0.008	0.014
45–49	0.027	0.032	0.030
50–54	0.055	0.063	0.058
55–59	0.971	1.795	1.368
60–64	0.9	0.9	0.9
65–69	1.8	1.5	1.7
70–74	3	3.1	3
75–79	6.6	5.3	6
80–84	11.7	10.3	11.1
85–89	20.2	15.1	18.3
90–94	33	22.6	29.9
95+	44.2	28.8	41.1

Source: Knapp., M et al (2014) Dementia UK Update, Alzheimer Society, London
 Note: Early onset dementia (under 60) is based on older data and is not strictly comparable with estimate for later onset of dementia amongst those aged 60+ years.

At 65,834, Alzheimer's Society's figures are some 22,000 lower than those published by Alzheimer Scotland. The reason for this difference is that studies into the prevalence of dementia in the UK and the rest of Western Europe since 2009 suggest that the prevalence of dementia has fallen. The most recent outputs from the longitudinal Medical Research Council (MRC) Cognitive Function and Ageing Study, which has been ongoing since 1992-93, found that the prevalence of dementia in people aged 65 and over has fallen in the last 20 years. Studies in Europe and the USA have reported a similar downward trend. This highlights that it cannot be assumed that age-specific prevalence rates for dementia will remain stable in the future.

Provision of unpaid care

The Census 2011 (see table DC3103SC) reports on the provision of unpaid care broken down by sex, age group and hours of unpaid care provided. Other tables provide information about the carers' general health, composition of their household and so on. The Scottish Household Survey and Scottish Health Survey also contain information about unpaid care and the health of carers.

Prevalence rates for housing related services

There are at least three sets of prevalence rates that have a specific housing focus:

- The Scottish Office 1997 draft Guidelines on community care housing needs are documented in [chapter 11 of the 2004 LHASA Good Practice](#)

[Guide](#). These set out prevalence rates for estimating the numbers of older people and 4 working age client groups - people with physical disabilities, mental health problems and multiple disabilities - with community care needs. The guidelines also divide these 5 client groups into low, medium or high need groups to reflect the severity of disability and suggest possible housing and support options for each grouping.

- The Housing LIN [SHOP Analysis Tool](#) sets out a model to estimate the potential future requirement for specialist housing, particularly extra care housing. It is based on a 'set of norms' for the supply of different types of specialist housing and the split between private and social provision. These 'norms' are derived from [More Choice Greater Voice](#) and [Housing in Later Life - Planning Ahead For Specialist Housing For Older People](#).
- The Retirement Housing Group model estimates the potential demand for different housing options for empty nesters, 'fit' older people and 'frail' older people. It has been used in the Greater London Area. An interesting facet of this model is that it looks at the propensity of older households to move. A copy of this report can be found at: <http://www.london.gov.uk/publication/planning-housing-publication>

All of these approaches could be used to generate possible 'what if' scenarios but none would produce robust and credible projections; they are based on national benchmarks and rely on out-dated or arbitrary assumptions. More specifically:

- The 'norms' that underpin the two English models are not made clear but they appear to take little, if any, account of different local housing market conditions, consumer demand and behaviour and supply constraints.
- The English models have a strong focus on extra care housing and private leased retirement housing, which is reflective of the policy landscape in England. The models appear to take minimal account of home care, housing support, adaptations and other upstream preventative interventions to deflect demand from specialist housing provision.
- The basic assumptions about the split between private and social provision in both English studies models do not full account of the distribution of the price of homes occupied by older homeowners relative to price of retirement homes and suitable mainstream units and the extent to which this limits their options to relocate.
- The 1989 Scottish Office disability prevalence rates for the numbers of people each of the five client groups are very outdated but may be useful if used in conjunction with other prevalence rates outlined earlier. Changes in policy in the last 25 years mean that the suggested types of housing or support are no longer valid.

APPENDIX 7: SPECIALIST HOUSING CHECKLIST

This checklist could be used to appraise development proposals intended for inclusion in the Strategic Housing Investment Programme (SHIP). It could also be used to seek local community views about development proposals for their area.

Spatial Planning And Health Group Checklist	
Area	Will the proposal:
Mix of land use	<ul style="list-style-type: none"> • Provide a diverse mix of land uses? • Improve the availability, affordability and quality of housing? • Improve water management and reduce flood risk? • Promote diversity?
Street layout and connectivity and active travel	<ul style="list-style-type: none"> • Enhance neighbourhood attractiveness, layout and design? • Improve walkability and cyclability? • Promote physically active travel (such as walking and cycling) and general levels of physical activity? • Limit traffic speeds and traffic noise, and make the street environment safer and more pleasant for walking and cycling and community interaction? • Reduce or avoid steady flows of traffic preventing communal use of the street on streets where people live?
Access to public and other services	<ul style="list-style-type: none"> • Improve access to health care, education, employment, leisure facilities and social, cultural and sporting facilities? • Increase access to services for marginalized groups?
Safety and security	<ul style="list-style-type: none"> • Increase the resilience of the area to the potential impacts of climate change? • Reduce crime and fear of crime?
Open and green space	<ul style="list-style-type: none"> • Provide open spaces and a green infrastructure (e.g. tree planting in urban areas)? • Preserve and enhance existing green infrastructure, for example with green roofs, green security, planted areas, living walls?
Affordable and energy efficient housing	<ul style="list-style-type: none"> • Reduce energy use? • Help the development of practices and/or technologies that are low-carbon or carbon neutral? • Reduce fuel poverty?
Food access	<ul style="list-style-type: none"> • Improve the location of food production and availability of local food outlets to meet local needs? • Improve opportunities for growing local produce such as allotments? • Provide for the control of outlets for unhealthy food?
Air quality and noise	<ul style="list-style-type: none"> • Enhance land, air and water quality? • Enhance pollution prevention and control?
Access to Employment	<ul style="list-style-type: none"> • Influence investment, including the creation of employment and the development of employment skills, including for vulnerable groups? • Offer opportunities for training?
<p>Source: SPAHG (2011) Steps to Health Planning: Proposals for Action http://www.apho.org.uk/resource/item.aspx?RID=105724. The SPAHG was constituted from the NICE Spatial Planning and Health Programme Development Group to examine the available evidence related to spatial planning and health.</p>	