

dwell

designing for wellbeing
in environments
for later life

How can the design of housing & neighbourhoods improve older people's wellbeing?

A participatory approach to research & design

DWELL Research Project Team:

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How can the design of housing & neighbourhoods improve the wellbeing of older people?

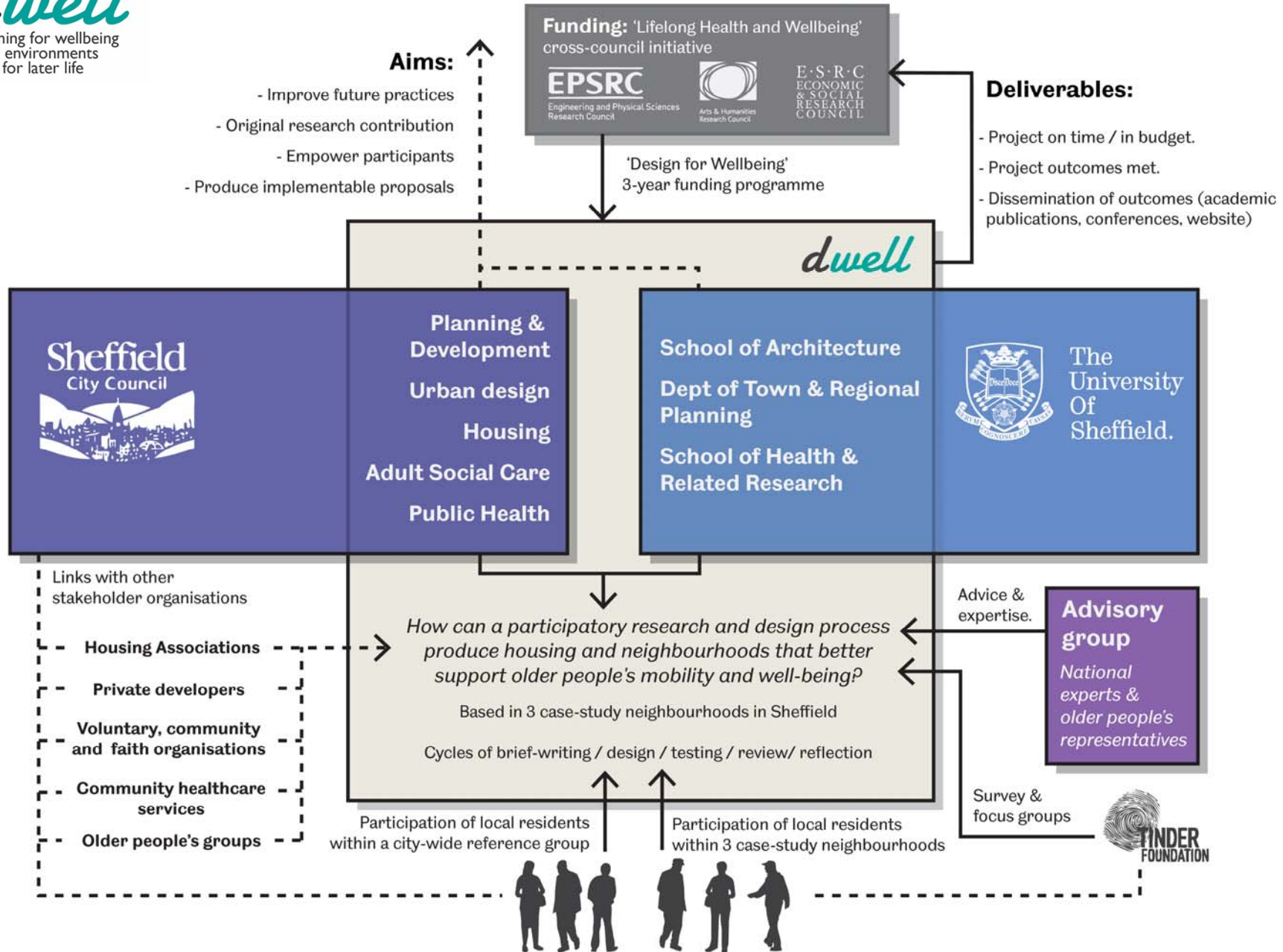
A participatory approach to research & design

- Funded by UK Research Councils (EPSRC, ESRC, AHRC)
- 3 year project running from 2014 - 2017
- An innovative partnership between University of Sheffield researchers, Sheffield City Council, and other local & national participants: housing associations, private developers, and local residents
- **The project aims to produce developed and *tested* prototype designs, codes, and specifications**



Arts & Humanities
Research Council





London Housing Design Guide

INTERIM EDITION



MAYOR OF LONDON



Lifetime Neighbourhoods



www.communities.gov.uk



SILVER LININGS

THE ACTIVE THIRD AGE AND THE CITY



RIBA

Levitt Bernstein



NON-MAINSTREAM HOUSING DESIGN GUIDANCE

Literature review

January 2012



HOUSING AND CARE FOR OLDER PEOPLE IN THE UK: Current Provision and Emerging Trends
An Overview by PRP



13.02.2008 Factsheet no. 6
Care Services Improvement Partnership CSIP
Housing LIN

Design Principles for Extra Care

This fact sheet gives essential basic information about key design principles and issues to consider when designing and developing a brief for a new Extra Care Scheme. Case studies illustrate the variety of models that this concept of housing takes and show ways of developing a range of different sites.

Prepared for the Housing Learning & Improvement Network by
PRP Architects
17 Ashton July 2008
27 Ashton February 2008
Ave Hale Northallerton Spring 2008
Clifford Avenue, Harrogate October
Micklethorpe, Harrogate

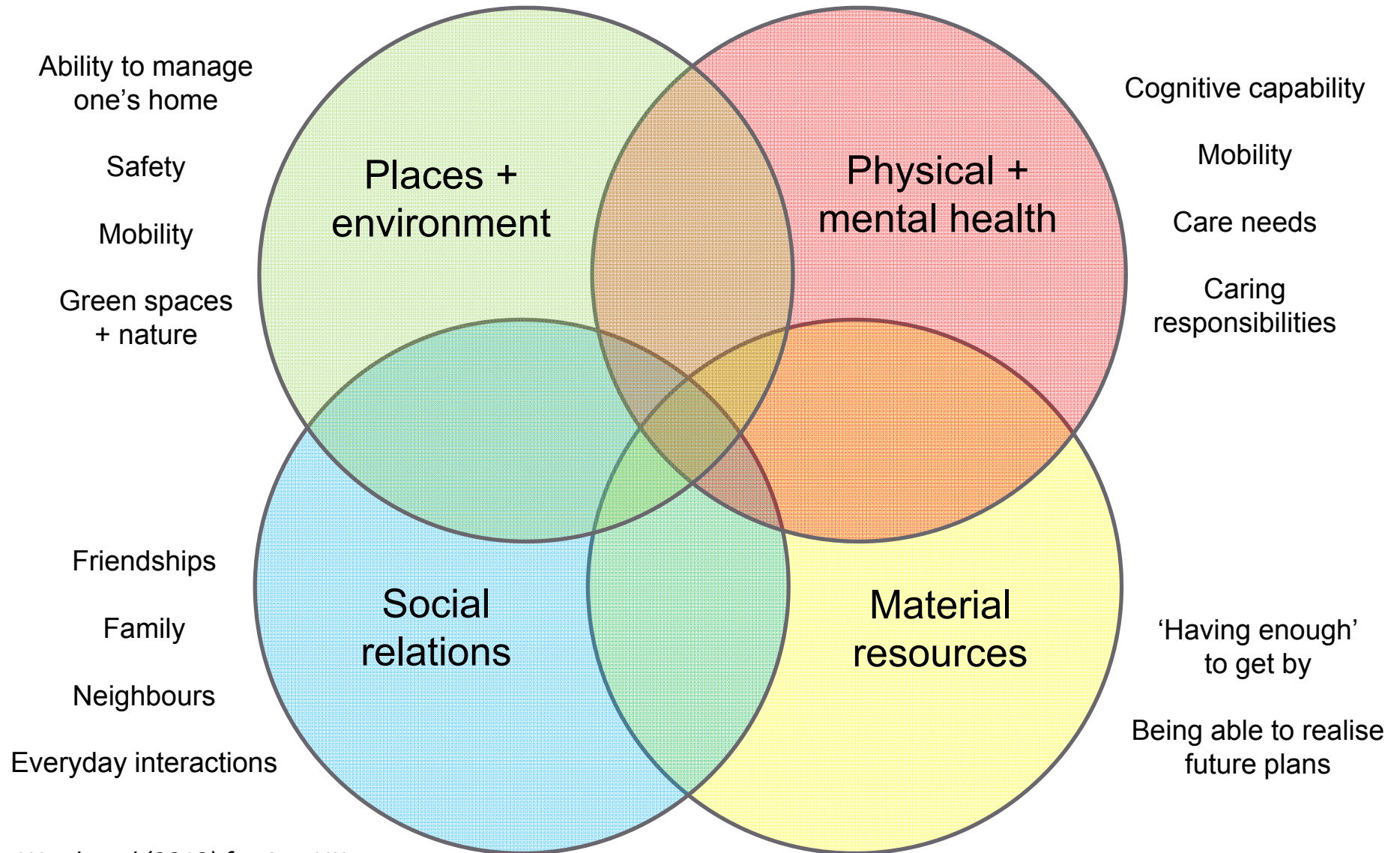
The help to improve services and achieve better outcomes for children and families, adults and older people including those with mental health problems, physical or learning disabilities or people in the criminal justice system. The work set out and is funded by the Department of Health

Homes for our old age

Independent living by design

CASE
Housing Learning and Improvement Network

What is well-being in later life?



What is Mobility in later life?



“Mobility is life - if you can’t get out you become a vegetable”

We define older people’s mobility as ‘engagement with the world past, present and future’: family, friends, culture, services, current affairs, the transcendent, natural and built environments.



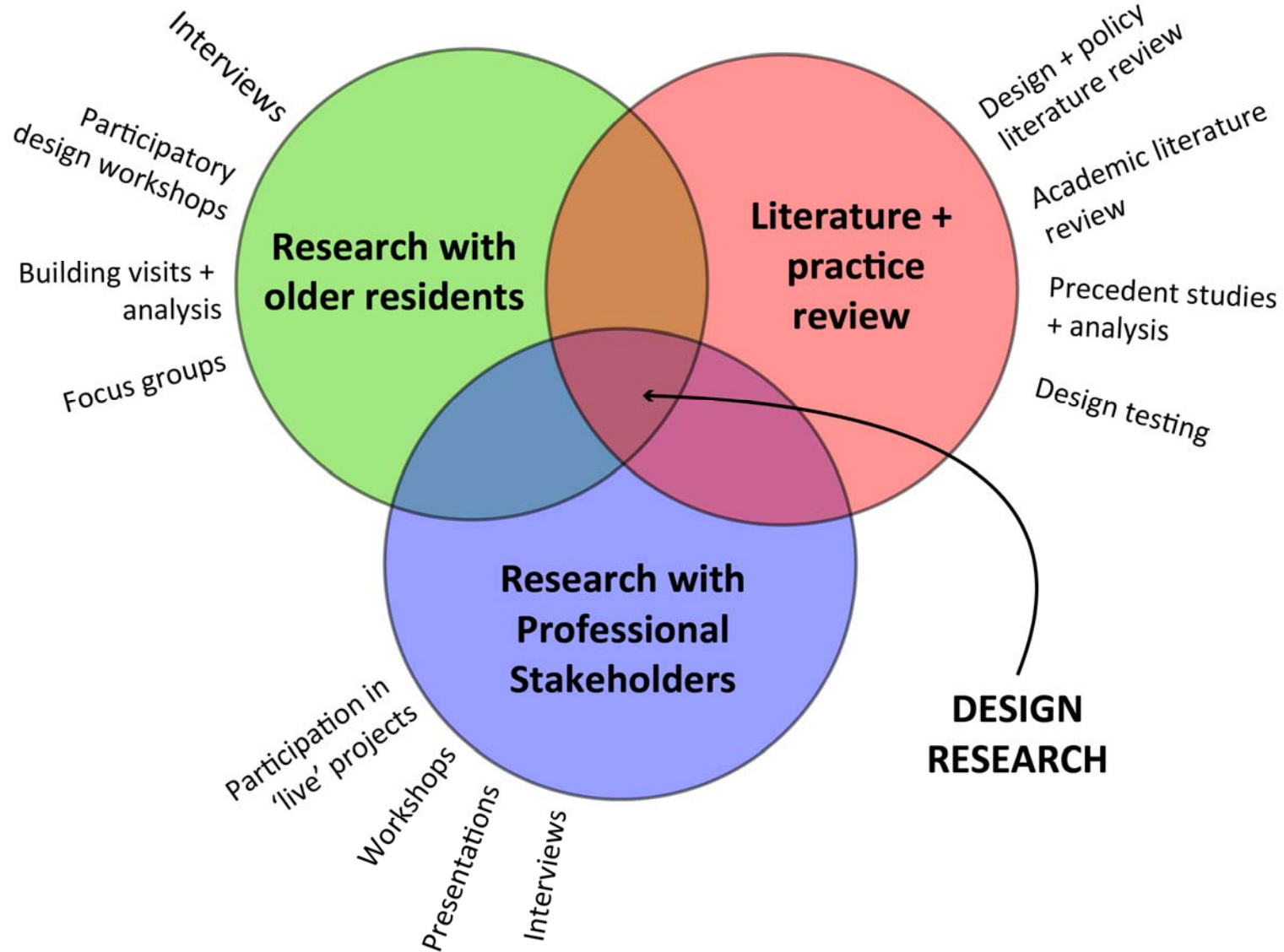
The role of design in research

Innovation – offering new typologies or ways of living that aren't currently on offer, or creative solutions or new visions in the face of 'wicked' problems.

Joined-up thinking – a holistic understanding of well-being that incorporates material + non-material elements: spaces, materials, light, nature, people and activities, and sense of place, but also understands the cost and delivery drivers of built environment projects.

Engagement – valuing and drawing upon both local and professional knowledge. Using creative tools and methods to encourage participation in local decision-making processes and move beyond the status quo.

Research methods



1) Designing at multiple scales



City - strategy + policy (Local Plan) + delivery mechanisms, mapping supply + demand of specialist housing



Neighbourhood - Lifetime neighbourhoods, mapping local assets, joining-up local services



Housing – analysis of housing typologies, densities, public + private interactions



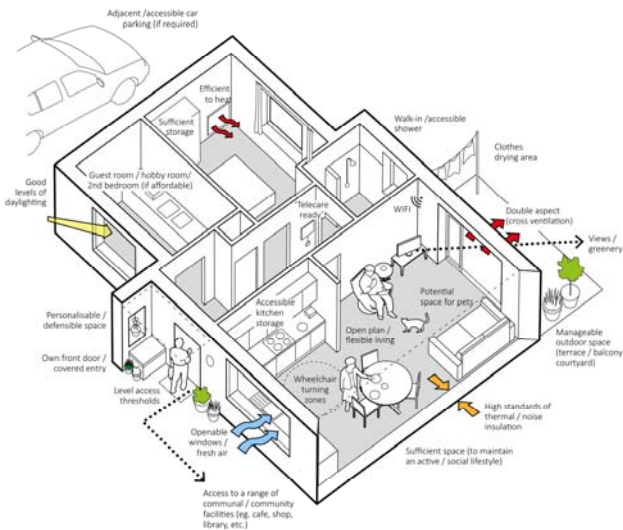
Dwelling - comfort, safety, flexibility, storage, thresholds, materials, details

2) Designing temporally



Designing for the past – understanding housing from a lifecycle perspective; enabling residents to express their personal + cultural history/ identity

Designing for the present - enabling maximum independence and active engagement with the local neighbourhood and beyond;



Designing for the future – flexible homes for changing physical + social needs; providing comfortable and comforting spaces to grow old and die; considering lifetime + maintenance running costs



3) Designing *with* (instead of designing *for*)

Rethinking ageing – moving beyond a deficit or needs-based model of ageing towards a more aspirational model. “*I don't think of myself as 'old'*”

Participatory design – valuing the input of local residents (or potential end-user) alongside ‘expert’ professional knowledge

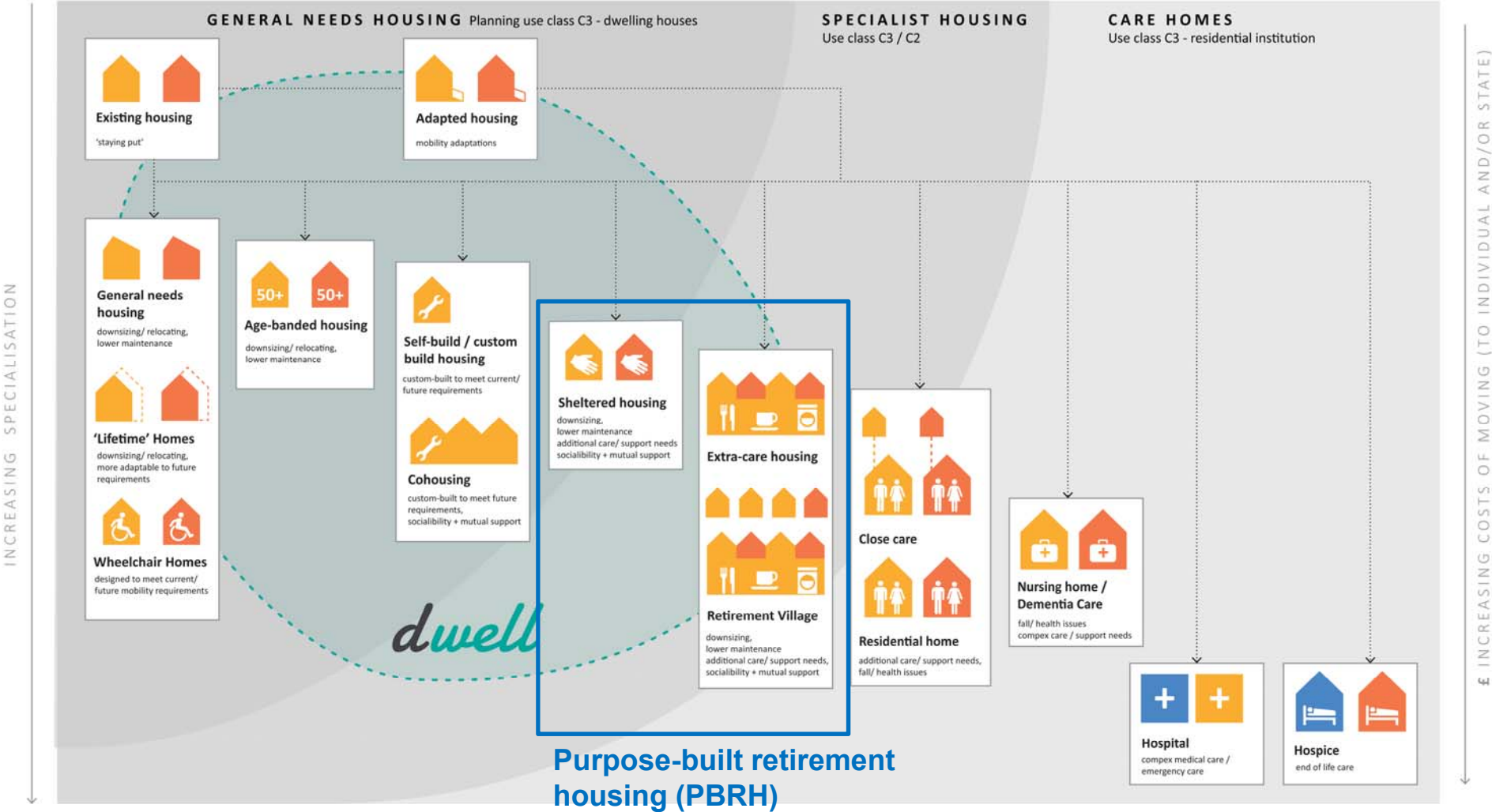
Governance – involving older people in local decision-making; creating a sense of ownership over new projects

KEY:  Private housing / private sector  Social housing / voluntary sector  NHS



INCREASING CARE NEEDS / DECREASING INDEPENDENCE →

Domicillary care Warden / alarm systems On-site personal care / support Nursing care Palliative care





City scale – key questions



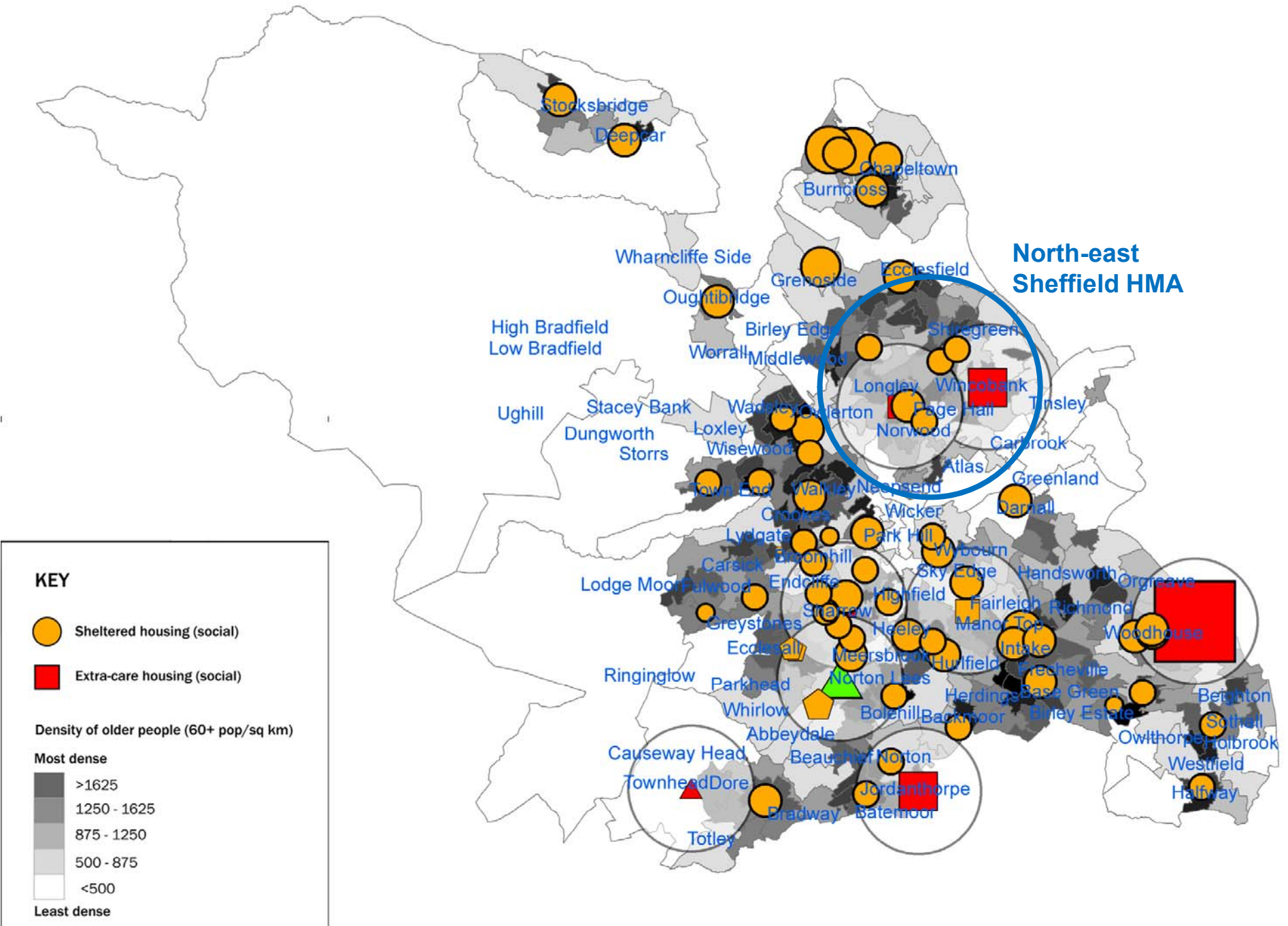
Where in the city should new purpose-built retirement housing (PBRH) housing be sited?

Why are some neighbourhoods more popular with older people than others?

Should land be specifically allocated for PBRH in the Local Plan?

What types + tenures of PBRH are in demand in different parts of the city?

How can commissioners model future demand for PBRH?



KEY

-  Neighbourhood centre
-  Sheltered housing (social)
-  Residential Care home (social)
-  Residential Care Home (private)
-  Extra-care housing (social)
-  Extra-care approx catchment radius (1 mile)

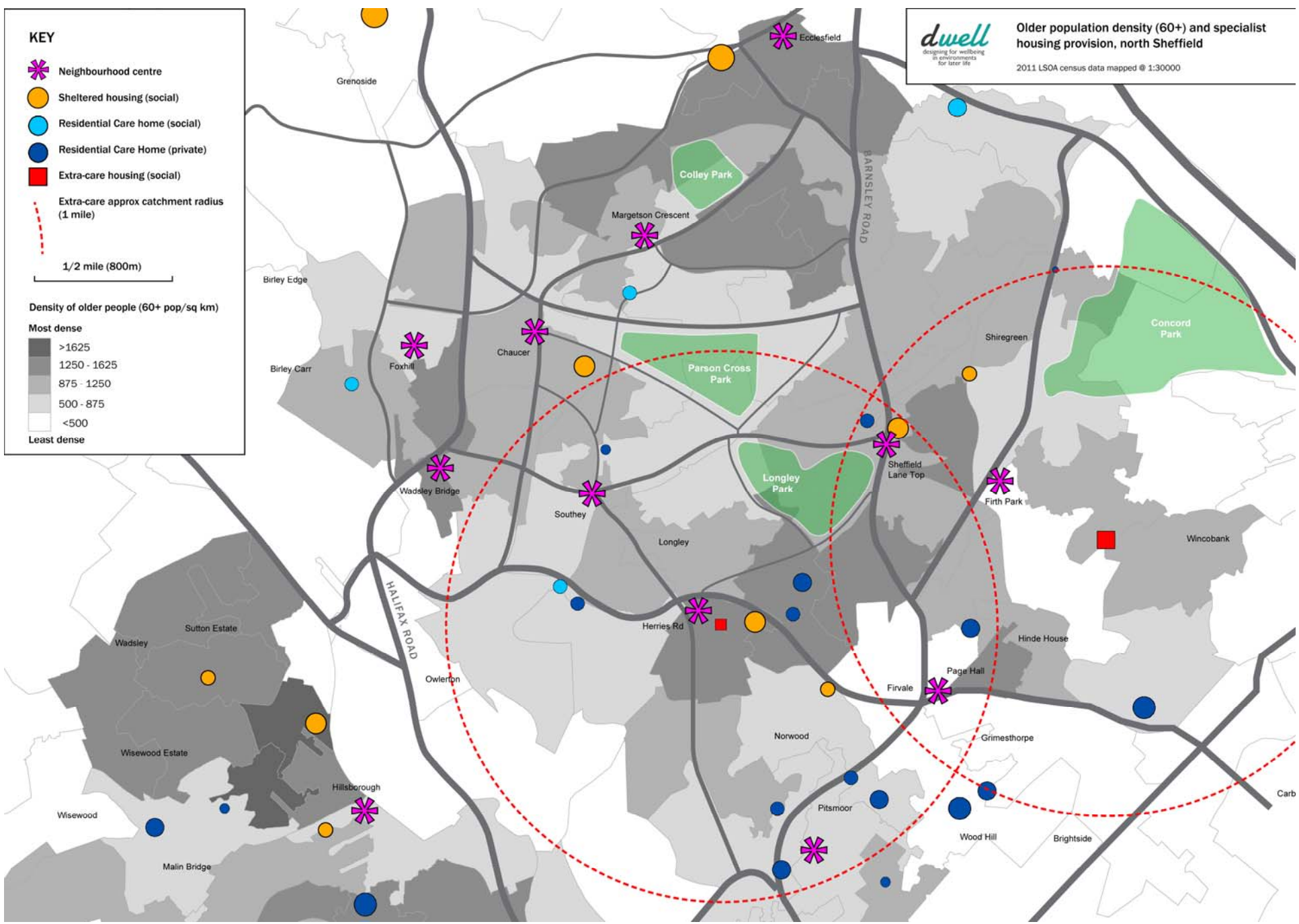


Density of older people (60+ pop/sq km)

Most dense

-  >1625
-  1250 - 1625
-  875 - 1250
-  500 - 875
-  <500

Least dense





Neighbourhood scale – key questions



Should there be specific policies for the planning of PBRH? (eg. proximity to neighbourhood centres)

What facilities are available in the locality?

What communal facilities are essential / desirable within new PBRH developments?

Can the wider community benefit from the communal facilities in PBRH? How is this sustainably managed?

Case Study

Parson Cross, North-east Sheffield

Low density 1930-40s estate with large public open spaces.

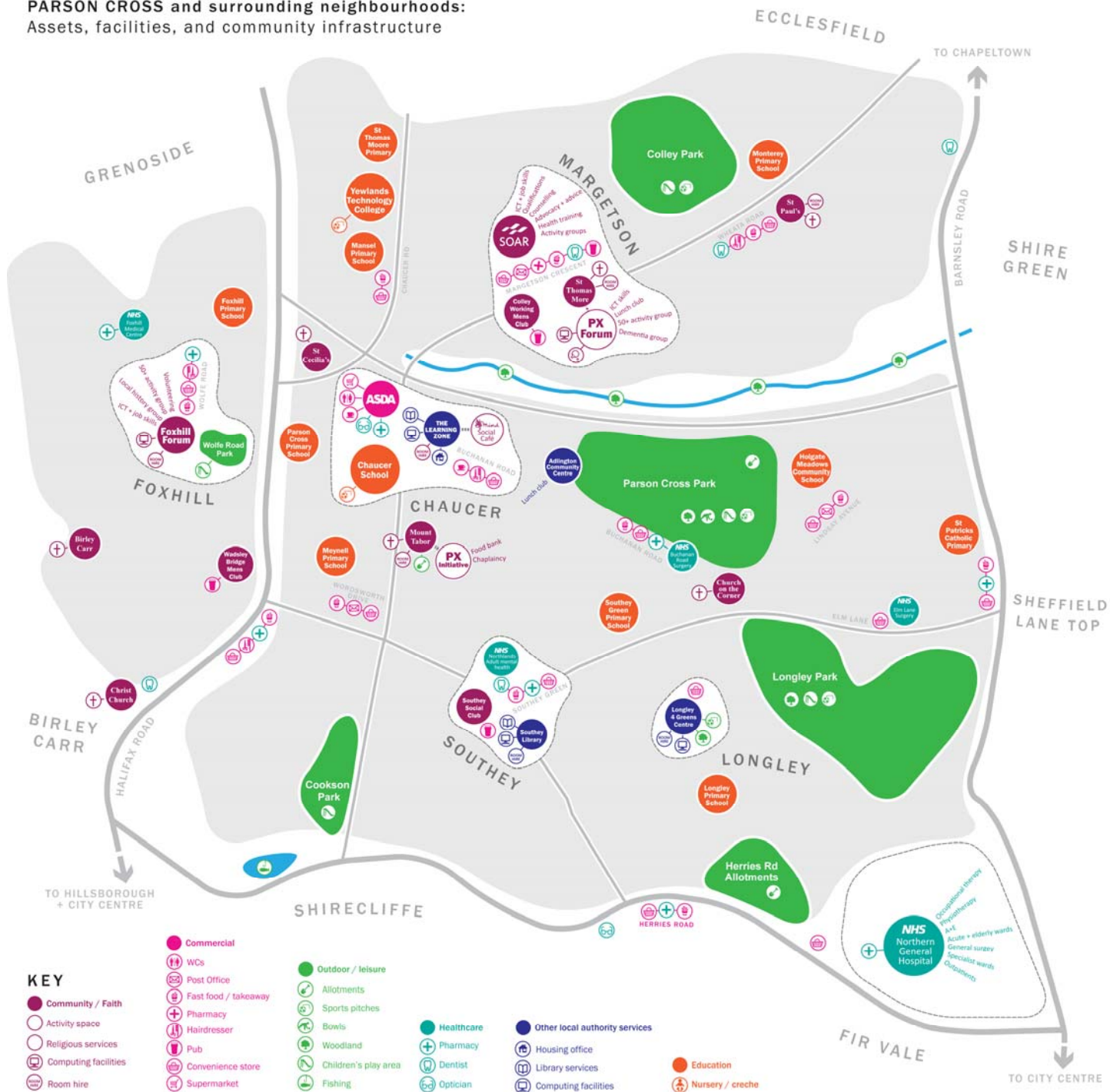
The only available PBRH is provided in residential care settings or older sheltered housing schemes.

Strong community infrastructure and voluntary services, but also suffers from a reputation of anti-social behaviour.








Many older people have strong social ties in the area, but would consider moving to a 'nicer' part of the city if they had the choice.



PARSON CROSS and surrounding neighbourhoods:
Assets, facilities, and community infrastructure



increasing costs / service charges
 increasing scale of development (to offset cost + risk) →

	LOW	MEDIUM	HIGH
Feature / Benefits			
 Social space informal interaction with residents, visitors + others	Common room / lounge	Separate games room (snooker, table tennis etc) Guest accommodation	Separate function room (stage, PA system)
 Eating / drinking provision of on-site meals	Tea-making facilities (in common room)	Self-service kitchen Cafe-bar (sandwiches, toasties etc)	Restaurant + kitchen (lunch + evening meals)
 Activity space for adult learning and social interaction		Craft / hobby rooms Library Computer suite	Workshop (woodworking etc)
 Outdoor space for exercise, relaxation and social interaction	Shared private gardens (with seating / walking paths)	Private balconies / terraces Growing space (greenhouse, allotments) Tool store	Range of gardens Golf course Tennis courts
 Health + fitness space for exercise, relaxation and treatment		Gym / fitness suite Treatment rooms	Swimming pool Health club / spa
 Other communal facilities	Laundry facilities / sluice room Scooter store / charging WCs	Visiting greengrocer etc. Assisted bathing Hairdresser	Convenience store
 Management facilities	Staff office Refuse + plant	Staffed reception desk	On-site staff accommodation

Case Study

Madeley Centre + Lea Court Extra-Care, Staffordshire West + Machell Architects / Housing 21

Community/ rural hub attached to new extra-care housing.

Facilities (including computer suite, café, activity spaces, function room) shared between residents and the wider village.

The physical separation and different aesthetic of the community building makes it feel separate from the extra-care accommodation – mitigating territorial issues of residents and non-residents ('us and them').

Image: © West + Machell Architects





Housing typology – key questions



How can PBRH be integrated into existing neighbourhoods?

What is the appropriate scale of PBRH in different contexts?

How is existing design guidance (eg. HAPPI principles) interpreted by planners + designers?

How can the design typology of PBRH balance issues of security, cost, integration, and quality?

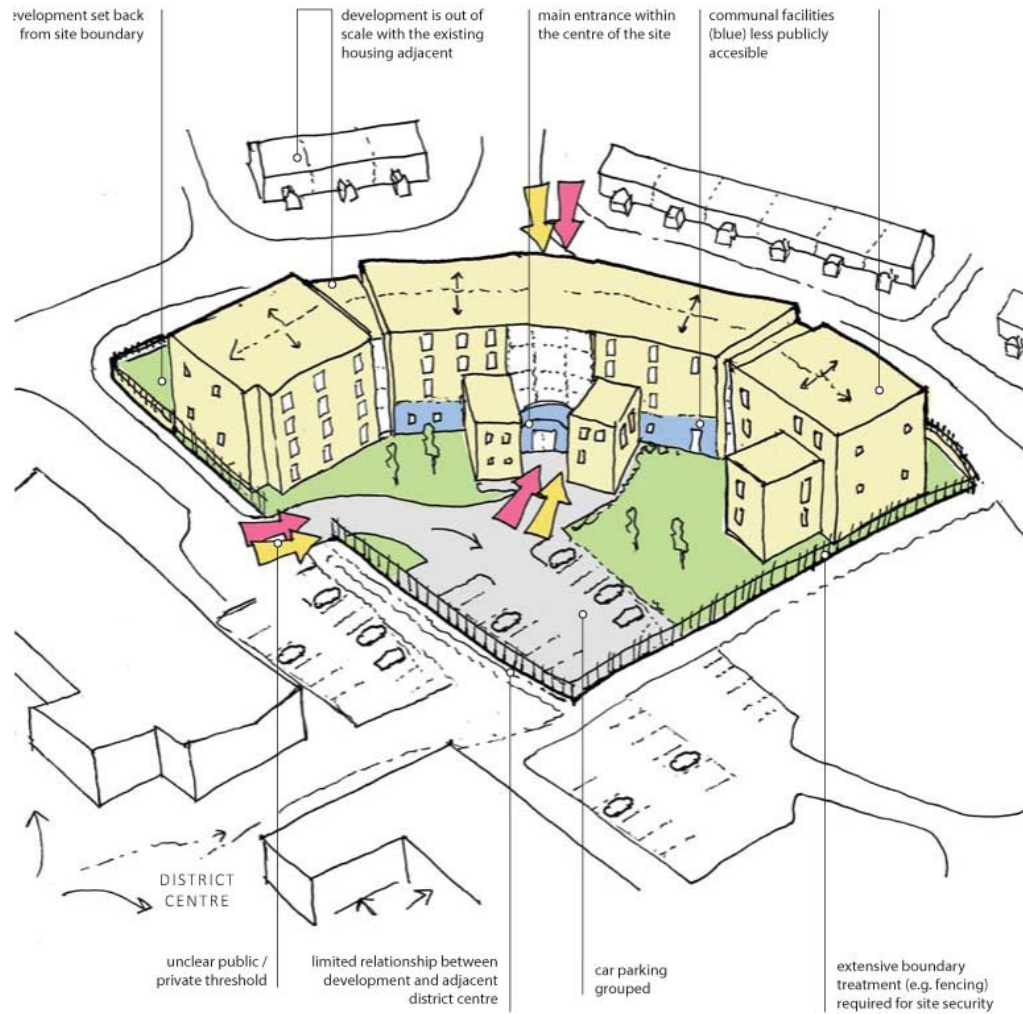
How do different typologies promote (or inhibit) social interaction + well-being?

Image: © PRP Architects

Case Study

White Willows, Jordanthorpe, Sheffield

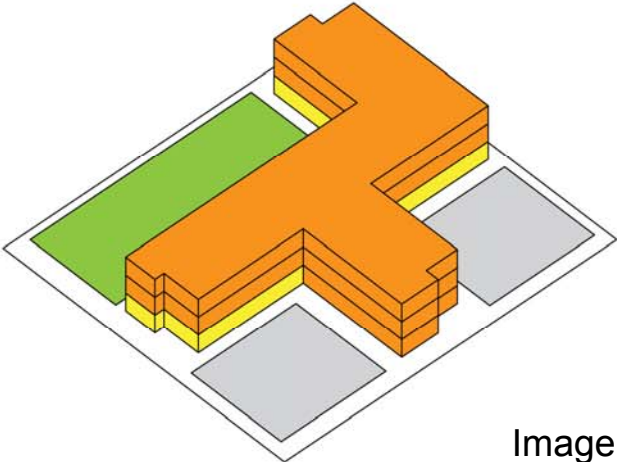
West + Machell Architects / South Yorkshire Housing Association



'INWARD LOOKING' SITE LAYOUT

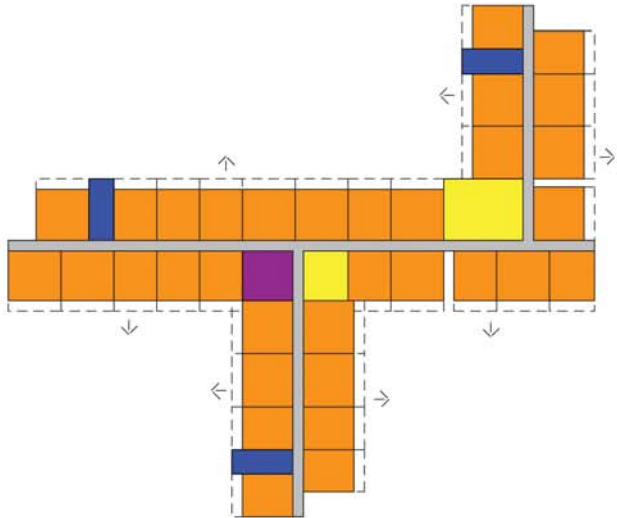


Double-loaded apartment block



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Image: © McCarthy + Stone



Typical plan



Example scheme

Queen Elizabeth Court, Kirkby Lonsdale
McCarthy + Stone

Deck-access apartment block

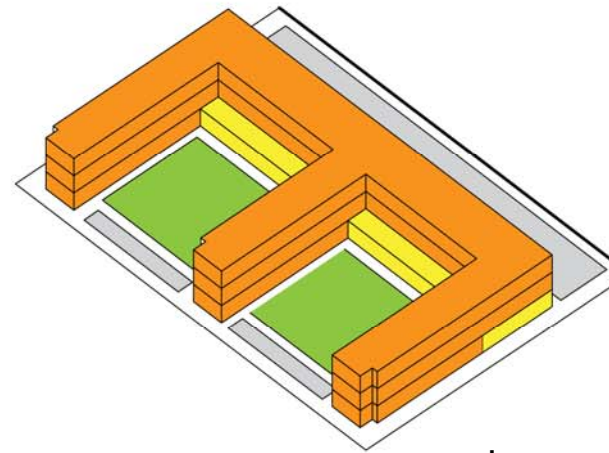
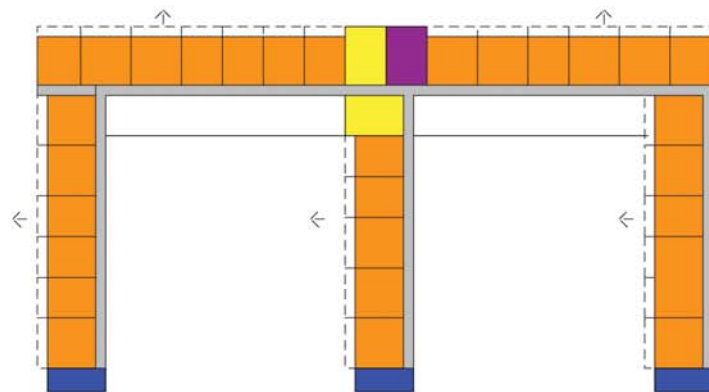


Image: © PRP Architects



Typical plan



Example scheme

Pilgrim Gardens, Evington
Pilgrim Homes / PRP Architects

Hub + spoke apartments

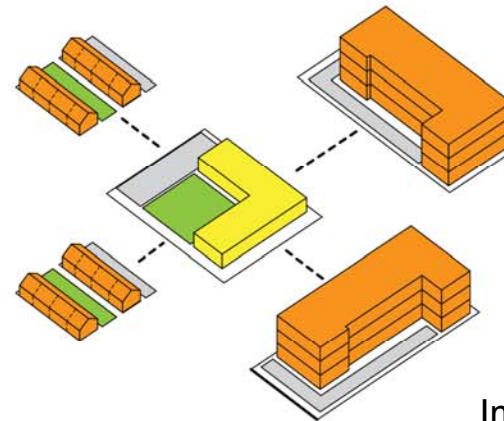
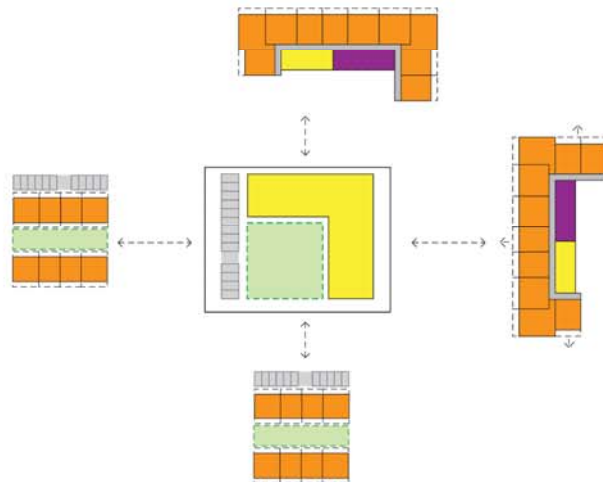


Image: © housingcare.org



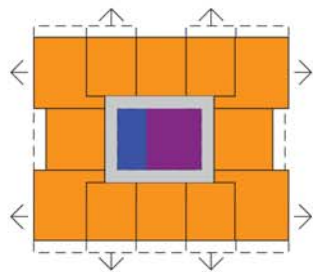
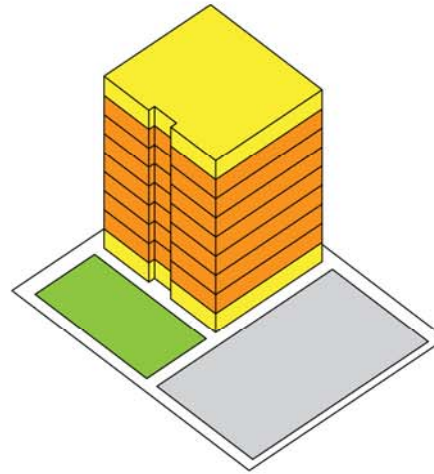
Typical plan



Example scheme

60 Penfold Street, London
Notting Hill Housing Trust

Point/ tower block apartments



Typical plan

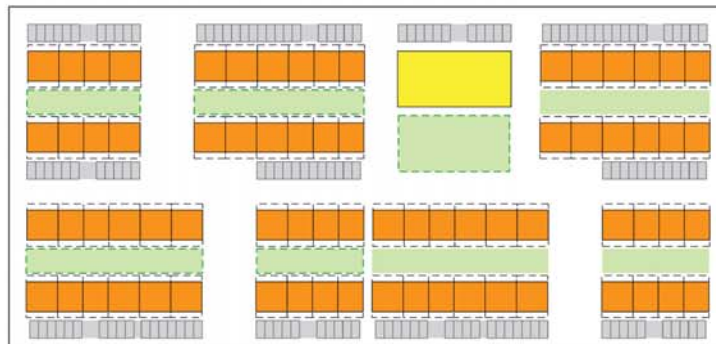
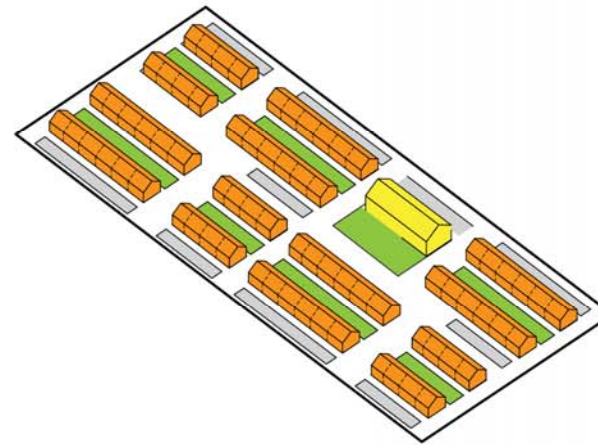
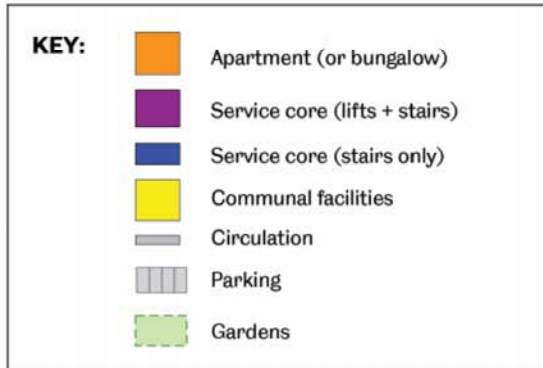


Example scheme

Image: © mae Architects

Lisson Arches, Westminster
Westminster City Council / Mae Architects

Retirement village



Typical plan



Example scheme

Hartrigg Oaks, York
Joseph Rowntree Foundation

“Opportunities for informal social interaction
across private and semi-private thresholds”

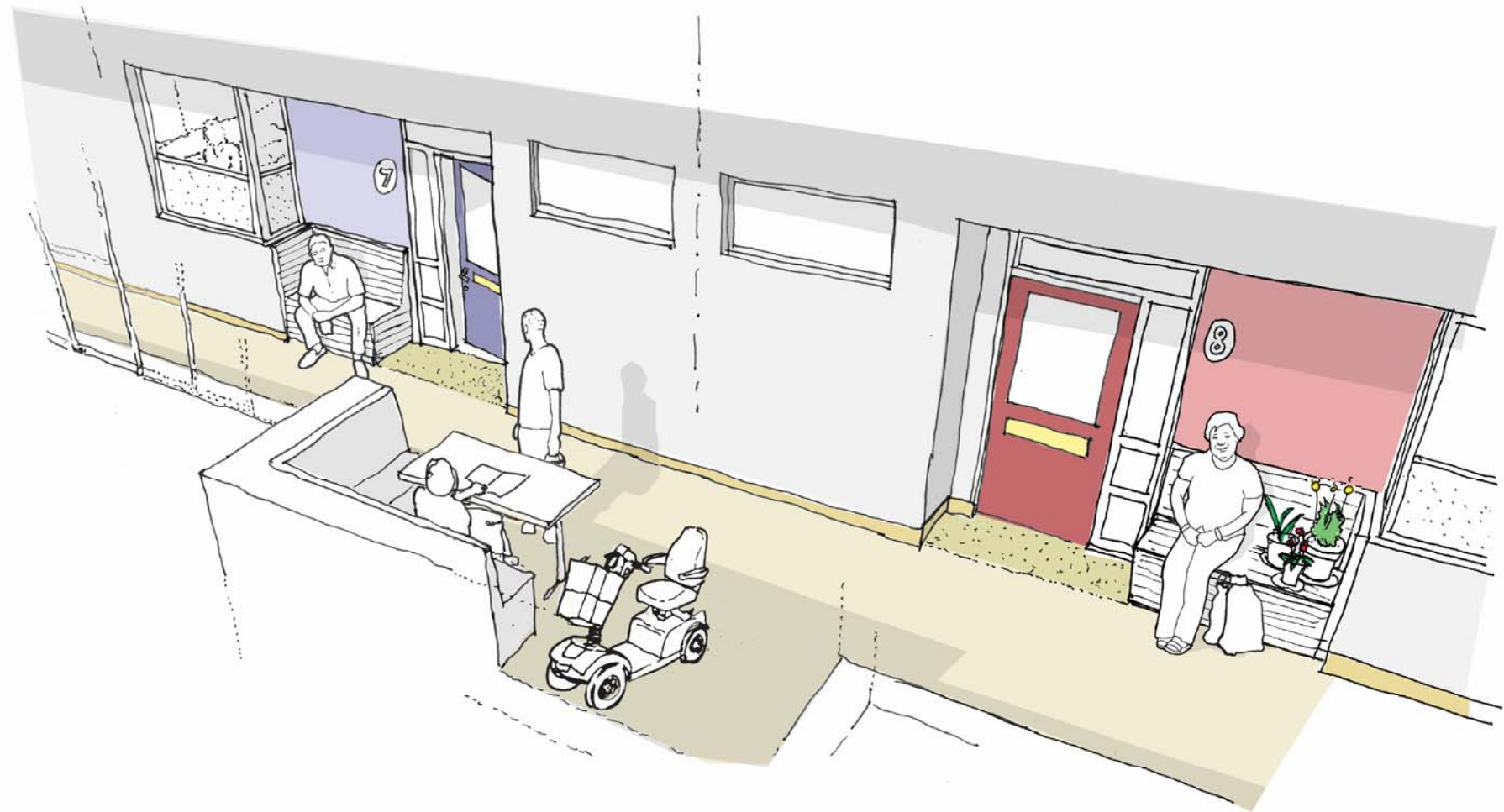
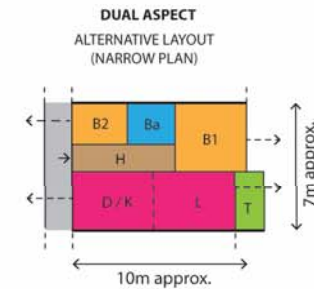
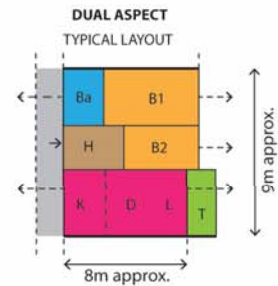
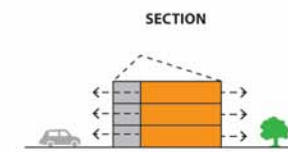
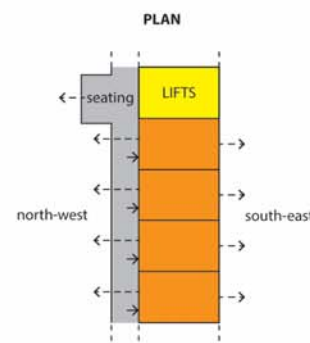
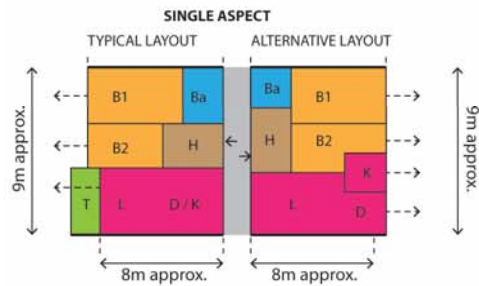
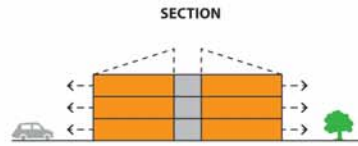
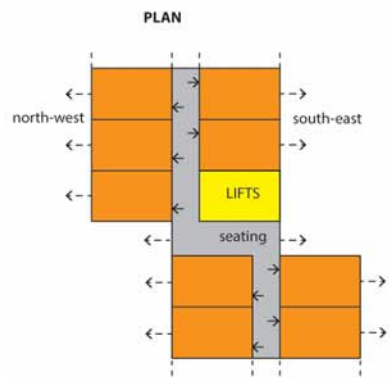


Image: © DWELL / University of Sheffield

Single aspect

vs

Dual aspect



- + Lower build cost
- + Internal circulation



- + More flexibility
- + More daylight
- + More ventilation
- + Better views
- + No north-only apartments
- + Lower maintenance costs

Images: © PRP Architects

“At least one busy and well-lit communal room with direct access onto a sheltered, sunny, and secure garden space”





Dwelling scale – key questions



How can dwellings in PBRH be designed in way that provides flexibility (and what cost impact does this have)?

What daylighting + ventilation standards should be applied to PBRH?

What is 'adequate' in terms of storage (including storage of mobility aids)?

How can external amenity spaces be usable throughout the year?

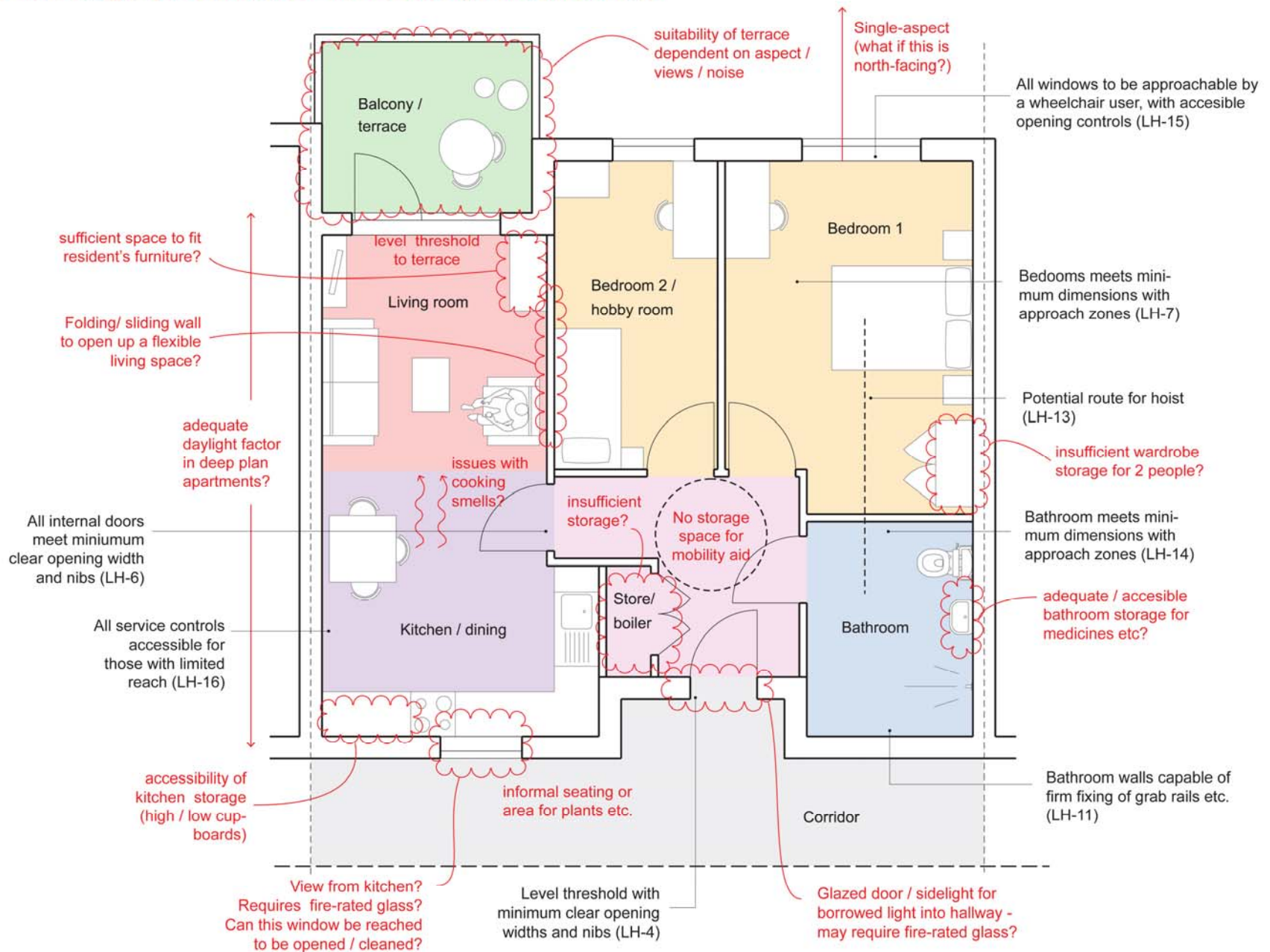
Kitchens and bathrooms designed + specified to anticipate future changes in mobility.

Image: © PRP Architects

Typical 2-bed extra-care apartment (62 sq m)

Layouts designed to meet Lifetime Homes minimum standards & HAPPI guidelines

Notes in red highlight additional DWELL design considerations

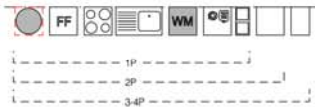


Analysis of space requirements for apartments (Lifetime Homes + London Housing Design Guide)

Bathroom / WC
(London Housing Design Guide / Lifetime Homes)



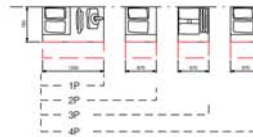
Kitchen/ utility
(LHDG)



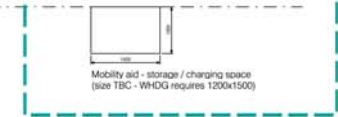
Kitchen
DWELL additions



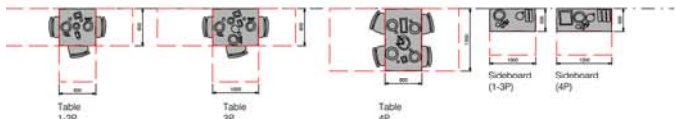
Storage
(LHDG)



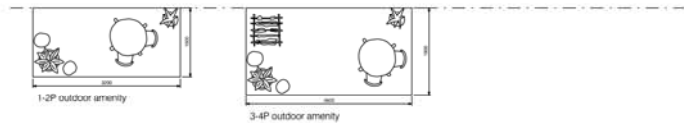
Storage
DWELL additions



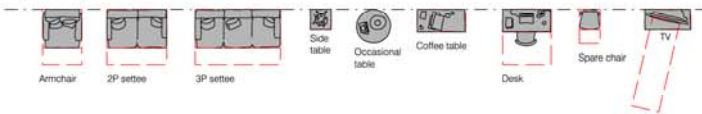
Dining Room
(LHDG)



External amenity
(LHDG)



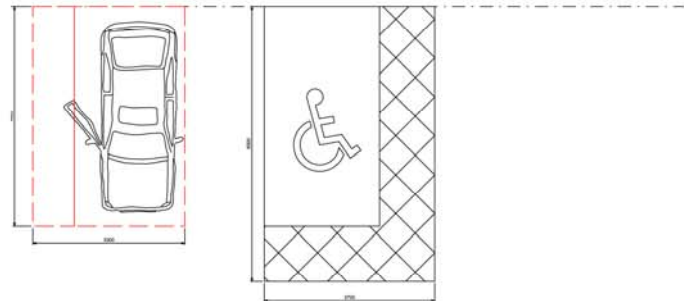
Living Room
(LHDG)



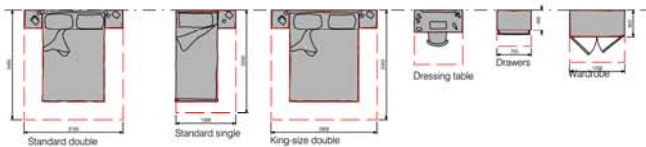
Living room
DWELL additions



Car parking
(Lifetime Homes / WHDG)



Bedroom
(LHDG)



Spare Bedroom
DWELL additions / alternatives



Case Study

Pilgrim Gardens, Evington, Leicester
PRP Architects / Pilgrim Homes

Image: © PRP Architects





Conclusion + Further work

Analysis + further development –

Working with professional stakeholders – particularly managers – and residents groups to refine prototype schemes + specifications

Cost + value modelling –

Working with developers and cost consultants to test viability and incorporate lifetime heating/ lighting and maintenance costs

Designing for uncertainty and change

Testing proposed dwellings and PBRH types using a number of alternative scenarios.

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