

Neurodiversity and the Planned Environment

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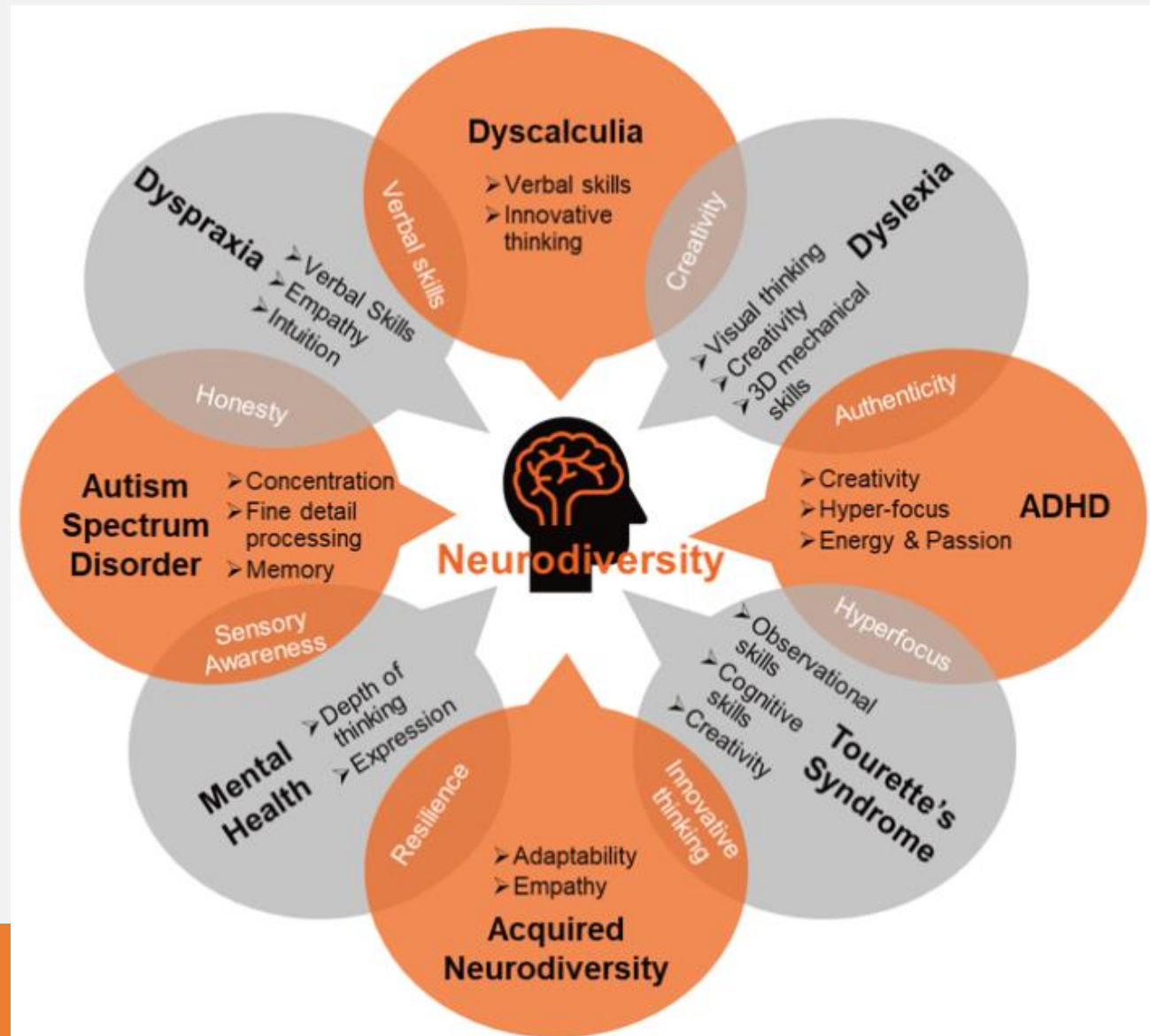
RTPI East of England Young Planner of the Year

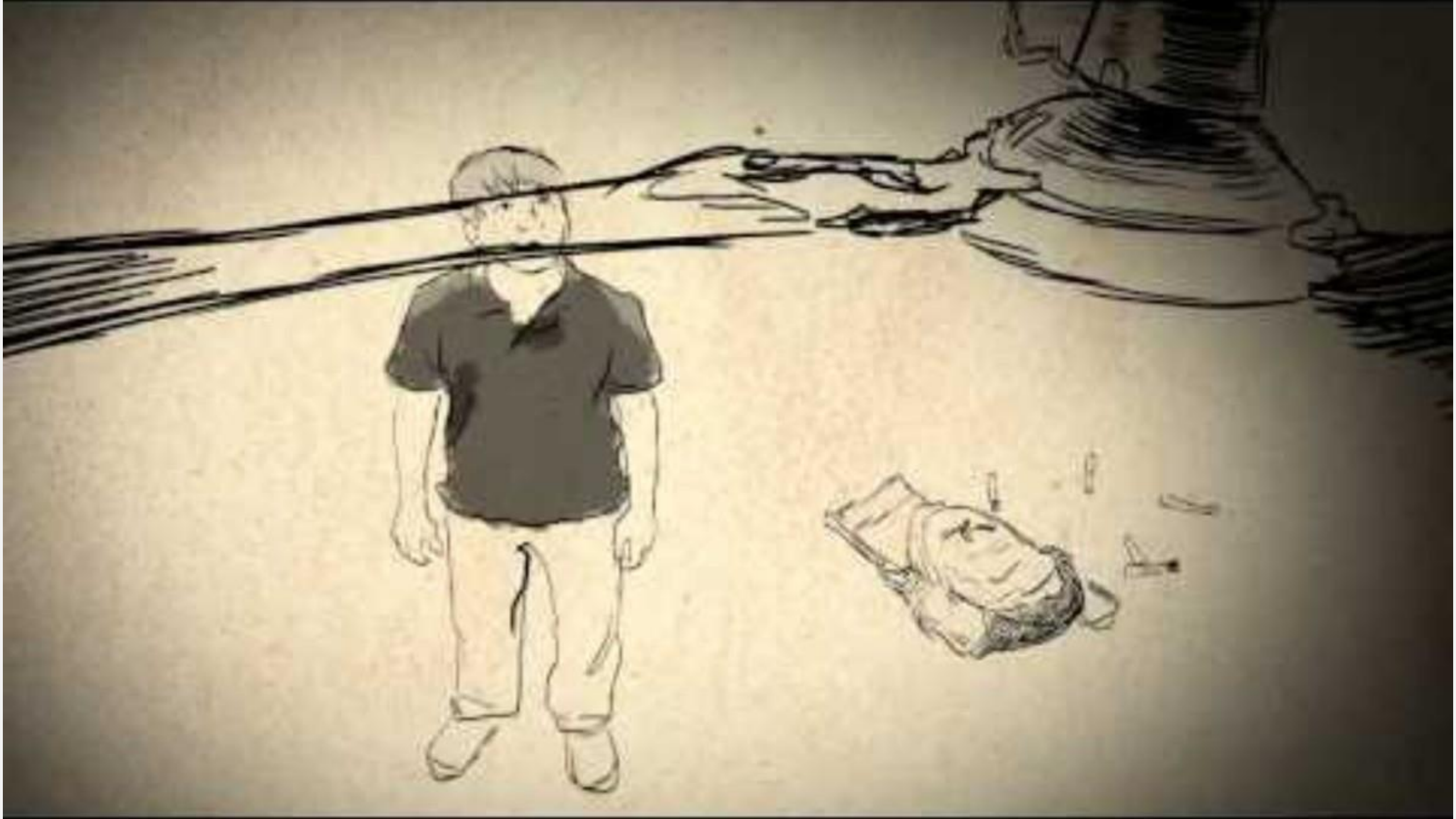


What is Neurodiversity?

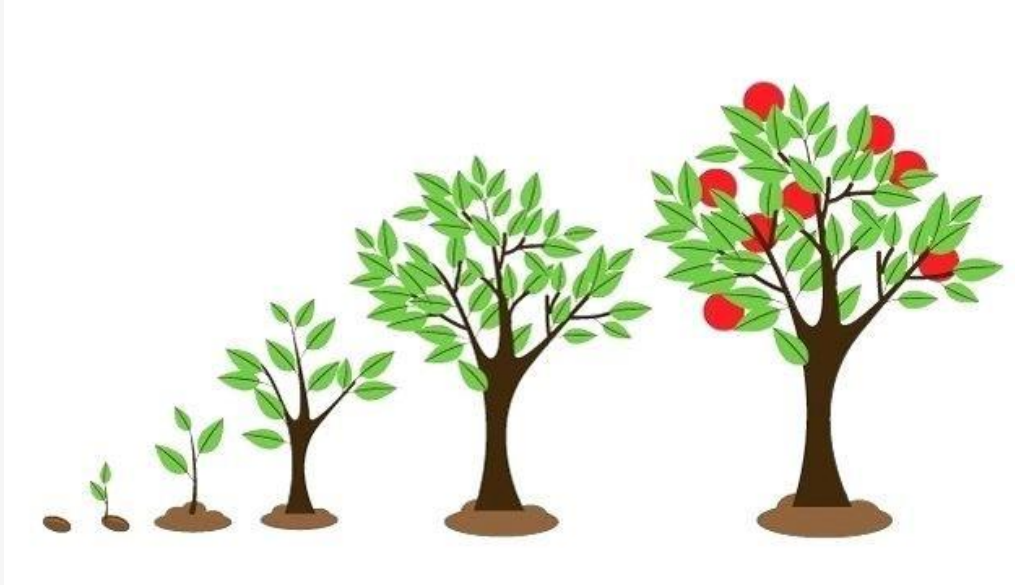
- An umbrella term for a variety of diverse ways in which the brain works
- Can include medical conditions, learning disabilities and other non-diagnosed occurrences. (genetic or acquired)
- Approximately 15% of the global population are believed to be neurodivergent

Not just labels and diagnoses!





Helping people thrive

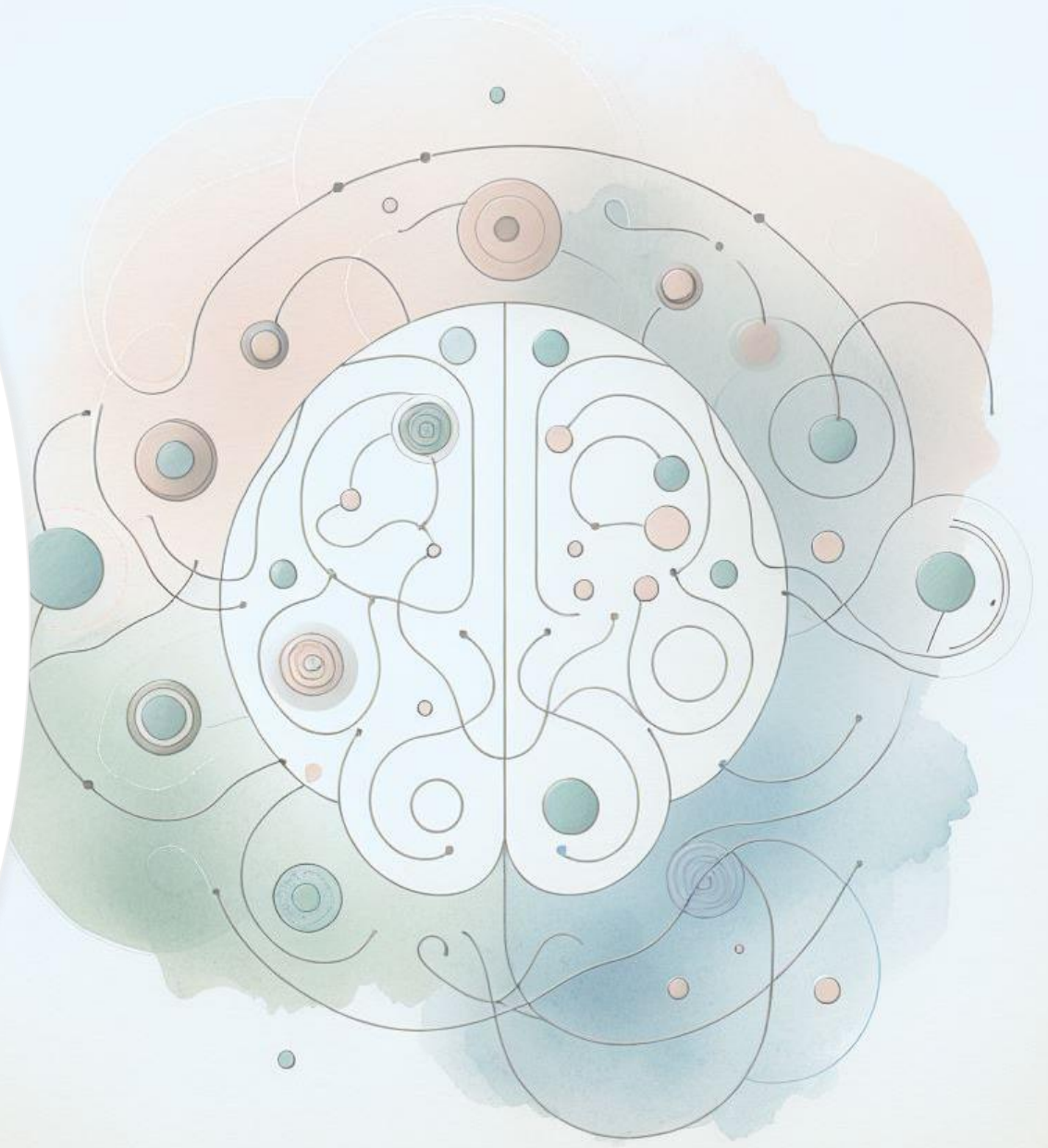


*“If we take care of these seeds, they will grow up nicely.
If you take care of me, I will grow up nicely”*

Neurodiversity and the Planned Environment

How can Town and Parish
Councils (and other stakeholders)
make a difference?

- Mandate and Planning Policy
- Design Principles
- Engagement



NPPF December 2024

(as amended February 2025)

- **Paragraph 8 b)** – Social objective - "well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being
 - See also paragraphs 96 and 102 referencing
- **Paragraph 63** – Sufficient housing for people with disabilities
- **Paragraph 96** - Planning policies and decisions aim - to achieve health, inclusivity and safety
- **Paragraph 97 b)** – community facilities – to take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community
- **Paragraph 102** – Access to a network of high-quality open spaces... important for health and wellbeing
- **Paragraph 117** – Development should address the needs of people with disabilities and reduced mobility in relation to all modes of transport
- **Glossary: People with disabilities** - "These persons include, but are not limited to, people with ambulatory difficulties, blindness, learning difficulties, autism and mental health needs."

Planning Practice Guidance

HEALTHY AND SAFE COMMUNITIES

- **Paragraph 002 - What are the main health organisations that need to be involved in considering planning for health?**
 - Health and Wellbeing Boards, Local Clinical Commissioning Groups, local healthwatch organisations – Joint Strategic Needs Assessments; dementia care and health inequalities; engagement with the wider community
- **Paragraph 003 – What is a healthy place**
 - It meets the needs of children and young people to grow and develop, as well as being adaptable to the needs of an increasingly elderly population and those with dementia and other sensory or mobility impairments

Planning Practice Guidance

HOUSING FOR OLDER AND DISABLED PEOPLE

- **Paragraph 002 - Why is it important to plan for the housing needs of disabled people?**
 - Includes specialist and support housing
 - Living **safe and independent** lives
- **Paragraph 003 – What range of needs should be addressed?**
 - References NPPF glossary - may generate a **range of housing requirements which can change over time**
 - Local planning authorities may wish to consider groups outside this definition
 - To enable **disabled people to live more safely and independently**, local planning authorities will need to consider their variety of needs in both plan-making and decision-taking
- **Paragraph 019 – How can the needs of people with dementia be addressed?**
 - “Local planning authorities should consider design principles when developing new housing... **especially housing aimed at people with dementia**... there should be a range of housing options and tenures available to people with dementia... **innovative and diverse housing models should be considered** where appropriate”.
 - Lays out characteristics of a dementia-friendly community

Planning Practice Guidance

HOUSING FOR OLDER AND DISABLED PEOPLE – INCLUSIVE DESIGN

- **Paragraph 017 - How can planning and design promote access and inclusion?**
 - Access and use by everyone
 - Breaking down unnecessary physical and psychological barriers and exclusions caused by the poor design of buildings and places
 - *"The most effective way to overcome conflicting policies and to maximise accessibility for everyone is for all parties to consider inclusive design from the outset of the process. This is particularly important when considering historic buildings and conservation, and highways."*
- **Paragraph 018 – How can places be designed to be age-friendly and accessible for all?**
 - Clear benefits outlined - [Building for Equality: Disability and the Built Environment report](#)
 - Inclusive design can help older and disabled people live more independently and reduce health and social care costs
 - Outlines accessibility and age friendly issues to consider

Planning Practice Guidance

HOUSING FOR OLDER AND DISABLED PEOPLE – INCLUSIVE DESIGN

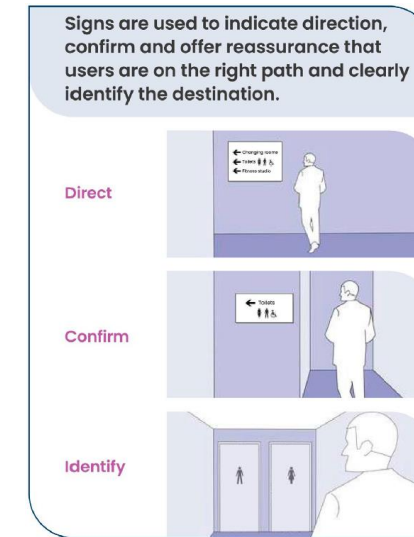
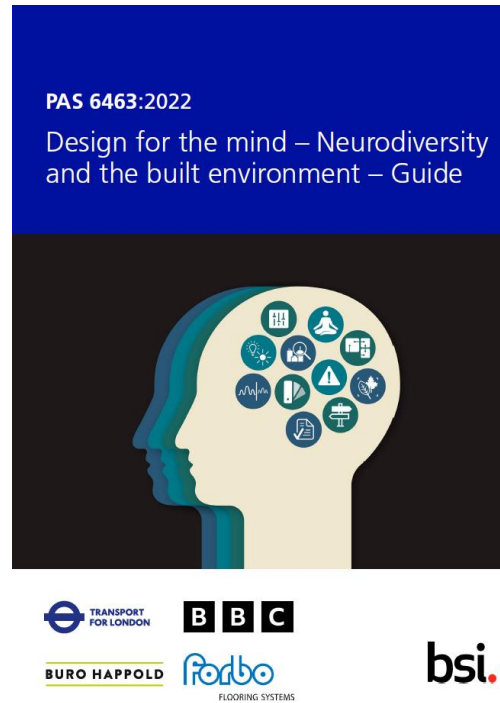
- **Paragraph 019 - How can for the needs of people with dementia be addressed?**
 - Outlines characteristics of a dementia-friendly community:
 - easy to **navigate** physical environment
 - appropriate **transport**
 - communities shaped around the **views of people** with dementia and their carers
 - good **orientation and familiarity**
 - reduction in **unnecessary clutter**
 - reduction in **disorienting visual and auditory stimuli**
 - Innovative and diverse housing models should be considered where appropriate

Material considerations

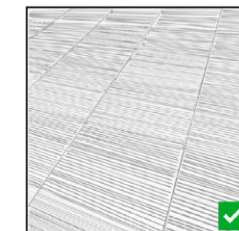
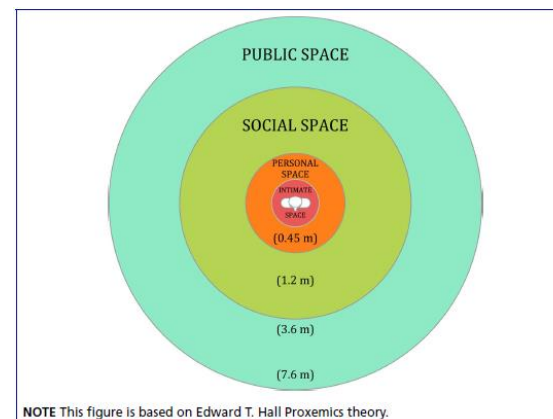
Material considerations can include (but are not limited to):

- Overlooking/loss of privacy
- Loss of light or overshadowing
- Parking
- Highway safety
- Traffic
- Noise
- Effect on listed building and conservation area
- Layout and density of building
- Design, appearance and materials
- Government policy
- Disabled persons' access
- Proposals in the Development Plan
- Previous planning decisions (including appeal decisions)
- Nature conservation

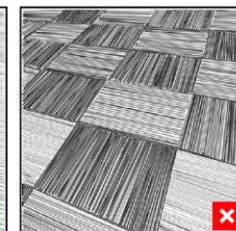
PAS 6463 – Design for the Mind



Examples of wayfinding systems.



No Rotation



Tiles Rotated



Tiles rotated, but with reduced pattern contrast

Example Local Policy: Watford

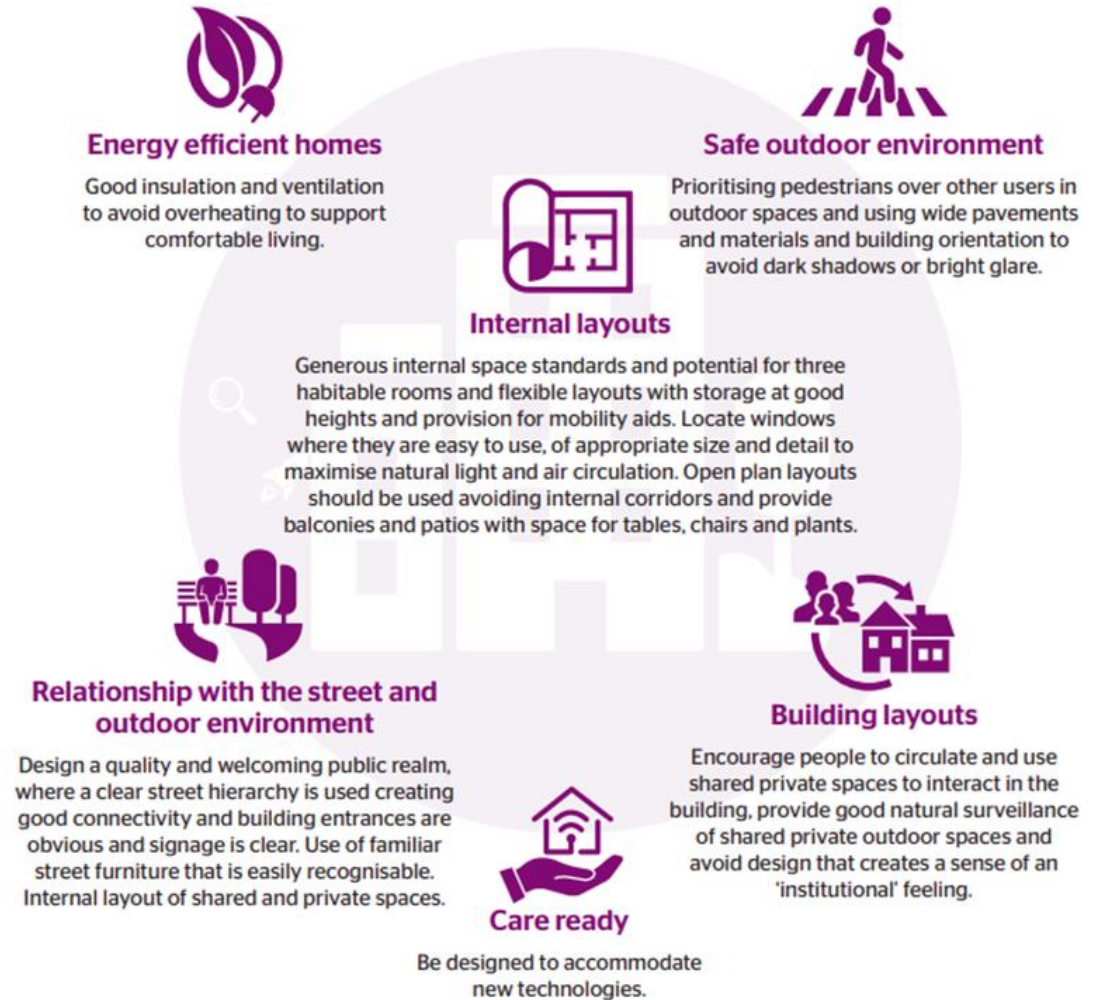
Dementia friendly homes

3.52 It is estimated that nationally the number of people living with Alzheimer's will more than double by 2040 and directly affect one in three people aged over 65 (Alzheimer's Society). In Watford this translates to about 2% of people who could be living with Alzheimer's by 2038. This is recognised locally by Watford Borough Council, having declared their intention to be a 'Dementia Friendly Town' in 2019.

3.53 Good quality housing and sensitively planned environments, whether a family home, extra-care housing, residential care or nursing care, can have a substantial impact on the quality of life of someone living with dementia. Small changes can often be enough to help someone living with dementia to be more independent, by providing an environment that is clearly defined, easy to navigate, and feels safe. Design considerations to support people with dementia are set out in Figure 3.3.



Figure 3.3: Dementia friendly design principles



Example Local Policy: Milton Keynes

Designing Dementia-friendly Neighbourhoods

Supplementary Planning Document



Familiarity

Familiar surroundings enable people to recognise and understand their surroundings, which helps to prevent and alleviate spatial disorientation and confusion and to aid short-term memory

Legibility

People can understand where they are and identify which way they need to go, helping to prevent and alleviate spatial disorientation, confusion and anxiety

Distinctiveness

People's attention and concentration are captured by the distinctiveness of the various parts of the neighbourhood, which aids orientation and wayfinding

Accessibility

People are able to reach, enter, use and move around the places and spaces they need or wish to visit, regardless of any physical, sensory or cognitive impairment

Comfort

People feel at ease and are able to visit, use and enjoy places and spaces of their choice without physical or psychological discomfort

Safety

People are able to use, enjoy and move around the neighbourhood without fear of coming to harm

Features of Dementia-friendly Design

Accessibility to Facilities

Careful consideration should be given to the location of housing for older people; whether this is mainstream housing, bungalows, step free apartments, sheltered housing, extra care, retirement or residential care homes. Easy access to services and facilities, including public transport, will allow people living with dementia to live well and remain independent for longer. A mix of uses provides the opportunity for people with dementia to interact with other people.

Key measures

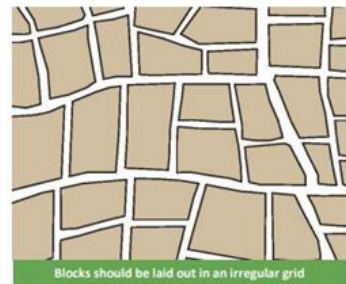
- Housing designed for older people, such as sheltered housing or care homes, should be located within a 5-10 minute walk of local shops and services, including public transport.
- For all other housing, services and facilities, including public transport, should be within 10-20 minutes walking distance (500-800m) of home.
- A mix of uses should be provided within all significant new housing developments.

Layout

People living with dementia may have reduced spatial awareness and less capacity for sense of direction. Therefore, design the strongest visual cues to indicate direction.

Key measures

- Provide a hierarchy of distinguishable street types, including quiet side roads as alternative routes away from crowds/traffic.
- Blocks should be small and laid out on an irregular grid based on an adapted perimeter block pattern. Streets should be short and not too wide.
- Streets should be well connected and gently winding with open ended bends to enable visual continuity.
- Forked and t-junctions are more common than crossroads.
- Visual cues, such as landmark buildings or features, are positioned at decision points, such as junctions and turnings.
- Take care using shared surfaces – a 'safe-zone' with defined edges is needed.



Example Local Policy: Aylesbury

- Para 2.4 (Spatial Vision) – “increased opportunities for **all residents** to participate in local community events celebrating their history, identity, and **diversity**”.
- H6a Housing mix – “Creating **socially mixed and inclusive** communities”
- D1 Delivering Aylesbury Garden Town – “enhancing Aylesbury reputation as a centre for education, diversity and excellence... paralympic heritage of the town will be celebrated... designed to provide the **choices and chances for all to live a healthy life taking a whole systems approach to key local health and wellbeing priorities and strategies... create healthy, sociable, vibrant and walkable neighbourhoods with equality of access for all**”
- Para 4.30 – Green and blue infrastructure to create an **accessible, distinctive, attractive** sense of place and identity.

Housing for older people

- 5.33 As set out at paragraph 50 of the NPPF (2012) local planning authorities should plan for a mix of housing to meet the needs of different groups in the community including older people. The demographic projections in the HEDNA’s housing needs assessment show that the population of Buckinghamshire is likely to increase by between 64,700 and 73,700 people over the 20-year period 2013-2033. The number of people aged 75 or over is projected to increase by around 32,100, approximately half of the projected growth. It follows that there is likely to be a significant need for housing which will be able to meet the needs of older people.
- 5.34 The Buckinghamshire HEDNA Update 2016 identifies the following demand for housing for older people in Aylesbury Vale:

Table 13 Demand for older person housing

Older person housing type	Number of units
Change in population aged 75+ over Plan period	+12,727 people
Extra care – Owned	380
Extra care – Rented	190
Sheltered ‘plus’ or ‘enhanced’ sheltered – Owned	130
Sheltered ‘plus’ or ‘enhanced’ sheltered – Rented	130
Dementia	80
Leasehold Schemes for the Elderly (LSE)	1,530
TOTAL	2,440
Percentage of overall Objectively Assessed Need (OAN)	12.6%

Material consideration in a project: Englishcombe Lane, Bath





**Material consideration in a project:
St Christopher's Drive, Oundle**

Example Neighbourhood Plan: Stanstead Abbots & St Margaret

Id	Sub-group	Objective	Action	Priority	Timescale	Responsibility	Resources/ Cost if known
C6	Community	Encourage healthy activities such as canoeing and running	Local sports groups could be encouraged to start up more active and fitness groups and promote Hertfordshire Health Walks	Med	0-3 years	Sponsors and Parish Council	TBD
C7	Community	Provide public toilets	Work with council and local businesses to build and maintain public toilets in a suitable location (e.g., close to the playground)	High	0-2 years	Sponsors/ Parish and District Councils	TBD
C8	Community	Promote community facilities for young people	Replace existing scout hut Increase the range of park equipment suitable for young people with disabilities and for older children	Medium	3-5	Scout movement Volunteers Businesses Parish Councils	Unknown
H1	Heritage	To establish the date of the settlement at Stanstead Abbots	Work with developers to gather information on appropriate sites that help to identify and date activity across the settlement area. Gain community skills and expert cooperation to run a community programme of test pits across the village to gather evidence (Testing should	Medium	Throughout development period and ongoing	Developers (as appropriate) Residents SALHS Ware Museum HCC Heritage team	Unknown

Example Neighbourhood Plan: Campbell Park

APPENDIX 5 Community Actions

Community Actions 1

Opportunities shall be taken to provide a new Parish Office.

Community Actions 2

Existing churches, religious buildings and community facilities shall be protected and retained unless it has been clearly demonstrated that there is no longer a genuine need for such facilities.

Community Actions 3

The Parish Council will continue to improve the play facilities under its management and encourage Milton Keynes Council to improve the play facilities under their control. The Parish Council is committed to ensuring the provision of sufficient play areas throughout the Parish.

Community Actions 4

Fishermead sports ground will be improved by pitch drainage and the development of associated community facilities including changing rooms.

Community Actions 5

The Parish Council will undertake a programme of 'safer spaces' across the Parish, in consultation with local people, which will include clean-up and repair of broken infrastructure, e.g. landscaping, parking areas, lighting, and improved CCTV coverage of public places. Priorities within this programme will include the 'Redway' network and footpaths

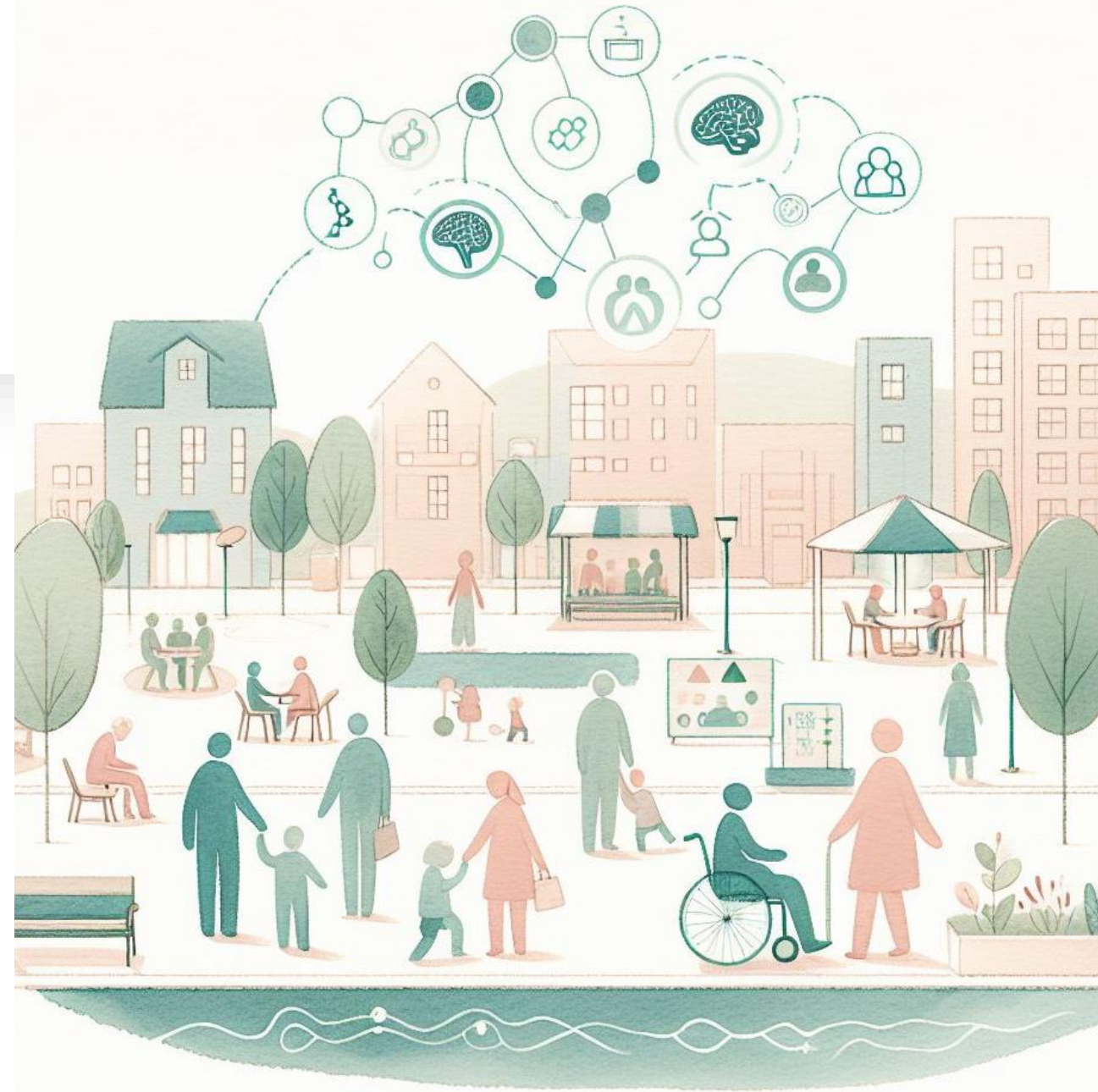
Community Actions 6

a) Improvements to the Redway network will be made to facilitate ease of movement through and around the Parish in a manner which minimises the impact on the safety, amenity, heritage and enjoyment of those living, visiting and working in the Parish. The Parish Council will pursue the delivery of the following projects through appropriate avenues. All development proposals which relate to these sites shall, where appropriate, contribute to meeting these improvements within the Plan:

- b) Improve access / connectivity between grid squares to enable residents to access shops / facilities.
- c) Improved safety specifically lighting.
- d) To encourage neighbouring Parishes to maintain the access links between Woolstone and Oakgrove.
- e) Safety provisions in underpasses and overbridges linking to Central Milton Keynes.
- f) Installation of speed management measures on cycle routes particularly from Central Milton Keynes, the Redway network adjoining Child's Way.

What is Neuroinclusive Design

Neuroinclusive design is a human-centred approach to designing the built environments that consider the diverse sensory needs and preferences of all individuals, including those who are neurodivergent.





Some Design Items to Consider for Neurodiversity

- Lighting
- Seating
- Colours
- Natural elements
- Sensory friendly materials
- Layout
- Quiet spaces
- Accessible design
- Acoustics
- Wayfinding
- Flooring
- Thermal comfort
- Odor

Designing for Schools and Universities

- Have quiet rooms
- Simple layout
- Accessible design
- Sound proofing
- Outdoor learning spaces
- Lighting
- Flexibility





Designing for Workplaces

- Helps with employee productivity and well being
- Quiet working spaces
- Simple but flexible layouts that provide natural movement
- Outdoor spaces

Designing for Residential

- Design away from noisy environments
- Try and make them personalized to specific needs
- Create sensory positive green spaces
- Simple site layouts
- Inclusive wayfinding
- Social spaces



Neurodiverse Engagement

1



**Involve
neurodiverse voices**

2



**Big picture
first**

3



**Show what
matters**

4



**Keep it
clear**

5



**User
choice**

6



**Be
considerate**

7



**Continue to
adapt**

Summary

- ✓ Be familiar with the NPPF, Local Plans and Material Planning considerations
- ✓ Understand the local authority evidence base and needs, as well as connecting with health organisations
- ✓ Create Neighbourhood Plans and representations which evidence neurodiversity needs and ways these can be addressed
- ✓ Be familiar with neuroinclusive design concepts
- ✓ Engage in an accessible and inclusive way
- ✓ Be empathetic, and listen – especially when it comes to sensory experience



Who are
Neurodiversity
in Planning?

neuro 
diversity
in planning



neuro diversity in planning

This network is about raising acceptance of neurodiversity among town planners and other built environment professionals working within the industry, and increasing understanding of its importance to planning decisions, policy, research and practice.

We aim to encourage town planners to recognise their role in promoting and creating an inclusive society.

Key Workstreams:

Design

How we understand what barriers currently exist in the built environment, and how we can plan and design safe, supportive and accessible places for neurodivergent people.

Engagement

How we can make infrastructure and planning consultation and engagement, be it online or in person, accessible for a neurodiverse audience.

Work

How we promote and champion the benefits of neurodiversity in the workplace and create a culture where neurodivergent planners are understood and accepted.



Learn more!

- Designing for Neurodiversity Booklet coming soon in Autumn 2025
- Other resources already available such as our engagement toolkit and terminology guide
- Visit our website to find out more about the network, the team behind it and to view resources:
 - <https://neurodiversityinplanning.co.uk/>
- Contact the team by email:
hello@neurodiversityinplanning.co.uk
- And don't forget to follow us on [LinkedIn](#) for the latest updates
- [Matthew Harmsworth MRTPI LinkedIn](#)

Other resources

	Neurodiversity in Planning Network LinkedIn Website
	Neurodiversity in Business Resource Hub
	RTPI Mental Health and Wellbeing Hub
	PAS 6463:2022 - Design for the mind. Neurodiversity and the built environment. Guide



Thank you
