
AGE-FRIENDLY URBAN ENVIRONMENTS

AGE FRIENDLY THEMES
**OUTDOOR SPACES AND BUILDINGS,
TRANSPORTATION, COMMUNITY
SUPPORTS AND HEALTH SERVICES**



NPAS GOALS AND OBJECTIVES

GOAL 3: SECURITY

Enable people to age with confidence, security and dignity in their own homes and communities for as long as possible.

OBJECTIVE 3.3

Support the design and development of age friendly public spaces, transport and buildings.

INTRODUCTION

The National Positive Ageing Strategy (NPAS) of Ireland (2013) identifies four national goals and two cross-cutting objectives. The goals aim to; support the greater participation of older people in all aspects of community life; maintain, improve and manage their health and wellbeing; enable them to age with security and dignity in their homes and communities and to use research to better inform policy responses. The cross-cutting objectives seek to combat ageism and improve information provision.

The Healthy and Positive Ageing Initiative was established in 2014 with the aim of increasing knowledge around the factors contributing to the health and wellbeing of older people. The Initiative seeks to provide partners in wider government and society with a framework to help prioritise actions and to translate the goals of the NPAS and *Healthy Ireland* in order to stimulate local action by stakeholders in Age Friendly Counties.

The work of the Initiative helps to achieve Goal 4 of the National Positive Ageing Strategy and it is also aligned with the goals and actions of *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013-2025*.

The Initiative is jointly funded by the Department of Health, the HSE, and The Atlantic Philanthropies. It is operational in three main areas of activity:

- National Indicators of Positive Ageing, leading to the 2016 publication of the first biennial report on the health and wellbeing of older people in Ireland.
- Local indicators - using data from a survey of older people collected locally.
- Research - additional research to fill data gaps relating to indicators or to the design or configuration of future services and supports for older people.

There are many different ways to measure the age-friendliness of built environments. The HaPAI team have developed a measurement tool that identifies the characteristics of the built environment that contribute most to increasing the age-friendliness of an urban area. Measuring these key characteristics can provide local Age Friendly Alliances with the information necessary to monitor progress towards age friendliness in the urban built environment. This guide provides information on how the measurement tool was developed and offers guidance on how this tool can be used locally. The tool is reliable, ready-to-use and intended to reduce some of the complexity involved in deciding what to measure, and how.

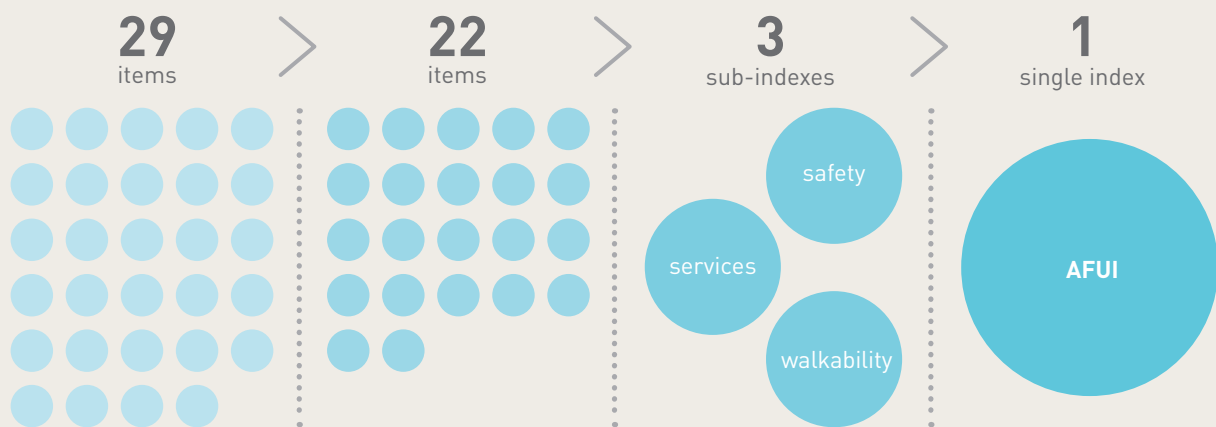
The tool is called the Age-friendly Urban Index (AFUI)

The AFUI is a composite index, meaning that it captures multiple characteristics of the urban

environment in a single measure. The HaPAI team used the HaPAI AFCC survey data to develop the AFUI. The process of developing the AFUI involved using statistical tests and techniques to identify what should be kept in, and what should be left out when measuring the age-friendliness of urban environments in Ireland.

There were two stages to the research process

1. Develop a long-list of survey questions that could be included in the index (29 questions were identified)
2. Complete statistical tests called exploratory factor analysis, confirmatory factor analysis, and measurement invariance, internal consistency, and construct validity to provide a reliable and valid index



This process helped to reduce the number of questions about the urban environment that need to be asked in a survey or evaluation, while also making sure that 'big picture' was captured.

The index can be reported altogether, and each sub-index can also be used separately.

The knowledge developed in conducting the HaPAI AFCC survey and the results of the research process to develop the AFUI ensures that those considering using the AFUI for monitoring and evaluation can be confident that the measure meets the standards and

criteria of a good indicator as set out by the Health Information Quality Authority (HIQA, 2010):

- specific
- relevant
- valid
- reliable
- acceptable
- has an explicit evidence base
- feasible to collect and analyse
- sensitive to change over time

HOW TO USE THE AFUI IN A SURVEY

Here is the list of questions to use that form the AFUI. The questions cover three domains:

1

SERVICES

2

WALKABILITY

3

SAFETY

The response categories are shown in the right-hand column. Survey participants should choose only one category for each question.

SERVICES

- Access to postal services
- Access to full banking services
- Access to public transport
- Access to cinema or other entertainment
- Access to recreational park or green area
- Access to community centre or other venue where you can meet friends
- Access to supermarkets or other shops
- Access to cafes and restaurants
- Access to local health services
- Access to local Gardai / Garda station
- Access to public library

RESPONSE CATEGORIES

- Service not available (value 1)
- With great difficulty (value 2)
- With some difficulty (value 3)
- Easily (value 4)
- Very easily (value 5)

WALKABILITY: Satisfaction with...

- Number of pedestrian crossings and traffic lights
- Timing of pedestrian crossings and traffic lights
- Availability of seats or resting places
- Availability or effectiveness of traffic calming measures
- General appearance and upkeep
- Quality and continuity of paths or pavements
- Availability of accessible toilets

RESPONSE CATEGORIES

- Very dissatisfied (value 1)
- Dissatisfied (value 2)
- Neither satisfied nor dissatisfied (value 3)
- Satisfied (value 4)
- Very satisfied (value 5)

SAFETY

- How safe do you feel at home during the day?
- How safe do you feel at home at night?
- How safe do you feel "Out and About" during the day?
- How safe do you feel "Out and About" at night?

RESPONSE CATEGORIES

- Very unsafe (value 1)
- Fairly unsafe (value 2)
- Neither safe or unsafe (value 3)
- Fairly safe (value 4)
- Very safe (value 5)

The results of the AFUI will be even more relevant and informative when they are combined with information on the people who completed the survey. Here are some examples of the background information that was collected as part of the HaPAI AFCC survey. The full background section is available in the main report, 'Positive Ageing in Age Friendly Cities and Counties'.

Gender	Male or female
Education	Primary/none; secondary; third level
Marital status	Married; single (never married); separated or divorced; widowed
Household composition	Living alone; Living with spouse or partner; Living with spouse/partner and other family or other
Principal Economic Status	Retired; employed; self-employed; unemployed; out of the labour market (permanently sick or disabled; looking after home or family; in fulltime education or training)
Health status	Excellent/very good/good/fair/poor
Disability status	Has longstanding illness or condition that limits daily activity
Location	Town (1500+ population); inner city; city suburb

When designing your study using the AFUI it is helpful to consider the healthy and positive ageing outcomes that the AFUI is strongly and weakly correlated with, as a guide:



The AFUI is suitable for use in areas classified in the Census of the Population as urban:

- ✓ Town with a population of 1500+ or more
- ✓ Inner city
- ✓ City suburbs
- ✗ Villages
- ✗ Open countryside

The AFUI was developed using information for people aged 55 and older, and is therefore most relevant to this age group. The AFUI has not been used in studies with younger participants at the time of publication.

A WORKED EXAMPLE OF HOW TO USE THE AFUI TOOL

Survey participants will select one response and this has a unique value. To calculate an overall score for each domain e.g. Services, all unique values should be added together. Here is an example of what each domain might look like in a survey, and how to calculate the overall score.

SAFETY

How safe do you feel:

	Very unsafe (value 1)	Fairly unsafe (value 2)	Neither safe or unsafe (value 3)	Fairly safe (value 4)	Very safe (value 5)
At home during the day?				✓	
At home at night?				✓	
Out and about during the day?		✓			
Out and about at night?	✓				

In this example the overall score for safety for this participant will be $1+2+4+4= 11$

WALKABILITY

How satisfied are you with:

	Very dissatisfied (value 1)	Dissatisfied (value 2)	Neither satisfied nor dissatisfied (value 3)	Satisfied (value 4)	Very satisfied (value 5)
Number of pedestrian crossings and traffic lights				✓	
Timing of pedestrian crossings and traffic lights				✓	
Availability of seats or resting places		✓			
Availability or effectiveness of traffic calming measures			✓		
General appearance and upkeep				✓	
Quality and continuity of paths or pavements				✓	
Availability of accessible toilets		✓			

In this example the overall score for safety for this participant will be $4+4+2+3+4+4+2= 23$

SERVICES

Can you access:

	Service not available (value 1)	With great difficulty (value 2)	With some difficulty (value 3)	Easily (value 4)	Very easily (value 5)
Postal services					✓
Full banking services					✓
Public transport			✓		
Cinema or other entertainment		✓			
Recreational park or green area					✓
Community centre or other venue where you can meet friends				✓	
Supermarkets or other shops					✓
Cafes and restaurants					✓
Local health services			✓		
Local Gardai / Garda station			✓		
Public library			✓		

In this example the overall score for safety for this participant will be $5+5+3+2+5+4+5+5+3+3+3= 43$

Based on these three examples, the total AFUI score will be: $11+23+43=77$

Because there is a fixed number of response categories the total scores for each domain and the total AFUI score will have a minimum and maximum possible value:

- **Services** ranges from a minimum of 11 (services not available) to a maximum of 55 (very easily)
- **Walkability** ranges from a minimum of 7 (very dissatisfied) to a maximum of 35 (very satisfied)
- **Safety** ranges from a minimum of 4 (very unsafe) to a maximum of 20 (very safe)
- **AFUI index score** ranges from a minimum of 22 (low) to a maximum of 110 (high)

The AFUI contains information about the quality of the local environment as rated by a person, rather than an audit approach to counting presence or absence of certain local features, such as parks. This person-centred approach can be helpful for local decision-makers and planners with an interest in understanding how a person experiences their local environment and how their experiences may be improved.

As there is a wealth of international evidence that links these features to health and wellbeing, it is important to monitor these features over time to identify where improvements can be made.



The HaPAI survey is a random-sample survey of community-dwelling people aged 55 and older, living in 21 local authority areas: Dublin City; South Dublin; Dublin Fingal; Dún Laoghaire-Rathdown; Galway City; Galway County; Clare; Limerick City; Limerick County; Kildare; Kilkenny; Laois; Louth; Meath; Wexford; Wicklow; Cavan; Cork City; Cork County; Mayo; and Tipperary.

The questionnaire was developed from a survey framework which mapped the WHO Age Friendly domains to the objectives of the NPAS. Several data and literature sources were reviewed (national/international surveys, research literature, and the WHO Age Friendly Indicators – A Guide) to identify survey questions that were; reliable, valid, have an explicit evidence base, support national and international comparison, are sensitive to change over time, and align directly with the NPAS and Age Friendly Ireland Programme goals.

Older people in two different public consultation sites were invited to comment on the draft questionnaire. In the first session 150 participants attended and gave feedback. Their comments and the gaps identified were addressed prior to the second consultation which involved a group of 30 participants who completed the survey individually. Overall, feedback focused on the overall clarity and accessibility of each question and substantive survey gaps.

Fourteen survey areas were included: outdoor spaces and buildings; transport; housing; safety; social participation; education and lifelong learning; respect and social inclusion; civic participation and

employment; communication and information; health status and health behaviours; carers; health services; psychological wellbeing, and personal safety (elder abuse). Questions on socio-economic status and geographic location were also included to support further analysis of the survey data.

Data was collected between 2015 and 2016 and a multi-stage random-route sampling strategy was used to generate a sample of this population. A random sample of 50 District Electoral Divisions (DED) in each local authority, were the primary sampling units (PSUs). Within each DED a starting address was selected and interviewers then called to every fifth house in order to complete the 10 interviews required in each of the 50 areas. Where two or more older people lived at an address, the interviewer applied the 'next birthday' rule to select one participant.

Each participant completed a Computer-Assisted Personal Interview (CAPI) in their own home with a trained interviewer from Amárach Research. A total of 10,540 interviews were completed. The overall response rate was 56%, and this ranged from 51% to 63% across the areas. Survey response rates typically vary for different groups within a given population and this can lead to biased estimates when reporting results. Therefore, sample weights based on the Census (2011) were applied to the survey data to adjust for differences in participation rates by age, gender, education, and marital status and ensure that the survey results are representative of this population.