

# PROJECTING THE FUTURE

A big conversation about the future of the project profession

CHALLENGE PAPER 3

AGEING AND DEMOGRAPHICS:  
THE 100-YEAR LIFE

OCTOBER 2019

#projectingthefuture

## ABOUT THIS PAPER

### HOW DOES THE PROJECT PROFESSION THRIVE IN A CHANGING WORLD?

**That's the question at the heart of Projecting the Future, a big conversation about the future of the project profession which is being led by APM during 2019-20.**

This is the third in a series of Challenge papers which are taking a closer look at different aspects of our changing world and the implications for the project profession. It examines the rise in human longevity and the changing demographics facing the UK and many other nations around the world. It is a story of incredible progress in healthcare, in economic development and in the lifting of living standards globally – yet it is also a trend that raises complex issues.

The growth of the older population will affect politicians, policy makers, public services and businesses alike. It will have a major influence on the environment in which project managers work, and on the work that they are entrusted to deliver. It will also shape project professionals' own careers, as longer working lives and less linear career paths become the norm.

As in the other areas considered in Projecting the Future, the project profession will be at the centre of the changes that lie ahead, tasked with leading complex projects and programmes that deliver transformative outcomes.

We want to work with you to start developing answers to the challenging questions raised throughout Projecting the Future about how the project profession can best prepare for the future. Whatever your stake in the profession – an individual, an employer, a 'customer' of projects, or an expert in a given field – we want to hear your voice.

We look forward to your input, and to working with you to develop a shared view of how the project profession as a whole can realise its potential as a true leadership delivery profession.

### JOIN THE CONVERSATION

We hope you will share your views, insights and evidence with us and other project professionals on LinkedIn, Facebook, or Twitter.

   **#projectingthefuture**

You can also email your thoughts and comments to: [ptf@apm.org.uk](mailto:ptf@apm.org.uk)

We are particularly keen to hear about case studies of projects and strategies that reflect the needs of an ageing population in some way.

We recommend reading the Projecting the Future discussion paper and the other Challenge papers in the series: i) the fourth industrial revolution, data, automation and artificial intelligence; and ii) climate change, clean growth and sustainability. They can be found at: [www.apm.org.uk/projectingthefuture](http://www.apm.org.uk/projectingthefuture)

## THE BIG ISSUES

**In the UK and around the world, people are living longer. Life expectancy is increasing, average ages are rising, and older people are becoming a bigger proportion of society. The prospect of a 100-year life is a reality for as many as half of today's babies, according to some experts.<sup>i</sup>**

To describe this as a 'challenge' could seem ungrateful: longer life for more of humanity is a triumph, the result of historic progress in tackling poverty, fighting disease and improving healthcare. Yet longer human lives could be one of the most transformative of the trends explored in Projecting the Future. Credit agency Standard & Poor's has argued that ageing populations will lead to "profound changes" in growth prospects for countries around the world as age-related spending puts increasing pressure on public finances.<sup>ii</sup> Bigger populations of older people mean greater care requirements, and as the balance between the traditional 'working age' population and old-age population shifts, tough questions emerge about how health and social care should be funded.

In the UK, the ageing society is one of the four Grand Challenges in the government's 2017 Industrial Strategy, which sets out the aim of harnessing the "power of innovation" to meet the needs of an ageing society.<sup>iii</sup> Part of the strategy is to accelerate the use of sophisticated technologies for ground-breaking medical research – for instance in mapping the human genome – allowing better anticipation, prevention, diagnosis and treatment of disease and chronic conditions.

The net effect of increasing longevity has been, to date, an increase in global populations: over 7 billion today, it is set to hit 8.5 billion by 2030 and 9.7 billion by mid-century. Most of the fastest-growing nations are in Africa, where enormous population growth is forecast.<sup>iv</sup> By contrast, population

growth is slowing in many parts of the world, including the UK, as fertility levels fall: indeed, for many Western countries, populations are forecast to start declining before the end of the 21st century.<sup>v</sup>

These dynamics are already resulting in significant changes in the age profile of the population in countries like the UK. Older people constitute an ever-larger proportion of the whole, with the working population shrinking by comparison. From an economic perspective, that is a change of profound importance. How can fewer working people support a growing older population? Statutory retirement ages have started to change across the Western world: how will the idea of retirement change in the years ahead? What contribution should citizens make to their own later-life care, and what is the state's role? And what is needed by way of infrastructure and social support, for example in housing, transport, or care systems, as the population's needs change?

These complex issues are connected to equally challenging questions around intergenerational wealth and asset ownership. Younger people today lack the levels of asset wealth enjoyed by previous generations at the same age.<sup>vi</sup> Is this 'wealth deferred', a temporary delay as the baby boomers grow old, or does it represent a more permanent structural shift in wealth? In either case, how should policymakers respond, and how will change be delivered?

The ageing population will drive changes across the economy, as demand grows for goods and services suited to their needs, reflecting the increasing purchasing power of older people as a demographic group. Those changes will invariably need to be achieved through projects.

Longer lives are much to be welcomed but adapting to them will be far from simple.

**"No other force is likely to shape the future of national economic health, public finances, and policymaking as the irreversible rate at which the world's population is ageing."**

Standard & Poor's *Global Ageing 2010: An Irreversible Truth*

15,000

PEOPLE IN THE UK TODAY ARE 100 OR OLDER

10M

PEOPLE ALIVE IN THE UK TODAY CAN EXPECT TO LIVE TO 100

BY 2050,

OFFICIAL FORECASTS SUGGEST

SOME EXPERTS THINK MORE THAN

1 IN 4

PEOPLE IN THE UK WILL BE AGED 65 AND OVER

1 IN 3

CHILDREN BORN TODAY CAN EXPECT TO LIVE PAST 100

1/2

OF CHILDREN BORN TODAY WILL LIVE PAST 100

BY 2041, THE UK'S POPULATION IS SET TO GROW FROM

66M TO 73M

THE GLOBAL POPULATION IS GROWING:

7.6BN

TODAY

9.7BN

FORECAST IN 2050

10.9BN

FORECAST IN 2100

SOURCES FOR THE ABOVE GRAPHICS: 15,000 <sup>vii</sup>, 10M <sup>viii</sup>, 1 IN 4 <sup>ix</sup>, 1 IN 3 <sup>x</sup>, 1/2 <sup>xi</sup>, 66M TO 73M <sup>xii</sup>, GLOBAL POPULATION <sup>xiii</sup>

AVERAGE GLOBAL LIFESPANS ROSE FROM

64.8 TO 70

YEARS BETWEEN THE EARLY 1990S AND 2010-15

THE UK'S OLD AGE DEPENDENCY RATIO - THE NUMBER OF PEOPLE OF WORKING AGE FOR EACH OLDER PERSON - IS FALLING

3.3

TODAY

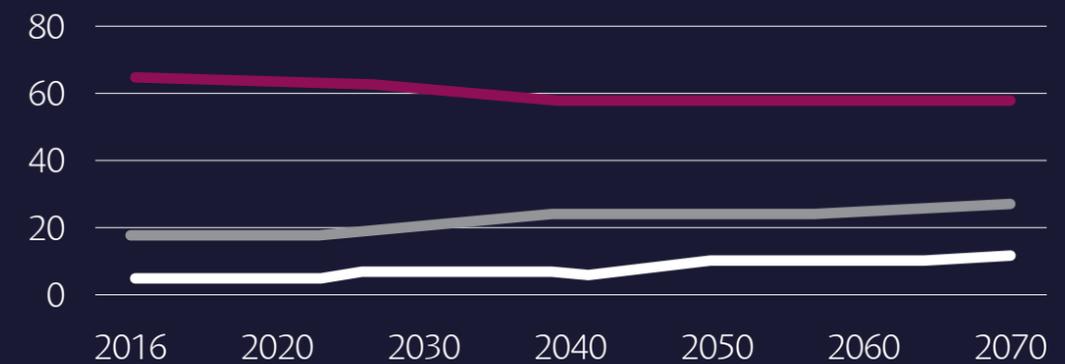
2.6

BY 2030

2.0

BY 2070

FORECAST UK DEMOGRAPHIC CHANGES, 2016 - 2070



WORKING AGE POPULATION, 15-64 - AS % OF TOTAL POPULATION

ELDERLY POPULATION, 65 AND OVER - AS % OF TOTAL POPULATION

VERY ELDERLY POPULATION, 85 AND OVER - AS % OF TOTAL POPULATION

SOURCES FOR THE ABOVE GRAPHICS: 64.8 TO 70 <sup>xiv</sup>, DEPENDENCY RATIO <sup>xv</sup>, FORECAST UK DEMOGRAPHIC <sup>xvi</sup>

## OPPORTUNITIES AND CHALLENGES

### An older population

By every measure, the UK's population is getting older. The average age passed 40 for the first time in 2014. Some 18.2% of the UK population was aged 65 or over in mid-2017, up from 15.9% in 2007; it will be over 20% by the end of the next decade, and by mid-century the proportion will be almost one in four.<sup>xxvii</sup> The 'baby boomers' born after World War II are hitting old age.

### The old age dependency ratio

The proportional growth of the older population means that there is a falling number of people of working age for each older person. The UK has 3.3 people of working age today for each older person, but by 2030 this will be just 2.6, falling to 2.0 by 2070.<sup>xxviii</sup> This has major economic implications.

### The 100-year life

Official life expectancy for babies born in the UK today is 79.2 years for men and 82.9 for women. One in three can expect to live to 100 – and indeed, it is already estimated that 10m people who are alive today will live past 100.<sup>xxix</sup> Commentators like Lynda Gratton and Andrew Scott, authors of *The 100-Year Life*, go further. They argue that official expectations have historically been conservative compared to actual longevity gains, and suggest that more than half of today's babies can expect to live past 100 in the UK and other rich countries. Others, however, are sceptical, and contend that extrapolating from the trends of recent decades is misleading: they point to slowing increases in life expectancy in recent years<sup>xxx</sup> and to the rise of life-style related conditions and diseases, such as obesity and type 2 diabetes in children.<sup>xxxi</sup>

### Intergenerational wealth

One of the trends associated with the booming older population is the difficulty faced by younger generations in building asset wealth. The Intergenerational Commission found that millennial families are only half as likely to own their home by age 30 as their baby boomer predecessors. Millennials are four times more likely to rent, and they spend more of their income on housing.<sup>xxxii</sup> In his influential book on this generational shift, politician David Willetts accused baby boomers of having "stolen their children's future".<sup>xxxiii</sup>

### Rising costs for health and social care

An ageing population is driving significant rises in expenditure in major areas of public spending, especially state pensions, healthcare and long-term social care.<sup>xxxiv</sup> Of course, an ageing population is not the only factor behind soaring costs: leading health thinktank the King's Fund has pointed out that overall population growth and the availability of more sophisticated

treatments are bigger factors.<sup>xxxv</sup> Nonetheless, the Resolution Foundation thinktank estimates that public spending on health, care and social security is set to rise by £24bn by 2030 and by £63bn by 2040: it has called for a new NHS Levy, collected through National Insurance.<sup>xxxvi</sup> The balance between public and private spending is a critical question for debate, and policymakers continue to wrestle with the challenges of funding later-life care equitably: a government green paper promised in the 2017 Budget has still yet to appear.<sup>xxxvii</sup>

### Chronic health conditions and funding

Health challenges will increasingly shift from acute illness to chronic conditions for older populations. AgeUK forecasts that by the age of 85, some 80% of people can be expected to have at least two long term health conditions.<sup>xxxviii</sup>

### Preventative healthcare

The NHS Long Term Plan, published in January 2019, recognises the importance of preventative healthcare and discusses the challenges of an ageing population. It states that connected home-based and wearable monitoring equipment will enable the NHS to predict and prevent health events which would otherwise have led to a hospital admission. That might include scales to monitor a patient's post-operation weight, a location tracker for a dementia patient, or a home testing kit for patients on blood thinners. The Plan recognises the need for "major work to digitise community services" if the NHS is to take advantage of technological progress – work that will of course generate substantial projects.

### Workforce supply challenges

Linked to the NHS Long Term Plan is its People Plan for tackling the critical workforce challenges facing the healthcare system.<sup>xxxix</sup> It aims to make the NHS the "best place to work", to improve leadership culture, to address urgent shortages – including 40,000 nursing and 10,000 medical vacancies – and to introduce a "new operating model" for the workforce to deliver "21st century care". An interim version of the People Plan was published in June 2019 and a full version is due in November 2019.

### The rise of the "silver economy"

While creating challenges for the public purse, larger older populations also have far more consumer power: globally, the over-60s already account for an estimated \$15trn of spending power. The "longevity sector" could make up over 50% of US and Japanese GDP by the 2030s, according to one analysis of the power of the 'silver dollar'.<sup>xxx</sup> The UK's Industrial Strategy aims to help companies overcome any barriers to developing products and services that are needed by the older population, such as the regulatory frameworks governing personal finance products.

### Saving and retirement

Rising life expectancy means that it is increasingly tough for most people to accumulate the level of savings needed for a reasonable retirement income from the age of 65. Many people now in their mid-40s might need to work into their mid-70s; those in their 20s may need to work into their 80s.<sup>xxxi</sup> This has been reflected by moves in many countries to delink the state pension age and retirement. Mandatory retirement ages were abolished in the UK in 2011 and significant reforms have been introduced to pensions, including auto-enrolment in workplace pensions and new pensions freedoms which give people more control over their money at the point of retirement.

### Living preferences

Longer life and changing social norms are being reflected in changing living arrangements for older people. It is projected that the UK will have 1.42m more households headed by someone aged 85 or over by 2037, an increase of 161% in a quarter of a century.<sup>xxxii</sup> The rising numbers of mid- and late-life adults who are single, childless, or live at a distance from adult children is driving innovative new living arrangements such as 'senior cohousing communities', or SCCs – a form of communal living that integrates common areas and private residences.<sup>xxxiii</sup>

### Transforming work

Longer working lives mean that multi-generational workplaces are here to stay. Career paths are not just likely to be longer, but less linear too. Retirement may become a gradual downshifting in seniority and/or hours, rather than a sudden all-or-nothing leap from full-time work. These changes will challenge employers' current policies and practices and demand better management and leadership, improved knowledge transfer, and a renewed emphasis on employee engagement. Gratton and Scott have forecast an "HR battle" that will be "akin to the battles about the length of the working week and working conditions that marked the Industrial Revolution". Ultimately, the result will be to break the present "lockstep" link between age and life stage.<sup>xxxiv</sup> As change happens, there will surely be a need for new frameworks that help people adapt to longer working lives and lengthy retirement periods, especially by supporting long-term financial planning.

### Technology and health

Tech giants like IBM, Google and Microsoft are all engaged in health related initiatives, for example in the application of AI to design personalised cancer treatments.<sup>xxxv</sup> Digital technology will improve surgical precision. Cheaper genome mapping and measurement of blood biomarkers will enable quicker diagnosis and treatment, even allowing prediction of potential risks and preventative measures. The use of apps and wearable technology could also enable monitoring of patients at home, reducing pressure on hospitals and budgets, and improving care.

### Data and trust

As in other spheres, access to data will be critical to generating technological solutions to health challenges, including the enormous datasets generated in the UK through the NHS. Patient trust will be critical, as will be connected care systems, to underpin better care. Will states which have less concern for individual privacy, like China, have an advantage in using such data?

### Ageing is a global trend

Similar population trends to those of the UK are to be found in other industrialised nations around the world, and globally, the old age population is soaring. In 2017 there were 962m older people around the world, up from 382m in 1980; the number is set to reach 2.1bn by 2050. That represents a proportional shift from one in eight of today's population to one in five.<sup>xxxvi</sup> Europe is "currently the oldest continent with the highest old-age dependency ratio, and will remain so in 2070".<sup>xxxvii</sup> Presently, only Japan has an older population of more than 30%, and while 64 other countries will join it by 2050,<sup>xxxviii</sup> Japan has by some distance the oldest population in the world today, with challenging implications for economic growth, productivity, healthcare and society.<sup>xxxix</sup>

### Areas of population growth (and decline)

While many industrialised nations face the challenges associated with ageing populations, other parts of the world have booming younger populations and are on course for dramatic population growth during the 21st century. African nations make up all of the forecast top ten fastest-growing countries in percentage terms – and eight of the top ten in terms of absolute population growth. Niger, for instance, is expected to grow by 581% by 2100, or 141m people; Nigeria is expected to grow by 527m people. India, meanwhile, is set to overtake China as the world's most populous country as soon as 2027. In fact, China's population is set to contract by 374m – more than the entire current population of the USA – over the course of the century.<sup>xl</sup>

### The multi-century life

Are there any limits on the ability to extend life? Some of the wilder forecasts for human longevity suggest that the first people to live 1,000 years might already be alive today.<sup>xli</sup> Futurist Ray Kurzweil and David Grossman have identified three "bridges" to a multi-century lifespan. The first bridge to cross is to follow current medical best practice in order to prolong life long enough to benefit from the second bridge, the coming revolution in biotechnology – and from there, to the third bridge, through which nanotechnology allows the repair of human cells at a molecular level.<sup>xlii</sup>

## A PROJECT PROFESSION VIEW

**We look at some of the potential implications of the revolution in human longevity for the project profession. Agree? Disagree? Whatever your perspective, we hope you'll add to the debate.**

Any assessment of the impact of ageing populations and changing demographics has to start with the fact that ageing populations are a trend to be celebrated: the result of human ingenuity and triumphs in diverse fields across science, medicine, and economic development. Undeniably, though, these successes also bring with them a host of complex issues.

There are close links to the other Challenges that will be covered in Projecting the Future. Progress in medical research and care, for example, will be driven by the ongoing revolutions in data, AI, and technology. But taking advantage of the potential of new technology will demand major work in the NHS, for example in digitising systems to enable connected home-based care and the use of wearable devices that could allow patients to be monitored with fewer trips to hospital.

Transformative projects will also be needed to deliver reform of social care for older people with chronic conditions and end-of-life care, but there is as yet no coherent approach to reform, nor consensus on some of the profound questions that need to be settled. How should we fund better care? What is the role of the state, and what will individuals pay? The policy challenges over health and social care are some of the most complex problems facing policy-makers, but it is vital that progress be made in the years ahead. For a way forward, we might look at one successful transformational project, pension auto-enrolment – yet even this took over a decade of development to be delivered, and there was much greater consensus about the aims of change than is to be found around care today.

There are connections to other Challenges too. Demographics affect climate change: population growth around the world pushes resource use and greenhouse gas emissions upwards, even as governments adopt net-zero emissions targets. Older populations will demand different forms of mobility and

transport (the subject of the next Challenge paper) – indeed, one US survey found that autonomous vehicles were the number one emerging technology wanted by older people.<sup>xliii</sup> And cities will need to change to reflect different ways of living, for example in how homes are designed and community spaces built.

There are numerous implications for business. Opportunities will be created by the emergence of demand for services and products that meet the needs of an ageing society, and that will drive investment in innovation. Products that support active lifestyles and help people to enjoy independent living and a better quality of life for longer will be popular, as will be technologies to help monitor and manage people's health. Financial products suited to longer lives will be needed. And industries like construction will be affected, as the ageing population is reflected in the rapid rise of households headed by someone aged 85 or over.<sup>xliii</sup> Projects in the built environment will need to address the increasing need for specialised housing, like senior cohousing communities and retirement villages with built-in wrap-around care services. Can solutions be found to avoid perpetuating loneliness and isolation?

Of course, the workplace will also be profoundly affected, as employers are confronted by the implications of the ageing society and the emergence of truly multi-generational workforces. Traditional links between age and career stage are already being smashed, and in this respect, the project profession will be affected as much as any other. Longer working lives will make it imperative that professionals learn, train, retrain and relearn throughout their careers – a theme that will be explored in the sixth Challenge paper – especially at a time when work is being rapidly transformed by new digital technology. Could project professionals' planning skills help chart a path through the complex and fast-changing environment for work and retirement in the decades ahead?

The growth of the older population is set to create enormous opportunities and challenges for the project profession for years to come. Project professionals will be at the heart of how successful change is delivered.

## DISCUSSION QUESTIONS FOR THE PROJECT PROFESSION

Throughout Projecting the Future, we want to explore the questions that matter about the future of the project profession.

We want to hear from you: from individuals, teams, departments, organisations, institutions and communities. We want your views, ideas and evidence relating to these questions – and we are keen to hear about case studies that show how the project profession is starting to adapt to these challenges.

**1. How do you think that demographic change and longer lives could affect the project profession? How will the issues covered in this paper affect you personally?**

**2. Should the key challenges raised by the changing demographics and increasing longevity be reflected in project management toolkits? How?**

**3. Do public or consumer-facing products and services currently take adequate account of older people's needs? How could projects that you are involved in be adapted to better suit an older population?**

**4. How will the emergence of more multi-generational workplaces and teams, and less linear career paths, affect career progression for project professionals? What advantages are there from more age-diverse project teams?**

**5. How will project professionals need to develop their skillsets over the course of their careers? How does the prospect of a longer working life shape your own expectations and plans for your professional development? How could you use project management skills to plot your own route through an extended working life and lengthy retirement?**

**6. If more professional development will be needed throughout life, who will be responsible for making it happen? What are the responsibilities of employers, professional bodies, government, and individual professionals?**

**7. Which sectors will be impacted most by demographic change? Are the challenges vastly different across different societies, and can lessons be learned from other parts of the world?**

**8. How will the changes associated with the ageing society be impacted by other cross-cutting challenges, like climate change, new technology or changing work patterns?**

**9. Is there anything else not addressed here that the project profession needs to be discussing in relation to the impact of ageing, demographics and the 100-year life?**

**See page 2 for details of how you can join the big conversation.**

## FIND OUT MORE: FIVE TOP SOURCES

- The UK government's Industrial Strategy White Paper features a section on the ageing society <https://www.gov.uk/government/topical-events/the-uks-industrial-strategy>
- The Government Office for Science published Future of an Ageing Population in 2016, a wide-ranging foresight report looking at the implications of an ageing society. It considers the potential on areas including working lives, housing and neighbourhoods, health and care systems, and physical, social and technological connectivity. <https://www.gov.uk/government/publications/future-of-an-ageing-population>
- The Intergenerational Commission established by the Resolution Foundation thinktank undertook comprehensive analysis of the issues around intergenerational wealth and questions of fairness as the UK's demographic balance changes. <https://www.resolutionfoundation.org/advanced/a-new-generational-contract/>
- The 100 Year Life: Living and Working in an Age of Longevity (Bloomsbury, 2016), by Lynda Gratton and Andrew Scott, explored how life and work might change as we live longer. Their website includes a diagnostic tool for assessing the tangible and intangible assets that can help shape personal readiness for longer life and ensuring it "becomes a gift and not a curse." [www.100yearlife.com](http://www.100yearlife.com)



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**Association for Project Management**

Ibis House, Regent Park  
Summerleys Road  
Princes Risborough  
Bucks, HP27 9LE

Tel (UK) 0845 458 1944  
Tel (int) +44 1844 271 640  
ptf@apm.org.uk  
apm.org.uk



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