



Hampshire 2050 Commission

**What Will Shape
Our Future?**

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Hampshire 2050 Commission: What will shape our future?

Introduction

Hampshire County Council has established the 2050 Commission to open up a dialogue across the County about what our collective future might look like and how we prepare for it. The Commission's remit is wide ranging, looking at our economy, services and society in the future.

The Southern Policy Centre have been asked by HCC to help the Commission understand the drivers of Societal Change – looking at how local and national policies have shaped where we are today and what will shape the future for our communities, as well as highlighting emerging trends that will impact on how residents will live and work over the next 30 years to 2050.

Hampshire already offers a vibrant economy with a high quality of life, although some of our communities do not share in that prosperity. Our public services are also at a tipping point, with scarce resources needing to be deployed to meet rising demand. Policies will need to be put in place now that will allow Hampshire to grow and thrive, seizing opportunities and tackling challenges.

Attached to this document are three papers which are intended to help the Commission as it begins to debate the changes our society faces, the challenges we must meet and the opportunities before us. They do not aim to be a comprehensive assessment of the County's possible future, but rather highlight some of the key trends we face and suggest how they may shape the future.

Drivers of Change

Appendix 1 explores four key drivers which will influence society and shape our future: our people, how we are governed, the environment and the development of digital technology. For each of these drivers, after a brief introduction, we have set out an overview of the big issues that will shape the future – this is not intended to be comprehensive, our aim is to suggest, for debate, what may be important. Each page covers a broad analysis of where we are today:

- **Today's Context** – what are the key policies, programmes or other factors which shape society today
- **Current Trends** – what are trends or emerging policies which may influence the future
- **Key challenges** – significant problems which we are facing right now, or which are likely emerge in the near future
- **Opportunities** – ways in which we can maintain and strengthen our economy and communities
- **Services** – how our public services might evolve in response to each driver
- **Key Risk** – what might jeopardise future success

For each driver we end with a table which suggests what should be done – the **Steps that will shape the future**. For each of the themes the 2050 Commission are

exploring this table sets out what we consider are the steps Hampshire should take in response to the trends, challenges and opportunities we face.

SPC suggest that the task for Hampshire's 2050 Commission, drawing on our broad analysis and other sources of information, is to advise on the policies which the County Council and others should put in place to respond the issues, challenges and opportunities we identify to ensure a positive future for Hampshire's communities.

The future for Hampshire's citizens

Whatever factors shape our future, they will impact on real people - Hampshire's current residents, those moving into the County and those yet to be born here. To help understand what the future might look like from the perspective of our residents Appendix 2 looks at what life could be like for one hypothetical family in 2050 if we are successful in facing up to future challenges and seizing opportunities.

Our narrator is Harry, born in Winchester in 2020. We explore how life has changed for him, his parents, grandparents and siblings over the 30 years since his birth, drawing on some of the issues, challenges and opportunities we have identified in Appendix 1. His story is a positive one, Hampshire has risen to the challenge.

However, we have also examined what might happen if we don't get it right. Appendix 3 takes a look at how the stories of the members of Harry's family would be different if we don't put effective policies and programmes in place. It considers in particular what their futures might hold if we:

- fail to recognise the changing work environment and don't equip people with the skills and support they'll need;
- miss the opportunity to provide a more integrated health and social care service, which focuses on the individual;
- don't plan for the right mix of housing types and tenures so that everyone can find an affordable home;
- fail to protect our natural environment and rural communities; and
- don't solve the funding challenges facing our public services.

Conclusion

The Commission are encouraged to debate our suggestions as to what may shape the future, explore their implications and to decide what they think will be most important policies for a prosperous and inclusive 2050.

APPENDIX 1

DRIVERS OF CHANGE: OUR PEOPLE

Demographic changes in Hampshire's population will shape the character and identity of our communities. The population is ageing, with over 65s making up a greater proportionⁱ. The UK's population is becoming more mobile: cities are growing through internal and international migrationⁱⁱ, graduates are moving to Londonⁱⁱⁱ, a smaller proportion of our population lives in rural areas, and average age of that population is increasing^{iv}. Notwithstanding greater mobility, it has been argued that individuals increasingly want to identify more closely with a place or locality (a 'citizen of somewhere'^v) which may mean that the distinctive character and identity of our communities increases in importance. Hampshire is prosperous, but not all share in that prosperity^{vi}.

Today's Context	<ul style="list-style-type: none"> • Growing population, with a greater proportion of older people • Greater mobility, particularly for young people, with free movement with EU • National policies to drive equality of opportunity for all
Current Trends	<ul style="list-style-type: none"> • Increasing urbanisation and controls on inward migration to UK • Global mobility of businesses
Key Challenges	<ul style="list-style-type: none"> • Growing economic and health inequality • An ageing population will place growing demands on health and social care • Young people may no longer see Hampshire as a place for them to live and work • Shaping a pattern of migration and movement which balances economic need with social cohesion
Opportunities	<ul style="list-style-type: none"> • Working with HE and FE institutions to ensure our population's skills allow Hampshire to develop a flexible, creative, entrepreneurial workforce • Integrated planning for vibrant, diverse places with a sense of community that people want to live in • Building inclusive, engaged communities with a positive sense of identity
Services	<ul style="list-style-type: none"> • People will expect more personalised services, based around their needs, accessible, delivered digitally • Health and social care need to provide a more integrated approach built around individual needs. The focus should shift from acute to primary care, early intervention and prevention will be key to managing demand • Provision of suitable housing, with a diverse range of housing types and tenures meeting the needs of all to maintain diverse communities
Key Risk	<ul style="list-style-type: none"> • Growing social inequality if we fail to provide positive solutions to economic and societal challenges

OUR PEOPLE: STEPS THAT WILL SHAPE THE FUTURE				
ECONOMY	LIFESTYLE	ENV'MENT & PLACE	MOBILITY	RURAL
<ul style="list-style-type: none"> • Identifying opportunities for older workers • Developing and retaining key skills through local HE/FE • Managing changed working patterns • Responding to patterns of internal and inward migration • Ensuring a high level of sustainable business start-ups 	<ul style="list-style-type: none"> • Developing flexible skills allied with creativity and entrepreneurship • Protecting peoples' personal wealth (income/pension) • Focusing on personal health and wellbeing • Providing personalised services (health, care, housing, transport, learning etc.) 	<ul style="list-style-type: none"> • Shaping a local identity based on peoples' perceptions of their place • Improving local environment quality • Understanding what makes a community as patterns of work and leisure, along with demography, change 	<ul style="list-style-type: none"> • Travel for work reduced through better digital connectivity • Personal travel for 'experience' increased • Facilitating greater personal career/life mobility 	<ul style="list-style-type: none"> • Planning for the changing demographic of rural population • Developing new models for farming and the rural economy • Countryside becoming a destination for leisure and recreation

DRIVERS OF CHANGE: HOW WE ARE GOVERNED

National Government will continue to drive devolution of powers and funding, albeit in a piecemeal fashion with a reluctance to devolve substantial powers or funding. That is driving a trend towards more localised decision-making, designing solutions that work for particular places rather than a 'one-size-fits-all' approach^{vii}. This trend is reinforced as more organisations become open to joint working and integrated approaches to service delivery. It raises the challenge of ensuring effective local governance and providing clear, place-based leadership.

Today's Context	<ul style="list-style-type: none"> • Mayoral-led combined authorities driving joint working • Growing role for non-elected bodies (eg LEPs, HE Institutions) in decision-making and delivery of services • Public expectations of a voice in decision-making
Current Trends	<ul style="list-style-type: none"> • Government funding increasingly directed to collaborative groupings of public/private sector organisations • Localisation of decision-making to meet local priorities • Cross-sector and cross-organisation integration to improve outcomes and efficiency
Key Challenges	<ul style="list-style-type: none"> • Hampshire is not given, or does not take, opportunities for greater control over decision-making or finances • Organisations across Hampshire are unable or unwilling to develop collaborative partnerships which allow the exercise of more integrated decision-making and delivery of services • Localised decision-making is not balanced with a wider strategic perspective, leading to sub-optimal outcomes
Opportunities	<ul style="list-style-type: none"> • A greater ability to respond to the specific challenges our communities face • Involving a wider group of stakeholders in decisions about the future of our communities and services • Providing more integrated services which are designed around individual needs and local priorities, and not constrained by organisational boundaries
Services	<ul style="list-style-type: none"> • The opportunity for greater control over budgets and priorities, and to breakdown organisational boundaries which restrict delivery will be vital to the future of health and social care services • Strategic planning for the infrastructure and services will provide the basis on which our communities and economy can thrive • Hampshire can determine local priorities for investment
Key Risk	<ul style="list-style-type: none"> • We fail to develop an approach to collaborative leadership which allows constructive joint working and facilitates integration

HOW WE ARE GOVERNED: STEPS THAT WILL SHAPE THE FUTURE				
ECONOMY	LIFESTYLE	ENV'MENT & PLACE	MOBILITY	RURAL
<ul style="list-style-type: none"> • Localised planning and funding to support 'bespoke' growth • Seizing opportunities to engage business • Building successfully on local economic strengths 	<ul style="list-style-type: none"> • Place-based localised decision-making • Democratically engaged communities • Personalisation: services shaped by what people need, not what organisations want • Collaboration between organisations 	<ul style="list-style-type: none"> • Cross-sector integration – planning and delivery at a local level • Distinctive local mosaic of services driven by local priorities • Evolving sense of local identity based on a coherent geography 	<ul style="list-style-type: none"> • Strategic transport planning and investment decided at a regional level • Maintaining service integration as powers/funding are devolved 	<ul style="list-style-type: none"> • Stronger urban/rural relationships (possibly based on city regions?) • Retaining a strong voice for rural communities

DRIVERS OF CHANGE: THE ENVIRONMENT

It is generally accepted that we must manage the impact humans have on our natural environment for a sustainable future. Dealing with pollution and the activities which lead to climate change are now national policy priorities. DEFRA is re-shaping rural policy to reflect the concept of ‘natural capital’: the recognition that the environment has a value to society as a provider of goods and services, and so should be protected and enhanced^{viii}. More importantly, our communities, and in particular younger people, also see them as challenges we must face^{ix}.

Hampshire sees our environment as an asset: it attracts visitors and provides jobs, whether in tourism, or agriculture and forestry. But equally important is the contribution it makes in other ways - for example by enhancing peoples’ wellbeing, improving our physical and mental health, or by helping us manage flooding.

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| Today’s Context | <ul style="list-style-type: none"> Public policy is slow to respond to the challenge of environmental degradation, and risks becoming out of step with public mood “Low carbon” approaches to help manage the impact of climate change |
| Current Trends | <ul style="list-style-type: none"> Recognising “natural capital”: the contribution our environment makes to the economy and society Factoring the value of the environment into decision-making Reversing environmental degradation Recognising the importance of “quality of place” |
| Key Challenges | <ul style="list-style-type: none"> Degradation of our environment is detrimental to the character of Hampshire, damaging the rural economy and harming individuals’ health and wellbeing Over-prescriptive regulation of the environment constrains our economy and rural communities Uncontrolled development threatening valuable landscapes and habitats |
| Opportunities | <ul style="list-style-type: none"> Understanding the opportunities which a ‘natural capital’ perspective offers to our economy and communities Recognising the contribution the natural environment makes to our sense of place and identity Ensuring development in Hampshire adopts the principle of ‘net environmental gain’ in promoting growth |
| Services | <ul style="list-style-type: none"> Using environmental assets to manage the risk of flooding – natural flood management Developing the potential of ‘green energy’ to realise economic, social and environmental benefits Managing valuable landscapes to balance productivity, access and protection |
| Key Risk | <ul style="list-style-type: none"> We fail to protect and improve our natural environment, and lose the benefit to our health & wellbeing and economy |

THE ENVIRONMENT: STEPS THAT WILL SHAPE THE FUTURE				
ECONOMY	LIFESTYLE	ENV’MENT & PLACE	MOBILITY	RURAL
<ul style="list-style-type: none"> Public funding to deliver environmentally desirable outcomes Regulation to minimise environmental impacts Seizing commercial opportunities based on natural capital Policies to support green energy 	<ul style="list-style-type: none"> Engaging communities in environmental protection Recognising the environment’s contribution to individual health and wellbeing Education to raise environmental awareness 	<ul style="list-style-type: none"> Minimising environmental impact, maximising benefit in all decision-making Natural and built environment seen as part of quality of place, highest standards adopted Planning well-designed development in urban areas Minimising atmospheric pollution 	<ul style="list-style-type: none"> Minimising impact of travel on the environment (reducing journeys, ‘smart’ journey planning, more efficient means of transport, lower energy use, reduced pollution) 	<ul style="list-style-type: none"> Shaping a policy on rural support payments post- Brexit to protect rural communities New models of ‘environmental land management’ Protection of wildlife and bio-diversity Maintaining a diverse and healthy landscape

DRIVERS OF CHANGE: DEVELOPMENT OF DIGITAL TECHNOLOGY

Digital technologies now underpin much of our lives, whether at work or leisure. Digital delivery is becoming a platform for innovation in all sorts of areas, from retail through to medical services. These technologies are shaping new paradigms for service delivery and altering user expectations about levels of personalised service which can be provided. They are an evolutionary force, driving change and innovation, and challenging existing practice.

Digital technologies offer an opportunity to breakdown the barriers between organisations, but that must come with in a change of often inward looking organisational cultures and a willingness to develop shared leadership.

Today's Context	<ul style="list-style-type: none"> • Ensuring communities are digitally connected • Increasing use of personal digital devices to retrieve data and interact with others
Emerging Trends	<ul style="list-style-type: none"> • Development of artificial intelligence and robotics in the home and workplace • Impact of remote, flexible or mobile working facilitated by technology on pay and employment security • Digital access to goods, services and information
Key Challenges	<ul style="list-style-type: none"> • Artificial intelligence and robotics replacing human roles in many occupations and workplaces • Ensuring communities or groups of the population are not left behind in the drive to digital • Avoiding the isolation personal digital technologies may encourage undermining our sense of community
Opportunities	<ul style="list-style-type: none"> • Managing changes to existing economic model to avoid harmful economic and social impacts • Digital delivery provides the opportunity to re-design services with a focus on end-users, breaking down organisational barriers • Technology offers mechanisms to engage the whole community
Services	<ul style="list-style-type: none"> • Technology will free people to do 'value added' tasks, altering the work-life balance • Digital facilitating integration of services in a way which focuses on individual outcomes rather than one-size-fits-all • Technology can allow us to do more for less: better services at lower cost
Key Risk	<ul style="list-style-type: none"> • Services can be shaped to reflect the differing character and identity of different communities • Hampshire fails to assess and adopt relevant technologies quickly and effectively

DEVELOPMENT OF DIGITAL TECHNOLOGY: STEPS THAT WILL SHAPE THE FUTURE				
ECONOMY	LIFESTYLE	ENV'MENT & PLACE	MOBILITY	RURAL
<ul style="list-style-type: none"> • Responding rapidly to the severe disruption of existing models in key sectors, notably retail • Adapting to a more mobile, less place-based economy • Adapting to more flexible, less secure models for work 	<ul style="list-style-type: none"> • Changes in opportunities for personal interaction • Opportunity for all parts of the community to be proficient in digital skills • Digital equality – ensuring equal access for all in the community 	<ul style="list-style-type: none"> • Integrated services delivered digitally • Locally shaped implementation of 'Smart Cities' programmes • Understanding the impact of digitally driven patterns of communication, work, leisure and travel on communities 	<ul style="list-style-type: none"> • Establishing a workable operating framework for autonomous vehicles (infrastructure, inter-operability etc) • Moving from mass travel to personalised travel • Providing timely and accurate information to travellers 	<ul style="list-style-type: none"> • Using technology to support sustainable rural communities • Understanding the impact of digital technologies on in- and out-migration in rural communities • Using technology to tackle social isolation

References

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- ⁱⁱⁱ Centre for Cities (2016) <http://www.centreforcities.org/publication/great-british-brain-drain-where-graduates-move-and-why/>
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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/682975/Rural_population_and_migration_February_2018.pdf
- ^v Goodhart – The Road to Somewhere (Hurst & Co., 2017)
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- ^{viii} Health and Harmony: the future for food, farming and the environment in a Green Brexit - Defra (2018)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684003/future-farming-environment-consult-document.pdf
- ^{ix} Survey of public attitudes and behaviours towards the environment - Defra (2014) <https://data.gov.uk/dataset/ab16e19f-a4e1-42e4-9f6e-5ffe2dc7680/survey-of-public-attitudes-and-behaviours-towards-the-environment>

APPENDIX 2

The Fielders: The story of a Hampshire family

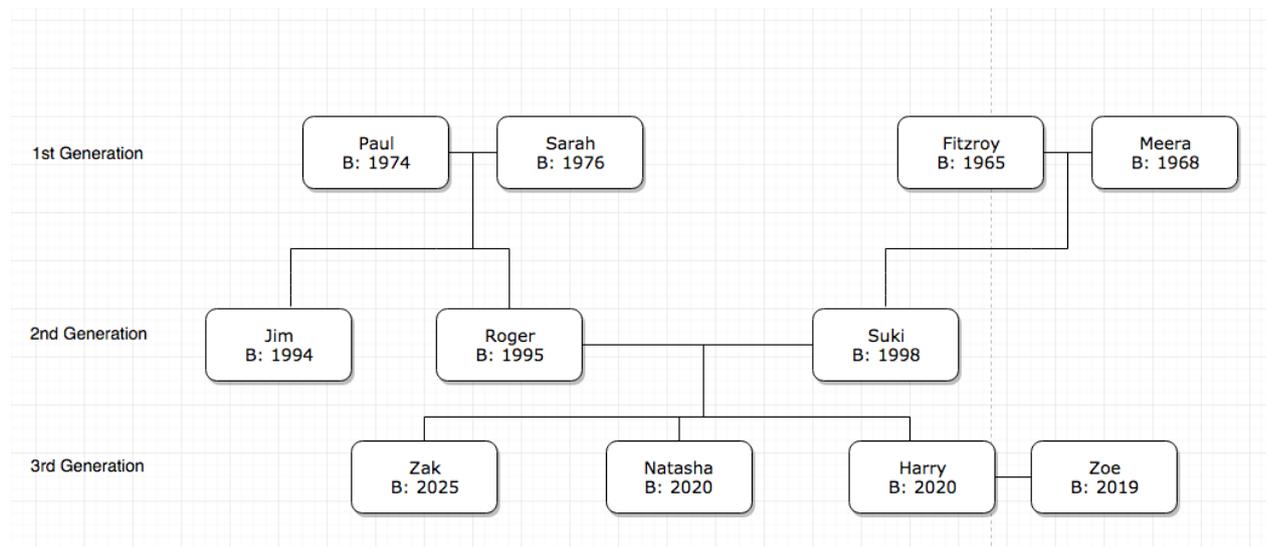
Hello, my name is Harry Fielder. The year is 2050, and I have just turned thirty years old.

I was delighted to be asked to contribute a guest post to *Hampshire Now*, particularly when the editor told me: "Write whatever you like, as long as it's about Hampshire!"

Given it's my birthday, AND halfway through the century, I am feeling a bit nostalgic, so I thought I would take a look back at what has changed for me and my immediate family over the last few decades living in Hampshire.

Note: You can consume this article in lots of different ways, but I thought it appropriate to type it out manually for you to read on-screen, just like in the old days.

So, in this article I am going to tell you a bit about each member of my family in turn, starting with me. To set the scene, here's a little chart with our family tree:



Harry: Me!

I live with my girlfriend Zoe in a fantastic apartment in Welborne in Hampshire. It is not very large, but it is perfectly suited to our needs. This place really does have a decent mix of housing for everyone.

I make my living developing virtual learning environments. I have a mixture of customers, including local public services, small and large companies, and of course the universities whose offerings have changed dramatically in the last 20 years or so, particularly with early innovations like the 'Personal Virtual Tutor', and 'Almost Einstein' bots.

I mentioned earlier that I just turned thirty. To celebrate I held a joint party with my twin sister, Natasha, who lives in London. Although we see each other frequently - it's ages since we were actually in the same physical space as each other. Well, it was a special occasion!

Zoe made all the arrangements, and I was delighted when the bolt-on module for our apartment arrived - it took less than an hour to assemble, after which we had three times the amount of usable space.

Dad said he remembers a time when extending an apartment would have needed something called 'planning permission' which used to take ages, and needed lots of form-filling and manual assessments. Thankfully, those days are long gone, and all the 'paperwork' was processed automatically within a few minutes.

We don't need this much space for long, but Zoe is twelve weeks pregnant, so we'll need to add an extra room permanently in the not to distant future...

Grandparents: Paul and Sarah

Grandpa Paul

Grandpa Paul has had an amazing life. Born in 1974, he left school with hardly any qualifications, and took a driving job for a major supermarket chain delivering groceries to local stores from a large distribution centre. 'Officially', he was self-employed, but he only ever drove for the one chain.

He met Grandma when they were both in their early twenties. Neither earned very much, but they managed to get a council house in Winnall, a nice estate in Winchester, and were pretty happy for many years.

That all changed in 2027 when the supermarket told Grandpa they no longer needed drivers. Grandpa had heard of driverless vehicles, but never imagined that they would replace him. At 53 he tried to find other driving jobs, but there was very little demand. He even had to sell his beloved lorry for scrap as it failed to meet new environmental regulations for road haulage.

That was a terrible blow for Grandpa - who had worked since he was 16 - and it made him deeply unhappy. Things looked really bleak until Dr Morgan diagnosed him with depression, and sent him to see Sally, a wellbeing specialist and coach.

It's amazing how one door can open when another closes. Sally - who we jokingly called Aunt Sally - helped Grandpa open a new chapter in his life. Who'd have thought a lorry driver could also be a talented artist?! After a year or so of experimenting with different materials and techniques, he sold his first painting. The same customer went on to commission three new pieces of work, and even asks him to render two of them digitally - steep learning curve or what!

By 2040, Grandpa had sold enough paintings and interactive sculptures to earn a decent living. His foray into digital art meant that people across the World kept on buying his pieces years after he had produced them, providing him with regular income even when he isn't working. That led to him being in a position to buy a lovely detached bungalow on the South Downs. I'm personally grateful, as Grandpa has helped me out financially several times over the years, and I know he's done the same for other family members as well.

Grandma Sarah

Grandma lost both her parents when she was quite young, and had a bit of a troubled childhood. She couldn't wait to leave school, and found a job on the checkouts at Sainsbury's in Hedge End. It was a bit of a trek from home, but she didn't have great qualifications, and she liked the people she worked with. She started off on the checkouts, and moved into the warehouse when the new self-service tills started replacing people at the front of the store.

One day, a simple misprint on a barcode resulted in a queue of lorries trying to deliver thousands instead of dozens of toilet rolls to the store. Trying not to laugh, she investigated the problem with the first of the delivery drivers in the queue, who was called Paul, who also found it funny. It turned out they shared a sense of humour, and apparently "one thing led to another"...

Grandma continued to work at the same store for many years. Her hours varied and they let her work flexibly to fit around maternity and childcare. The team became smaller and smaller, but she was kept on as she was good at dealing with deliveries and sorting out any anomalies. She left once it was clear that Grandpa was making a good enough living to support them both from his artwork.

In her early fifties, Grandma was diagnosed with diabetes and some other health complications. The symptoms were similar to those of Great Grandma, who died really young, aged just 56.

Fortunately, Grandma was invited to become part of a new pilot project which looked at her as a "whole person" and recommended things she could do herself to improve her quality of life. I can't quite remember, but it was called something like the 'Hampshire integrated health project', and involved professionals from the council, NHS and couple of other organisations working closely together. As well as making some changes to her lifestyle, Grandma also had a small implant in her neck which contained smart drugs to manage her condition. Grandpa jokingly refers to it as "another chip on her shoulder".

Grandparents: Fitzroy and Meera

My other grandparents are Fitzroy (Grandad) and Meera (Nanny). I say "are", but sadly, only one of them is still with us.

A bit older than my other grandparents - Grandad was 55 when I was born, and Nanny was 52. I remember as a toddler visiting them in their tall red brick Victorian house in the St John's area of Winchester. They had a lovely garden, with fruit trees, and two chocolate labradors called Max and Nellie. Visiting them was always a treat and I still think of it as "the dog house".

I never really understood what Grandad did for a living- he was very bookish, and I think it was something to do with the Law. Unfortunately I never got the chance to have a proper grown-up conversation with him, as he was diagnosed with early onset dementia when he was only 57. Nanny gave up her job at the university to look after him, and effectively became his carer for several years.

They received brilliant support from health and care services who provided a range of assistance, including advice on techniques to help manage Grandad's condition in the early stages. There was also practical help, with gadgets like sensors and monitors to track his movement, one of which was on the garden gate to remind him not to leave on his own. When he opened the gate it made a noise which Grandad laughingly referred to as "the machine that goes ping". Nanny also received support through groups and forums, enabling her to meet and compare notes with other carers.

Even with the best of efforts, eventually it became too difficult for Grandma to cope, and Grandad moved into a specialist care home in 2033. The Care Home was a joint venture between the County Council and BUPA, purpose-built, and provided Grandad and the other residents the best possible quality of life. There were little touches which made quite a difference:

One of these was pets - it wasn't practical for residents to have their own pets, but they received regular accompanied visits from dogs, cats and other pets. Another nice touch were the resident animatronic animals, which are hugely popular with the residents. There was a chocolate labrador pup which was the spitting image of one of the dogs I first saw at 'the dog house'. I 'do' technology for a living, but even I am amazed at how lifelike and responsive they are. The same sensors which enable the pets to respond to touch and voice, provide valuable environmental and other data to the nurses, so it's a win, win for everyone!

Being reasonably well off, Nanny and Grandad had to draw down a sizeable chunk of their savings to pay for Grandad's specialist care. When Grandad moved to the Care Home, Nanny sold the house in St John's. She didn't want to live in a large house on her own, and she was beginning to struggle with the stairs anyway. Once the house was sold, Nanny found a super ground-floor flat in sheltered accommodation near Twyford.

Sadly, Grandad died in 2035, towards the end of his second year at the care home.

Nanny is still going strong in Twyford. It suits her really well, and lets her keep her independence, but there's help, support and medical care on-hand as-and-when she needs it. I'm pleased to see that residents are able to keep pets if they want. Nanny doesn't have her own dog, but keeps a jar of treats, which ensures she receives regular canine visitors.

My parents: Roger and Suki

Dad

When I was born in 2020, Dad was a Highways Engineer, working for Hampshire County Council. He had been there a few years and his job involved liaising with contractors to check that work was being done to the right standard, and grappling with myriad council systems and databases that had grown up over many years.

In 2030 Dad and the whole of his team transferred to the newly established regional transport delivery partnership to lead the Hampshire and Isle of Wight team. This provided an opportunity to deploy systems which had been developed in an agile way using advanced open technologies - as a result the new team hit the road running. Dad really enjoyed innovating using new technologies, and was promoted several times in short succession.

During Dad's time with the council & the subsequent partnership, he has witnessed huge changes. For example:

Since autonomous vehicles became the norm, all modes of transport constantly communicate with each other. As a result it has been practically impossible for cars to collide, either with each other, or anything else, including pedestrians. Back in 2020 at least 80% of accidents were at least in part caused by human error. By removing the possibility of human error, a great many lives have been saved. It also had a secondary impact of completely disrupting the insurance industry in the process.

Traffic jams, once common, have largely been consigned to history. Vehicles still come in different shapes and sizes, but are compatible, allowing multiple vehicles to join up for long journeys and split again. Dad says: "it's like Lego started making vehicles".

Old fashioned 'manual drive' cars are very rare, only seen in museums and vintage car rallies. They haven't been allowed on public roads without special permission since 2037. As a result, car parks have disappeared completely as there are just enough vehicles to meet demand at any one time.

Also very rare nowadays is what used to be called "Street Furniture" - there used to be all sorts of bollards, barriers, traffic lights and signs, most of which are no longer needed. There's lots of technology on and in the roads, but for the most part it is invisible.

That said, street lights are still a thing, but improved understanding of bioluminescence mean that powering them is no longer a problem (though I understand that in some circumstances like full moons they can be a little unpredictable)

Speaking of roads - apparently they used to keep wearing out and things called 'Potholes' were both common and deeply unpopular. One of the programmes Dad was involved in early on experimented with different techniques to increase the longevity of road surfaces. This included reusing plastic waste in the mix (first tried in 2019) and, later 3D printed Nanoparticle surfaces, which are self-cleaning, self-vibration damping, structural health monitoring and self-healing.

Earlier on I mentioned that much of the technology is invisible, but that doesn't mean it isn't there. Sensors now exist that can detect changes in practically anything. The old favourites, of course: road surface conditions like temperature, light, humidity, water, rainfall, sunlight etc, also vehicle movements, number of passengers, speed, min, max, average distance between vehicles etc. All of this analysed in real time and available as needed.

Of course, there are now more dimensions to travel, with Hyperloop moving from theory to practice in the early 2020s and becoming increasingly common once the cost of construction fell rapidly during the 1930s. It's still a little pricey, but if you want to travel from Portsmouth to Birmingham, you can get there in 20 minutes with hyperloop, with a vehicle ready at the other end pre-programmed to take you to your ultimate destination.

Dad says "Flying cars - don't get me started!" So I won't say any more about that, apart from they are real, are in common use, and have been since 2040. Pilots, however, are increasingly rare.

But Dad's life isn't all about work and technology. He is one of a band of enthusiasts who call their hobby the "Antiques Show Road", which basically revolves around restoring and showing early 21st Century vehicles.

Mum

Mum describes herself as a geek. Her first degree was in Computational Linguistics, and her second degree combined Game Theory with Computer Games Technology. She spent the final year of the latter on a placement with Winchester City Council, who offered her a job with a project applying gaming technology to their new digital customer interface.

That was so successful, that she was seconded to Basingstoke to run a similar project for them.

After that, with several years experience of games technology for public services under her belt, Mum went freelance. That increased her income, and also let her select which projects to work on, and when.

She didn't realise at the time, but it also provided the perfect flexible work life balance to help Nanny look after Grandad when his dementia worsened.

Uncle Jim - Dad's brother

Uncle Jim is a farmer, living in a small village in the Test Valley. There isn't a history of farming in the family and I think he just spotted an advert for a tenant farmer, and decided to give it a go.

He has always been fascinated by the delicate balance between people and the environment, and he does his best to farm in an environmentally-friendly way. He is one of a generation of farmers who have first-hand experience of farming under both European and UK post-Brexit environmental regulations.

Despite some reservations about Brexit, Uncle Jim was delighted when in 2020 the Government invited him to join the pilot of a new environmentally friendly land management regime. The pilot had been set up in response to environmental challenges and pressures, and recognised the economic value of the environment, and the role farmers play. For Uncle Jim, it meant farming in an environmentally way - which of course he already did - and helping to develop local food and farming networks. In return, he receives a decent subsidy from the Government.

Outside farming, Uncle Jim is very active on the local community council. For some years he has been concerned about people living on their own in the countryside, and he successfully lobbied for the first 'Community Autobus' which helps people in isolated areas meet up and get provisions delivered to their home.

My siblings: Natasha and Zak

Natasha: twin sister

Nat is my twin sister. We went to the same schools, but had different circles of friends, and Nat moved to London as soon as she could. Her reasons were complex, but were partly due to her struggling to find work and accommodation locally, and many of her friends were already living in London. I think she also felt that Winchester wasn't lively enough to satisfy her artistic appetite.

Nat has always been really interested in the arts and drama, and she has immersed herself in everything arty imaginable. She trained as an actress, but didn't complete the course. Nat isn't interested in formal qualifications or getting 'a job', and stayed as long as she felt she was learning something.

She is a talented actress, and can turn her hand to just about anything with creative twist. Right now, I see a lot of Nat, as we are setting up a company together, specialising in using role play and scenario simulation. We have a couple of customers lined-up already, including a project for a branch of law enforcement that I can't talk about. Our new company may well turn into a proper family business, as Mum is going to be helping us out with some of the game theory aspects. I can't divulge any of the details, but if anyone reading this is familiar with the old Star Trek movies, you might remember the "Holodeck". If you know what that is, we're working in that space.

My brother Zak

Zak is my younger brother. Born five years after me and Nat, Zak is probably best described as an “entrepreneur and internationalist”.

Right now he is studying part-time for his degree, but he’s also running the company he started while at school. The company is based in Berlin, but Zak works “from wherever”, according to what he is working on at the time. When in Hampshire, Zak has access to a co-working space in Southampton, and also uses community cafes, and Learning Pods (as spaces at Discovery Centres have become known).

Zak cares deeply about communities and, like many of his generation, considers himself to be a citizen of the world. Amongst other things, his girlfriend Misako is Japanese, and he is a Senator on Wessex SubGov (a sub-regional governance body). He also hasn’t ruled out a career in politics once he finishes his degree.

APPENDIX 3

The Fielders: An alternative story

The same family, same history, but because Hampshire didn't rise to the challenge of the future and plan ahead, the family's story came out rather differently....

Harry's Story

I live with four other people in a shared house in Southampton. It's former student accommodation, which isn't ideal, but the alternative was to move back in with my parents, which is what my younger brother Zak had to do after he finished university. If I did that as well, we'd have to share a room, which none of us would like.

My girlfriend Zoe is still living with her parents. She is pregnant and her parents aren't at all chuffed at the idea of having a baby in the house once again - they've already been through all that with their own children.

We are hoping to rent a small flat together when the baby is born, but it's really difficult to save anything as neither of us earns very much, and none of the promised "affordable housing" has been built. In theory I have three jobs, but one is a part-time, and the other two are both zero hours contracts. If we can't scrape enough together ourselves, I'm hoping that our parents between them might be able to help us out with the rent.

Did I already mention I just had my birthday? Well, I did, and so did my sister Nat. For what it's worth, we are twins, not that you'd know it, though, as we haven't seen each other for ages. That said, I did see her two years ago at the Winchester Hat Fair where she was doing some street theatre. I struggle to keep up with her as she is officially "of no fixed abode", and she refuses to use social tech to keep in touch.

Grandparents: Paul and Sarah's Story

Grandpa Paul

In 2027 the supermarket told Grandpa they no longer needed drivers. Grandpa had heard of driverless vehicles, but never imagined that they would replace him. At 53 he tried to find other driving jobs, but there was very little demand, apart from a bit of ad hoc work for a couple of smaller delivery companies (while they were still around).

It was a terrible blow - he had worked since he was 16 - and it made him deeply unhappy. Things looked really bleak and Dr Morgan diagnosed him with depression, prescribing antidepressants. It's such a shame as he's naturally a creative guy, and I'm sure all he needed really was some support and counselling. Sadly that wasn't available - we were told there was no budget - and he now just mopes around at home.

Grandma Sarah

Grandma continued to work at Sainsbury's at Hedge End for some time. Her hours varied and Sainsbury's let her work flexibly to fit around maternity and childcare. The team became smaller and

smaller, until eventually she was the only one left in the warehouse. It was just as well, as she was the only one earning once Grandpa lost his driving job.

That really put the pressure on Grandma and she worked overtime whenever the opportunity arose. However, when she was in her early fifties she was diagnosed with diabetes and some other health complications. She was still really keen to work, but just couldn't manage the hours. Some days she was too tired to go in at all and she had to ring in sick. To be fair, Sainsbury's were a really understanding employer, and they let her retire early when she was 58. She and Grandpa now just about get by on her Sainsbury's pension and their combined State pension.

Grandparents: Fitzroy and Meera Story

Care services tried to help when Grandad was diagnosed with early onset dementia, but they were both under-resourced and inundated with new cases. No one had sufficient time to look at the big picture, and Nanny had to deal with lots of different agencies who each seemed to operate in their own little world.

Everything needed paying for separately, and the savings that Nanny and Grandad had built up over many years quickly disappeared. As Grandad's condition worsened and he was moved into a care home, Nanny was forced to take out equity release on the house.

Sadly, Grandad died in 2035, towards the end of his second year at the care home, and Nanny immediately sold the house. After equity release and paying for Grandad's final care and funeral, Nanny had just about enough left to rent a tiny flat in Eastleigh. It is on the second floor, and the Housing Association doesn't allow residents to have dogs, so she has to make do with photos instead.

My parents: Roger and Suki's Story

Dad

When I was born in 2020, Dad was a Highways Engineer, working for Hampshire County Council. He had been there a few years and his job involved liaising with contractors to check that work was being done to the right standard, and grappling with myriad systems and databases that had grown up over the years. He has long been a proponent of developing common standards across organisations, particularly for data.

Dad's professional life seemed to consist of fire fighting issues and chasing contractors. He would have loved to help find innovative new ways to make the service more efficient, and he had loads of ideas that never saw the light of day. It was hugely controversial - but perhaps inevitable - when the government of the day in 2030 introduced new legislation which resulted in local highway services moving over to Richard Branson and his new 'Virgin Highways Enterprise' as part of a multi-billion pound national contract.

Dad reapplied for his old job and was successful, but lost some of his pension rights, and other benefits. He was instructed never to do something unless it was explicitly included in the contract. Anything outside of the contract cost the government extra.

Dad can rant for Britain about the state of the UK's transport infrastructure. Basically, it's a mess - a very expensive mess. It's practically impossible to work out who is responsible for what. Ministers blame agencies, who blame contractors, who blame sub-contractors.

Just over the Channel people, goods, services and data move seamlessly from one place or organisation to another. There are common standards, and interoperability is the norm. You hear about other countries who have 'self-healing roads', no congestion, and hardly any accidents, whereas over here, confusion reigns.

Mum

Mum's first degree was in Computational Linguistics, and her second degree combined Game Theory with Computer Games Technology. She spent the final year of the latter on a placement with Winchester City Council. There was talk of a new job being created to apply gaming technology to customer services at the council, but that never turned into anything, because the Council never had the money for the new technology.

Mum left at end of the placement and went to work full-time for a games maker in Portsmouth. They turned out to be a good employer, and let Mum work flexible hours when Grandad became ill, which meant she could help Nanny look after him as his dementia worsened.

When she and Dad have had a few drinks they sometimes speculate that lateral thinking, combined with collaborative working and intelligent use of technology could have revolutionised things at the council.

Uncle Jim's Story

In the lead up to Brexit there was talk of a new Government pilot for an environmentally friendly land management regime. I don't know why, but that never transpired, and there was no financial incentive for farmers to farm 'in tune' with nature.

Uncle Jim did his best, but he couldn't make the farm pay, and he ended up losing it in around 2030. It was so sad, as he played a key role in the local community, sitting on the community council, and helping to develop local food and farming networks. He is still active in the local "Better Countryside" campaign, but I think he privately believes it's now too late for many of our native species.

It's ironic that he lobbied hard about rural isolation when he was on the community council, and he's now found himself in the same situation as many of the people he was trying to help. It's just as well supermarkets deliver to rural areas otherwise he wouldn't be able to survive, though he notes grimly that they don't deliver any locally produced food.

To complete the story of the Fielders, this is how Harry's brother and sister fared...

Natasha's Story

Natasha joined an increasing number of young people who "dropped out" of society. They felt there was little point in striving for a degree, only to find there were no jobs worth having, and home ownership became a distant dream, reserved for the lucky few.

As job vacancies dwindled in number, new value started to be attached to human creativity - basically anything left that machines struggled to do. As a result, all sorts of artistic enterprises

began to spring up, initially as part an underground movement. This was the world that Natasha inhabited.

Shunning technology, Natasha joined a travelling comedy theatre group called “Interpretive Darts”, and she would occasionally see Harry and the rest of the family when she visited Winchester for the Hat Fair.

Zak’s Story

Zak dreamed of studying international entrepreneurship at Berlin University. It was, he said, part of his “cunning plan” to help bring the nations of the world together to live in harmony with each other (whilst also making a decent living for himself).

He studied hard at school, passed the Holoexam and verbal dexterity tests with flying colours, and learned to speak German fluently, even though instantaneous translation (nicknamed the “Babel Fish”) has been available since he was a toddler.

Sadly there was just the one flaw in his cunning plan - he was turned down for a Study Visa, meaning he wasn’t allowed into the country. At first, when his application was rejected in just a few seconds, he thought it was a mistake. However, when his third attempt was also rejected he asked the bot to explain why and was told that he hadn’t demonstrated that he would bring sufficient economic value to EU2. He also didn’t possess nearly enough credits on his World Profile for a FastPass.

He was deeply disappointed, but persevered with the equivalent degree at Solent University, which he passed with distinction. He has been trying to find funding and support for his company, so far without success.