

University for Peterborough Project Phase 3

**Living Lab, University Quarter
Cultural Hub and expanded
University campus and operations
in Peterborough**

Business Case

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Executive summary

Strategic Case

Peterborough is a recognised cold spot for Higher Education. To address this, Cambridgeshire and Peterborough Combined Authority (the Combined Authority) and Peterborough City Council (PCC) are committed to supporting the development of a new higher education provider for the City on its journey to becoming the University of Peterborough to:

- increase the skills levels of local people; and
- increase highly skilled employment opportunities, principally by generating and accelerating an innovation ecosystem centred on artificial intelligence, digital and advanced manufacturing technologies that enable new products and systems that contribute to a net-zero carbon and healthier future.

The principal partners in the phase 3 of the University of Peterborough development project are the Combined Authority, PCC and Anglia Ruskin University (ARU)(the Academic Delivery Partner (ADP) for the new University).

The new university campus is to be delivered in 5 phases:

- Phase 1: First Teaching Building.
- Phase 2: Peterborough Research and Innovation Incubator
- Phase 3: Second Teaching Building and Living Lab.
- Phase 4: Inward Investing Research Institute & SPF-Funded R&D Programme.
- Phase 5: Third Teaching Building & Sports Science Facility.

Phases 1 and 2 are underway. Phase 1, ARU-Peterborough will open the first teaching building to its first students in September 2022. This first teaching building was approved for funding in late 2019 and is under construction with completion confirmed for July 2022. It will provide space for 2,000 students from September 2022, rising to 3,000 by 2025, studying Health, Social Care, Education, Management, Finance and Law. Phase 2, Net Zero Innovation Incubator was approved for funding in mid-2020, received planning permission earlier this year and commenced construction in October 2021. Completion is forecast for December 2022.

This Business Case is concerned with the phase 3 development of the new University campus, which comprises a **Living Lab, University Quarter Cultural Hub and expanded university teaching space in Peterborough**, to meet cultural, regeneration and economic levelling up priorities for the region. Phase 3 will allow ARU Peterborough (the higher education provider which will become the University) (“the HEP”) via a second teaching building supporting 1,700 more students from 2024, expanding its curriculum into STEM fields and embedding the HEP in Peterborough through the Living Lab and Cultural Quarter. The Living Lab will be a public-facing, high-quality interactive science centre for Peterborough with public space for exhibitions and events, designed to stimulate and inspire more young people into STEM sectors.

The strategic policy framework within which the Combined Authority works and the rationale for the University for Peterborough project flows from the Cambridgeshire and

Peterborough Independent Economic Review and related documentation including in the Combined Authority Employment and Skills Strategy, Local Industrial Strategy and Local Economic Recovery Strategy. The project supports wider national objective including the Government's Industrial Strategy, Levelling Up, the UK Innovation strategy, Net Zero and the Oxford-Cambridge Arc.

As previously acknowledged as part of the CPCA's approvals for Phase 1, a new University will make a substantial positive economic impact in Peterborough and the wider sub-region, enabling the region and the UK to compete in an ever more dynamic global economy through innovation and creating knowledge-intensive businesses. It will deliver significant cultural and social benefits. It is a Mayoral priority within the Combined Authority's Business Plan and a key intervention within the Local Industrial Strategy and Employment and Skills Strategy, to address the current disconnect between work and qualifications. Expanded HE provision will be an essential component in realising ambitions to: establish the foundations for raising aspirations and attainment; support business skills needs; improve productivity; stimulate structural economic change; and enhance well-being.

The top-line objectives for the new University are:

- Improve access to better quality jobs and improve access to better quality employment, helping to reverse decades of relative economic decline, and increasing aspiration, wages and social mobility for residents.
- Make a nationally significant contribution to Government objectives for levelling up, increase regional innovation, and accelerate the UK's net zero transformation.
- Accelerate the renaissance of Peterborough.
- Translate the resulting increase in individual opportunity, prosperity and social mobility into outcomes across wellbeing, health and healthy life expectancy from the programme, and on into people living happier, healthier lives.

The main benefits of establishing phase 3 of the University Campus in Peterborough, for an additional 1,700 students from September 2024 and include: 264 temporary construction jobs, 157 created over the first 4 years (98 academic staff and 59 professional services), 16 indirect and induced jobs created and as result of increased footfall and increased local economy spend by additional students and university employees: 67 jobs.

Economic Case

Three options have been considered in the economic case as follows:

1. **Phase 1 stand alone:** The first phase of the project to establish the new University Campus in Peterborough with capacity for 3,000 students by September 2022. As this Phase is currently under construction and fully committed to by the partners it is regarded as the 'Do minimum' option.
2. **Phase 3 stand alone:** this option compares the merits of investing in the Living Lab, University Quarter Cultural Hub and expanded University in Peterborough on its own merits (operating independently from Phase 1). This option reviews the costs and benefits solely attributable to Phase 3.

3. **Phase 1 and 3 combined:** this option reviews the proposal contained in this Business Case of establishing a second teaching building for occupation by ARU Peterborough and a high-quality interactive science museum for Peterborough (The Living Lab). For the purposes of this Business Case this is regarded as the 'Recommended option'.

Quantitative economic appraisals of the remaining three options show that the Recommended option has a Benefit Cost Ratio of 6.7 (compared with 10.1 for the Do minimum option and 2.7 for the Phase 3 standalone), based on four direct quantifiable benefits from the proposed options:

1. Increased employment as a direct result of the creation of additional teaching space for the University as staff are recruited.
2. Employment created in the wider economy as an indirect result of the creation of the new University.
3. The economic benefits from the salary uplift from studying on one of the additional HE courses which would be possible as a result of the Phase 3 expansion and gaining graduate level employment as new graduates enter the workforce and graduate level jobs are created, attracted or retained within the region.
4. Benefits to the exchequer from increase wages, personal and corporation taxes.

When coupled with the qualitative analysis of each option (which included student numbers, net present costs and benefits, and BCR calculations) against the project objectives, this confirms the Recommended option as the preferred option and this conclusion easily survives sensitivity testing of assumptions on the scale of the costs and benefits of the Recommended option (including student numbers).

Commercial Case

Procurement of the phase 3 infrastructure is split into the following categories:

1. Land: the proposed development plot
2. Professional team procurement to be complete by mid-February 2022, following approval of this FBC.
3. Main Contractor: procurement of the main contractor will be required to deliver the physical capital works.

Procurement of the infrastructure will involve selection of a Main Contractor to deliver the physical works via a Design & Build procurement route utilising a competitive tender and an industry standard form of contract (JCT). There is a wealth of potential main contractors and subcontractors who operate in the region and therefore interest in this scheme is expected to be high, which will typically result in competitive pricing. Signing of the contract with the Main Contractor for construction is scheduled to allow for start in March 2023 and completion by September 2024.

The building will be based on a 2,900m² Gross Internal Area (rounded up); a multi-use educational facility suitable for a mixed use of working, learning, teaching, collaborating inclusive of 1,000m² GIA Living Lab, and will include all associated external landscaping and infrastructure, delivered within the available cost envelope (currently £27.9m).

The land on which this phase 3 building will be located is notionally defined based on logical physical boundaries (back of footpath) etc. and logical extension of the current infrastructure strategy for phase 1 & 2. The actual red line will be subject to finalisation of RIBA 2 design by the appointed consultant team and legal due diligence.

The site location taken forward as part of this Business Case has been selected following evaluation of a number of options outlined in the RIBA 1 report, option 1 to the east of the current phase 1 and 2 developments and option 2 to the south of the phase 2 development emerged equal in overall scoring. Option 2 to the south of the phase 1 and 2 buildings remains the preferred option but given the planning difficulties option 1 (Regional Pool Car Park) is considered the most deliverable at this stage. This decision will be reviewed on appointment of the consultant team for phase 3.

Costings for the project have been benchmarked and the building, which is an appropriate size for a building of this nature and allows more flexible use as an adaptable asset for the future, is considered to be deliverable within the available budget.

Financial Case

The agreed budget of £28.87m the phase 3 capital build will be funded as follows

Funding Source	Amount (£)
LUF Investment Funding	20,000,000
Combined Authority	2,000,000
ARU Capital Investment	4,000,000
PCC– contribution of land	1,870,000
Total Funding (Phase 3 only)	27,870,000

Project affordability is critically dependent on:

1. Securing the transfer of LUF funding as well as all other investment capital funding.
2. Risks associated with income (student numbers) and expenditure being able to be mitigated through cost control, increased income and/or use of the contingency provision.
3. Risks associated with enabling works, Land transfer, planning approval and agreement of contract sum being able to be mitigated through management of each workstream within the required timeline and budget while continuing to meet the outcomes of the LUF.

Subject to these considerations, at this stage of project development and implementation, it is anticipated that funds will be available to meet the project budget. No cash-flow implications are anticipated for the Combined Authority or ARU as they have sufficient funds to meet the payments for shares in to PropCo1, relative to the cash demands on the Company required to pay its creditors associated with the construction of the Phase 3 building. However, PCC will need to negotiate terms with the Department of Levelling-Up Housing & Communities (DLUHC), to cash flow PCCs payments for shares, in to PropCo1, from the LUF funding. Currently the terms of the LUF funding are payments 6 months in arrears of actual expenditure on the project by PCC. This cashflow and capability to make

payments for shares will need to be resolved prior to conclusion of the amendments to the Shareholders Agreement.

No cash-flow implications are anticipated for the Combined Authority, ARU or PCC as all funding to be provided by them (including LUF grant) will be in place before the construction phase goes ahead.

A key project objective is to create a sustainable operating model for ARU Peterborough/the University such that, after initial start-up costs, it will operate on a self-sufficient basis. The operating model shows sufficient revenues are generated throughout to cover operational costs, on a broadly breakeven basis from 2022/23 and revenues generated appropriately thereafter to fund the ongoing operational expenditures, with a marginal profit delivered year on year.

The model shows that the key financial risks for the ADP and its ability to fully establish ARU Peterborough as a University are:

- The need to recruit at least the student numbers anticipated by the model and maintain target per student fee levels to generate sufficient income (particularly in the light of the impacts of Covid-19).
- Potential increased costs, particularly for asset maintenance.

The potential mitigations for these risks include contingency provision throughout the ten-year period, as well as a suite of measures to control costs and/or increase incomes. Subject to these considerations it is anticipated that funds will be available to meet the Phase 3 project budget.

To ensure appropriate funds are available, all necessary steps will be taken to ensure each party makes the required financial contribution into PropCo1 bank account by mid-February 2022. This will include negotiations on payment terms for the LUF funding from DLUHC to PCC. This will ensure that PropCo1 has the required funds to cover the construction costs, providing certainty of payment for the Main Contractor and their supply chain, and ensuring that cash funds are readily available for PropCo1 to make payments as required.

Following approval of this Business Case, should the members of PropCo1 require funding to be approved based on the required cashflow such that PropCo1 can continue to develop design, procurement, planning and secure legal advice up to contract award, the cashflow and apportionment of costs will, based on cash subscriptions outlined in this Business Case, for Phase 3 be ARU 15.4%, CPCA 7.7% and PCC 76.9%.

Management Case

The project has a number of stakeholders including: planning consultees; neighbours; Members of Parliament; PCC, the Combined Authority and ARU. These key internal and external stakeholders will be managed under a strategy agreed between PCC, ARU and the Combined Authority, outlined in the established communications strategy.

The Combined Authority and PCC have put in place the resources needed to manage the work streams required to deliver the project, based on an understanding of the shared goals. The Combined Authority will appoint external consultants on behalf of PropCo1 to ensure the necessary capacity and capability is available for successful implementation of the project.

Project governance has been established to reflect the current arrangements within each organisation. Responsibility for the project will be mandated to the joint venture between the main Partners (PropCo1) and ultimately to the Combined Authority and subsequently the operation of the university by ARU Peterborough.

The key principles are that PropCo1 will delegate authority to the Combined Authority and its agent to manage the delivery of phase 3 under the Development Management Agreement, reporting to PropCo1. Should change be required then authority will need to be sought from PropCo1.

ARU Peterborough will occupy the Phase 1 and 3 buildings as tenant, reporting to PropCo1 on an annual basis in respect of the building condition and maintenance. The parties agree to review each of the roadmap, milestones and steps towards them on an annual basis to consider whether the build plan remains achievable and compliant and where it is not believed to be so, to agree changes to be made.

The project plan has been developed within the following constraints and assumptions:

- Delivery of the phase 3 building to be in operation for September 2024 in line with the LUF funding milestone, noting that the memorandum for agreement between Department for levelling up Housing and Communities and the local authority (currently being drafted) states in clause 4.10 that the Council must spend all grant funding by the end of the funding period, 31 March 2024.
- In alignment with the Planning strategy that considers the requirement for a full planning application for phase 3 only that is not reliant on any outline planning permission being determined being undertaken by the combined authority, by a date to be agreed (not part of this Business Case), and the wider masterplan for the embankment being undertaken by PCC for conclusion in Q1 2022.
- Approval of the Business Case in January 2022 to allow funds to be approved to maintain programme to achieve the delivery milestones outlined in the LUF.
- Appointment of the consultant team to commence design and legal advice at the start of February 2022

A detailed project risk register (including control strategies) has been developed based on the following risk categories: surveys and site constraints; commercial viability; design; legal; procurement; operational; governance; construction logistic and programme.

The responsibility for management of risk for the delivery of the Phase 3 building will lie with PropCo1, which will delegate authority to the Combined Authority for the management of risks associated with the design, procurement and delivery of the phase 3 building.

Authority for the management of risk will remain with PropCo1 up to completion of the phase 3 building. Day to day responsibility for risk management will be the responsibility of the Project Manager, who will hold quarterly risk workshops with members of the project

team. The risk register will be reviewed at least monthly by PropCo1. These monthly risk reviews will be an integral part of monthly reporting to PropCo1. Where management of risk requires interventions beyond the authority delegated to the Combined Authority by PropCo1, decisions will be referred by exception to PropCo1 for agreement on how risks are to be mitigated in line with the governance and agreed terms of reference outlined above and to be set out in the Development Management Services Agreement

Covid-19 impacts and opportunities

A wealth of established and emerging evidence predicts that as a result of the Covid-19 crisis Peterborough and the Fens, will be one of the hardest hit economies in the UK. This is partly due to education deprivation and partly due to the region's low-tech industrial base; factors that combine to increase risks of the region also being one of the slowest to recover.

Therefore, a more inclusive recovery and regrowth strategy is needed for region's economy; one which increases higher value, more knowledge intense and more productive growth and shifts the spatial distribution of economic growth and to support an increase in innovation-based business growth across the whole the Combined Authority economy. This will be more important than ever in the recovery following the Covid-19 crisis.

In common with a number of cities in the UK, the establishment of the university and associated innovation eco-system aims to produce the knowledge engine to drive these changes and ensure Peterborough is not one of the "left-behind" towns following the Covid-19 crisis.

ARU's business model is less exposed to the potential impacts of Covid-19 than other HEIs for a variety of reasons including pre-existing blended delivery, lower reliance on international students, low buildings overheads, low gearing and a broad curriculum offer that is likely to be more resilient to the impacts of Covid-19. ARU has developed the portfolio of courses for ARU Peterborough/the new University in Peterborough with due consideration of suitability post Covid 19, including engagement with key stakeholders. ARU's course portfolio and delivery model have proved extremely resilient to the effects of Covid thus far, such that ARU is currently showing an 18% yoy growth in its student population.

Local demographics indicate HE is about to enter a period of growth in the market, not least due to the latent demand in the "cold spot" identified in the strategic case. It will particularly target:

- First generation HE students of all ages.
- People who are unemployed, retraining or upskilling (esp. post COVID-19)
- Large Corporates and bespoke apprenticeship programmes.

ARU also has a strong track record in Degree Apprenticeships, built on a reputation for vocational based HE provision (ARU is the largest provider of Degree Apprenticeships in the UK and a thought leader in their development); a brand that will be further carried into Peterborough. They are undertaking a wide range of preparatory activities to develop the ARU-Peterborough offer taking full account of the impacts of (and opportunities presented by) Covid-19 as they become clearer which will encompass the growth targeted through Phase 3.

A key potential impact of Covid-19 is that it might make young people who live locally, more likely to study nearer to home; ARU-Peterborough is designed to fill the gap identified through the “cold spot” and Phase 3 will, therefore, enable more students in the region to study from home should they wish to do so.

1 Strategic Case

1.1 Introduction

Peterborough has been recognised for many years as a cold spot for Higher Education. Cambridgeshire and Peterborough Combined Authority (the Combined Authority), working with Peterborough City Council (PCC), is committed to supporting the development of a new higher education provider for the City, on its journey to becoming the University of Peterborough, to:

- increase the skills levels of local people; and
- increase highly skilled employment opportunities, principally by generating and accelerating an innovation ecosystem centred on artificial intelligence, digital and advanced manufacturing technologies that enable new products and systems that contribute to a net-zero carbon and healthier future.

These two objectives will support local people to gain access to long-term employment opportunities and support local businesses to grow by making it easier to hire skilled employees, invest in innovation and attract new high value firms to the city and surrounding area.

The University project (as defined below) is being developed in phases.

“The University of Peterborough will be a high-quality employment-focused University for the city and region. It will acquire an international reputation for innovative technological approaches to face-to-face learning and in applied technology and science. It will be characterised by outstanding student satisfaction and response to local needs. The curriculum will be led by student and employer demand as well as developing opportunities in the technological, scientific and business areas. Its buildings will be architecturally leading, flexible and environmentally friendly. The curriculum, academic community and buildings will reflect a desire to be the greenest university possible”.

The principal phases of development of the new campus to host the University are as follows:

- **Phase 1: First Teaching Building** - Establish the University campus in the city via the first teaching building, providing space for 2,000 students from September 2022, rising to 3,000 by 2025, studying Health, Social Care, Education, Management, Finance and Law.
- **Phase 2 Peterborough Research and Innovation Incubator** - Build a base of innovative and collaborative start-ups to support bottom-up development of the innovation ecosystem: 20 hi-tech start-ups and scale-ups building an indigenous innovation ecosystem specialising in net zero technologies in an innovation incubator on the campus with Photocentric Limited as anchor tenant.
- **Phase 3: Second Teaching Building and Living Lab** - Grow the University via a second teaching building supporting 1,700 more students from 2024, expanding its curriculum into STEM fields and embedding the University in Peterborough through the Living Lab and Cultural Quarter. The Living Lab will be a public-facing, high-

quality interactive science centre for Peterborough with public space for exhibitions and events, designed to stimulate and inspire more young people into STEM sectors.

- **Phase 4: Inward Investing Research Institute & SPF-Funded R&D Programme** – Establish an innovation ecosystem focused on net zero technologies by attracting a major Research Institute onto the university campus in Peterborough, and develop an R&D Programme which facilitates the dissemination of research from the Research Institute into local businesses, enabling collaboration in the ecosystem and creating opportunities for local businesses to link into the Research Institute's global network of major net zero-focused businesses, ultimately stimulating local business growth and demand for higher-level skills.
- **Phase 5: Third Teaching Building & Sports Science Facility** – Expand further the teaching capacity with space for an additional 2,250 students on the embankment campus for a total student headcount of 7,000 by 2031. This phase will include the relocation and enhancement of the current Embankment Athletics Track to an alternative site, with agreement of PCC and the Peterborough & Nene Valley Athletic Club (PANVAC), to produce a Sports Science Facility in Peterborough. Like the Living Lab within the Phase 3 building, these sports facilities will be open to the public and play an active role in increasing sports and fitness engagement across the city.

The intention is for the new University be fast-growing between 2022 and 2032 with a review to be undertaken by ARU and the Combined Authority expected to take place in 2028 to evaluate the benefits and feasibility of the University becoming independent from ARU with its own degree awarding powers and ultimately University Title. Progress has been made by ARU-Peterborough in relation to its governance arrangements and academic infrastructure, including the appointment of a Chair and set of governors, due to meet in February 2022. Also, the appointment of an Inaugural Principal and management team to lead operations of ARU-Peterborough and the development of the curriculum to be delivered in the Phase 1 building, including 27 courses registered with UCAS.

The building development programme is already underway:

- Phase 1 has begun, and ARU-Peterborough will open to its first students in September 2022. This first teaching building was approved for funding in late 2019 and is under construction with completion confirmed for July 2022.
- Phase 2 construction work has also commenced with Photocentric as joint venture partner and the building's anchor tenant. This Net Zero Innovation Incubator was approved for funding in mid-2020, received planning permission earlier this year and commenced construction in October 2021. Completion is forecast for December 2022.

This Business Case is concerned with phase 3 of the University campus development, which comprises a **Living Lab, University Quarter Cultural Hub and expanded university campus in Peterborough**, to meet cultural, regeneration and economic levelling up priorities for the region.

It is recognised that there remains uncertainty around a number of elements of the project that are the subject of this Business Case and robust mitigation measures are in place to ensure the costs will not exceed the allocated budget and that Phase 3 of the project will be delivered on time. These are described in other chapters of this Business Case.

1.2 Principal partners

1.2.1 Public sector partners

Cambridgeshire and Peterborough Combined Authority was established in 2017 under a Devolution Deal with central Government. Its purpose, defined by the Devolution Deal, is to ensure Cambridgeshire and Peterborough is a leading place in the world to live, learn and work. The Combined Authority's Devolution Deal, which runs for 30 years, also sets out a list of specific projects which the Combined Authority and its member councils will support over that period. A university for Peterborough is one of the major commitments in that list, and the Combined Authority has already invested £43.5m through its devolved Gainshare, Delegated Local Growth Fund and the Getting Building Fund, for which it was Local Lead Authority.

Peterborough City Council (PCC) was formed as a unitary authority in 1998, having previously been part of Cambridgeshire County Council. The council's strategic priorities are to: drive growth, regeneration and economic development; improve education attainment and skills; safeguard vulnerable children and adults; implement the Environment Capital agenda; support Peterborough's culture and leisure; keep communities safe, cohesive and healthy; and achieve the best health and wellbeing for the city. As well as a central role in the University Programme, PCC is leading the regeneration of Peterborough via a range of programmes, including through its Town Investment Plan, a £49 million programme of projects encompassing business and skills, regeneration and infrastructure and visitor attractions. During the creation of the Combined Authority, PCC was instrumental in ensuring that the inclusion of a university for Peterborough was specified in the Devolution Deal. As Local Lead Authority for the Levelling Up Fund (LUF), PCC secured the £20m of LUF that forms the majority of the financing for this Phase 3 Project.

1.2.2 Academic Delivery Partner

Anglia Ruskin University Peterborough (ARU) is the Academic Delivery Partner (ADP) for the University Project. ARU will work to develop a curriculum for ARU-Peterborough/the university with flexible modes of delivery to address the characteristics of the region, its communities and the Higher Education cold spot. Locally based, ARU is one of the fastest growing universities in the UK with strong performing Science and Technology and Business Faculties, several research institutions classified by the Research Excellence Framework as world-leading and has a wide range of established international partnerships. On the basis that ARU would be given the right to occupy both the first and second, majority public funded, teaching buildings rent free, to conduct the business of offering higher education in Peterborough, they were required to compete for the role of ADP through a procurement that took place in 2019.

1.3 Strategic context

1.3.1 About the Combined Authority

The Combined Authority has statutory powers and a budget for transport, affordable housing, skills and economic development, made up of funding devolved from central Government. The Mayor also has powers to raise monies through local taxes, although these have not been used to date.

Under its new Mayor, the Combined Authority's strategy is driven by the values the Mayor wishes to be the hallmark of his term in office:

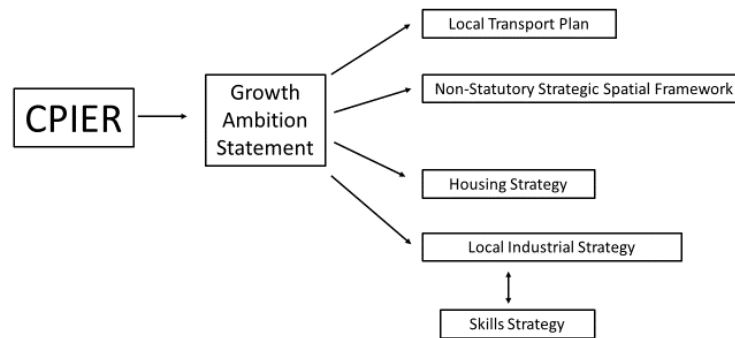
1. Compassion
2. Cooperation
3. Community

These frame how the Combined Authority will pursue the Devolution Deal's overall aim of achieving sustainable growth and integral human development, and give rise to an investment programme that has the following six themes:

1. **Health and Skills:** building human capital to raise both productivity and the quality of life.
2. **Climate and Nature:** restoring the area's depleted natural capital and addressing the impact of climate change on our low-lying area's special vulnerabilities.
3. **Infrastructure:** from digital and public transport connectivity, to water and energy, building out the networks needed to support a successful future.
4. **Innovation:** ensuring this area can continue to support the most dynamic and dense knowledge economy in Europe.
5. **Reducing inequalities:** investing in the community and social capital which complement skills and connectivity as part of the effort to narrow the gaps in life expectancy and income between places.
6. **Financial and systems:** improving the institutional capital which supports decision-making and delivery.

The university project supports all of these, with specific emphasis and impacts on 1, 4 and 5.

The strategic policy framework within which Combined Authority works is summarised below (CPIER is the Cambridgeshire and Peterborough Independent Economic Review).



The Combined Authority's Board brings together the Leaders of the councils in the area under the chairmanship of the Mayor and is also attended by the Police and Crime Commissioner, Chairman of the Fire Authority, Chairman of the Business Board and a representative of the NHS.

1.3.2 About Peterborough City Council

Peterborough City Council is a unitary local authority for the City of Peterborough, which has a population of just over 200,000 people. PCC's five core values are:

- **Expertise** - recognise and value the differences, skills, knowledge and experience of all colleagues
- **Trust** - honest and open in all dealings and deliver on promises
- **Initiative** - proactive and use creativity to identify and resolve problems
- **Customer Focused** - understand and aim to meet customer's diverse needs, treating them fairly and with respect
- **Work together/One team** - work with colleagues and partners to deliver the best services possible.

PCC's constitution sets out how the council works, how decisions are made, and the procedures it follows to make sure its work is efficient and accountable to local people.

The council is made up of 60 councillors and has a leader and cabinet model of decision making. The Cabinet is responsible for running council services and ensuring best value is delivered. They are also responsible for implementing policies, delivering services, approving new policies other than major policies, playing a leadership role and generally promoting the economic, environmental and social well-being of the city.

PCC's vision is to **'create together a Peterborough resident are proud to live, work and grow up in and where services deliver what local people need and give value for money'**.

PCC's Corporate strategy 2021-25 signals a strong commitment to:

- Our communities – seeking engagement and contribution, ensuring everyone can play a part in improving their own lives and the lives of others and
- Our environment – which is central to how we think and act. Reversing the trend of increasing consumption and delivering on our commitments to becoming a truly sustainable city,

Priority outcomes for the Corporate Strategy include:

- Pride in our communities, our places and our environment
- First rate futures for our children and young people, quality support for our adults and elderly
- Better jobs, good homes and improved opportunities for all

PCC's Corporate Strategy 2021-2025 strategic priorities are:

1. Drive growth, regeneration and economic development

- To bring new investment and jobs
- To support people into work and off benefits
- To boost the city's economy and the wellbeing of all people

2. Improve educational attainment and skills

- To allow people to seize opportunities of new jobs and university provision
- To keep talent and skills in the city's economy

3. Safeguard vulnerable children and adults

4. Implement the Environment Capital agenda

- To position Peterborough as a leading city in environmental matters
- To reduce the city's carbon footprint

5. Support Peterborough's culture and leisure trust Vivacity

- To deliver arts and culture to all people

6. Keep all our communities safe, cohesive and healthy

7. Achieve the best health and wellbeing for the city

The new university programme particularly supports priorities on 1 and 2.

1.3.3 About Anglia Ruskin University

ARU is an innovative global university with students from 185 countries, based in Cambridge, with campuses in Chelmsford, London and Peterborough offering a wide range of courses in `computing and technology, engineering, law, business, economics, life sciences, health and social care, the arts and education.

ARU includes six high-profile research institutes, StoryLab (originally known as the Culture of the Digital Economy Research Institute), the Global Sustainability Institute, the Veterans and Families Institute for Military Social Research, the Policing Institute for the Eastern Region, the Cambridge Institute for Music Therapy Research and the Vision and Eye Research Institute. Alongside these institutes ARU is engaged in a range of research groups, dedicated to subjects as diverse as ecology, finance and economics, cyber security, and political history.

ARU's vision is **transforming lives through innovative, inclusive and entrepreneurial education and research** and its values are

- Ambition
- Innovation
- Courage

- Community
- Integrity
- Responsibility

ARU's 2017 strategy sets out a 10-year vision, priorities and ambitions and is built around three central themes.

- **Creating a leading learning and innovation ecosystem** to deliver an outstanding educational experience, combining the best of face-to-face and digital learning; increase work-based opportunities; and activities that enhance academic success and employability.
- **Building and nurturing vibrant university communities** that are inclusive and welcoming of all and with a particular focus on continuing to attract and retain international students and growing postgraduate student communities.
- **Strengthening the underpinning operations of the University**, building on its reputation for enterprise, to be known for use of innovative, user-focused approaches to problem-solving and putting the needs of those who study and work with ARU at the forefront of the way it designs its activities.

The ARU Peterborough/university project supports all of these.

1.3.4 Policy alignment

National Policy

The UK needs a dual training system where vocational education and training is well known and highly recognised worldwide due to its combination of theory and applied training, embedded within real-life work environments. Central Government has outlined in its Industrial Strategy the need to see more people equipped to acquire intermediate and higher-level technical skills that the economy needs now and in the future. The Combined Authority's Skills and Jobs Transformation Programme, of which the new University and its campus development is a key element, supports these wider national objectives including:

- **Levelling Up** is the government's pledge to increase opportunities in all parts of the UK, "levelling up" all regions to align them with those most prosperous regions of London and the South East. The specifics of the strategy are expected to be outlined in a Levelling Up White Paper by the end of 2021, however several funding initiatives aimed at Levelling Up have already been launched, including the Levelling Up Fund and the UK Community Renewal Fund. Innovation and R&D funding will play a significant role in rebalancing the economy, so addressing the existing innovation imbalance, by changing the approach to funding and support, will be crucial for the Government in delivering its levelling up agenda. The Council has secured £20m of funding from the Levelling Up Fund to invest in Phase 3 of the University for Peterborough project .
- **UK Innovation Strategy** - Released in July 2021, setting out the Government's ambition for an innovation-led economy. The primary objective is to boost private sector investment across the UK, creating the conditions for businesses to innovate across the UK, addressing the existing regional innovation imbalance and driving the

“levelling up” of the UK economy. As part of this, Government has committed to increasing UK investment in R&D to 2.4% of GDP by 2027. The UK Innovation Strategy states:

“We need to embed innovation across the country, drawing on geographical and sector strengths in places and creating markets on a scale large enough to have a global impact. To do this, we need to ensure more places in the UK host world-leading and globally connected innovation clusters, creating more jobs, growth and productivity in those areas.”

The model for place-based innovation developed in this programme will meet the challenge set through the Innovation Strategy, to help create “a surge of business-led innovation and an increase in firms’ adoption and diffusion of innovation”. In particular, phase 2 and phase 4 help to establish a place-based innovation ecosystem at pace and scale with the University at its centre: an innovation ecosystem that attracts, supports and retains innovative manufacturing businesses, enabling spin-out, start-up and scale-up firms to leverage technology and funding through a Joint R&D Programme, to grow and establish themselves in the Peterborough region. This is achieved by attracting global research institutions, currently located in successful innovation ecosystems like Cambridge and elsewhere, to relocate into left-behind cities with innovation potential, where they act as an integrator of large groups of global companies to fund research programmes linked to local industrial sector clusters. In the case of Peterborough, this will focus on AI, digital and advanced manufacturing technologies related to the enablement of net zero products, processes and power generation systems.

- **Net Zero** – including the recently announced 68% emissions reduction by 2030 and the Prime Minister’s 10 Point Plan for a Green Industrial Revolution through investment in innovative technologies and the creation of 250,000 green jobs.
- **Oxford-Cambridge Arc** – The Oxford-Cambridge Arc is already home to a booming and varied economy that contributes significantly to the success of Global Britain. Over the last 20 years, it has grown faster than any region outside London, and employment and wages are above the national average. It is home to some strong and innovative sectors, world-leading companies, internationally recognised research and development centres and research universities. Peterborough, the largest city in the Arc’s north, is important to unlocking future growth across the Arc, driven by the region’s strong sector clusters of advanced manufacturing and future energy technologies.

The Government’s proposed Post 16 education reforms aim to streamline qualifications for students through the Post 16 Review of qualifications at level 3 and below in England to create a coherent system with clear, high quality progression routes for students of all ages, including the National Retraining Scheme. These need to support the recommendations of the Augar Review into Post-18 Education funding and the review of Higher Technical Education. The Government’s Level 4 and 5 reforms present an opportunity to ensure that technical/vocational learning is available in Peterborough.

It is clear that Government HE policy is concerned with increasing the supply of higher-level technical skills, ensuring genuine inclusiveness in higher education provision and participation and supporting the expansion of agile modes of learning including distance and virtual learning approaches to enable increased participation. All of these are strong drivers for the approach to be adopted for the development of a new University for Peterborough.

This in turn supports the UK Government's Industrial Strategy which articulates the national strategy to achieve a vision of:

- The UK having the world's most innovative economy.
- Good jobs and greater earning power for all.
- A major upgrade to the UK's infrastructure.
- The UK being the best place to start and grow a business.
- Prosperous communities across the UK

A new University will make a substantial positive economic impact not only in the City but in the wider sub-region supporting these national policy frameworks, enabling the region and the UK to compete in an ever more dynamic global economy through innovation and creating knowledge-intensive businesses. At the same time, it will deliver significant cultural and social benefits that are inherent in the aims of these national policies.

Regional strategies

The new University project responds to key regional strategies, of which the following are particularly relevant for phase 3:

- **Cambridgeshire and Peterborough Independent Economic Review (CPIER)** – The 2018 CPIER made a clear recommendation for the development of a university for Peterborough and The Fens. The project is seen as crucial to addressing “uneven access to higher education” and lower educational attainment figures for areas geographically close to - but economically isolated from - existing centres of education, by creating more pathways to higher education for local communities. The CPIER stated that the university should be strongly rooted in the local and sub-regional economy by drawing on established strengths in manufacturing and engineering - citing the fact that the local economic benefits of university research are magnified when local firms are “technologically close” to a university. The CPIER also recommended high levels of investment to ensure a clearly defined educational offer centred around subjects that integrate with the local economy and embrace new technologies.
- The draft **2022 Cambridgeshire and Peterborough Combined Authority Employment and Skills Strategy** sets out a vision for Cambridgeshire and Peterborough to be a “successful, globally competitive economy offering high-skilled, well-paid, good quality jobs, delivering increased productivity and prosperity to support strong, sustainable and healthy communities and enabled by an inclusive, world-class local skills system that matches the needs of our employers, learners and communities.” The Strategy explicitly references the priority for a new University in Peterborough which raises regional higher education participation, and delivers

technical courses aligned to local employers' needs and jobs of the future. See below for further details.

- **Cambridgeshire and Peterborough Local Industrial Strategy (LIS)** – The 2019 Local Industrial Strategy identifies the northward expansion of the innovation clusters and networks from Cambridge, as the primary route to improving the knowledge intensity and quality of employment for Peterborough and the Fens. A specific goal within the LIS is to scale growth further to benefit the whole area, building on Cambridge's World class assets to create inclusive growth across the regional economy. The strategic approach the LIS defines to achieve this includes to:
 - Improve the long-term capacity for growth in Greater Cambridge to support the expansion of this innovation powerhouse and, crucially, reduce the risk of any stalling in the long-term high growth rates that have been enjoyed for several decades.
 - Increase sustainability and broaden the base of local economic growth, by identifying opportunities for high growth companies to accelerate business growth where there is greater absorptive capacity, beyond the current bottlenecks to growth in Greater Cambridge.
 - To do this by expanding and building upon the clusters and networks that have enabled Cambridge to become a global leader in innovative growth, creating an economy-wide innovation and business support eco-system for inclusive growth

A key intervention specified for enabling this is a new university for Peterborough to fill the higher-level skills gap in the north of the regional economy, support accelerated business growth and raise individual opportunity and prosperity

- **Cambridgeshire and Peterborough Local Economic Recovery Strategy (LERS)** – This 2021 strategy responds to the economic impacts of Covid-19 and establishes the goal for the region to make a leading contribution both to the UK's recovery from the Covid-19 pandemic and to its future global success. It sets out how CPCA will accelerate the recovery, rebound and renewal of the economy, helping people effected and achieving the ambition to double GVA by 2042 in a digitally enabled, greener, healthier and more inclusive way.

The Combined Authority 2019 Skills Strategy provided a framework for expenditure against strategic priorities focused on learning that delivers sustained job outcomes, productivity and economic growth. Devolution of skills budgets provides scope to embed an approach that coordinates local resources and establishes priorities.

The Cambridgeshire and Peterborough region plays an important role in the UK economy. Although the area is home to large and globally significant businesses, small/medium businesses dominate the local landscape. The region comprises three distinct economies with differing sector specialisms and differing social and economic skills needs:

- Peterborough and surroundings (including north Huntingdonshire).

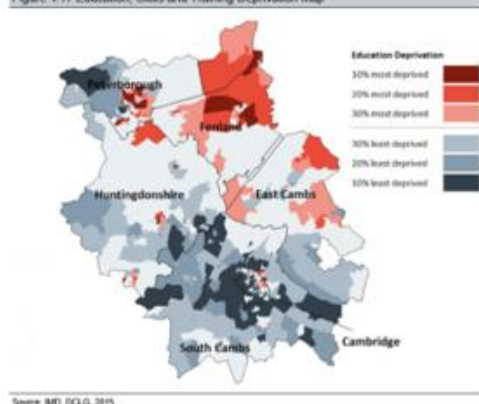
- The Fens (including Fenland, some of East Cambridgeshire and part of Huntingdonshire).
- Greater Cambridge (Cambridge and South Cambridgeshire, including southern parts of Huntingdonshire and East Cambridgeshire)

Broadly speaking, Greater Cambridge has the highest levels of skills and the best educational outcomes; Greater Peterborough and the surrounding area experiences lower levels of employment and greater economic inactivity (suggesting an economy marked by longer term issues relating to engagement and long-term alienation) and the Fens has lower labour market performance, related to the accessibility of both jobs and training. Levels of education deprivation are shown in the figure below and are concentrated in the north and north-east of the region in particular.

Based on recent economic data/evidence collected from the CPIER and the Hatch Regeneris' Skills Strategy Evidence Base Report, the Combined Authority's 2019 Skills Strategy identified a need for a University for Peterborough, which was included in the 2019 Skills Strategy and reinforced in the draft 2022 Skills Strategy. The Combined Authority is committed (as a devolution priority) to supporting the establishment of expanded HE provision in Peterborough, with a course mix driven by the requirements of residents and businesses.

Education deprivation is concentrated in the north-eastern areas of the CPCA. Peterborough and Fenland in particular although there are small clusters in Huntingdon and Cambridge. By contrast significant areas of Huntingdonshire, South Cambridgeshire and Cambridge are lowest in education deprivation.

Figure 4.17 Education, Skills and Training Deprivation Map



Distribution of qualification outcomes



Peterborough is a recognised cold spot for HE provision in the region, which results a higher-level skills gap amongst the working population (see section 1.3.5 below):

It is imperative that, to achieve inclusive growth, the Combined Authority concentrates efforts on closing the skills gaps, and overcomes the barriers and challenges to progression by developing bespoke life-long learning for all ages through a tailored approach. Key to success will be growing local talent (alongside attracting new talent to the area). The Combined Authority 2019 Skills Strategy, therefore, set a strategic direction to enable sustainable futures by creating a culture of positive change within the skills arena following three key themes:

1. Achieve a high-quality offer tailored to the needs of the three sub-economies.

2. Empower local people to access education and skills to participate fully in society, to raise aspirations and enhance progress into further learning or work.
3. Develop a dynamic skills market that responds to the changing needs of local business.

The draft **2022 CPCA Employment and Skills Strategy** sets out a vision for Cambridgeshire and Peterborough to be a *“successful, globally competitive economy offering high-skilled, well-paid, good quality jobs, delivering increased productivity and prosperity to support strong, sustainable and healthy communities and enabled by an inclusive, world-class local skills system that matches the needs of our employers, learners and communities.”*

Going further than the 2019 Skills Strategy, the draft 2022 Employment and Skills Strategy sets out what this vision means for each of the groups interacting with the skills system: people, employers, providers and place leaders:



People experience fulfilment and good physical and mental health with productive, quality working lives. They drive their own learning and career journeys and feel confident to enter and re-enter the labour market over the course of their lives. They can access support and learning to meet their personal and work ambitions when and how they need.



Employers are providing good quality jobs; have the skills they need in their staff and can recruit the right person for the right job. They understand their skills needs and their inputs shape an agile, responsive skills system that delivers a regional pipeline of talent, matched to job opportunities to support strong businesses and enable business growth.



Providers work collaboratively across Cambridgeshire and Peterborough in an integrated education and skills system to deliver learning, qualifications, careers education and support to enable people to enter the labour market in the ways that suit individual's needs and ambitions.



Place leaders secure outcomes for the whole place, convening and supporting collaboration between employers and the integrated skills system, as well as linking into other local services for people across Cambridgeshire and Peterborough to

lead healthy lives and fulfilling careers.

As an essential part of achieving this vision the 2022 Employment and Skills Strategy explicitly includes the priority for a new University in Peterborough which raises regional higher education participation, and delivers technical courses aligned to local employers' needs and jobs of the future. It also highlights the requirement to ensure that high-quality employment opportunities are created in the region which the university's graduates can then fill, if the Strategy's objectives for delivering increased productivity and prosperity are to be achieved.

The 2022 Employment and Skills Strategy finds that current participation in higher education varies across Cambridgeshire and Peterborough, including being just 6.7% in Peterborough and 3.2% in Fenland. It also notes that the region's education providers, whether on a campus or operating from a satellite site, play an important role as anchor institutions in their community, providing civic leadership, collaborating, driving investment to renew localities and raise aspirations. However, patchy engagement with post-16/18 education is exacerbated by education estate and access cold-spots – including in Peterborough – and physical and digital access challenges for rural and deprived communities. The 'Education Cold Spot' has long been recognised as a major challenge holding back prosperity in the Combined Authority's more deprived areas, particularly in the north around Peterborough.

These have been updated in the draft 2022 Skills Strategy which is built on four core themes:

1. Pre-work learning and formal education: ensuring people can access learning and experiences during formal education that provide a strong foundation for labour market entry and future working lives.
2. Employer access to talent: ensuring employers both drive and consume a dynamic market of skills provision, which shapes the current and future workforce.
3. Life-wide and lifelong learning: ensuring people are aware of their learning needs and opportunities and able to access provision that enables their development.
4. Support into and between work: ensuring coordinated support is available for those who need additional assistance to transition into or between work.

The university project will catalyse action under all these themes. It is a Council and Mayoral priority as well as a key intervention within the Local Industrial Strategy and the Skills Strategy, to address the current disconnect between work and qualifications. Furthermore, expanded higher education provision will be an essential component in realising the ambitions set out in the Cambridgeshire and Peterborough Independent Economic Review (CPIER) to: establish the foundations for raising aspirations and attainment in Peterborough and the surrounding region; support business skills needs; improve productivity; stimulate structural change in the sub-regional economy; and enhance the well-being of the local population.

Moreover, young people in Peterborough and surrounding areas often leave school/college/university without possessing some of the practical skills to function in the modern workplace. There is concern also that the teachers/academics lack knowledge of vocational

career pathways and technical curriculums and that there is currently a disconnect there is between schools/colleges and employers/businesses. The Combined Authority's strategies focus on activity-based transitions that are outcome based and business-focussed within the key sectors of Construction, Logistics, Agriculture/Food, Life Sciences, ICT/Digital, Health and Social Care to create pathways to further study in either FE or HE.

The ARU Peterborough/University curriculum offer has been designed to support raising aspirations to grow the student numbers from the local area, meet student expectations and meet the needs of the local economy. Combined Authority's policy is to prioritise skills interventions, including supporting the establishment of a new University for Peterborough with provision driven by local employer demand for skills in both public and private sectors, encouraging apprenticeships. Through the LIS and LERS, The Combined Authority is also working to activate employer demand and motivate learners and their families to raise their aspirations.

1.3.5 Objectives

The Partners' (the Combined Authority, PCC & ARU) ambition is to create a new University for Peterborough that will deliver a step-change in life-chances for young people in Peterborough and beyond. Key to the success of the new University will be its ability to grow and retain local talent alongside attracting and retaining new talent to the area. Through this project, the Partners are committed to raising personal and community aspirations along with improving social-mobility and contributing to inclusive social and economic growth. The Partners' will continue to promote and support skills provision that meets employer demand and motivates learners and their families to aspire to building prosperous futures for themselves and their communities, harnessing lifelong learning.

The top-line objectives for the new University are:

- **Improve access to better quality jobs and improve access to better quality employment**, helping to reverse decades of relative economic decline, and **increasing aspiration, wages and social mobility** for residents.
- Make a nationally significant contribution to Government objectives for **levelling up, increase regional innovation, and accelerate the UK's net zero transformation**, while also helping to fulfil the growth ambitions of the Ox-Cam Arc and radiating prosperity northward from Cambridge into north Cambridgeshire, the Fens and Peterborough.
- Accelerate the renaissance of Peterborough as a knowledge-intensive university city, **increasing civic pride** and satisfaction with Peterborough as a place offering a good quality of life with improved public facilities, and **providing a tangible example of levelling up and a pilot for place-based innovation** in left behind cities, that could be adopted and adapted nationally.
- Translate the resulting increase in individual opportunity, prosperity and social mobility into outcomes across wellbeing, health and healthy life expectancy from the programme, and on into **people living happier, healthier lives**.

Specific quantitative academic objectives for the new University are to commence provision of education at the start of Academic year 2022/23 for a student headcount of 2,000, rising to 3,000 through the first building and then onto 4,700 through this second teaching building. The aspirational target is to rise further to a student headcount of 7,000 by the academic year 2027/28.

Improving higher-level skills and the knowledge capacity must be accompanied by parallel stimulation and supply of higher value jobs to provide opportunity for the increased number of higher-level skilled people, including development of an innovation eco-system in the region.

Replicating the “Cambridge Phenomenon” that has taken decades to evolve organically and develop requires a specifically designed and long-term programme of interventions that balance supply of improved human capital with demand for it. This in turn requires indigenous and inward business growth that is more knowledge intensive and higher value, requiring higher level skills.

In the case of Peterborough and The Fens, this means addressing the HE cold spot to generate more level 5, 6, 7 & 8 skills, focused on key, higher value growth sectors such as high-value manufacturing and digital. In comparison to the average city in the UK, and within a workforce of 103,000, Peterborough needs be able to mobilise 17,000 more workers at these higher skills levels, to become competitive as a place, and arrest four decades of decline in prosperity and health outcomes.

Filling the higher-level skills gap in Peterborough and The Fens, will have limited impact without effective measures to grow significantly the business and industrial demand for those skills. This will require, concurrent development of the innovation and business support eco-system to grow indigenous high-value firms and attract new ones to the city.

Employers both drive and utilise a dynamic education and skills system, which shapes the current and future workforce. This will be addressed by establishing and expanding the new university for Peterborough through the delivery of Phase 3, providing an increased pipeline of graduates for employers.

There is considerable evidence of best practice in developing and managing place-based innovation ecosystems, which has been used by the Partners to build a strategy to develop such an eco-system for Peterborough and the Fens. It includes actors and components able to:

- build on the regional master plan provided by the LIS, which identifies the threats and challenges facing the regional economy and its key sector-clusters, along with the potential skills and innovation interventions to overcome those challenges. It has clear targets for ecosystem-level innovation outcomes in terms of inputs, such as volume of R&D and knowledge generation, and outputs such as the value and volume of new products and services created and launched into market, delivering outcomes in terms of new, higher value, jobs created.
- operate locally with connectivity to a truly global, sector-based collaborative network in AI, digital and high value manufacturing sectors into which to connect;

- enable the flow of information, resources, talent, and solutions between complementary firms across networks, rolled out to Peterborough's local network of 200 manufacturing firms, managed by Opportunity Peterborough;
- connect firms through formalised innovation partnerships such as membership of a broad R&D programme, or individual projects, innovation alliances (e.g. joint R&D centres jointly staffed by business and universities). Such innovation creation platforms must extend into commercialisation partnerships and market-entry joint ventures and hubs, to ensure market-specific product and service launch and innovation-based growth; and
- provide a clear central coordinating service, facilitating cross-industry collaboration and providing professional services in both management advice and technology applications, capable of managing the ecosystem-level service provision, e.g. the use of facilities and management of an extensive portfolio of R&D, as well as the provision of commercialisation, incubation and growth services.

The Partners further anticipate that the new University (as expanded by Phase 3) will have:

- a substantial positive economic impact on Peterborough City and the surrounding region such that investment in the new University will generate direct, indirect and induced impacts across a wide range of industries, supply chains and the wider consumer economy;
- a positive regenerative effect to support the transformation of Peterborough itself into a regional centre improving the experience of all citizens and visitors to the area, including generating new opportunities for graduate-level employment and encouraging both local participation in HE and the local retention of graduates to benefit the wider economy;
- a transformational effect on the life-chances and well-being of its students and raise aspiration more broadly within Peterborough and the surrounding region. We anticipate that this will include:
 - Improving life-chances, health and well-being outcomes of students and, over time, the wider community;
 - building confidence and capability among the graduates of the new university and potentially encouraging innovation and entrepreneurship;
 - enhancing the capabilities of those graduates who continue to live and work in and around Peterborough to improve their productivity and earning potential; and
 - attracting and retaining investment locally to create more opportunities for the people of Peterborough and the surrounding region to benefit from higher education and contribute to the on-going success of the region.

Local strategies

Further investment in a University for Peterborough as a means of regenerating the city is a priority reflected across several local plans and objectives. This includes the Peterborough City Council's Town Investment Plan (TIP), which aims to kick-start economic growth through urban regeneration, the development of skills infrastructure and improved connectivity. Specifically, the plan includes the development of "a university with the potential to transform the city" on 'Opportunity Site 5' as a means of regenerating city centre space.

There is also alignment with Peterborough City Council's long-term regeneration and investment priorities as identified in its Local Plan.

Phase 3 of the new University will support further in meeting the cultural, regeneration and economic levelling up priorities in Peterborough (see below).

This will deliver the vision of the City's Culture Board to upgrade, create and connect existing and new cultural and creative spaces – in this case three museums, an arts venue, two theatres and two libraries in 50 acres of renewed, open, green space in an enhanced natural environment. In so doing, it creates a University Quarter that becomes a central cultural hub for the city, attracting 50,000 visitors a year and creating a destination area greater than the sum of its parts. The Living Lab will be the centrepiece of Peterborough's new University Quarter Cultural Hub.

This catalytic investment to create the University Living Lab and additional teaching space, builds on and integrates £45m of prior and current investments made through the Local Growth Fund (towards earlier phases of the new university) and Towns Fund (towards the wider masterplan and infrastructure for the City). It will have a visible, tangible impact on people and places, and support economic recovery.

The regeneration of the river embankment will open up a key leisure area for the city centre. Opening up the embankment, clearing the scrub areas, illuminating it and populating it with hundreds of students moving between the university quarter and the city centre will improve public security and transform a poorly used city-centre site into a vibrant cultural, commercial and community hub that local people can be proud of.

1.3.6 Current position

While the Cambridgeshire and Peterborough region has an enviable HE profile thanks in part to the presence of institutions and universities that have a world-class reputation, Peterborough has been recognised for many years as a cold spot for Higher Education (e.g. Peterborough and Fenland have around a quarter of the number of HE entrants of South Cambridgeshire)¹.

Current HE provision in Peterborough consists of:

1. **Peterborough Regional College:** has around 4,500 students and a broad course offering with particular HE teaching specialisms in engineering and construction, primarily at the Park Crescent campus, including **University Centre Peterborough (UCP)**, a 100% owned subsidiary of Peterborough Regional College, providing around 500 qualifications per annum across business, engineering, digital, finance, construction management and accounting disciplines. While its curriculum is modelled on education pathways it is moving into curricula linked to employment or business needs through development of a Green Technology Skills Centre with support from the Towns Fund. UCP does not have degree awarding powers and currently degrees are validated by Anglia Ruskin University.
2. **Anglia Ruskin University:** a satellite campus located in Guild House, Peterborough, with bespoke provision of around 400 qualifications per annum in health, social care

¹ Hatch Regeneris CPCA Skills Strategy Evidence Base, December 2018

and education. It is intended that this provision will be transferred to the Phase 1 new University at the embankment site once completed for academic year starting September 2022/23.

There is no HE provision in Fenland or North Huntingdonshire. The dispersed rural character of, and poor transport networks in, Fenland in particular make it challenging to establish HE operations in these areas. The sparsity of population and travel to learn times (rather than distances) have tended to inhibit the creation of viable provision, in the absence of flexible modes of delivery to compensate for these characteristics of the region.

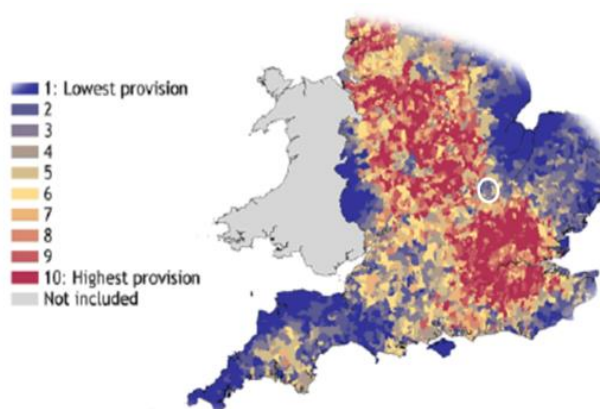
The result is that low skills levels have historically limited wages, progression and quality of life:

- In Peterborough, low skills levels have historically limited wages, progression and quality of life.
- The lack of a higher education provision in the region is a major contributor to poor economic, social and health outcomes.
- Peterborough's economy has been held back by a fragmented innovation ecosystem lacking a unifying focus.
- The region is changing, seizing opportunities in the UK's net zero transformation, particularly in growing Advanced Manufacturing businesses.
- Transplanting key elements of the Greater Cambridge innovation ecosystem into Peterborough, and creating an inherent connectivity into it, will help both places to grow, rebalancing growth across the Cambridgeshire and Peterborough region, and supporting ambitions for the Ox-Cam Arc.

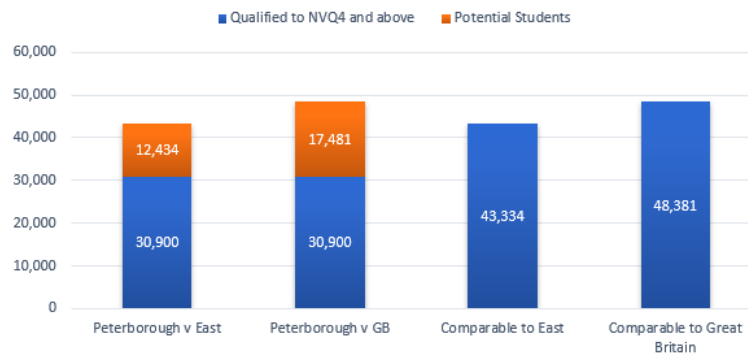
1.3.7 Case for change

A Higher Education "cold spot"

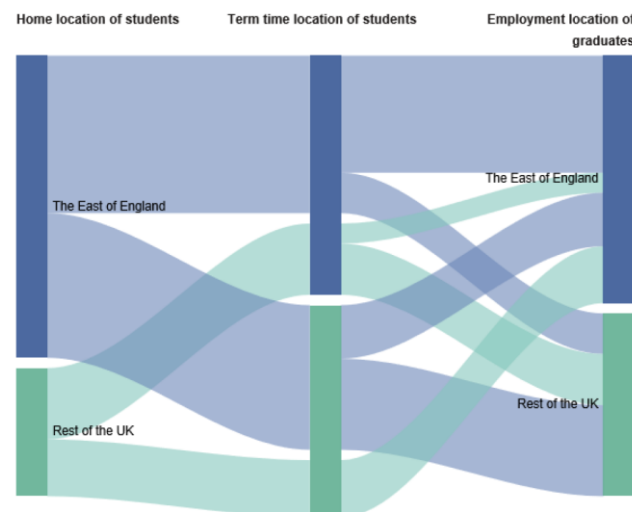
To be effective the University must address the characteristics of the higher education cold spot in the region (see figure below, sources: HESA and ILR 2012/13).



If Peterborough matched the East of England an additional 12,000 people aged 16-64 would have an NVQ Level 4 qualification or above and if Peterborough matched the UK, 17,000 more people would have such a qualification (see chart below).



There is no doubt, therefore, that, as a higher education cold spot, Peterborough and the wider Cambridgeshire and Peterborough region north of Cambridge is under-served by current providers. Furthermore, there is a net-outflow of students from the East of England with many fewer local students returning to the region after graduation; and, equally, many fewer students who study in the East settling in the region after studying here, effectively denuding the region of graduate talent (see HESA Destination of Leavers Survey figure below with additional interpretation in the footnote²).



Source: HESA Destination of Leavers Survey, 2014/15

Note: Populations cover those HE graduates in employment who have had a postcode in the selected region during their time in HE. This includes their home address, term-time address and employment location.

² The groupings from top to bottom on destination:

1. East of England (EE) students, who study in the East and stay after graduation
2. UK students (out of EE region) who study in the East and stay after graduation
3. EE students who study out of region but return after graduation
4. UK students (out of EE region) who study out of region but move into region after graduation
5. EE students who study in the East and leave the region after graduation [Net Loss]
6. UK students (out of EE region) who study in the East and leave after graduation
7. EE students who study out of region and do not return to the region after graduation [Net Loss]

Categories 5 and 7 outweigh categories 2 and 4. The net effect is a drain on the region. However, these groups are not the target market for the University— these students are already travelling in/out of region for a specific higher education experience which is already available. To compete directly for these students with their current institutions of choice would be fool-hardy given the imbalance in resources, infrastructure and brand equity. This route would lead to a “Red Ocean” of brutal competition.

Qualification levels in Peterborough, Huntingdonshire and Fenland are below national averages, which contributes to limiting wages, progression and quality of life for residents and unemployment rates are higher than the national average. The vision set out in the Industrial Strategy notes that skills development is vital for growth in jobs and earning power. The table below sets out some key labour market indicators³

Indicator	Peterborough	East of England	GB
Proportion of 16-64s with no qualifications	7.6%	5.7%	6.4%
Proportion of 16-64s with NVQ 4+ ⁴	32.1%	39.2%	43.1%
Average Attainment 8 ⁵ score at KS4	46.3	-	50.2
Proportion of employees with jobs in managerial, professional & technical occupations (SOC group 1-3) ⁶	42.3%	48.9%	50.2%

In addition to the indicators above, in Peterborough:

- Wages are 9% lower than the England average.⁷
- Productivity per worker is 11% below the national average.⁸
- 41% of neighbourhoods (LSOAs) within Peterborough rank within the 20% most deprived in the UK.⁹
- Social mobility is low, with Peterborough ranked 191st and Fenland ranked 319th out of 324 local authority districts.¹⁰
- Healthy life expectancy is below retirement age in many neighbourhoods and is declining in the most deprived areas.¹¹

Long term structural problems in the labour market appear to have been exacerbated by the pandemic. Rates of Universal Credit claims in the city doubled in the 12 months from March 2020 to rise above 27,000 in a city with a workforce of 120,000.¹² Nearby Fenland shares many indicators of deprivation, with poor skills outcomes a key driver.

Peterborough ranks 34th lowest out of 650 constituencies for the highest levels of child poverty¹³, with one in three children living in relative poverty, despite most families containing at least one working adult. Improving access to skills and raising educational attainment has the potential to reduce deprivation as well as provide residents with better employment prospects.

The local population has grown at a faster rate than the national average, which will in due course translate to a bigger local market for students. Moreover, the Cambridgeshire and

³ Metro Dynamics analysis of ONS data

⁴ NVQ4+ is a measurement of qualification level which is broadly equivalent to an undergraduate degree.

⁵ 'Attainment 8' is a measurement which captures the progress a pupil makes from the end of primary school to the end of secondary school.

⁶ Standard Occupation Classification (SOC) groups 1 – 3 are workers in managerial, professional and technical occupations.

⁷ ONS (2021) Annual Survey of Hours and Incomes

⁸ ONS (2020) Subregional productivity: labour productivity indices by UK NUTS2 and NUTS3 subregions

⁹ Indices of Multiple Deprivation (2019).

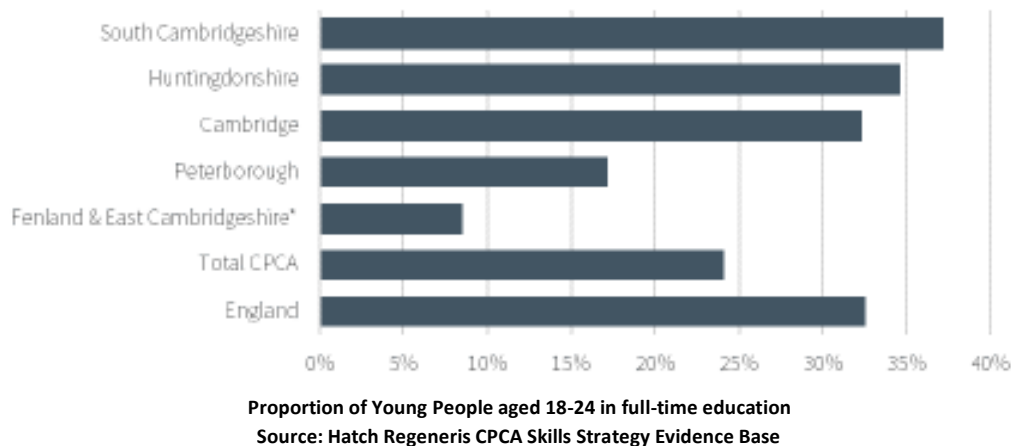
¹⁰ Social Mobility Index, 2016

¹¹ ONS Health and Life Expectancies, 2016-2018

¹² <https://cambridgeshirepeterborough-ca.gov.uk/what-we-deliver/resilience-2/>

¹³ Analysis of government and HMRC data shows that in 2019/20 9,524 children aged 0-15 in the Peterborough constituency were impoverished

Peterborough area has a much lower proportion of 18-24 year olds in full-time education than nationally and in Peterborough the proportion is very much lower than any other part of the region except Fenland and East Cambridgeshire.



Addressing provision to under-represented and under-employed groups is critical as there may already be unfilled vacancies and employment opportunities within the region for which there is a dearth of suitably qualified applicants. This is uncontested market space where competition in HE (which is burgeoning) is largely irrelevant. The University can expand on its unique offering to serve the cold spot, to attract under-represented groups and to redress the balance between Peterborough and the rest of the region.

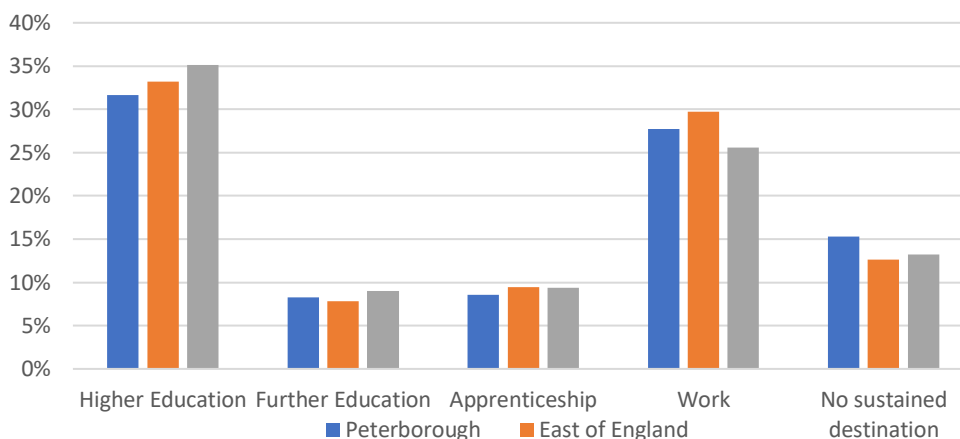
During the last four decades, Peterborough's population has doubled, and with it, the level of employment available. However, due to the much lower than average (nationally) supply of Level 4-6 skills, it has proved difficult to grow or attract in, sufficient high-value firms to maintain the city's productivity levels. This has created a degradation in the average value of jobs, wages and health outcomes that has significantly retarded the north of the Cambridgeshire and Peterborough region's economic growth potential, and its ability to contribute to region-wide productive growth.

The lack of a higher education institution is a major contributor to poor economic, social and health outcomes: Peterborough is one of the largest cities in the UK without a university.¹⁴ This means higher education has felt inaccessible and irrelevant to many people, and low aspirations entrench poor outcomes. In many parts of Fenland and other rural areas around Peterborough drive times to the nearest university exceed 60 minutes, making higher education practically inaccessible.

The lack of higher education provision in northern parts of Cambridgeshire and Peterborough means fewer school leavers (at 18 years old) progress onwards to higher education than would otherwise. In Peterborough, 31% of school leavers progress onto higher education compared to 35% nationally, with more school leavers progressing directly into lower-skilled employment. Crucially, 15% of 18-year-olds in Peterborough record 'no sustained destination' six months after leaving school, compared to 13% nationally, indicating that more school leavers in Peterborough choose either not to enter education or

¹⁴ <http://lovemytown.co.uk/universities/universitiestable2.asp>

work, or are dropping out within six months. See figure below for destinations and progression rates for 18-year-olds, 2019¹⁵



ARU's analysis of demand for higher education in the Cambridgeshire and Peterborough region predicts an increase in the number of 18-year-olds over the next 5 years leading to a 13% increase in students entering HE by 2025 (up to 6,105) with a static participation rate of 44%, and a 20% increase (up to 6,521) if the participation rate grows to the England average of 47%. Demographic analysis suggests also that this new demand is likely to be from groups who are more likely to stay in the region to study and then subsequently to work.¹⁶

Encouraging more residents into higher value jobs will help to raise social mobility in Peterborough and especially Fenland which ranks in the bottom 1% of district councils on these measures. The Peterborough Town Investment Plan notes that more deprived residents tend to experience poorer health and educational outcomes and fail to progress to higher paid jobs and better housing, in part because there is no local higher education institution to enable social mobility. There is a danger of these residents becoming trapped in low skill, low pay employment and failing to reach their potential.

Peterborough has been held back by a fragmented innovation ecosystem lacking a unifying focus: disconnect between research and industry has hampered innovation in the digital and advanced manufacturing sectors that holds the key to a renaissance for the city and its region. Further, the lack of a higher education institution to act as a knowledge engine for the region means that local firms have been cut off from access to key research which could translate into business-level innovation. In recent years cities such as Rotherham, Coventry and Middlesbrough, which all share similar economic characteristics to Peterborough but are different in that they contain large scale research institutes to act as local knowledge engines, have surged ahead while Peterborough has not.

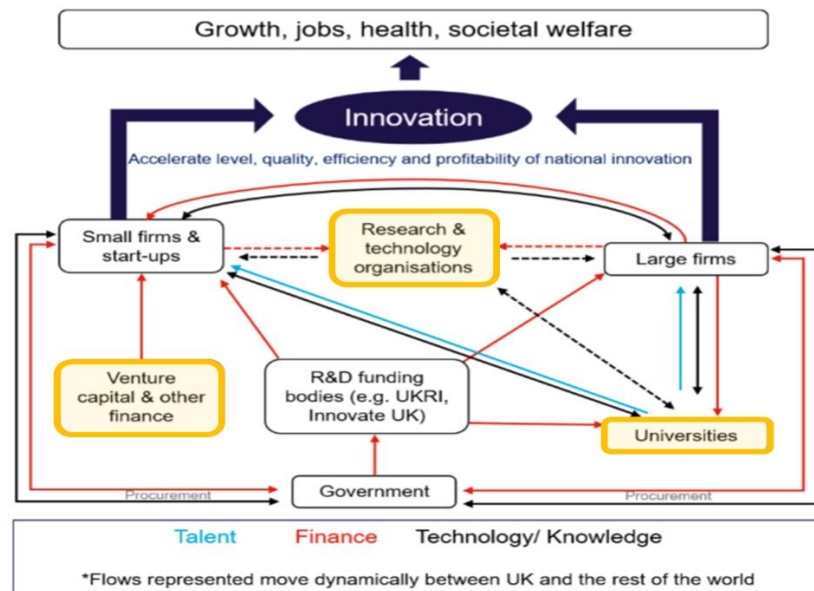
The UK Innovation Strategy highlights the vital nature of interactions between universities and businesses for spurring innovation. More broadly, the Innovation Strategy notes that *"innovation occurs in an ecosystem in which companies, research institutions, further education providers, financial institutions, charities, government bodies and many other players interact through the exchange of skills, knowledge and ideas, both domestically and*

¹⁵ Metro Dynamics analysis of DfE School Leaver Destinations data (2019)

¹⁶ ARU analysis conducted for Phase One Full Business Case

*internationally.*¹⁷ Without a university or research institution to act as a knowledge engine in a place it is unlikely that an innovation ecosystem will be able to form or flourish.

The diagram below from the UK Innovation Strategy presents a view of the components required to establish an effective innovation ecosystem in a place. Currently the Peterborough region is missing three (shown in orange) of the six necessary components. The figure below shows components and gaps of Peterborough's Innovation Ecosystem



Without deliberate intervention, these missing components are unlikely to form naturally.

Connections between Peterborough's innovation ecosystem and nearby Cambridge will help both places to grow, rebalancing growth across the Cambridgeshire and Peterborough region, and supporting ambitions for the Ox-Cam Arc: Peterborough and Cambridge are connected geographically, economically, socially and politically.

Peterborough is part of the Ox-Cam Arc and is on the northern edge of the 'Golden Triangle', with Cambridge as its northern-most point. The Ox-Cam Arc is one of the world's most successful innovation ecosystems, with Cambridge recognised as a world-leading centre of innovation. Over the last 20 years, The Arc has grown faster than any region outside London, and employment and wages are above the national average. It is home to some strong and innovative sectors, world-leading companies, internationally recognised research and development centres and research universities.¹⁸

Peterborough has a role to play in securing the ongoing success of Cambridgeshire and the Ox-Cam Arc by acting as a centre for new growth in advanced manufacturing, helping to unlock growth constraints which risk limiting the ongoing success of the Ox-Cam Arc.

The evidence base clearly shows that Peterborough and the north of the region more generally, while not conventionally thought of as being "in the north", has been "left behind". The CPIER notes that: *"In many ways, [Cambridgeshire and Peterborough] is a microcosm of the UK as a whole. It has a prosperous south, based around one principal city,*

¹⁷ UK Innovation Strategy, July 2021

¹⁸ Creating a Vision for the Oxford-Cambridge Arc: Consultation (2021)

which receives the majority of foreign investment and attracts high value companies and talent from across the world. International evidence increasingly shows that this concentration of growth leads to both high living standards and significant inequality. Further north, there is much industry and innovation, but while there are many success stories, business investment, skill levels and wages are lower.”

A more inclusive growth strategy is needed; delivering the region’s overall growth ambitions means that action must be taken to increase productivity in the north of the region, changing the spatial distribution of growth and supporting an increase in business growth and skills levels across the whole of the local economy (particularly growth in higher value businesses).

Core to this transition and future success is Peterborough’s growing cluster of green and environmental innovative engineering businesses, focussing increasingly on zero carbon technology, with the new University in Peterborough acting as the regional anchor institution and knowledge engine.¹⁹ Local firms in this sector and wider manufacturing base are integrated into the supply chains of the Midlands’ manufacturing sector, the energy and agri-food clusters of the East of England, and the Advanced Manufacturing and Future Energy clusters of the Oxford-Cambridge Arc.

Peterborough’s economic growth is therefore aligned with and will help drive the success of the OxCam Arc, East of England, Cambridgeshire and Peterborough and the wider Midlands / England’s Economic Heartland growth areas.

A new approach

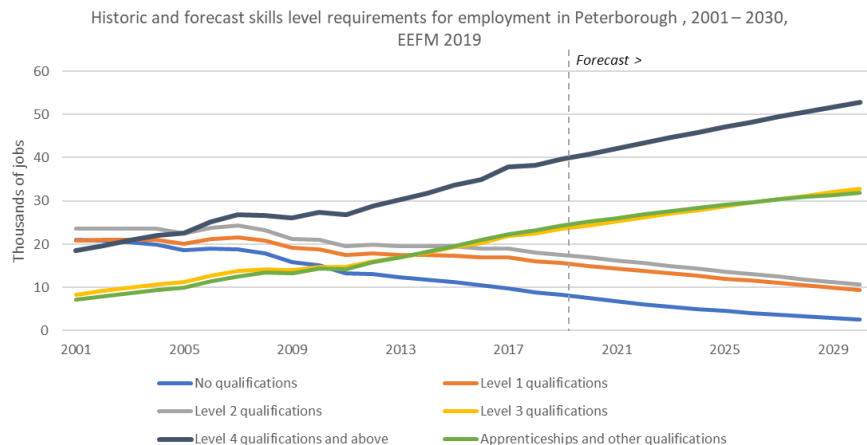
To reverse decades of relative economic decline in Peterborough and Fenland, the 2019 Combined Authority Skills Strategy identified a new higher education institution in Peterborough as the only viable solution to the HE Cold-Spot, while the Local Industrial Strategy identifies the northward expansion of the innovation clusters and networks from Cambridge, as the primary route to improving the knowledge intensity and quality of employment for Peterborough and the Fens.

The draft 2022 Employment and Skill Strategy acknowledges the progress made in implementing the new university and emphasises the importance of delivering the new university project.

To take part in and continue to support Peterborough’s knowledge intensive growth, residents need local education pathways to access high quality jobs. If those pathways are not available, then residents will miss out on the benefits of growth.

The chart below, from the East of England Forecasting Model, shows forecast skills level requirements for employment in Peterborough to 2030. It shows demand for an extra 12,000 degree-qualified residents by 2030 in the City. The figure below shows historic and forecast skills level requirements for employment in Peterborough, 2001 - 2030

¹⁹ Cambridgeshire and Peterborough Local Economic Recovery Strategy (2021)



Meeting future needs in Peterborough means establishing a university and accompanying innovation ecosystem at a pace and scale which generates impact as quickly as possible, while recognising the substantial difficulties faced in doing so.

The core strategy for developing the University is based on directly tackling the characteristics of the addressable component of the current market failures (the “cold spot” identified in the CPIER and LIS) without unnecessary direct competition with existing providers. The hallmarks of this strategy, based on a clear understanding of the market needs in and around Peterborough and by balancing resource constraints, include:

- A clear focus on under-represented groups and those “left behind” i.e. those who cannot or will not travel to existing providers.
- A solution based on a limited physical experience i.e. the capital available will support only a modest campus development (at least) initially.
- A phased approach which evolves with the needs of the region and is facilitated by successive successful phases of development i.e. a model in which viable provision is established early and becomes the foundation for reinvesting in later phases.
- The development of highly effective, collaborative and cooperative relationships between education providers to build a clear pipeline of opportunities, to raise aspiration, to identify and promote role models and to create a source of competitive advantage.

The vision for the University is that it will be:

“a high-quality employment-focused University for the city and region. It will acquire an international reputation for innovative technological approaches to face-to-face learning and in applied technology and science. It will be characterised by outstanding student satisfaction and response to local needs. The curriculum will be led by student and employer demand as well as developing opportunities in the technological, scientific and business areas. Its buildings will be architecturally leading, flexible and environmentally friendly. The curriculum, academic community and buildings will reflect a desire to be the greenest university possible”.

The University will provide access to higher education for rural areas around Peterborough, including Fenland, where in many cases drive times to the nearest University currently

exceed 60 minutes. Establishing a new higher education institution in Peterborough will help to raise aspirations and skills levels in surrounding areas also.

Wider impacts

Phase 3 of the University project will deliver significant social value through the provision of a dedicated community cultural and learning space in a core area of the City Centre. It will help raise aspirations and awareness amongst local people of the new university offer and so will help attract local residents to study at the university. By enabling local higher education provision, it will ensure that more highly skilled young people in Peterborough remain in the city.

A higher education experience is one of the most powerful and transformational investments which can be made both by individual students and by civil society more broadly. Moreover, universities in cities help build community cohesion and drive-up educational standards and attainment e.g. with lecturers/professors becoming governors at local schools.

The Partners are determined to make these investments, to encourage others to make such investments and to bring the positive benefits of higher education to the people of Peterborough and the surrounding region.

A new University will, therefore, offer much more to the people of Peterborough and the region. It will give Peterborough and surrounding areas an opportunity to reinvent its economy as the city continues to grow in population, creating a virtuous circle for continued growth of the economy and the new University, raising aspirations locally and supporting business needs for skills.

1.4 About the project

1.4.1 Scope

Phase 3 is to develop a second teaching building for occupation by ARU Peterborough/the new university with a Living Lab at its heart. This phase enables the university's growth to 4,700 students between 2022 and 2027, with future growth in student numbers to follow in Phase 5. This project is for investment in a 3,000m² second teaching building as part of the expanding university campus, 1,000m² of which will be available for use as a University Living Lab and public teaching space. The Living Lab will be a high-quality interactive museum for Peterborough with public space for exhibitions and events. Upper floors of the building will be provided exclusively as teaching space for Peterborough's expanding student cohort, hosting 1,700 students studying STEM subjects each year.

The Living Lab is designed to stimulate and inspire more young people into STEM sectors, including into the university's STEM-focused curriculum, which will be taught in the same building. Broadening Peterborough's cultural offer, it will provide a window into the city's net zero future through events, exhibitions and flexible learning, including festivals of ideas, immersive displays, hackathons, forums and evening classes. It will serve to increase skills provisions in these areas, offering a step change in local education provision and supporting the growth of net zero-focused industries and businesses in Cambridgeshire and Peterborough.

Project delivery in terms of work and spend on the Phase 3 building must begin in March 2022, to meet the terms of the LUF funding offer from the Department for Levelling Up, Housing & Communities, with initial procurement of the consultant team by the Combined Authority and commencement of the building RIBA 2 design. The building structure will be complete by end of March 24, also to comply with the terms set out in the LUF funding offer, noting that the memorandum for agreement between Department for levelling up Housing and Communities and the local authority (currently being drafted) states in clause 4.10 that the Council must spend all grant funding by the end of the funding period, 31 March 2024.

This Business Case is concerned only with the phase 3 development of the new University for Peterborough campus comprising:

1. Development of the third university building on the Embankment site in Peterborough City centre (this site will be built in phases as the University establishes and grows).
2. Procurement of a consultant team for the design, procurement and management of the delivery and aftercare of phase 3. The Peterborough HE Property Company (PropCo1) joint venture between the Combined Authority, PCC and ARU is an established and already operating, special purpose vehicle established to deliver the initial phase of the university development. PropCo1 will require the support of an appropriately skilled and resourced organisation to manage the delivery of this project. This will include the following key activities:
 - a. Initial designs to enable early planning discussions
 - b. Technical documents for the procurement process
 - c. Management of the design development with the contractor through to execution of a JCT D&B
 - d. Submission of planning application at the appropriate time
 - e. Practical management of the works as contract administrator/ clerk of works, including regular meetings, quality assurance and delivery against timescales.
 - f. Cost management and reporting
 - g. Compliance with funding obligations
3. Procurement of a main contractor to deliver the phase 3 University building for opening September of academic year 2024/25.

1.4.2 Benefits

The main Benefits of the project stem from establishing Phase 3 of the University Campus in Peterborough, for up to 1,700 more students from 2024/25, bringing the total number of students to 4700, with a curriculum and delivery model that is designed to meet the skills needs that growth in the Greater Peterborough business base will generate. The plan for the courses to be provided, space required, and staffing levels has been developed by ARU to support Greater Peterborough and the Fen's key sectors.

The key benefits to be delivered by this Phase 3 project include:

1. Number of temporary jobs created: 264 in construction²⁰.
2. Number of jobs created: 157 created over the first 4 years (98 academic staff and 59 professional services)²¹.
3. Number of indirect and induced jobs created: 16 indirect jobs in the University supply chain and 16 in the local economy as a result of increased employment in education²².
4. Number of indirect jobs as result of increased footfall and increased local economy spend by additional students and university employees: 67 jobs²³.
5. Increase in GVA associated with additional graduates in workforce, increased income earned from graduate roles and increased spend in the local economy over 10 years: £83m.

1.4.3 Risks, constraints and dependencies

The main risks associated with achieving the project outcomes are set out in the risk register at Annex 6.1 together with measures to mitigate and manage them. The main risks are summarised in the tables below for each of the phase 3 infrastructure works and delivery.

The table below summarises the **key constraints** that have been placed on the project and within which it must be delivered:

Constraints	
Timescales	<p>A requirement in the terms of the LUF funding offer to start in March 2022 with initial procurement of the multi-disciplinary team which will then provide design, procurement, planning and management of construction works to complete by end March 2024.</p> <p>This will require a site to be selected with fewest development constraints, which will be subject to further development of the design in RIBA 2 and due diligence on the selected plot.</p> <p>The selection of the procurement route for the main contractor will be critical in the ability to meet the timings required.</p> <p>The critical path runs through the appointment of the new consultant team, site selection, design, planning running in parallel with procurement, PropCo1 sign off, enabling works, construction and fit out prior to opening September 2024/25 with no programme float.</p>

²⁰ Based on (2012) Forbes D. at al, "Forecasting the number of jobs created through construction". 1 job per £75,000 of expenditure (2012 prices, 1 job per £90,600 at current prices). Assumed 1 year construction contracts. Construction costs assumed at 80% (20% design and professional fees) of capital costs and distributed over 4 years.

²¹ Assumed academic staff 5% of total students number; and professional services 3% of total students number (based on Phase 1 FBC)

²² The calculation is based on Type 1 Education industry employment multiplier for indirect (1.1) and Type 2 Education industry employment multipliers (1.2) for induced jobs and it is based on the direct jobs created in Education. Source: 2020, Scottish Government. Supply, Use and Input-Output Tables and Multipliers for Scotland 1998-2017.

²³ Based on £29,797,016 increase in local economy spend over 10 years (by additional students and University employees relocating in the area) and £44,378 GVA value per additional new job created in wholesale and retail industry

Constraints																														
Procurement	<p>Consultant team – The Combined Authority will procure the consultant team under an existing framework ready for appointment in February 2022 to comply with the LUF funding terms.</p> <p>Main Contractor phase 3 - Agreement of the procurement strategy for this phase will be agreed on award of the consultant team for the main contractor.</p>																													
Capital funding	<p>Phase 3 (£27.9m: for the Living Lab, university quarter and second teaching building, including a £20m investment from the Levelling Up Fund): Construction complete in 2024 for the Living Lab and second teaching building supporting additional 1,700 students (570 graduates per year), with potential for significant growth in student numbers in future.</p> <p>The £20m of Levelling Up Funds requested will be leveraged with £7.9m of local investment from the City Council, Combined Authority and ARU to help establish the university quarter.</p> <table><tr><th colspan="6">Investment into Living Lab, University Quarter and second teaching building</th></tr><tr><th>Contributor</th><th>LUF (PCC)</th><th>PCC</th><th>CPCA</th><th>ARU</th><th>Total</th></tr><tr><td>Value (£m)</td><td>20</td><td>1.87*</td><td>2</td><td>4</td><td>27.87</td></tr><tr><td>% of total</td><td>71.8%</td><td>6.7%</td><td>7.2%</td><td>14.4%</td><td>100%</td></tr></table> <p>*land value to be confirmed by red book valuation</p>						Investment into Living Lab, University Quarter and second teaching building						Contributor	LUF (PCC)	PCC	CPCA	ARU	Total	Value (£m)	20	1.87*	2	4	27.87	% of total	71.8%	6.7%	7.2%	14.4%	100%
Investment into Living Lab, University Quarter and second teaching building																														
Contributor	LUF (PCC)	PCC	CPCA	ARU	Total																									
Value (£m)	20	1.87*	2	4	27.87																									
% of total	71.8%	6.7%	7.2%	14.4%	100%																									
Outcomes	Up to 2,000 students for the 2022/23 academic year, rising to 3,000 by 2024/25 in phase 1 rising to 4,000 by 2025/26 and 4,750 by 2027/28 in phase 3 with an aspirational target (subject to availability of the necessary capital funding) of up to 7,000 students by 2030/31.																													
Design	The design will need to be developed within the overall funding envelope, in consideration of the enabling works costs and infrastructure costs.																													
Land	Clean title for land required to construct Phase 3 from PCC including indemnification from covenants etc. to be determined following plot selection and due diligence on the plot by the design team following award in February 2022.																													
Planning	The planning strategy for phase 3 has been tested with the Local Planning Authority through pre application discussions. The strategy involves a full planning application for phase 3 coming forward for determination ahead of a wider outline planning application (OPA) for the University campus. The OPA will be developed concurrently to ensure there is visibility of the long-term campus growth strategy. A masterplan commissioned by PCC and being developed out over winter 2021/22 will also inform both the full and OPA applications. This strategy will allow for the timely determination of a planning permission for phase 3, followed by an OPA for the longer term.																													
Budget	The budget for phase 3 has been tested at RIBA 1 for option 1 and the current assumptions made in this Business Case. However, any change in those assumptions will need to be managed by the consultant team in conjunction with PropCo1 within the agreed budget without deterrents to the outcomes required under the LUF. Further details of the risks and mitigation around these assumptions are stated in the Risk Register in Annex 6.1																													

The table below summarises the **key dependencies** that are outside the scope of the project on which its ultimate success depends:

Dependencies	
Adjacent development	<p>Local transport projects and third-party development on land earmarked for future phases of the University.</p> <p>Interface with other phases of the development phase 1 & phase 2 from logistics and potential for different contractor delivering infrastructure beyond current phases.</p>
Land	<p>At the time of writing this Business Case, a preferred location of phase 3 has been identified as part of a RIBA 1 design. The Business Case assumes a land value based on phase 1 valuation and actual size of plot, valuation and due diligence will be required after the approval of this Business Case.</p>
Funding for Phase 3	<p>A requirement in the terms of the funding offer from the Department for Levelling Up Communities & housing, stipulates that the project must deliver LUF expenditure by 31 March 2022. To enable this, a number of legal dependencies need to be satisfied as follows.</p> <p>For work and spend to start in March 22, a formal contract must be signed by PropCo1, by the 15 February 2022, with the procured multi-disciplinary consultant for the initial work packages of RIBA Stage 2 design to inform planning applications.</p> <p>For PropCo1 to place the contract above, it must be in receipt of the phase 3 funding of £26m. To enable transfer of that funding from PCC, ARU and Combined Authority, amendments will need to be made to the original Shareholders Agreement between the parties, reflecting the investment for shares from each party, constituting the additional £26m of cash invested (and later, the land transfer from PCC). Related to this, an Agreement for Lease for the second building from PropCo1 to ARU-Peterborough, is required to be signed as well as updates to the existing Collaboration Agreement.</p>
Enabling constraints	<p>The assumptions made in this Business Case regarding the site selection will need to be tested by the consultant team and the timeline / strategy for any enabling works following due diligence of that plot.</p>
Parking	<p>The location of phase 3 on the regional pool carpark (option 1) will require relocation of the 200 parking spaces into an alternative location – currently under review between the Combined Authority and PCC with one option being an adjacent council owned car park. It is only the 140 phase 1, 2 and 3 related spaces that will need to be re-provided from the overall 200.</p> <p>This will necessitate further parking capacity modelling, currently being undertaken through an update to the City Centre Parking Strategy, reporting Spring 2022, and a corporate decision and associated approvals to agree to any loss of income generating car parking spaces to the Council in favour of the university.</p> <p>As part of the agreement, it will also be necessary for the Combined Authority to agree with PCC and PropCo1 the relocation of spaces within the regional pool carpark attributable to PropCo1.</p> <p>The agreement and relocation of current parking on the regional pool car park will need to be undertaken by end Q4 2022 such that on entering into the</p>

Dependencies	
	<p>contract with the main contractor for the works in January 2023, the relocation can take place for construction, enabling and site set up works to begin prior to spade in the ground March 2023.</p> <p>It is also assumed as part of this Business Case that following the review of local parking capacity that the additional parking requirement for phase 3 (staff and students) could be accommodated in current parking provision post covid 19. This is subject to further review and agreement with PCC as corporate landlord and separately as the LPA and will require contribution to transport mitigation measures as part of Planning determination for phase 3.</p>

The table below summarises the **key Operational Risks**

Ability to Recruit Students:	<p>Student recruitment, marketing and admissions processes and systems to include UCAS support, direct entry and employer-sponsored routes are vital to the success of the new venture. It is anticipated that the focus of these services will be positive, proactive, outgoing and engaging to reach out to under-represented groups, to engage with their needs and win their active participation in the University and PUFC.</p>
Development of an Arena on the embankment	<p>Following a review of the proposals put forward in the Peterborough Embankment Masterplan on Saturday 20th November and the public webinar on Monday 22nd November ARU area ware of the future proposals for an Arena on the Embankment. The dominant footprint of the stadium, so close to the University, will significantly jeopardise the effective operation and future growth of the University; undermine the economic and social returns on the investments already made; and, ultimately, limit the attractiveness, viability and future potential of the University.</p> <p>ARU and Partners remain dialogue with PCC and its representatives on the Masterplan which is benign developed for publication end of January 2022; although it is noted that this does not currently form part of any planning policy nor has a formal planning application come forward for the arena as of the date of the business case</p>

2 Economic Case

2.1 Option identification

Critical success factors (CSFs) for the project can be grouped into three broad headings:

- Factors relating to the continued development of the University.
- Factors relating to the physical regeneration and cultural development of the City.
- Factors relating to the design and delivery of the physical infrastructure.

2.1.1 Critical success factors

Factors relating to the development and success of the University

1. **Ability to Recruit Staff:** The quality of the University is critically dependent on the calibre of its staff. Recruiting and retaining high calibre staff is the first critical challenge. The development of the Living Lab, University Quarter Cultural Hub and expanded University will support this creating more teaching and research opportunities and inspire a wider group of learners.
2. **Ability to Recruit Students:** UK universities now operate in an environment that has many (though not all) of the characteristics of a market. They compete for students, compete for staff, compete for research funding, and league table standings. Phase 3 must be seen as relevant to not only the Peterborough community, but also the wider region and the whole country.
3. **Ability to engage with local businesses and industry:** Large corporate businesses represent a significant group of stakeholders and will present an opportunity for both course development, industrial collaboration/placement opportunities and future employment destinations for graduates. However, students are expected to foot most, if not all, of the costs of this vocational training. The success of STEM and apprenticeship programmes will be key to levelling up aspirations. To address the persistent local skills deficits which hold back Peterborough's growth aspirations will require businesses not only to engage but to support some of the costs of educating their future work force.
4. **Curriculum Development to Fit the Target Market:** Higher education is in a state of flux. Industries are changing, post-pandemic norms are adapting giving rise to increase expectations from students. Students no longer wish to sit in large classes for fixed periods of time at certain times of the year and want instead to move through the curriculum at their own pace and at a time their choosing. This will require adaptive learning tools and support for blended and distance learning so that students do not feel isolated and alone.
5. **Creation of the Academic Infrastructure:** To meet the expectations of the twenty-first century, requires not just excellence in teaching, but also in all the facilities and services that make up the expanded University. Student and academic services need to provide a full range of social, welfare and other student-facing services alongside that of academic assessment, examinations, graduation etc.

Factors relating to the physical regeneration and cultural development of the City.

6. **The Living Lab, University Quarter Cultural Hub** and expanded university in Peterborough, will meet cultural, regeneration and economic levelling up priorities in Peterborough by:
- Creating a new landmark cultural asset, The Living Lab.
 - Regenerating a dilapidated mixed brownfield site adjacent to the city centre to create a new destination space for Peterborough, the University Quarter Cultural Hub, with the Living Lab at its centre.
 - Providing facilities within the Living Lab building to: support 1,700 local students studying in STEM fields; supporting a critical stage in the expansion of the University of Peterborough; and addressing the persistent local skills deficits.

Factors relating to the design and delivery of the physical infrastructure

7. **Meeting the Budget:** The phase 3 building including the external landscape and supporting infrastructure must be delivered within the budget of £27,870,000 based on £20m of Levelling Up Funds, leveraged with £7.87m of local investment from Peterborough City Council, the Combined Authority and ARU. The timeline requires approval of the Business case in January 2022, and this has meant that it is not possible to meet the requirements of a Full Business Case and can only rely on the information available at the time of writing to present a deliverable strategy that will meet the outputs and timelines required in the LUF application. Further work is needed to test assumptions, develop the brief, and site response, in consideration of the ongoing consultation in parallel with the wider outline planning permission (not forming part of this Business Case). This will require a Full Business Case once contract close, land transfer, parking agreements (PropCo1) and shareholder agreements are in place for end Q4 2022.
8. **Meeting the Programme:** The phase 3 building must be open for business to students in September 2024. This will need to be achieved through a detailed programme management that will correlate all key interdependencies, such as achieving planning consent, design freeze, tendering and procurement etc, in addition to delivering an efficient building form and utilising readily available components that will minimise the risk of construction over-runs. The master programme assumes the following critical path milestones are achieved to meet this key Milestone:
- a. Business Case approval January 2022.
 - b. Full Business Case and reviewed following RIBA stage 2 design and costings; and selection of contractor July 2022.
 - c. Planning application submitted in September 2022 for determination in January 2023.
 - d. Main Contractor enters into a pre-construction service agreement and commences design and agreement of contract sum in July 2022 (pending agreement of the procurement route on award of consultant team by the Combined Authority in February 2022).

- e. Legal agreements concluded by PropCo1 and sign Main Transactional Agreements for Phase 3 in December 2022.
 - f. Main Contractor agrees contract sum in January 2023.
 - g. Completion for operation in September 2024
9. **Delivering the Spatial Brief:** The spatial brief for the Living Lab is embryonic at this stage with the curriculum, course structure, timetabling etc remaining to be developed and agreed by ARU. It is anticipated this will be concluded in Q2 of 2022 and that the building will accommodate a spectrum of spaces including specialist teaching, general teaching, study, public engagement, and ancillary operational spaces to support the current specialisms of:
- Business and Innovation.
 - Creative Digital Art and Science.
 - Health Education and Social Care.
 - Engineering, AgriTech and the Environment.
10. **Masterplan:** An Outline Planning Application (OPA) for the University Quarter is currently being progressed, although phase 3 will be determined as a standalone application ahead of a decision on the OPA. The location of phase 3 will be taken into consideration by the OPA. An option appraisal study has been undertaken to assess the preferred site for phase 3, the Living Lab, within the overall Embankment site. Following this evaluation, option 2 – the Artificial Pitch site to the south of the phase 1 and 2 buildings – is the equal preferred option for the location of the Living Lab but this Business Case has been prepared on the basis of option 1 due to the potential programme and cost risk of option 2 associated with the relocation of the all-weather pitch. This decision will be reviewed prior to commencement of the next stage of the design process (RIBA 2) once further detail is known on the associated planning issues, as well as any implications for the loss of parking spaces necessitated by option 1. The project must deliver a clear logistics strategy that seeks to minimise impact on operational buildings during the building of future phases, and critically the experience of students and staff using these buildings.
11. **Respond Positively to Stakeholder Consultation:** The phase 3 building, and wider masterplan, must respond to the output from a wider stakeholder consultation to ensure a project that can be delivered successfully. It must also achieve a high-level of ‘buy-in’ within the city and region without detriment to budget, programme or operational aspects of the project. This will be critical both for the successful delivery of all phases of the project to 2032 and to ensure that partners in the city and region are supportive of the University as it develops.
12. **Obtaining Planning Consent:** The phase 3 building must achieve planning consent by January 2023 to meet the inter-related requirements of the project programme and be open for business in September 2024. This will need to be achieved through a close and collaborative working partnership with the local planning authority and the project team via a Planning Performance Agreement, including a pre

applications service, identifying issues early to inform the design process and minimise the risk of a refusal and pre-commencement conditions.

13. **Levelling Up Priorities:** The co-location of the Living Lab within the university, and its integration into connected libraries, theatres, and museums, creates a Cultural Hub which will play an important role in bringing local people of all ages into the University Quarter. In this way, it will open the horizons of local people and better integrate the university with the city, producing wider economic benefits for local businesses and institutions. The Living Lab, part of the expanded University Quarter in Peterborough, will meet cultural, regeneration and economic levelling up priorities in Peterborough by:

- Creating a new landmark cultural asset, The Living Lab.
- Regenerating a dilapidated mixed brownfield site adjacent to the city centre to create a new destination space for Peterborough with the Living Lab at its centre.
- Providing facilities within the Living Lab building to support 1,700 local students studying in STEM fields, supporting a critical stage in the expansion of ARU Peterborough/the university, and enabling economic recovery and growth and levelling up by addressing the persistent local skills deficits.

14. **Be Relevant, Adaptable and Flexible:** The phase 3 building, including its environmental systems, must be designed to be adaptable to respond the changing needs in the future. The Living Lab will provide a window into the city's net zero future through events, exhibitions, and flexible learning, including festivals of ideas, immersive displays, hackathons, forums, and evening classes. Exhibitions and facilities at the Living Lab will explore green technologies, such as vertical farming, renewable energy, and green vehicles, making the University's STEM curriculum more accessible and relevant to local people.

2.1.2 Options

Living Lab, University Quarter Cultural Hub and expanded University in Peterborough development

No previous Outline Business Case has been undertaken for phase 3 aside from the Business Case for the Levelling Up Fund. The Value for Money assessment in the Levelling Up Fund application concluded that delivery of the Living Lab, University Quarter Cultural Hub and expanded University in Peterborough (the Recommended option), was the preferred way forward on the grounds of both affordability and economic impact. This Business Case has reviewed three options to test this impact as follows:

4. **Phase 1 stand alone:** The first phase of the project to establish the new University Campus in Peterborough with capacity for 3,000 students by September 2022. As this Phase is currently under construction and fully committed to by the partners it is regarded as the 'Do minimum' option.
5. **Phase 3 stand alone:** this option considers Phase 3 as if it were intended to function alone (i.e. completely separately and independently from Phase 1). It considers the

merits of investing in the Phase 3 based solely on its £28m cost to delivering capacity for 1014 students in September 2024, rising to 2347 by September 2030.

6. **Phase 1 and 3 combined:** this option reviews the cost and benefits of Phase 1 and 3 combined. It is the proposal contained in this Business Case of establishing a second teaching building for ARU Peterborough and a high-quality interactive science museum for Peterborough (The Living Lab). For the purposes of this Business Case this is regarded as the 'Recommended option'.

Having established this strategic approach to development of a University in Peterborough, the options considered are thus:

1. **Do minimum:** Deliver Phase 1 only with capacity for 3,000 students by September 2022.
2. **Phase 3 stand alone:** Review of the costs and benefits solely attributable to Phase 3
3. **Recommended option:** reviews the cost and benefits of Phase 1 and 3 combined. It is the proposal contained in the Business Case for the Levelling Up Fund to establish a second teaching building as an expansion of Phase 1 project and a high-quality interactive science museum (The Living Lab).

The following subsections present a summary analysis of these options against the project aims and objectives, including indicating:

- Any options likely to fail to deliver the project objectives or sufficient benefits.
- Any obvious impracticalities inherent in any of the options.
- Any options that are clearly unfeasible, unaffordable or too risky

Do minimum (Phase 1 only - 2020/21 base year for prices)

- The key benefits to be delivered include (in summary):
 - £294.5 million in Net Present Benefits over a 10-year period.
 - £29.0 million in Net Present Costs over a 10-year period.
 - £265.5 million in Net Present Value over a 10-year period.
 - Benefit Cost Ratio of 10.1 over a 10-year period.
 - Total of 14,311 additional graduates by 2029/30.
 - Maximum students in any one year – reached at 3,010 from 2023/24 onwards.

Phase 3 stand-alone (2020/21 base year for prices)

- The key benefits to be delivered include (in summary):
 - £68.9 million in Net Present Benefits over a 10-year period.
 - £25.4 million in Net Present Costs over a 10-year period.
 - £43.6 million in Net Present Value over a 10-year period.
 - Benefit Cost Ratio of 2.7 over a 10-year period
 - Total of 3,510 additional graduates by 2029/30.
 - Maximum students in any one year – reached at 2,347 from 2030/31 onwards.

Recommended option

- The key benefits to be delivered include (in summary):

- £363.4 million in Net Present Benefits over a 10-year period.
- £54.4 million in Net Present Costs over a 10-year period.
- £309.0 million in Net Present Value over a 10-year period.
- Benefit Cost Ratio of 6.7 over a 10-year period.
- Total of 5,357 additional graduates by 2029/30.
- Maximum students in any one year – reached at 5,357 from 2030/31 onwards.

Phase 3 building locations

The site for the University Quarter is approximately 13 hectares and sits to the north of the Embankment site currently being master planned by Peterborough City Council (PCC). It also encompasses the consented phase 1 and 2 buildings and landscape. The University will be located on the Embankment, a 55-acre site located to the southeast of the city centre and within approximately a 5-minute walk from the centre.

The overall Embankment site stretches from the Cathedral to the north, southwards to the River Nene; and from the city Lido and Theatre in the west to the Frank Perkins Parkway, a primary highway accessing the city from the A1(M), to the East.

The site currently accommodates:

- a. Large open public space to the south that is used for temporary events in the city.
- b. A regional pool / gymnasium and associated parking.
- c. Athletics track and artificial pitch.
- d. A public car park.
- e. A small children's play area.

The site is substantially an open area used for social, recreational, leisure and cultural uses and buildings are limited to the regional pool and a single storey changing facility for the running track. The site has several overgrown poorly maintained tree belts, generally planted to screen sports facilities and car parks. The site is crossed by several foot / cycle paths particularly focused along the River Nene, the leisure facilities to the north and adjacent to the elevated Parkway to the east. The site affords good access to the city centre to the north-west; is linked to the east via an underpass and towpath below Parkway and to the west to existing footpaths around the Theatre, Lido, and Old Customs House.

An option appraisal study was undertaken to assess the preferred site for phase 3, the Living Lab, within the overall Embankment site. The requirement to locate the building within land designated within the Outline Planning Application, currently being developed, was a prerequisite for the optional appraisal. In addition, to deliver the project within the required timescale, the use of land currently accommodating the athletics' track and Regional Pool was deemed not feasible.

Following consultation, four strategic locations were identified:

- Option 1** –Artificial Pitch (South of Phase 2).
- Option 2** – Regional Pool Car Park.
- Option 3** – Bishops Park, north of the Regional Pool.
- Option 4** – Bishops Road / Parkway (North-east).



Option 1 – Regional Pool Car Park

Option 2 – Artificial Pitch (South of Phase 2)

Option 3 – Bishops Park, north of the Regional Pool

Option 4 – Bishops Road / Parkway (North-east)

Following this evaluation, option 1 and 2 emerged equal in overall scoring. Through the consultation both locations were considered to have good cohesiveness with the buildings delivered in phases 1 and 2 creating a strong sense of ‘campus’ and protects the student and staff experience during future phases of work. Option 2 – to the south of the phase 1 and 2 buildings – remains the preferred option for the location of the Living Lab.

However, given the planning policy requirements associated with the replacement of the Artificial Pitches, option 1 (Regional Pool Car Park) was considered the most deliverable in planning terms at this stage in meeting the LUF funding milestones. This decision will be reviewed on appointment of the consultant team for phase 3, prior to commencement of the next stage of the design process (RIBA 2) once further detail is known on the associated planning issues and parking strategy outputs. All options considered deliver the desired outcomes of the project given that the use/scale of the building is the same for each option.

This Business Case assumes delivery of the phase 3 building to the east of the current development on the former Wirrina Carpark (option 1). Although the preferred option is to the south of the current development (option 2), option 1 forms the basis of this Business Case due to the potential programme and cost risk of option 2 arising from the likely need to gain planning approval for relocation of the football pitch currently on the embankment prior to determination of an OPA. Option 1 is not without programme and risk and requires transport and parking strategy; to be developed on appointment of the consultant team in February 2022. However, this is considered to present less risk to the required timeline.

As a result of this, this Business Case has been developed based on the option that provides the least programme risk to meet the constraints outlined above. The assumptions made in the planning strategy to mitigate the programme risk, should therefore, be revisited in February 2022 with the consultants who will be appointed by the Combined Authority on 15th February 2022.

The assessment was informed by a full desk top analysis of the constraints and opportunities of the site and each option was assessed against several key criteria agreed by the project team as noted below:

1. Heritage impact.

2. Title impact.
3. Visibility / Identity.
4. Access to city amenities.
5. Cost impact (infrastructure + public realm).
6. Landscape impact.
7. Geotechnical.
8. Impact on residential.
9. Campus growth.
10. Logistics (Construction).

2.2 Value for money

2.2.1 Economic appraisal

The main Benefits of the project stem from establishing a University Campus in Peterborough, for 2,000 students from September 2022 growing to 5,357 students by 2030 (see table below), with a curriculum and delivery model to meet the skills needs that growth in the Greater Peterborough business base will generate.

	Phase 1		Phase 3						
Year	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
On-campus	920	1533	2081	2345	2532	2666	2755	2821	2882
Off campus	1080	1477	1943	2080	2229	2308	2371	2422	2475
Total	2000	3010	4024	4425	4761	4974	5126	5243	5357

The plan for the courses to be provided, space and staffing levels required is to be developed to support Greater Peterborough and the Fens' key sectors. An initial economic appraisal of the teaching phases of the project (phases 1 and 3) has been developed based on the following parameters and assumptions:

- a. Phase 1 delivers 2000 students from September 2022 growing to 3010 students by September 2023 with a £30.3m grant contribution and an estimated £4m land contribution from PCC.
- b. Phase 3 requires an additional £28m of public sector monies (bringing total public expenditure up to £62.3m including the land contribution) with 1014 students starting in September 2024, rising to 2347 by September 2030.

The full impacts and costs have been applied over a 10-year period from 2020/21, with the following main assumptions:

- Fiscal costs are incurred as draw down of government grant in line with the capital expenditure profile for the project.
- Benefits of operations of the University from year 1 to 10 – staff and supply chain expenditure.
- GVA and fiscal benefits are estimated on the basis of uplift to salary from gaining a degree (i.e. the difference between graduate and non-graduate salary).

- Assumed that 50% of graduates who have attained a HE qualification and graduate salary, would have not otherwise done so in Peterborough and the surrounding area.
- GVA and fiscal benefits accrue from the salary uplift from non-graduate to graduate salaries – assumed can attribute 50% of these benefits to the University investment.
- Graduate salaries increase by 3.5% per year, non-graduate salaries by 2.5%.
- Increase in University staff salaries is set at 2% per year.
- Discount rate of 3.5% per year.
- GDP deflator of 2.0% per year.
- Local student expenditure is not modelled – it is assumed this would occur anyway if the individuals were instead not to go to university and chose to stay and work in Peterborough in non-graduate jobs.

Economic appraisals of the ‘**Do minimum**’, ‘**Phase 3 stand-alone**’, and ‘**Recommended**’ options have, therefore, been conducted on the following basis:

- Direct staff employment follows the forecasts from ARU’s Operating Model for phase 3 received on the 7th December 2021.
- Indirect employment is anticipated to be 200% of the direct employment reflecting the buying power of the institution, its staff and its students.
- Average GVA per employee for direct and indirect jobs created is estimated at £42,000.
- Average graduate salary in 2018 is £34,000, average non-graduate salary is £24,000. Grad salaries inflate at 3.5% per annum, non-graduate at 2.5%. GVA from graduate employment is calculated as 161% of total salary uplift (difference between graduate and non-graduate earnings).
- For the Do Minimum option, further growth is projected arising from the proposed intervention (+1%) making the combined growth factor +3% above the baseline.
- Additional corporation tax revenues from enhanced GVA are forecast at 1.36% of the GVA generated.
- PAYE from new jobs created has been estimated based on tax rates for 2019/20 per graduate level job.
- National Insurance Contributions from new jobs has been estimated at 11.1% of salaries per employee

A summary of the impact and value for money over 10 years is provided in the table below:

Appraisal Outputs	Phase 1 maximum 3,010 students per annum reached in 2023/24	Phase 3 – maximum of 2,347 students reached in 2029/30	Phase 1 + 3 combined
Total Net Present Benefits (10-year)	£294,504,261	£68,919,214	£363,423,475
Total Net Present Costs (10-year)	£29,020,967	£25,374,505	£54,395,472
Net Present Value (10-year)	£265,483,294	£43,544,709	£309,028,004
Benefit Cost Ratio (10-year)	10.1	2.7	6.7
Additional graduates to 2029/30	14,311	3,510	17,821

There are broadly four direct quantifiable benefits from the proposed options:

1. Increased employment as a direct result of the creation of additional teaching space for the University as staff are recruited.
2. Employment created in the wider economy as an indirect result of the creation of the new University.
3. The economic benefits from the salary uplift from studying the additional HE courses available as a result of Phase 3 and gaining graduate level employment as new graduates enter the workforce and graduate level jobs are created, attracted or retained within the region.
4. Benefits to the exchequer from increase wages, personal and corporation taxes.

2.2.2 Risk appraisal

The key risks with respect the economic appraisal all lie in the ability of ARU-Peterborough/the university to deliver the predicted 2,347 additional student numbers by 2030, as contained in their Operating Model for Phase 3 over and above those already agreed and committed to under phase 1 (i.e. the capacity for 3,010 students by September 2022).

The economic appraisal is vulnerable to fluctuations in the numbers of students recruited and graduated by the University as highlighted in the sensitivity analysis below. The ability to recruit locally based staff may also be a factor that erodes the impact of the new University. A further concern could be the extent to which graduate level employment is available locally and whether the new University is able to generate the scale and quality of graduates required to meet local economic needs. These sensitivities have been tested and the net impacts reported below.

The majority of UK university applicants are still planning to start university in the autumn despite ongoing uncertainty around term times and course administration. While Covid-19 is a high risk for those over 60, traditional-aged university students face relatively low risks from the disease. However, in recent weeks, we have seen just how quickly the novel coronavirus can spread in areas with a high concentration of people – and university campuses are no exception. According to a recent survey by UCAS, almost nine out of every ten undergraduate applicants said they still plan to head to university in September or October.

The number of 18-year-olds in the UK is growing. More people tend to go to university during recessions, as job numbers shrink, and students look to 'up-skill'. For phase 1 ARU provided an analysis of HE demand in the region, which predicts an increase in the number of 18-year-olds over the next 5 years leading to a 13% increase in students entering HE by 2025. Nationally, the Higher Education Policy Institute, October 2020 stated that nationally even without increase in demand in participation, demographically there would be an increase in demand of 40,000 full time higher education places in England by 2035 due to the rises in the 18-year-old population. ARU's local demographic analysis suggests also that this new demand is likely to be from groups who are more likely to stay in the region to study and then subsequently to work.

According to the Higher Education Policy Institute, over 350,000 more higher education places will be needed in England by 2035 to keep up with demand²⁴. The report shows for England:

- if demography were the only factor, without any increase in participation, there would be an increase in demand of 40,000 full-time higher education places in England by 2035 due to rises in the 18-year-old population;
- if participation also increases in the next fifteen years at the same rate as the average of the last ten years, then this increases to a demand of 358,000 full time higher education places by 2035; and
- the greatest growth in demand will be seen in London and the South East, due to both demographic changes and patterns of participation. Their projections suggest that over 40% of demand for places will be in London and the South East.

2.2.3 Preferred option

The economic appraisal of the three options presented above shows that the Benefit Cost Ratio (BCR) for the recommended option still far outstrips the alternatives. This review confirms the Recommended option as delivering very good value for money (VfM).

The preferred option delivers a Benefit Cost Ratio of 6.7 based on current costings and student numbers. While this is a significant reduction from the value of delivering Phase 1 alone, it is still an exceptional return according to government guidance and benchmarks which defines the VfM category as:

- Poor VfM if the BCR is less than 1.0;
- Low VfM if the BCR is between 1.0 and 1.5;
- Medium VfM if the BCR is between 1.5 and 2.0;
- High VfM if the BCR is between 2.0 and 4.0; or
- Very high VfM if the BCR is greater than 4.0

However, reducing this project to a simple BCR number belies the fact that the success or failure of this investment in Peterborough, relies on many factors. Simply assuming that such a high BCR value assures its success can lead to a false sense of comfort. The Economic Analysis is only one part of a well-informed decision.

2.2.4 Sustainable Growth Ambition benefits

The Combined Authority has adopted six key themes to assess each supported by project.

Theme	Ambition	Contribution
Health and Skills	Building human capital to raise both productivity and the quality of life.	Improved resident wellbeing through access to culture, with positive benefits for physical and mental health.

²⁴ <https://www.hepi.ac.uk/2020/10/22/new-hepi-report-reveals-over-350000-more-higher-education-places-will-be-needed-in-england-by-2035-to-keep-up-with-demand-while-scotland-will-see-a-decline-in-demand-for-places-over-the-same-period/>

Climate and Nature	Restoring the area's depleted natural capital and addressing the impact of climate change on our low-lying area's special vulnerabilities.	Regeneration of open green space upcycled from a mixed brownfield site with cycle paths and pedestrian footpaths lined into broader Peterborough networks.
Infrastructure	From digital and public transport connectivity, to water and energy, building out the networks needed to support a successful future.	Improved cultural and heritage offer that is more visible and easier for residents and visitors to access.
Innovation	Ensuring this area can continue to support the most dynamic and dense knowledge economy in Europe.	Increase in graduate numbers working in the city leading to increase productivity through a higher skilled population.
Reducing inequalities	Investing in the community and social capital which complement skills and connectivity as part of the effort to narrow the gaps in life expectancy and income between places.	Reduced deprivation in a left-behind area with a persistent skills gap. Increase in civic pride, leading to increased wellbeing, health and life expectancy along with a reduction in anti-social behaviour.
Financial and systems	Improving the institutional capital which supports decision-making and delivery.	Structured risk management regime, residual risk will be systematically appraised and revaluated at strategic points during the life of the project.

2.2.5 Sensitivity analysis

In light of the risks outlined above, sensitivity testing has been carried out by adjusting key variables as follows:

- 50% reduction in Net Present Benefits.
- Doubling of the construction costs.

The key outputs from these appraisals are summarised in the table below:

Sensitivity Tests	Recommended Baseline	Sensitivity to 50% drop in Net Present Benefits	Sensitivity to failure to create graduate jobs with Construction Costs Doubled
Total Net Present Benefits	£363,423,475	£181,711,738	£ 363,423,475
Total Net Present Costs	£54,395,472	£ 54,395,472	£ 108,790,944
Benefit Cost Ratio²⁵	6.7	3.3	3.3

Therefore, even allowing for these significant risks, the preferred option still returns a strongly positive net present value and BCR is sustained. Therefore, there remains a strong economic case for investing in the Recommended option to generate direct and indirect benefits for the region.

Further sensitivity analysis has been conducted in respect of student numbers as follows:

- Scenario A: Phase 3 student numbers reach a maximum of 1600 in 2026/27
- Scenario B: Phase 3 student numbers reach a maximum of 1400 in 2025/26

In Scenario A, the BCR for Phase 3 is 2.7 over a 10-year period (compared to base case of 2.7). This hardly changes because of the graduate numbers not being affected so much. In 2026/27, there is only a small reduction in graduate numbers between 2027/28 and 2029/30 (three years), as the benefits are measured over the time-period 2020/21 to 2029/30.

In Scenario B, the BCR for Phase 3 is 2.3 over a 10-year period (compared to base case of 2.7). This

The key outputs from this review is summarised in the tables below:

Base case	Phase 1 + 3	Phase 1 alone	Phase 3 alone
Total Net Present Benefits	£363,423,475	£294,504,261	£68,919,214
Total Net Present Costs	£54,395,472	£29,020,967	£25,374,505
Net Present Value	£309,028,004	£265,483,294	£43,544,709
Benefit Cost Ratio	6.7	10.1	2.7
Scenario A: phase 3 max 1600 students from 2026/27			
Total Net Present Benefits	£362,601,373	£294,504,261	£68,097,112
Total Net Present Costs	£54,395,472	£29,020,967	£25,374,505
Net Present Value	£308,205,902	£265,483,294	£42,722,607
Benefit Cost Ratio	6.7	10.1	2.7
Scenario B: phase 3 max 1400 students from 2025/26			
Total Net Present Benefits	£353,896,203	£294,504,261	£59,391,942
Total Net Present Costs	£54,395,472	£29,020,967	£25,374,505
Net Present Value	£299,500,732	£265,483,294	£34,017,437
Benefit Cost Ratio⁸	6.5	10.1	2.3

²⁵ Given by Net Present Total Benefits/Net Total Costs

The conclusions from this further sensitivity testing, is that in Scenario A, the reduction in phase 3's capacity to 1,600 doesn't significantly affect BCR at all because:

- Impacts calculated over 10 years from 2020-21 to 2029/30 so the reduction only affects the tail end of this period
- Benefits are calculated by no. of graduates (earnings) – so there's a lag from when students start then graduate and start earning
- Difference in graduates over the three years from 2026/27 to 2029/30 isn't significant

However, in Scenario B the reduction to 1,400 does affect benefits and BCR. This would be highlighted further if phase 3 were assessed over 15 or 20 years. The BCR for phase 3 alone drops to a value of 2.3. Though still acceptable, this would make Phase 3 a border line project if it were to be submitted in a competitive round for public funding.

There remains a strong economic case for continuing with the Recommended option to generate direct and indirect benefits for the region. However, if financial pressures necessitate a cut in the phase 3 building's floorspace to keep within budget, then we would advise that the reduction in student numbers be kept to a minimum.

3 Commercial Case

3.1 Structure of the deal

3.1.1 Procurement strategy

Procurement of the infrastructure is split into two categories:

1. **Land:** the proposed development plot 'The Embankment, off Bishops Road Peterborough' forms part of the agreement between the Combined Authority and PCC where PCC have committed to providing land in phases for use in the development of the new University campus. The valuation of the land has yet to be agreed and a valuation will be commissioned by PropCo1 along with the necessary due diligence of the land following approval of this Business Case. For the purpose of this Business Case, the land valuations used for Phases 1 & 2 have been applied to the plot required for phase 3. The procurement of the land from PCC may require an Advertised Sale via a notice in the local press (it is publicly owned land for disposal under the 1972 regulations).
2. **Professional team procurement:** as part of the early mobilisation plan, the Combined Authority has started procurement of the multidisciplinary team using the Crown Commercial Services Framework. The procurement is planned to be complete with the team appointed by mid-February 2022, following approval of this Business Case.
3. **Main Contractor:** procurement of the main contractor will be required to deliver the physical capital works, which will broadly include:
 - a. Off plot Utilities, highways work associated with Phase 3.
 - b. On plot infrastructure works, utilities, road, car parks, landscape and ancillary buildings.
 - c. Building and internal fit out (including IT and AV).

The Combined Authority may undertake a supplier event to explore the market opportunity for the delivery by the main contractor. This will establish the market appetite from the market for the delivery of the phase 3 scheme and on what basis the scheme can be procured. Following the supplier event, a detailed procurement strategy will be prepared outlining the interface with design, route to market through OJEU or existing frameworks and the package strategy to align warranties with current works being implemented, for approval ahead of procurement action commencing.

3.1.2 The contract

Buildings/Infrastructure

Form of contract

The construction works are likely to be delivered via a Design & Build procurement route using a two-stage tendering process and an industry standard form of contract. A design and build procurement route will provide the Combined Authority (acting under a development management agreement) with a fixed price for the construction works, which will reduce the Combined Authority's exposure to potential overspend. By adopting a two-stage tendering process, the Combined Authority's client team will work with the contractor on an

open-book basis to ensure competition is maintained throughout the second stage, and that risks are appropriately allocated and managed. Long-lead items and works packages will be reviewed with the Main Contractor to verify competition throughout the supply chain, and to offer greater financial certainty to all parties. In addition, this procurement route will give PropCo1 the opportunity, where necessary, to place early orders for long lead items ahead of contract award for packages such as piling or structural frame to secure prices or minimise programme risk. This process will assist in ensuring the contractor's risk pricing is reduced and hence achieve value for money.

It is proposed that the JCT Design & Build form with client amendments is used, in line with approach adopted for delivery of phases 1 and 2. This is an industry recognised and widely used contract form, which ensures all parties are familiar with the structure, risk apportionment, key provisions, and contractual procedures/mechanisms. It is typical for clients to amend this form to insert additional provisions around risk apportionment and payment. It will be necessary for PropCo1 to procure professional legal advice required for the necessary client amendments to this form of contract.

There is also an opportunity as part of the design development process to further review the procurement strategy outlined above in the light of changing market conditions, with any alternative viable procurement route submitted for approval ahead of procurement action commencing.

Payment mechanisms

PropCo1 will appoint the main contractor and make payment under the agreed form of contract via the company held bank account.

Following procurement of the consultant team, PropCo1 will appoint them and be responsible for paying for the design, procurement and delivery of the phase 3 building under the agreed contract to the consultant team and the Main Contractor.

The payment mechanism for the construction works associated with the provision of the new buildings will be set out in the form of contract used, and subsequently in accordance with the payment terms dictated under the Housing Grants Construction and Regeneration Act 2011. It is typical for such payments to be based on interim monthly valuations of progress completed on site and applied for via the Main Contractor's Interim Applications for Payment. These applications will be verified by the Combined Authority's appointed Quantity Surveyor through valuation/inspections on site, validated through the necessary payment notices and paid in accordance with the contract terms as part of the delegated authority from PropCo1.

Further payment amendments may be proposed on advice from PropCo1's legal advisers, to ensure that the contractor signs up to the fair payment charter and that prompt payment is made throughout the whole supply chain.

Accountancy Treatment

As no PFI or similar arrangements are proposed for construction of the phase 3 building, no accounting treatment questions arise for presentation in this Business Case. PropCo1, a local authority controlled joint venture company, will own the asset once constructed and this will be incorporated into the financial statements of the local authorities accordingly.

3.1.3 Risk apportionment

The apportionment of risk for the construction phase will be agreed as part of the procurement strategy prior to the procurement of the main contract and sub-contract packages. The apportionment of risk (yet to be agreed) will allocate risk appropriately to mitigate risk to the client by whom the contractor is appointed (PropCo1). The risk register appended at Annex 6.1 identifies several key infrastructure risks for the delivery of the Phase 3 building, noting the risk likelihood, severity, and time and cost impact, and proposed mitigation strategy.

3.1.4 Implementation timescales

The timeline of events follows the approved project master programme (see project plan in Chapter 5, Management Case), to meet the key project milestones outlined in the successful LUF funding application to achieve spade in the ground in Q1 2023, completion of the building structure by March 2024 noting that the memorandum for agreement between Department for Levelling up Housing and Communities and PCC (currently being drafted) states in clause 4.10 that the Council must spend all grant funding by the end of the funding period, 31 March 2024.

This will be followed by completion of the fit out of the living lab and teaching facilities by September 2024. The programme makes no allowance for delay in determination of the full planning application for phase 3 and assumes the critical path is maintained in line with the project plan outlined in the Management Case.

3.2 Deliverability

The LUF bid application proposed a phase 3 building of 3000m² Gross Internal Area, of new space, of which 1,000m² will be dedicated community and cultural space for the Living Lab and associated community learning space derived from a fixed budget of £27.9m. This includes a construction budget sum of £26M with an allowance for land purchase. Following a RIBA 1 site appraisal and optioneering process, it is apparent that a smaller building will have to be delivered to meet the £27.9m budget, while still supporting an additional 1,700 students. A revised design proposal has been prepared for a phase 3 building based on a 2,900m² Gross Internal Area (rounded up); a multi-use educational facility suitable for a mixed use of working, learning, teaching, collaborating inclusive of 1,000m² GIA Living Lab. The land on which this phase 3 building will be located is notionally defined based on logical physical boundaries (back of footpath) etc. and logical extension of the current infrastructure strategy for phase 1 & 2. The actual red line will be subject to finalisation of RIBA 2 design by the appointed consultant team, relevant approvals from PCC relating to the release of land from other uses and legal due diligence by PropCo1 through the landowners PCC.

The site location taken forward as part of this Business Case has been selected following evaluation of a number of options outlined in the RIBA 1 report, Option 1 to the east of the current phase 1 and 2 developments and Option 2 to the south of the phase 2 development emerged equal in overall scoring.

Both locations are considered to have good cohesiveness with the campus created in phases 1 and 2 creating a strong sense of 'campus' and protects the student and staff experience

during future phases of work. Phase 3, site option 2 to the south of the phase 1 and 2 buildings remains the preferred option for the location of the Living Lab. However, given the planning difficulties associated with the replacement of the Artificial Pitches, Option 1 (Regional Pool Car Park) is considered the most deliverable at this stage in meeting the LUF funding milestones but is subject to relevant approvals from PCC as landowner and car park operator. This decision will be reviewed on appointment of the consultant team for phase 3, prior to commencement of the next stage of the design process (RIBA 2) once further detail is known on the associated planning issues.

The building will include all associated external landscaping and infrastructure, all delivered within the available cost envelope (currently £27.9m). The revised building is an appropriate size for a building of this nature and allows more flexible use of the building as an adaptable asset for the future.

3.2.1 Budget Estimate

An order of cost estimate has been developed for 4 site options within the embankment area. Each site offered specific benefits, but also significant cost constraints that impacts on their suitability for the phase 3 building. A general review of the sites has highlighted the requirement to increase infrastructure capacity for Phase 3, the potential for cost significant and onerous planning conditions on any of the sites and the challenge of keeping a cohesive feel to the longer-term development of the University campus.

Following a review of the options, two remain, of which option 1 is being taken forward as part of this Business case, based on its deliverability within the constraints of the LUF funding. On appointment of the consultant team by the Combined Authority (as development managers) in February 2022, should Option 2 (not included in this Business Case) be considered further, then that option will require the following costs to be accommodated:

- To relocate the existing sports pitch (exclusive of land costs), options under review by PCC.
- Logistics and access to site during construction, along the edge of the regional pool car park through temporary access road.
- Increased infrastructure route beyond Phase 1 and 2 building pending UKPN advice
- Ecology and works within the tree belt.

Other than the above, all other cost assumptions remain the same as option 1 (the option included in this Business Case)

An Order of Cost Estimate of how the budget is derived is shown below to reflect option 1 (further detail of costs associated with other options can be found in Annex 6.2). The construction works costs have been benchmarked against known industry data for similar size and quality educational buildings and are aligned with the median cost parameters.

Budget / Site Analysis		University of Peterborough - Phase 3 Development				
Project Summary					14 December 2021	
Option 1						
Elem Ref					Cost Target £	£/m2
1-7	Building Works (excl Externals works)				9,008,956	3,156
8	External Works				1,268,831	444
					10,277,788	3,600
	Option Specific Abnormals					
i	Sustainability initiatives allowance (based on 20% of building building works total)			20%	1,800,000	630
ii	Remove existing and replacement of RP Car Park				675,000	236
iii	Replacement of MUGA pitch				N/A	N/A
iv	New site access from Bishop's Road (incl s278 and s106)				175,000	61
v	Ecology and replacement/removal of tree belt				N/A	N/A
vi	Existing services diversion etc (as CPW notes)				20,000	7
vii	Haul road for construction				N/A	N/A
viii	Increase to infrastructure routes				N/A	N/A
ix	Earthworks to deal with surface water flood risk				N/A	N/A
x	Obstructions in ground				N/A	N/A
xi	Allowance for GAHE / GSHP, incl infrastructure (incl in sustainability allowance)				Included	N/A
		Works Cost Estimate	£		12,947,788	4,535
9	Main Contractor's Prelims			8%	1,035,823	363
10a	Detailed Design			5%	647,389	227
10b	Main Contractor's OH&P			3%	438,930	154
10c	Main Contractor's Risk			3%	452,098	158
10d	Pre-Construction Fees				Inc.	Inc.
	Construction Total (Exc. Inflation)			£	15,522,028	5,437
11a	Fees & Surveys			11%	1,707,423	598
11b	Legal Costs (Client to advise)				300,000	105
12a	Client Project Costs (Client to advise)			5%	776,101	272
12b	PropCo Staff Costs (Client to advise)				300,000	105
13a	Design Development Risk			5%	930,278	326
13b	Client Risk and Contingency			5%	930,278	326
	Cost Limit (Excluding Construction Inflation)			£	20,466,108	7,169
14	Inflation; to 4Q23 (applied to 0-10 and 12-13)			5.8%	1,187,034	416
	Cost Limit (Including Construction Inflation)			£	21,653,142	7,584
15	VAT (applied at the prevailing rate - subject to specialist advice)			20%	4,330,000	1,517
		Estimated Outturn Costs	£		25,983,100	9,101
					GIFA	
					2,855 m2	

Benchmarking

A benchmarking exercise has been undertaken to review the build cost. Benchmarking data represents an average cost per typical building element, represented as a cost per m² of Gross Internal Floor Area and excludes site specific abnormal elements such as facilitating/demolition works, and external works, to allow a fair comparison. The benchmarking below is representative of schemes delivered 5 to 15 years prior to Brexit and Covid-19 and gives an indication of an average build cost (£Nett/m²) of approximately £3,062/m² (excluding site facilitating and external works) (BCIS²⁶ data).

To further support the above data, the phase 1 and 2 build costs, which were tendered post Brexit and Covid-19, incorporate the Combined Authority and ARU design standards, and known site wide conditions have also been benchmarked. The benchmarked cost of phases 1 and 2 is £3,936/m². This benchmark figure has been used for the phase 3 development to ensure a more robust comparison.

This use of the more current phase 1 and 2 cost benchmark supports the conclusion that the proposed phase 3 building can be delivered in the current market and to the Combined Authority standards and specifications within the estimated budget.

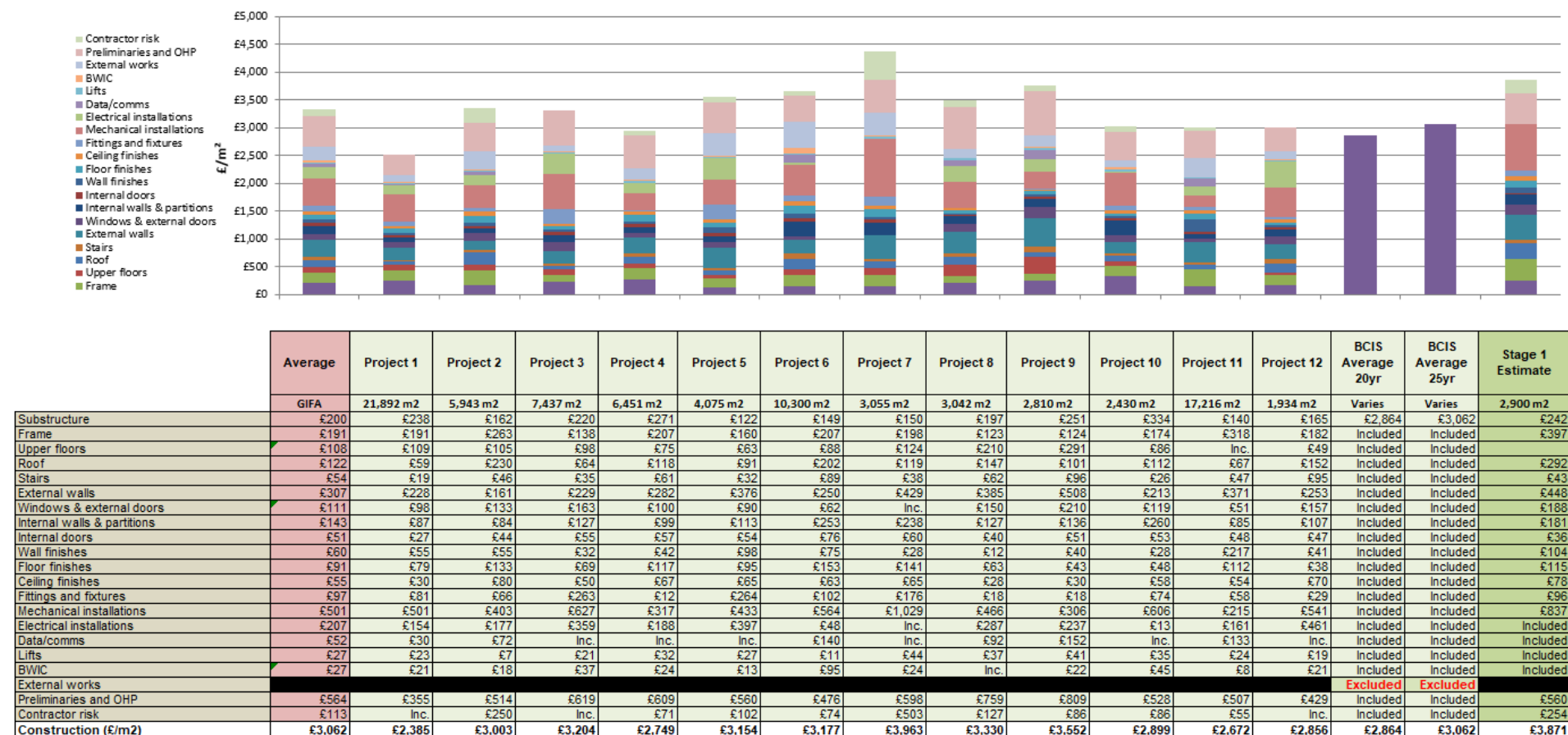
These costs exclude any cost for land acquisition which is addressed separately and does not form part of the capital costs. VAT has been applied at the prevailing rate of 20% and is not recoverable as confirmed by the Combined Authority. The Combined Authority have made allowances for their costs acting on behalf of PropCo1 taking responsibility for design, procurement, and delivery of phase 3 as outlined in the management case. These costs include:

- Combined Authority Staff costs.
- Banking and Audit.
- Financial software, insurances, company secretary fees.
- Legal Costs associated with completion of the shareholders agreement, land transaction not relating to the main contract.

Additional cost allowances have been made for known site-specific conditions.

²⁶ Building Cost Information Service (BCIS)

University of Peterborough
General Teaching New Build (Base date: 4Q21 (351) / Location: Peterborough (99))
Average Build Cost - Excluding external works



Sustainability

A 20% uplift to the build cost, a notional allowance, has been included to enable the implementation of sustainability measures as may be desired. The LUF bid indicated support for the Governments net zero objectives through building design and technologies. At RIBA 1, several sustainability frameworks (BREEAM, Passive Haus etc) were discussed for suitability particularly towards achieving NZCiO²⁷. Consideration to materials selection/choice, use of passive building fabric design principles and potential renewable energy solutions to support the sustainability requirements. The design team (to be appointed by the combined authority) will review sustainability options following their appointment in February 2022 to integrate into the design. This is in line with PCCs decision to announce a Climate Emergency in July 2019 and its commitment to make the Council's net zero carbon by 2030 and to influence partners decisions on the same.

In regard to the Combined Authority's duties under the Natural Environment and Rural Communities Act 2006 to "conserve biodiversity" and the Cambridgeshire and Peterborough Vision for Nature, a full Natural Environment Analysis will be undertaken in parallel with the RIBA Stage 2 Design for phase 3. This will include opportunities for conserving biodiversity, restoring or enhancing species or habitats.

ARU has pledged to incorporate sustainability into every aspect of the University's conduct and administration; from its formal and informal curriculum, to student life and activities, through to sustainability research and the impacts of campuses. Through its Sustainability Strategy 2020-26, ARU is incorporating sustainability and environmental awareness across teaching, research and University operations. The strategy gives a clear path towards a more sustainable University, a cross four goals

- Through its Education for Sustainability programme, ARU encourages our students to be the change, equipping them with the skills and values they need to help create a more sustainable future.
- ARU takes a distinctive approach to research – focusing not only on its academic quality, but also on its real-world impact.
- ARU strives, through its operations, to continually improve the environmental performance of its campuses, and the sustainability of its business processes.
- ARU continues to make positive contributions to its communities, both within the University and in the wider area, through partnership and collaboration.

Car parking for phase 3

The current cost allowance is for 12 parking spaces on campus for phase 3. The car parking requirements for phase 3 option 1 located on the regional pool car park is based on staff and student car parking capacity being accommodated in existing car parks in the city centre as a result of change in post Covid utilisation. Along with relocation of 128 spaces from the regional pool carpark that will need to be relocated for option 1 to be constructed as detailed in the section below on displaced services.

In addition, there will be a cost to phase 3 by way of contribution to transport mitigation, which has been considered within the building cost allowance for phase 3.

²⁷ Net Zero **Carbon** in Operation

There remains a residual risk that the parking provision on or off plot and any associated impact on the current road network exceed these assumptions, although there are insufficient details to quantify the scale of the risk there remains opportunity to value engineer the scheme while still meeting the outcomes in the LUF at the start of RIBA 1 on appointment of the consultant team. The timeline must be in place for Q4 2022 at point of contract close (inclusive of land transfer, shareholders agreement) and determination of planning. Early pre applications with the planning and highways teams at PCC will go some way to determining the nature and scale of early interventions or mitigations required to allow decisions to be taken in a timely manner.

Site Access

A cost allowance has been made for the creation of new access from Bishops Road and for some local s278 works associated with that access, which may be a planning requirement. Based on the assumption that all parking will be accommodated in current surplus, further offsite improvements allowances have been made within external works allowances as phase 1. Given the existing use of the Option 1 site is a 200-space car park, traffic movements are unlikely to exceed current baseline levels.

Displaced Services

The selection of option 1 for the phase 3 development necessitates a cost allowance for the provision of 200 car parking spaces relocated to Bishops Road car park, to replace the existing Regional Pool car park with another at grade carpark solution (exclusive of land costs). This must be relocated by January 2023 at the point of contract award, along with necessary changes to legal agreements as part of the documents presented with contract close end Q4 2022.

The above car park spaces exclude the 128 car parking spaces currently included as a planning condition for phase 2, as these are funded as part of the overall phase 2 funding package.

3.2.2 Procurement

The two stage Design and Build procurement strategy proposed can be beneficial for a project of this size and nature. Early Main Contractor involvement following the first stage of the tender process enhances the buildability of the scheme and supports early engagement of the supply chain.

Construction projects of this nature are desirable to a Main Contractor within the current construction market, however inflationary pressures as well as supply chain and labour issues brought about by Brexit and further increases as a result of Covid-19, are having a tangible impact on the short to medium-term pipelines of work for main contractors. Therefore, although a high level of competition is expected, this will inevitably impact tender prices. The project construction timescales are achievable, although tight, and the works are generally viewed as low risk, which should be reflected in the Main Contractor's commercial offer. It is anticipated that the Covid-19 pandemic will have limited on going risk and impact to site operations, however changes to government regulations on how Covid-19 is managed is a minor risk worth noting.

As the cost estimate is broadly based on tendered costs for phases 1 and 2 currently on site, many of the risk factors are already covered within the cost estimate and some inflation uplift has already been applied to accommodate any price changes in the lead up to procurement of the Main Contractor. It is also anticipated that in the period leading up procurement, delays in materials and labour supply would have eased.

Within the surrounding regions there is a wealth of experience from the construction market for delivering similar schemes through this procurement model. The site location is well served by key

transportation links and the site itself is generally unrestricted, which bodes well for acquisition of labour and materials. There is a strong supply of main contractors, and subcontractors who operate in the area and therefore interest in this scheme is expected to be high throughout the supply chain, which will typically result in competitive pricing. We, therefore, expect a high level of interest for the project from a large number of suitable contractors who have a strong portfolio of construction projects in the HE and Local Authority sectors. An initial review of key Contractors with suitable experience of design and build Higher Education projects is identified below:

Contractor	Regional Office Location
Balfour Beatty	Manchester
BAM Construct	Birmingham
Bouygues (U.K.)	Birmingham
Bowmer & Kirkland	Derby
Galliford Try	Leicester
Interserve	Leicester
ISG Plc	Cambridge
John Sisk	St Albans
Kier	Corby
McAleer & Rushe	London
McLaren Construction	Birmingham
Morgan Sindall	Rugby
Multiplex Construction	London
Osborne	London
Vinci Construction	Cambridge
Wates Group	Cambridge
Willmott Dixon	Milton Keynes

3.3 Covid-19 impact assessment

Data from the Cambridgeshire & Peterborough Independent Economic Review (CPIER), updated by new, ongoing econometric work to assess the extent of economic scarring resulting from the Covid-19 crisis, predicts that Peterborough and the Fens, will be one of the hardest hit economies in the UK. This is supported by the recent Centre for Cities study putting Peterborough as the 5th most “at risk” city in the UK from the economic impacts of Covid-19.

This is partly due to education deprivation (Peterborough is in the bottom 10% of all UK cities), resulting in a less resilient and adaptable workforce. It is also partly due to the region’s low-tech industrial base, characterised by increasing levels of administration and logistics employment, a waning high-value manufacturing sector and a reducing proportion of knowledge intense jobs. These factors combine to increase risks of the region also being one of the slowest to recover.

Therefore, a more inclusive recovery and regrowth strategy is needed for region’s economy. To recover the region’s growth ambitions requires action to be taken to increase higher value, more knowledge intense and more productive growth. Changing the spatial distribution of economic growth and supporting an increase in innovation-based business growth across the whole of the Combined Authority economy, was a key recommendation from the CPEIR and formed the basis of the following three priority goals of the Local Industrial Strategy; this will be more important than ever in the recovery following the Covid-19 crisis:

- To improve the long-term capacity for growth in Greater Cambridge to support the expansion of this innovation powerhouse and, crucially, reduce the risk of any stalling in the long-term high growth rates that have been enjoyed for several decades.

- To increase sustainability and broaden the base of local economic growth, by identifying opportunities for high growth companies to accelerate business growth where there is greater absorptive capacity, beyond the current bottlenecks to growth in Greater Cambridge.
- To do this by replicating and extending the infrastructure and networks that have enabled Cambridge to become a global leader in innovative growth, creating an economy-wide business support and innovation eco-system to promote inclusive growth

In common with a number of cities in the UK, the establishment of a university and associated innovation eco-system could produce the knowledge engine to drive the increased worker skills to raise business productivity, innovation, and knowledge intensity, capable of accelerating the economic recovery rate, in these “left-behind” towns.

3.3.1 Immediate Impact on ARUs business model (and that of ARU Peterborough)

ARU is a large university operating at scale across several campuses (including Peterborough) with a shared cost model. ARU has a long history of successful financial management. Its financial model is not heavily geared, consistently returns a surplus and the University has taken difficult decisions quickly when required. ARU’s business model rests on quick decision taking and being a first mover in the market, for example:

- First new medical school for 12 years.
- First to invest heavily into Degree Apprenticeships (now largest UK provider of these and a thought leader in their development).
- Early mover into Policing degrees.

ARU delivers bespoke portfolios and delivery models for customers, for example:

- ARU London offers flexible courses (e.g. 2 days per week) and has grown from 3,800 to around 9,800 students in the last 4 years.
- Offering employer focussed courses
- Degree Apprenticeships that are in tune with the market and able to respond very quickly to opportunities and requests

Following the impact of Covid-19 ARU set up a Covid 19 task force (September 2020 Delivery Project) and made an immediate move to online delivery. Its business model is less exposed to the potential impacts of Covid-19 than other HEIs, for example:

- ARU is not heavily reliant on international students (see numbers in section 1)
- It has dispersed campuses (with limited competition) and Covid-19 is likely to see more students staying in the region to reduce travel, allowing them to study from home.
- ARU has low building overheads (compared to other HEIs) as a result of its employer and employment-based curriculum.
- ARU’s strong base in health and public services is in tune with growing interest.
- ARU has had an increase in turnover over past year (& forecast for this) and overall student population.
- ARU has long experience in distance learning and has already successfully blended delivery with a viable strategy for September 2020 across all campus activity, providing clear reasons to bring students onto campus to further enhance their experience of working in small groups, using specialist facilities and equipment etc. This learning will have matured and embedded into delivery well before the new University opens in Peterborough in 2022.

- ARU has heavily invested in learning technology, for example their learning management system (Canvas) is state of the art and able to support and deliver an outstanding educational experience.

3.3.2 Target market segments

ARU has launched a Mobilisation Strategy and is finalising mobilisation plans (operational activities) across 7 workstreams (monitored on a monthly basis through our ARU Steering Group) covering the following areas of work

- Course development
- Learning resources and Infrastructure
- Workforce development and employee relations
- Legal, Finance and Governance
- Marketing and recruitment including admissions
- Stakeholder engagement
- Student support including SU

ARU has already launched twenty-seven courses as the phase 1 portfolio for the new University in Peterborough. This includes an innovative course design methodology including engagement with key stakeholders (schools, colleges, businesses, community groups). A data led approach to market segments has been implemented.

Key strengths of ARU that help to mitigate the risk posed by Covid-19 include:

- its range of provision, not being reliant on one or two markets;
- extensive employer engagement (150 companies in phase 1);
- flexibility, adaptability and agility in response to changing market conditions;
- ability to invest in short courses
- expertise and capacity in marketing and recruitment activity; and
- existing use of virtual Open Days, Virtual Applicant Days and Virtual Q+

While the original Academic Delivery Provider procurement process did not allow for conversations with industry, this work has now progressed through ARU's stakeholder engagement workstream and the new senior management team to further develop industry partnerships in Peterborough and the wider region. ARU is using both existing contacts and, where relevant, those in the Combined Authority's networks. Opportunity Peterborough and other regional bodies provide another route to engage with local businesses, to create awareness and develop courses that will ensure the current and future talent pool in the region is trained and work-ready. Specific activity has focused on the different market segments identified below.

18–24-year-olds from the local demographic

Population estimates of the numbers of 18–24-year-olds in the region indicate HE is about to enter a period of growth in the market, not least due to the latent demand in the “cold spot” identified in section 1 (approximately 24% of 18–24-year-olds in the region are in full time education, compared to around 33% nationally).

Area	Population (18-24 year olds)
Peterborough	14,184
Cambridgeshire	59,133
East Cambridgeshire	5,497
Fenland	7,082
Huntingdonshire	11,526
Total	97,422

ARU's analysis of HE demand in the region, predicts an increase in the number of 18-year-olds over the next 5 years leading to a 13% increase in students entering HE by 2025 (up to 6,105) with a static participation rate of 44%, and a 20% increase (up to 6,521) if the participation rate grows to the England average of 47%. Demographic analysis suggests also that this new demand is likely to be from groups who are more likely to stay in the region to study and then subsequently to work.

ARU will use its existing footprint to leverage demand (e.g. Guild House and the long established Nursing provision). Its approach is to bring in a Recruitment and Marketing team quickly to create demand, build intelligence and assess local need and infrastructure. They are creating relationships in the schools/colleges and wider community with dedicated outreach resources.

ARU has recruited an experienced Student Recruitment Manager who is based in Guild House with a team of marketing, outreach and recruitment specialists, supported by the wider ARU Marketing and Communications Directorate. They are engaging with the community, adopting a marketing approach of 'think local, act local'.

First generation HE students of all ages

ARU undertook a segmentation exercise to identify key segments followed by communications and marketing activity to build awareness with first generation and 21+ prospective students. They have leveraged their digital capability to widen reach including Virtual Open Days, Virtual Applicant Days and Virtual Q+A's. Their stakeholder comms plan focuses on creating demand (working with community groups).

People who are unemployed, retraining or upskilling (esp. post COVID-19)

ARU's Canvas platform is robust and effective, and they are developing 'tasters'; short programmes that will help build student confidence through bite size chunks of learning and online delivery. Virtual Open Days etc will again have a part to play here. ARU is also working in partnership with other providers e.g. CWA.

Large Corporates and bespoke apprenticeship programmes.

ARU has a strong track record in Degree Apprenticeships, built on a reputation for vocational based HE provision; a brand that will be further carried into Peterborough. Key activities and interventions to target this market segment include:

1. Leveraging ARU's existing Degree Apprenticeships course list:
 - a. While these require post-Covid-19 review, those listed continue to be UK wide standards that prevail in the market and are likely to remain relevant.
 - b. ARU specialises in focusing these on the needs of individual companies and sectors, for example:

- i. The Chartered Manager Degree Apprenticeships adapted by ARU for the charity sector.
 - ii. The Civil Engineering Site Manager Degree Apprenticeships adapted for Kier.
2. ARU's approach to Degree Apprenticeships in Peterborough includes:
 - i. Immediately deploying an existing and experienced member of ARU's Consultancy team to lead the short-term conversation and strategy in Peterborough including desk-based Industry and Business research, contributing to evolving plans via the Curriculum Development and Stakeholder Engagement workstreams and finding quick wins in the market and planning approaches.
 - ii. A sub-group of the course development workstream dedicated to creating the first set of apprenticeships to meet local demand.
3. Leveraging their successful approach to Degree Apprenticeships in Peterborough as exemplars, including:
 - a. ensuring the approach is always market led, collaborating with industry including listening to business needs and then providing co-designed solutions (work with Sanger/Wellcome Trust bringing The Bioinformatics Degree Apprenticeship to market;
 - b. creating long term partnerships from small starts (e.g. BBC and Amazon Web Services in Digital Marketing);
 - c. operating at scale (e.g. as part of a consortium of commercial partners and HEIs to deliver Police Degree Apprenticeships;
 - d. educating organisations on how to use and get the best from their Apprenticeship Levy;
 - e. working with IFA, ESFA, UUK and others to influence policy; ARU sits on and develops Industry Trailblazers for new Apprenticeship standards with the ESFA, (e.g. as founders of the Digital Marketing Trailblazer with the Post Office and as key members of the 'Building' Standards trailblazer) and is active in the Cambridge Ahead Skills Group.

3.3.3 Impact of social distancing

If social distancing represents even a medium-term expedient, most organisations will run out of space and capital before they can correct their buildings to become Covid-secure and still deliver the same capacity. With estimates varying between 75% and 90%, the net reduction in operating capacity anticipated is beyond the resources of almost all organisations. Nor is it easy simply to accept that the experience in, say, a 30 seat room with 8 people will be the same, or that to put 8 in one room and stream the class to other settings will be considered fair or equitable. Social distancing, therefore, fractures normal practices to levels at which they become a major resource challenge.

As outlined above, ARU is mitigating risks such as these and is already delivering a range of activity in response to Covid-19 impacts including:

- Covid-19 campus planning;
- an agile working and transformation group;
- auditing buildings to ensure that can safely accommodate staff and students;
- communicating regularly with students;

- tested contingency plans, including RAG rating all courses for suitability to deliver in different modes;
- timetabling students in a blended mode on campus (splitting the day into blocks)

This best practice will be adopted with ARU Peterborough. In addition, the Phase 1 building will not be at capacity until 2025, ensuring space will be available should social distancing be needed into the medium term. Other contingencies include options to use other buildings in Peterborough and/or region e.g. Guild House.

3.3.4 Covid-19 sensitivity test on current operating model

ARU has committed to managing the ARU Peterborough operating model to ensure it does not fail, managing risks in a variety of ways, outlined above and also to include

- Only recruiting staff as needed, including limiting senior staff costs.
- Flexible deployment of resources and management of costs within the operating model (see risk analysis in chapter 4 above).
- Using market intelligence to decide which courses to continue to develop; those that are not likely to be viable will not be taken forward. Equally, where interest from stakeholders has suggested new courses, ARU are receptive to moving quickly to create and meet demand
- Careful planning of future building on the Peterborough campus (both timing and configuration) in the light of actual growth in student numbers.
- Sharing costs across ARU will create economies of scale from which ARU Peterborough will benefit.
- Prudent use of the contingency in the model.
- Monitoring and contingency planning around the journey to independence with clear milestones to check progress, monitor risk and provide accountability.

The Heads of Terms include flexibility (recognising the uncertain times), for example, if student numbers drop and income reduces, ARU will reduce the cost base accordingly. By operating a shared service model and only employing new staff when demand dictates, ARU is confident in its ability to manage a financially viable product.

Recessional impacts

Recessional impacts may also drive students to study degrees that are sector specific via Degree Apprenticeships and higher-level degrees in companies that lead to jobs as an outcome. ARU intend this to be a key feature of the ARU Peterborough offer.

Previously, when recession hits the employed population ARU have seen that their student mix changes. In the period leading up to and during recession they see fewer employed students join part time courses with more switching to full time study. As industry starts to come out of recession and the employment market picks up, part time numbers start to increase and those students studying vocational degrees become much sought-after individuals from employers.

ARU's market know-how and extensive experience of delivering courses in different modes of study and being able to react to market forces will position them well to utilise this flexibility to deliver ARU Peterborough successfully. As the second largest of any public university provider in the UK in delivering Degree Apprenticeships, ARU has a track record of listening, working in partnership and responding positively to employers to shape the curriculum content.

ARU's portfolio of courses for phase 1 is vocational, employment specific and driven to meet market needs. By offering courses at different levels (level 3 through to level 7) through a variety of study modes (full time, part time, blended) they will have flexibility to cater for different student needs. For example, in their School of Engineering and the Built Environment ARU runs a combination of full time, placement, part time day release and block release courses leading to foundation degree, honours degree and degree apprenticeship qualifications. Students are able early in their course to move between the different modes of study as the marketplace dictates. At ARU London, they offer degree courses over two days per week to meet the needs of the student demographic (over 90% mature students), combined with the needs of industry and employers. Students are developing their qualifications and capability while often retaining part time work commitments alongside their full-time studies. This personalised approach to study will be a key feature at ARU Peterborough.

In September 2020, ARU returned to campus delivering face-to-face tuition, supported by online technologies. This experience of responding and succeeding in adversity will play a key part as they continue to develop the ARU Peterborough curricula. Greater use of online technologies and a shift towards a blended delivery approach will suit particular market segments such as those students balancing family and work commitments. The blended delivery mode is one that ARU uses successfully with Degree Apprenticeships, bringing students together on campus to create a community of learning whilst delivering content that students benefit from through face to face delivery. Learning and professional competence go hand in hand through the delivery process for PSRB accredited courses including Degree Apprenticeships, where theory and practice are inter-related. Offering career relevant courses whether they be in health, business, agri-tech or the creative and digital sectors will be a key selling point as these course lead to future employment.

The vocational, practice-based nature of ARU's proposed curriculum is designed to be attractive to adult learners seeking to upskill, re-train or join HE. ARU Peterborough is intended to be a new 'skills engine' for Peterborough and its region, undertaking activity directly with businesses through Degree Apprenticeships and work-based learning, and through community-based activities and work with local FE providers by providing access courses as a steppingstone to HE.

The 2016 Digital Skills Report showed that the shortage of digital skills represents a key bottleneck for industry and is linked to one in five of all vacancies. There is a mismatch in the types of skill offered by the labour market and those demanded. Over the set-up phase of the project, ARU is working with FE providers to ensure the courses being delivered support the skills needed in the 'new normal', that they are delivered in bite size chunks of learning using digital technologies wherever possible and that they provide a grounding to further study and employment.

The 50+ institutions in the region offering post-16 education provide a 'HE ready' group of students able to engage with ARU Peterborough's industry focussed HE portfolio. ARU Peterborough's offer is designed to tackle local skills gaps in digital technologies and more specifically advanced and specialist IT skills. There are skill shortage vacancies in Professional, Associate Professional and Technical occupations. Therefore, equipping the next generation of students with relevant technical and practical skills as well as developing their managerial and leadership skills (including people and personal skills) at a time of reduced employment, will be an investment for the future recovery of the economy. Covid-19 has increased interest in health-based courses and this will benefit the ARU Peterborough offer.

Local provision

Importantly, a key potential impact of Covid-19 is that it might make young people who live locally, more likely to study nearer to home; ARU Peterborough is designed to fill the gap identified through the “cold spot” and will, therefore, enable more students in the region to study from home should they wish to do so. ARU has a diverse mix of students and have experience of delivering an educational experience that supports the needs of local students. ARU will adopt a ‘think local, act local’ marketing approach and will build their track record of working with underrepresented groups identified by the Office for Students (OfS); the majority of ARU students fall at least into one group of disadvantage.

Partnerships

The development of the ARU Peterborough curriculum has been undertaken in conjunction with key stakeholders, using expertise within ARU to drive curriculum development forward and using many of the methodologies ARU already uses to engage employers. The course design phase has ensured employer input is firmly embedded throughout the design and approval process. ARU’s active curriculum model, ‘live’ briefs and course design intensive process are designed to ensure the courses are meeting the needs of both students and employers with a focus on developing the skills needed to seek and be successful in employment.

ARU has been developing new local, regional and national industrial partnerships targeting companies or organisations within the areas of its current and future ARU Peterborough curriculum. They have prioritised engagement of local companies including PhotoCentric, Caterpillar, Bauer and Engines. These partnerships match ARU’s key strengths to make ARU Peterborough sustainable in the medium and long term, comprising

- Short term partnerships with local/regional companies that have the potential to bring immediate results. These partnerships have already resulted in employer engagement in curriculum design and enhancement, student placements, internships and local graduate employment opportunities.
- Medium-term tactical partnerships in response to needs across the education portfolio.
- Long-term strategic partnerships with 1-2 companies in each curriculum area who are keen to engage with the new University across teaching, placements, employability, and further business opportunities including corporate education, research and knowledge transfer.

4 Financial Case

4.1 Financial model and appraisal

4.1.1 Project budgets and funding

The capital budget for phase 3 as identified on the Levelling Up Funding (LUF) bid informed the Site Appraisal exercise completed by the Combined Authority's design team

Further to the Site Appraisal, Option 1 is considered most suited to the requirements of the LUF funding and is therefore the basis of the RIBA Stage 1 design and cost estimate as summarised below.

		Option 1	
Elem Ref		Cost Target £	£/m2
1-7	Building Works (excl Externals works)	9,008,956	3,156
8	External Works	1,268,831	444
		10,277,788	3,600
Option Specific Abnormals			
i	Sustainability initiatives allowance (based on 20% of building building works total)	20%	1,800,000 630
ii	Remove existing and replacement of RP Car Park		675,000 236
iii	New site access from Bishop's Road (incl s278 and s106)		175,000 61
iv	Existing services diversion etc (as CPW notes)		20,000 7
v	Allowance for GAHE / GSHP, incl infrastructure (incl in sustainability allowance)		Included N/A
	Works Cost Estimate	£ 12,947,788	4,535
9	Main Contractor's Prelims	8%	1,035,823 363
10a	Detailed Design	5%	647,389 227
10b	Main Contractor's OH&P	3%	438,930 154
10c	Main Contractor's Risk	3%	452,098 158
10d	Pre-Construction Fees		Inc. Inc.
	Construction Total (Exc. Inflation)	£ 15,522,028	5,437
11a	Fees & Surveys	11%	1,707,423 598
11b	Legal Costs (Client to advise)		300,000 105
12a	Client Project Costs (Client to advise)	5%	776,101 272
12b	PropCo Staff Costs (Client to advise)		300,000 105
13a	Design Development Risk	5%	930,278 326
13b	Client Risk and Contingency	5%	930,278 326
	Cost Limit (Excluding Construction Inflation)	£ 20,466,108	7,169
14	Inflation; to 4Q23 (applied to 0-10 and 12-13)	5.8%	1,187,034 416
	Cost Limit (Including Construction Inflation)	£ 21,653,142	7,584
15	VAT (applied at the prevailing rate - subject to specialist advice)	20%	4,330,000 1,517
	Estimated Outturn Costs	£ 25,983,100	9,101
GIFA			
2,855 m2			

The budget estimate incorporates the limited design and survey information available following the completion of RIBA 1 by the Combined Authority's design team. It is inclusive of allowances made for client direct costs and represents the maximum capital budget currently available for the design and construction of the physical infrastructure, agreed at £26m (excluding land acquisition costs from the total funding package of £27.8m) comprising the following:

- Site Abnormals – essential enabling works required to make the site available for the required use.

- Facilitating Works – all site clearance, remediation, services diversions required to facilitate the main construction works.
- Building works – all substructure, superstructure, internal works, finishes, fittings furniture and equipment, building services, external works, and the associated management and supervision by the Main Contractor.
- Sustainability – costs associated with achieving a highly sustainable, energy and carbon efficient building.
- Fees & Surveys – all design fees applicable by the professional consultants forming the design team, including building control, plus all associated professional reports and surveys and budgets advised by the Combined Authority for the Combined Authority costs and legal fees
- Client Project Costs – the associated client direct costs consisting of loose furniture, wayfinding signage, café fit out, specific ICT enhancements.
- Design Development – contingency funds applied to the facilitating works, building works and client direct costs to cover increased costs resulting from progression and maturity of the design and associated project risk.
- Client Contingency – contingency funds applied to the facilitating works, building works and client direct costs to cover increased costs resulting from changes to clients/employers requirements at various stages of the design and construction of the development.
- Inflation – accounting for increases in building costs to the mid-point of construction
- VAT applied at the standard rate as applicable.

The Phase 3 capital build is to be funded through multiple streams comprising a combination of capital investment and other contributions. The table below, sets out the proposed sources of funding for the capital investment required by the project:

Funding Source	Amount (£)
LUF Investment Funding (PCC contribution as the lead authority for the LUF)	20,000,000
Combined Authority (approved recycled local growth funds)	2,000,000
ARU Capital Investment	4,000,000
PCC– contribution of land value ²⁸	1,870,000
Total Funding (Phase 3 only)	27,870,000

The underlying basis of the funding model is that the £20m investment funding is secured by PCC from the Levelling Up Fund (LUF) for capital investment into PropCo1, in return for shares. This, as well as the contributions from ARU and CPCA, is required to start spend and project delivery before end of March 2022 and deliver the building structure by March 2024, noting that the memorandum for agreement between Department for Levelling up Housing and Communities and the local authority (currently being drafted) states in clause 4.10 that the Council must spend all grant funding by the end of the funding period, 31 March 2024. All parties must be able to demonstrate sufficient funds to meet the payments for shares in to PropCo1, relative to the cash demands on the Company required to pay its creditors associated with the construction of the Phase 3 building. However, to enable this, PCC will need to negotiate terms with the Department of Levelling-Up Housing & Communities (DLUHC), to cash flow PCCs payments for shares, in to PropCo1, from the LUF funding.

²⁸ The final Value may be different pending an independent valuation

Currently the terms of the LUF funding are payments 6 months in arrears of actual expenditure on the project by PCC. This cashflow and capability to make payments for shares will need to be resolved prior to conclusion of the amendments to the Shareholders Agreement.

In addition, the Combined Authority's Business Board has allocated £2m of Local Growth Fund (LGF) towards investment in the phase 3 development. Further to this, PropCo1 has allowed £723,600 of its current reserves for the phase 1 build project to be used for preliminary works on the phase 3 project, relating to a RIBA stage 1 design, planning applications and the authoring of this Business Case. These monies are to be repaid to the phase 1 budget within PropCo1, upon receipt of the phase 3 shares subscriptions. The impact of this on project cash flow is identified in section 4.1.2 below.

Anglia Ruskin University (ARU – the Academic Delivery partner) will provide a £4m capital investment to the phase 3 development. This contribution is to be treated in the same way as the original investment in PropCo1. As such, start-up costs and the ongoing operational cashflows for ARU Peterborough taking into account the costs of growing to take into account Phase 3 will be the responsibility of ARU and, as was the case on phase 1, the Combined Authority and PCC will have no responsibility or obligation to underwrite such cashflows in operating ARU Peterborough/the university.

In addition to the LUF funding of £20 million, Peterborough City Council (PCC) will also provide the land for the project, which has yet to be valued; the assumed contribution of land value will be £1.87m as defined in the LUF (a definitive land valuation will be undertaken by PropCo1 on final selection of the preferred plot at the end of RIBA 1 in March 2022).

Following the allocation of the new shares the Company's share designation will be as shown in the table 1 below, after all parties have made their further investment for shares, in relation to the Phase 3 building.

Shareholding in The Peterborough Higher Education Property Company					
		PCC	CPCA	ARU	total
Phase 1	First teaching building	1.87	24.8	5.50	32.17
		5.8%	77.1%	17.1%	100.0%
Phase 3	Second Teaching building	21.87*	2	4	27.87
		78.5%	7.2%	14.3%	100.0%
	Total Shareholding in Propco1	23.74	26.8	9.5	60.04
		39.6%	44.6%	15.8%	100.0%

*land value of £1.87m may change subject to independent valuation

As set out in this Business Case, the funding strategy to finance the Phase 3 Second Teaching Building, and in line with similar capital investments of Combined Authority devolved and delegated funding, into the Phase 1, the First Teaching Building, the Combined Authority will invest its £2m funding as an investment for shares into the Peterborough HE Property Company Ltd (PropCo1), a special purpose vehicle designed to fund the construction, own and lease the buildings to ARU Peterborough for the operation of the higher education institution. As a result, the current Shareholder Agreement for the Company, will be amended to reflect the additional investment for shares. Notwithstanding the dilution of the Combined Authority's majority shareholding, it will retain its drag along rights so that in the event it chooses to exercise its rights to sell its shares in

PropCo1 (exercisable 10 years after the completion of the Phase 1 building) then it is able to drag PCC and ARU along with it in order to sell the entire shareholding in the company, subject to ARU having right of first refusal. Due to the increase in PCC's shareholding, it will also be granted such drag along rights.

Following approval of this Business Case, should the members of PropCo1 require funding to be approved based on the required cashflow such that PropCo1 can continue to develop design, procurement, planning and secure legal advice up to contract award, the cashflow and apportionment of costs will, based on cash subscriptions outlined below, be ARU 15.4%, CPCA 7.7% and PCC 76.9%. This equates to the following cashflow and costs for each party:

Cashflow For Peterborough University Phase 3 to December 2022																			
Budget Element Reference	Item	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total	Check
		£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
11a	Fees and Surveys (RIBA 1)	22,857	22,857	22,857	22,857	22,857	22,857	22,857										160,000	160,000
11a	Fees and Surveys (RIBA 2-3)						96,364	96,364	96,364	96,364	96,364	76,364	76,364	76,364	76,364	76,364	76,364	940,000	940,000
11a	Planning Fee											20,000						20,000	20,000
11b	Legal Costs						27,273	27,273	27,273	27,273	27,273	27,273	27,273	27,273	27,273	27,273	27,273	300,000	300,000
12a	Client Project costs (OBA AND FBC)	69,231	69,231	69,231	69,231	69,231	69,231	69,231	69,231			29,150						583,000	583,000
12b	PropCo staff costs						8,571	8,571	8,571	8,571	8,571	8,571	8,571	8,571	8,571	8,571	8,571	94,286	94,286
8i	Sustainability initiatives						9,091	9,091	9,091	9,091	9,091	9,091	9,091	9,091	9,091	9,091	9,091	100,000	100,000
9	Main Contractor's First stage costs									10,000	10,000	15,000	15,000	20,000	30,000	30,000	30,000	160,000	160,000
	SUB-TOTALS	£92,088	£92,088	£92,088	£92,088	£92,088	£233,387	£233,387	£210,530	£151,299	£151,299	£185,449	£136,299	£141,299	£151,299	£151,299	£151,299	£2,357,286	£2,357,286
	VAT on above	18,418	18,418	18,418	18,418	18,418	46,677	46,677	42,106	30,260	30,260	37,090	27,260	28,260	30,260	30,260	30,260	471,457	471,457
	TOTAL COST FOR MONTH	£110,506	£110,506	£110,506	£110,506	£110,506	£280,065	£280,065	£252,636	£181,558	£181,558	£222,538	£163,558	£169,558	£181,558	£181,558	£181,558	£2,828,743	£2,828,743
	Contribution Split of Cashflow																		
	ARU (15.4%)	17,018	17,018	17,018	17,018	17,018	43,130	43,130	38,906	27,960	27,960	34,271	25,188	26,112	27,960	27,960	27,960	435,626	435,626
	CPCA (7.7%)	8,509	8,509	8,509	8,509	8,509	21,565	21,565	19,453	13,980	13,980	17,135	12,594	13,056	13,980	13,980	13,980	217,813	217,813
	PCC (76.9%)	84,979	84,979	84,979	84,979	84,979	215,370	215,370	194,277	139,618	139,618	171,132	125,776	130,390	139,618	139,618	139,618	2,175,303	2,175,303

4.1.2 Financial model and appraisal(s)

PropCo1

For the phase 3 project it is essential that funding is available to proceed with the procurement of the design team to commence work and spend in March 2022 and complete work and spend of the LUF by March 2024, with full completion using Combined Authority and ARU monies by September 2024. A cashflow forecast has been prepared to identify the impact on PropCo1's finances and to forecast the anticipated funding requirements.

PropCo1 will need to ensure sufficient funds are available to deliver the phase 3 programme and enable payments in line and with fee draw down schedules when defined. The most significant financial milestone is Q4 2022, when PropCo1 will be entering into a binding contract with the Main Contractor for the construction of the phase 3 building.

In addition to the above, it may become necessary to award orders for long lead infrastructure works during the design stage Q4 2022, to secure network capacity and delivery to support use of the building in September 2024.

Noting the cashflow issue relating to the LUF payments from DLUHC to PCC as mentioned above, PropCo1 must have surety of funding, and all necessary steps taken to ensure each party subscribes

for the additional shares in PropCo1 by mid-February 2022 and has the necessary funds to make all payments falling due.

This will ensure that PropCo1 has the required funds to cover the construction costs, providing certainty of payment for the Main Contractor and their supply chain, and ensuring that cash funds are readily available for PropCo1 to make payments as required. The key funding milestones are shown in the table below. The funding sources, as identified above, are all secured.

Period	Financial Milestone	Cost	Cumulative
Oct '21 – Feb '22	RIBA stage 1 design, planning applications and Business Case.	£832,595	£832,595
Feb '22 - Dec '22	Finalisation of design	£1,996,148	£2,828,743
Jan '23 - Onwards	Commitment to Contract Sum	£23,154,357	£25,983,100

ARU-P Operating Model

A key project objective is to create a sustainable operating model for ARU Peterborough/the new university such that, after initial start-up costs, it will operate on a self-sufficient basis. The fundamental principles of a sustainable operating model include:

- Effective control of costs in relation to tuition fee income (this is at the core of the operating model).
- Recognition that estates/asset maintenance must be prioritised to avoid backlog maintenance liabilities that add to corporate risk profiles and undermine the core of the operating model.
- Ensuring all operational costs are covered by generated incomes, and any surpluses generated support reinvestment in new facilities to support further growth.

The phase 3 operating model for ARU Peterborough has been populated using the same assumptions applied for the phase 1 model with modifications only where required; the assumptions amended for phase 3 are as follows;

- The phase 1 model assumed teaching facilities would be in all three buildings – this has now been amended to phase 1 and phase 3 only.
- The timing of phase 3 has been bought forward to Sept 2024.
- The size of buildings has been amended to reflect the available budget and student numbers to deliver the outcomes required in the LUF.
- The rate of growth of ARU Peterborough student recruitment numbers for Phase 3 remains at the original assumption used for Phase 1 of 6% per annum with an additional 6% at the opening of each new phase of building. From 2027-28 the annual growth has been reduced to 2% to reflect the building nearing capacity. Future growth would require further teaching buildings.

Income:

- Tuition fee income is forecast based on a range of full time and part time courses proposed by ARU, including undergraduate and postgraduate courses both on-campus and off-campus.

- The average tuition fee is based on £9,000 per student FTE (after allowing for both premium fee levels and bursaries/hardship grants and other fee discounting practices).

Staffing:

- Academic SSR ratio of 26:1.
- Academic to Professional staff 3:1 for Faculty Professional staff numbers.
- Included numbers for the development phase (19 professional staff, 5 academic staff and 1 Project Manager).
- Included the Principal and other senior management posts.
- Assumed PAs in Professional 3:1 count.
- Assumed the majority of senior staff are part of Academic 26:1 count.
- Assumed Business Engagement & Innovation Manager within Professional staff 3:1 count.
- Professional services staff costs equivalent to ARU's current ratios to cover a shared service function to include services such as HR, Finance, Academic Registry, Library, IT OPEX, Student Services, VCO, Secretary's office, Marketing & Admissions.

Non Pay costs:

- This covers costs such as advertising, printing, stationary, s/w, books, consumables, scholarships, bursaries, staff non pay costs (travel, staff development, employee related costs), contract & professional fees.
- Costs calculated at 35% of faculty staff costs.
- OfS will require student support arrangements which will include scholarships or bursaries within the Access and Participation Plan.

Estates OPEX costs at £200 per m²:

- This is expected to cover the running costs for estates of the buildings based on the size of the buildings provided in the documentation growing in three phases.
- Running costs include items such as cleaning, utilities, rates, insurance.

Asset & Estate Maintenance:

- Assumed this is the LTM costs for Estates and IT.
- Proxy used based on current ARU values of LTM as a percentage of income.
- Rent/Lease costs have been assumed at £140 per m². (£13 per Sq.ft).
- There is an expected ten year 'rent-free' period.

Other Costs at 29% of income:

- Assumed to be equivalent to ARU's indirect costs to cover the costs of professional services such as HR, Finance, Academic Registry, Library, IT OPEX, Student Services, VCO, Secretary's office, Marketing, Admissions (Pay costs are included in the Staff cost section and non-pay costs in this section).

IT Start-up costs;

- Software and infrastructure costs included in the start-up phase are per the IT costings provided as Year 0 costs.

Loan for start-up cash flow

- £5.4m loan at estimated 2.5% interest for five years.

Inflation

- Both pay and non-pay inflation of 2% has been assumed

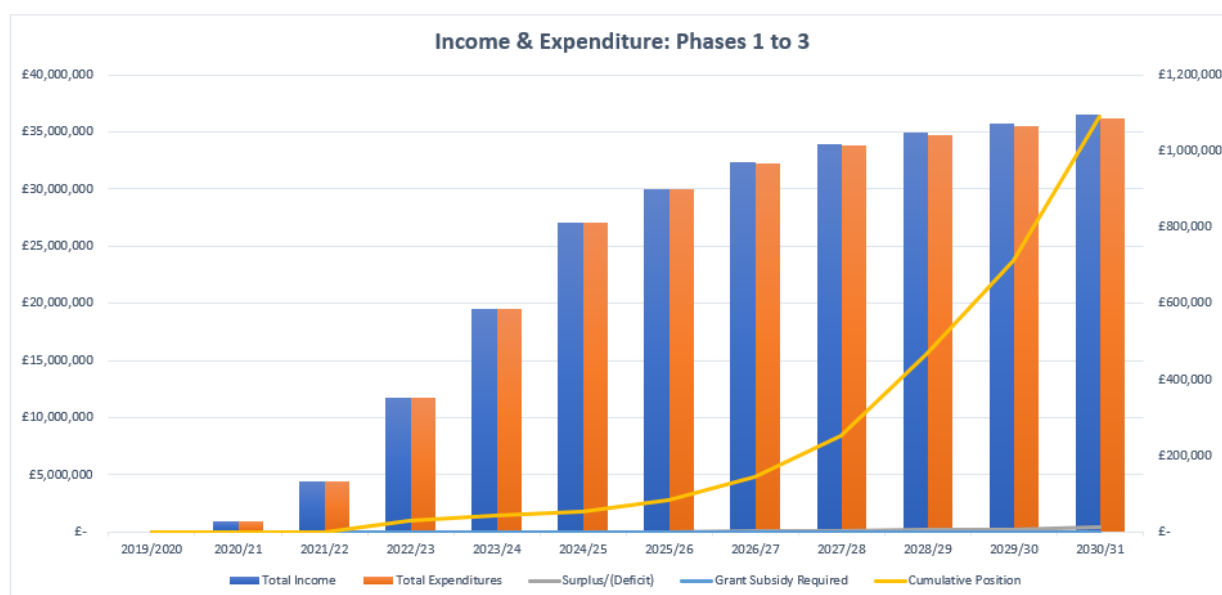
The financial model attached at Annex 6.3 forecasts revenues and expenditure for the period to 2030/31 and is in line with the longer-term ambitions of the Combined Authority. This Business Case is for phase 3 building only and as such are based on meeting student numbers of an additional 1700 students by 2027/8.

The costs associated with facilities management have been provided by ARU and are based upon a rate of £200/m² benchmarked against ARU's internal data. These costs remain as phase 1, which were reviewed against internal cost data provided by the Combined Authority's professional advisors (Mace FM) and benchmarked against reputable and well-established independent industry data, with the conclusion that these costs represent fair and reasonable allowance. The costs associated with facilities management include all aspects of hard and soft facilities management, incorporating insurances; routine maintenance; security; cleaning and waste management; energy usage; telephone communications; and general real estate management; any change to the original assumptions made for phase 1 as a result of sustainability will be managed by ARU within the current operating costs.

Mace FM advised in phase 1 that as a rule of thumb a cost of 1% of capital expenditure per has historically been applied to public sector projects under a design, develop, construct and operate contract to determine affordability prior to agreement of contracts. This relates to major replacements only and is in addition to the routine maintenance costs incurred in preserving the assets to ensure they reach their optimum life expectancy (covered by the facilities management costs). In this financial appraisal long term maintenance has been based on 1% on this basis as assumed in phase 1.

The financial operating model presented includes the operational costs and incomes of the phase 1 and 3 buildings only. The capital costs of the project and associated enabling works are to be funded from other sources as set out above.

The financial outputs from the operating model are summarised in the chart below, with further details of project cash flow are provided in the tables.



	Start Up Phase			Phase 1		Phase 3
Academic Year	2019/2020	2020/21	2021/22	2022/23	2023/24	2024/25
Total Income	£ -	£ 927,600	£ 4,472,400	£ 11,780,500	£ 19,499,425	£ 27,071,500
Total Expenditures	£ -	£ 927,600	£ 4,472,400	£ 11,752,200	£ 19,485,700	£ 27,059,900
Surplus/(Deficit)	£ -	£ -	£ -	£ 28,300	£ 13,725	£ 11,600
Cumulative Position	£ -	£ -	£ -	£ 28,300	£ 42,025	£ 53,625
Grant Subsidy Required	£ -	£ -	£ -	£ -	£ -	£ -

	Phase 3					
Academic Year	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Total Income	£ 30,028,925	£ 32,339,150	£ 33,881,625	£ 34,973,250	£ 35,783,375	£ 36,569,275
Total Expenditures	£ 29,998,000	£ 32,280,550	£ 33,770,550	£ 34,757,900	£ 35,540,100	£ 36,192,750
Surplus/(Deficit)	£ 30,925	£ 58,600	£ 111,075	£ 215,350	£ 243,275	£ 376,525
Cumulative Position	£ 84,550	£ 143,150	£ 254,225	£ 469,575	£ 712,850	£ 1,089,375
Grant Subsidy Required	£ -	£ -	£ -	£ -	£ -	£ -

The start-up phase identifies the requirement for £5.4m working capital prior to opening to students in phase 1 (2022/23). This will be funded by a short-term loan secured by ARU, to be repaid over a 5-year period.

The operating model shows sufficient revenues are generated throughout to cover operational costs, on a broadly breakeven basis from 2022/23 and revenues generated appropriately thereafter to fund the ongoing operational expenditures, with a marginal profit delivered year on year which reaches no greater than 1%.

The operating expenditures run very close to the revenues generated and there is a linear relationship between revenue and expenditure, which indicates that economies of scale and operational efficiencies are not anticipated.

Continued growth in revenue is predicted but is dependent on subsequent project phases to maintain growth in student numbers and income generated via tuition fees. The reported revenues are based on student numbers identified by ARU across a range of course types including full time, part time and distance learning-based tuition.

The cumulative position is illustrated by the yellow line within the chart, demonstrating that only a marginal surplus is generated in the model. The start-up phase does not generate any surplus, and the revenues identified are only sufficient to cover expenditures. A surplus of approximately £42,000 is generated over the 2 years phase 1 alone is in operation, culminating in a total of £1,089,375 by 2030/2031, which would be insufficient to fund any future infrastructure expansion plans, which in turn will require capital investment from alternative sources.

The collaboration agreement between the Combined Authority, PCC and ARU requires all parties to work together to deliver the project in accordance with the terms of the agreement. The parties have agreed to work in partnership and co-operate with each other to achieve the project steps and milestones within the timescale envisaged in the master schedule. There will be an annual review of the master schedule steps and milestones and the contract managers for each party will meet on a fortnightly basis (or frequency to be agreed) to discuss project progress and any disagreements which may arise. The Parties remain on track to meet milestones outlined in the master schedule which in summary are:

1. 2020 ARU Peterborough is incorporated – COMPLETE.
2. 2022 ARU Peterborough starts provision of education to students at the start of the academic year 2022.
3. 2025 ARU Peterborough is registered with OfS by the start of the Academic year 2025/26.

4. 2028 ARU Peterborough is granted unlimited TDAPs by the start of the academic year 2028/29.

4.1.3 Risk analysis

Whilst the shadow financial model set out in the OBC targeted a surplus to be generated each academic year, the financial model provided by ARU shows only a marginal surplus in each year and does not generate significant financial returns. This is a direct result of reduced targeted student numbers and increase staff costs within the ARU Peterborough operating model.

The differences from the OBC financial model and the associated risks are analysed in summary below:

- The shadow financial model included higher turnover figures as a result of higher **student numbers**, whereas the ARU model is based on lower student numbers, and as student numbers grow as a result of future growth, increased revenues are offset by increased operational costs. The absence of **economies of scale** as student numbers increase leaves scope in the model for greater efficiencies in operational expenditure. The current model, therefore, represents a worst-case scenario in this respect.
- The ARU-Peterborough model sets **staff costs** at a much higher rate than the shadow financial model, starting at 56% of income, and rising to 64% of income (the shadow financial model limited staff costs at 52% of income). This also leaves scope for future cost reductions that could further improve the outcome of the financial operating model. Conversely, the financial model is very sensitive to **cost inflation** (e.g. University staff pay increases), which may reduce the scope for economies of scale and operating efficiencies to yield financial savings.
- Costs for asset maintenance are shown as 1% of income. The shadow financial model set asset maintenance at 5% of IRV, which is more typical for Higher Education. There is a risk that 1% of revenue will result in **underfunding of building maintenance**, with resultant deterioration of the asset. Should maintenance costs be increased to 5% of IRV this would have a detrimental impact on the operational model and further funding may be required if the **contingency provision** is insufficient (see below). ARU and the Combined Authority are continuing to negotiate the details of the main transactional agreements, including flexibility in building design to meet requirements of the University and the portfolio of courses intended to be offered. As the design progresses is finalised there may be opportunity to **review the costs associated with long term maintenance** that could result in an improvement on the current forecast figures.
- The financial model does not include any **rent payments** (i.e., it assumes a 10-year rent-free period). At the end of the 10-year rent free period PropCo1 will agree, as part of the rent review defined in the agreement to lease, any rent to be paid; PropCo1 will determine how this income will be used. Rent payments beyond the rent-free period will adversely affect the model in that period and, given the marginal operating surplus in the first 10 years this could result in a deficit once rent payments fall due.
- The operating model indicates the £5.4m start-up costs being funded by a short term (5 year) loan, based upon a 2.5% interest rate. There remains a low risk to the project that this **interest rate** may not be achievable, resulting in a higher loan repayment. Conversely, there

may be opportunity under the current economic conditions for betterment in the 2.5% interest rate assumed.

- The financial model includes an ongoing **contingency** provision throughout the ten year period, averaging approximately £1m per annum. Given the other risks inherent in the financial model, this contingency provision will be a critical tool for management of financial risk in the operation of the new University, including the risks described above. If the contingency is not required, it represents a potential opportunity to provide betterment to the financial model.

A key risk under in current climate (most notably the **impacts of Covid-19**) that the level of student fees assumed may not be achievable. A reduction in revenues would negatively impact the operating model, should staff numbers and staff expenditure remain unchanged, and could lead to an annual deficit.

Conversely, as described in detail in section 3.3, the impact of Covid-19 could lead to higher numbers of students studying from home, which fits well with the business model for the new University and could, therefore, deliver student numbers in excess of those included in ARU's forecasts.

Furthermore, ARU's analysis of HE demand in the region, predicts an increase in the number of 18-year-olds over the next 5 years leading to a 13% increase in students entering HE by 2025 with a static participation rate of 44%, and a 20% increase if the participation rate grows to the England average of 47%.

Sensitivity testing of the operating model shows that a 1% net loss of revenue will translate into a cumulative deficit of approximately £300,000 within 3 years (i.e. by the end of Phase 1). If revenues fall by 3%, that deficit exceeds £1m and at 5% approaches £1.9m. Therefore, the sensitivity of the model to fluctuations in revenues is very high. Flexibility in the operating cost base has been identified by ARU as a scalable factor and a contingency budget is included in the model, however there are likely to be other calls on such contingencies and with such low initial margins, operating costs may be set too high to create a sustainable model. Further attention will be given to these variables during detailed negotiations with a view to achieving a target surplus in a range acceptable to both partners and which will help to mitigate these risks.

As a matter of principle for on-going operations once the main transactional agreements have been finalised, the new University pedagogy will need to be managed by ARU to ensure that the predicted revenue generated from tuition fees is realised and the costs are managed to match the student numbers and hence reasonable and sustainable surpluses achieved. A more detailed assessment of the potential impacts of Covid-19 on ARU's business model is provided in section 3.3.

Furthermore, the phase 1 agreements in place include terms to terminate ARU's involvement with ARU Peterborough (in the event of a failure to achieve the milestones and naturally as it becomes a university in its own right), provided always that ARU Peterborough will remain entitled to occupy the facilities on a rent-free basis during the period required to teach out students enrolled on ARU courses in Peterborough. As outlined in section 1.4 above, the documentation also includes further remedies for any failures by ARU to achieve the plans set out in those documents including ARU working with the Combined Authority, PCC and PropCo1 (with the aspiration for there to be a long term continuing relationship between the new University and ARU beyond the achievement of University Title to support the long-term sustainability of ARU Peterborough as a university).

As outlined above, the operating model does not generate sufficient surpluses to build reserves to fund the expansion of the new University in future phases nor is there adequate headroom to underpin borrowing to fund such expansion. Alternative funding strategies for any future expansion phases will therefore need to be developed by the Combined Authority and partners, including PCC and ARU, to facilitate further growth in student numbers.

4.2 Affordability

The project funding position is outlined in the table below, with project funds generated from a combination of the Combined Authority's own funding and Levelling Up Fund, supported by financial contribution from ARU. All figures are inclusive of VAT and other tax requirements.

Funding Source	Amount (£)
LUF Funding	20,000,000
Combined Authority	2,000,000
Anglia Ruskin University anticipated capital investment	4,000,000
Total Budget	26,000,000
Construction Works (Phase 3 building, inc. Client Directs and Contingency)	26,000,000
Land Acquisition (Land transferred for shares at £1.87m value by PCC as part of PropCo1)	1,870,000
Total Expenditure	27,870,000
Balance	0

The land for the Phase 3 site will be invested into PropCo1 by PCC in return for shares, with the land to be valued using the independent land valuation from phase 1 totalling £1.87m, which will form part of the PCC contribution to PropCo1. The final value of land is yet to be agreed and will determine the extent of PCC's resulting shareholding in PropCo1 including the LUF funding.

The LUF from PCC and the capital expenditure and financial investment from the Combined Authority for the phase 3 construction project is capped at £22m with the remaining investment provided by ARU. The current anticipated investment required by ARU is £4m (independent of short-term loans secured for the start-up costs). The table below demonstrates how the phase 3 capital spend will be utilised. As described in section 3 above, the construction and project cost has been benchmarked against other HE projects of similar scope and size and supports the conclusion that the proposed phase 3 building can be delivered to a suitable standard within this budget, and within acceptable cost parameters for a HE building.

		Option 1			
Elem Ref		Cost Target £	£/m2		
1-7	Building Works (excl External works)	9,008,956	3,156		
8	External Works	1,268,831	444		
		10,277,788	3,600		
<u>Option Specific Abnormals</u>					
i	Sustainability initiatives allowance (based on 20% of building building works total)	20%	1,800,000	630	
ii	Remove existing and replacement of RP Car Park		675,000	236	
iii	New site access from Bishop's Road (incl s278 and s106)		175,000	61	
iv	Existing services diversion etc (as CPW notes)		20,000	7	
v	Allowance for GAHE / GSHP, incl infrastructure (incl in sustainability allowance)		Included	N/A	
		Works Cost Estimate	£	12,947,788	4,535
9	Main Contractor's Prelims	8%	1,035,823	363	
10a	Detailed Design	5%	647,389	227	
10b	Main Contractor's OH&P	3%	438,930	154	
10c	Main Contractor's Risk	3%	452,098	158	
10d	Pre-Construction Fees		Incl.	Incl.	
		Construction Total (Exc. Inflation)	£	15,522,028	5,437
11a	Fees & Surveys	11%	1,707,423	598	
11b	Legal Costs (Client to advise)		300,000	105	
12a	Client Project Costs (Client to advise)	5%	776,101	272	
12b	PropCo Staff Costs (Client to advise)		300,000	105	
13a	Design Development Risk	5%	930,278	326	
13b	Client Risk and Contingency	5%	930,278	326	
		Cost Limit (Excluding Construction Inflation)	£	20,466,108	7,169
14	Inflation; to 4Q23 (applied to 0-10 and 12-13)	5.8%	1,187,034	416	
		Cost Limit (Including Construction Inflation)	£	21,653,142	7,584
15	VAT (applied at the prevailing rate - subject to specialist advice)	20%	4,330,000	1,517	
		Estimated Outturn Costs	£	25,983,100	9,101
				GIFA	
				2,855 m2	

Conclusions

Project affordability is, therefore, critically dependent on:

1. Securing the transfer of LUF funding into PropCo1 as well as all other investment capital funding within the company held account or an agreement reached through the PropCo1 members on releasing sufficient funding to cover costs to date and up to contract award in December 2022.
2. Risks associated with income (student numbers) and expenditure being able to be mitigated through cost control, increased income and/or use of the contingency provision.
3. Risks associated with enabling works, Land Acquisition, planning approval and agreement of contract sum being able to be mitigated through management of each workstream within the required timeline and budget while continuing to meet the outcomes of the LUF.

Subject to these considerations, at this stage of project development and implementation, it is anticipated that funds will be available (as described above) to meet both the project budget, requirements of ARU Peterborough's operating model and the LUF.

With respect to the infrastructure works, no cash-flow implications are anticipated for the PropCo1 as the Funding source in place by each party will be transferred into PropCo1 before the construction phase goes ahead.

5 Management Case

5.1 Stakeholders

The stakeholder analysis associated with phase 3 of the new University project can be split into two phases: first the design, procurement and delivery of phase 3; and second the expansion of the operations of ARU-Peterborough/the new University to deliver the anticipated outputs of phase 3.

This Business Case describes the approach to procurement of the consultant team, stakeholder management during the design, procurement and delivery phase and in expansion of the operations of ARU Peterborough/the new University.

Procurement of the consultant team for phase 3

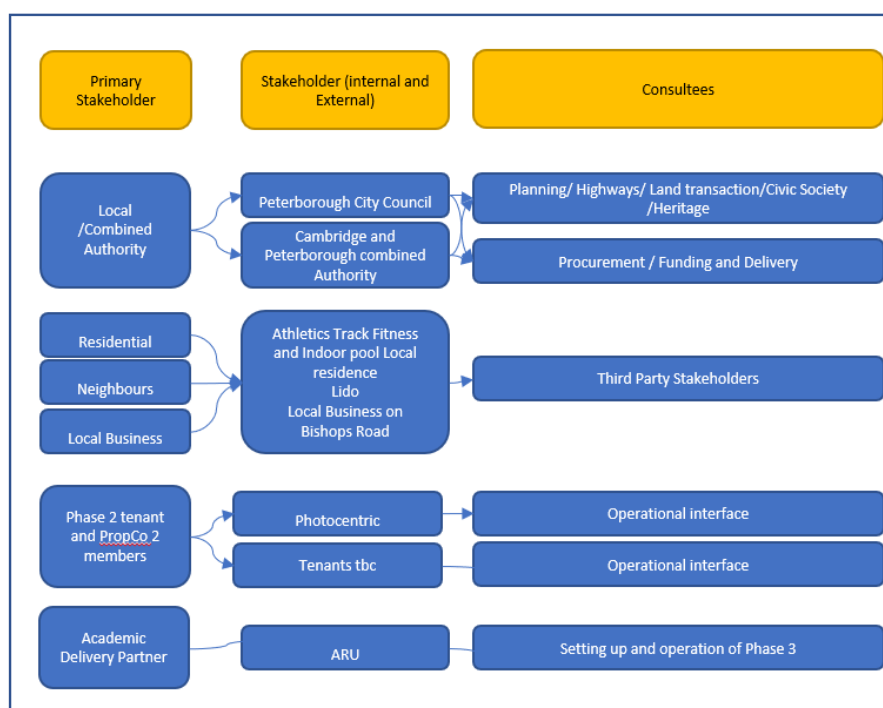
On behalf of the Peterborough, HE Property Company Ltd (PropCo1) the Combined Authority are procuring a consultant team to design, procure and deliver phase 3. The timeline set out in the programme requires a consultant team to be appointed on approval of this Business Case to commence work and spend of the LUF funding following appointment on the 15th February 2022.

Design Procurement and Delivery of Phase 3

The communications strategy will be managed by the Combined Authority with support from the appointed consultant team in the design procurement and delivery of the university phase 3.

The project has a number of stakeholders, summarised in the following categories.

1. Peterborough City Council (PCC) and the Combined Authority, including Peterborough Ltd, the PCC subsidiary operating the Regional Pool and Athletics Track.
2. The owner of the Innovation Incubator - The Peterborough R&D Property Company Ltd (PropCo2), including the Innovation Incubator tenants, Photocentric and others to be confirmed.
3. Neighbours including local residents and owners, and in particular the Civic Society and Peterborough & Nene Valley Athletic Club (PANVAC).
4. Academic Delivery Partner – Anglia Ruskin University (ARU) and ARU Peterborough.



These key internal and external stakeholder relationships will be managed by the Combined Authority and its appointed team of consultants (once procured), in consultation through the design, procurement and delivery of phase 3 on behalf of PropCo1. The relationships with the stakeholders will be managed under an agreed communications strategy outlined between PCC, the Combined Authority and ARU.

Set up and Operation of the New University of Peterborough

ARU will be responsible for the management of associated stakeholders to achieve the objectives of the new University (taking into account its expansion with phase 3), working with employers and stakeholders in the communities the University will serve. This will be led and managed by ARU in consultation with PCC and the Combined Authority.

5.2 Achievability

The Combined Authority and PCC have put in place the resources needed to manage the work streams required to deliver the project, based on an understanding of the priorities outlined in the LUF bid. Both authorities have to date provided resources in line with those requirements and both are, therefore, confident that the project is achievable based on their readiness and the available resources to meet the requirements of both agreements. This will include a further full time Project Manager within the Combined Authority's University Programme Management Team, bringing the total to three project managers (one for each phase) and an administrative assistant. The Combined Authority will appoint external consultants, where required, to ensure the necessary capacity and capability is available for successful implementation of the project including:

- Design, project and cost management: as described with in the project management section below.
- External legal support to augment the Combined Authority's and PCC legal teams.

Further external support or internal resources will be secured and deployed should any capacity/capability shortfalls be identified, subject to relevant governance approvals across the partner organisations, to ensure the project is fully resourced for successful delivery.

PCC have provided resources to support the project in its successful application for LUF funding and development of this phase 3 Business Case. In addition, the development management role undertaken by the Combined Authority will be complemented by a client-side project manager for PCC to coordinate the various workstreams and approvals necessary to resolve corporate landlord issues and land transfer among other activities.

ARU has put in place the resources needed for project delivery based on the timeline from contract award (see section 3 above). ARU has provided details of the resource profile as an indication of current thinking of resource planning including the recruitment and employment of Senior Management, Academic and Professional staff, based on the proposed student numbers and staffing forecasts within their final submission. With the Principal now in place ahead of the opening of the new University. ARU is committed to added value in recruitment as set out in the following extract from their final submission:

Economic: *We will ensure we adopt a ‘think local’ policy for recruitment of staff and procurement of resources to ARU-P, so that we develop a circular economy and keep as much wealth as possible in the local area*

Social: *Our Recruitment Policy already supports applications from individuals with protected characteristics and this will also be embedded in recruitment of staff at ARU-P. We believe ARU-Peterborough needs to a place where the community feels welcome.*

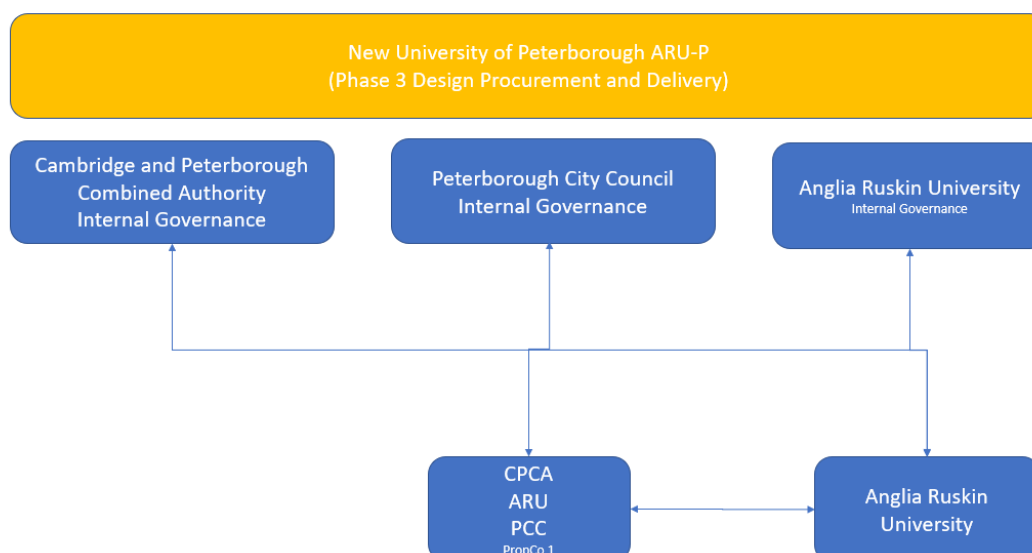
5.3 Project management

5.3.1 Structure and Governance

Project governance will be established to reflect the arrangements within each organisation and specific terms of reference for the project will be mandated by each organisation.

- The Combined Authority’s governance arrangements require all further investments into PropCo1 and all Shareholder Protection Matters included in the PropCo1 Shareholders Agreement to be agreed by the Combined Authority Board. All decisions of this nature will be submitted to the Combined Authority Skills Committee and the Business Board, if necessary and in accordance with the terms of approval of the LGF contribution, and then taken to the Combined Authority Board for final approval.
- PCC governance arrangements require all decisions relating to transfer of LUF funding to PropCo1 and the transfer of land to be approved by the Executive Director, Place and Economy in conjunction with the Chief Financial Officer, as jointly delegated officers by the PCC cabinet.
- Further approvals relating to release of the regional pool car park for development and its impact on adjacent car parks will be required by PCC in addition to approvals already delegated to officers of the Council from an October 2021 cabinet report which set out the arrangements for transfer of funds to PropCo1 and the transfer of land subject to conditions.
- ARU governance is led by its Vice-Chancellor’s Group (VCG) which acts as a forum for discussion of strategy and direction, and determination of high-level priorities for approval by the Board of Governors. The University Executive Team (UET) is the formal, senior decision-making body of the University (under delegated authority from the Board) and the wider Corporate Management Team (CMT) acts as a forum for discussion and development of strategy and operational delivery, bringing together all Director-level appointments whom are based at the main campuses of the University. One member of the UET will be the Principal and Chief Executive of ARU Peterborough, reporting directly to the Vice-Chancellor and leading the Peterborough Development Team, working closely with the Combined Authority and key stakeholders. The Senior Management and Board of Governors of ARU Peterborough will have an increasingly significant role in the governance of ARU Peterborough from 2022.

The three parties (PCC, the Combined Authority and ARU) are governed by the PropCo1 Shareholders Agreement which defines parties’ contractual obligations in relation to their shareholdings in PropCo1. This is outlined in the diagram below:



PCC, ARU and Combined Authority have already formed a special purpose vehicle – the Peterborough HE Property Company Ltd ('PropCo1') – to deliver Phase 1 of the new university campus in Peterborough. The phase 3 project is intended to be delivered by PropCo1 which will continue to be the entity through which funding is deployed, and delivery of both Phases 1 and 3 will be PropCo1's responsibility.

PropCo1 will acquire the land for Phase 3 from PCC in return for shares in PropCo1, under a separate Land Transfer Agreement.

A third-party valuation and due diligence on the land to be acquired by PropCo1 from PCC will be undertaken, the transfer of which must be completed for the point of building contract award alongside the Agreement for Lease (AFL) between PropCo1 and ARU Peterborough.

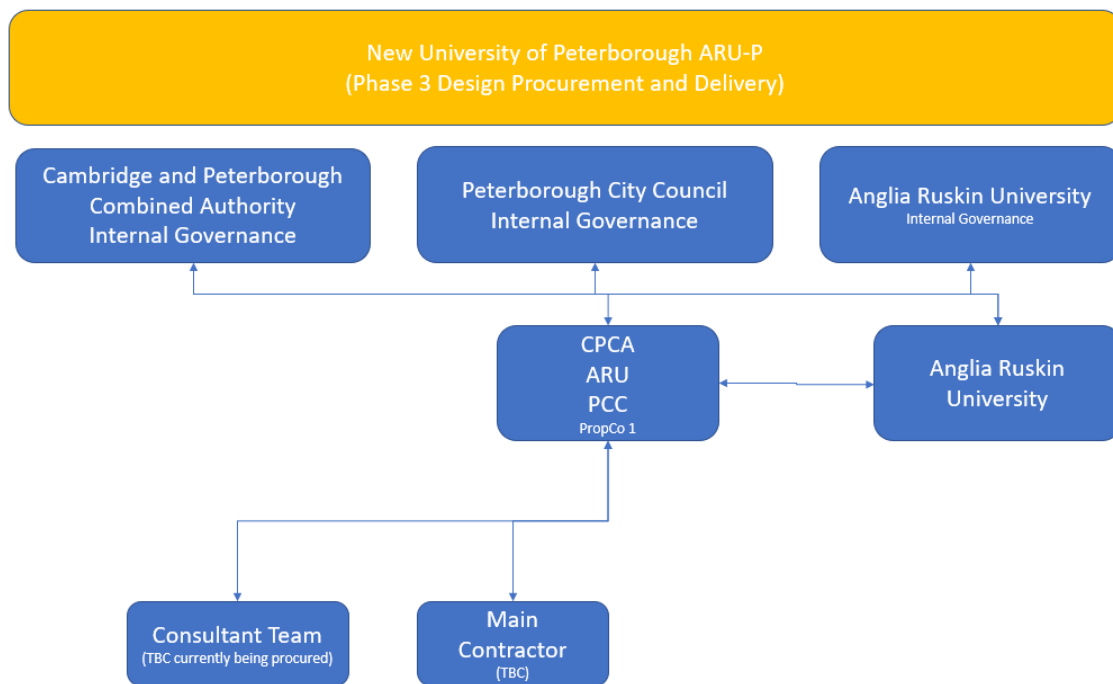
The Combined Authority will, under the Development Management Agreement be granted authority by PropCo1 to manage the design, procurement and delivery of phase 3, with the Board of PropCo1 acting as the programme management board. In this arrangement, responsibility for the delivery of phase 3 remains with PropCo1 and the terms of reference will be updated on commencement of phase 3; this will remain in place up to completion of the phase 3 building.

ARU will feed into PropCo1 via the contract administrator (to be provided by the consultants to be procured by the Combined Authority) in the development of the design and interface with the capital works. They will also update the Board in respect of curriculum design and development as the project progresses.

Once appointed, the main building contractor will report to PropCo1 via the contract administrator in respect of the agreement of the contract sum, enabling works and delivery of phase 3.

Day to day management and progress meetings will be managed by the contract administrator and will include ARU and the Main Contractor for delivery of the phase 3 building.

The organisational structure for the delivery of phase 3 is outlined below.



5.3.2 Roles and Responsibilities

Combined Authority

The development of phase 3 of the new university campus will be led by PropCo1 with delegated authority to the Combined Authority who, under the Development Management Agreement will be granted authority by PropCo1 to manage the design, procurement and delivery phase 3.

The Combined Authority (led by the SRO - Higher Education Programme Director for the new ARU Peterborough development) is providing leadership for the development of the project and will ensure a professional team is in place to support the design procurement and contract administration for delivery of the infrastructure for phase 3.

Funding for Combined Authority, as development manager, will be provided as part of the overall capital funding received from it as share investments from the Partners into PropCo1.

Peterborough City Council (PCC)

PCC is intending to provide the land for phase 3 of the project and will continue its representation on the PropCo1 board.

ARU

As described in section 3, ARU will provide the skills, knowledge, experience and resources to make a practical reality of ARU Peterborough as a new higher education provider and ultimately a university with degree awarding powers and University Title. This includes responsibility for:

- Staff recruitment
- Curriculum design and development
- Staff workload planning, resource scheduling and timetabling
- Student recruitment, marketing and admissions
- Student and academic services and systems development
- Library and learning resources services/systems
- Strategic planning, finance and governance services and systems development
- Full range of 'soft' FM and ICT services and resources

Consultant team

The Combined Authority will procure a professional consultant team ready for contract award following approval of this Business Case. The Consultant team is likely to consist of:

1. project management, cost management
2. architecture
3. mechanical and electrical engineering, environmental
4. structural and civil engineering
5. landscape design
6. planning consultant

5.3.3 Project Plan

The project plan has been developed within the following constraints and assumptions:

- Delivery of the phase 3 building to be in operation for Q4 2024 in line with the LUF funding milestone.
- In alignment with the Planning strategy that promotes the submission of a full planning application for phase 3, that is not reliant on any outline planning permission being consented and the wider masterplan for the embankment being undertaken by PCC scheduled for conclusion in Q1 2022.
- Approval of the Business case in January 2022
- Appointment of the consultant team to commence design and legal advice at the start of February 2022

The first milestone for PropCo1 will be the procurement of the multidisciplinary team and legal advice for 15th February 2022, ready for commencement of the design and procurement of phase 3 which will need to be in place for contract award in January 2023.

Procurement of the main contractor to deliver the physical capital works will be determined by the new consultant team on appointment in February 2022. The procurement is currently assumed to be a two stage Design & Build process with the successful supplier being selected based on an evaluation of quality and deliverability against profit and overhead costs. The successful supplier will initially be awarded a Pre-constructions Development Management Agreement through which the design will be progressed to enable a lump sum JCT Design & Build contract. This route approach is being proposed to ensure the project can progress in accordance with the project timescales.

The development will be constructed on land owned by PCC which, in conjunction with the buyer, PropCo1, will arrange third party valuation and due diligence on the land before contract award alongside the Agreement for Lease and fixed price sum with the main contractor who will deliver the new facility. PropCo1 will acquire the land from PCC under a separate Land Transfer Agreement ahead of necessary land transfer. This process has previously been followed for phase 1 of the University.

The planning application for the development will be prepared as part of the early design gateways to ensure timely application ahead of the start on site date. The Planning strategy for phase 3 remains under review by with the local planning authority and PropCo1 shareholders; for the purposes of this Business Case we have assumed a planning strategy based on pre application advice received in the run up to the completion of this business case.

The Local Planning Authority (LPA) is currently seeking advice from Counsel on nine questions relating to EIA procedural matters, securing contributions / off site mitigation along with other

interrelated dependencies on PCC namely, Parking & Transport and a PUFC arena proposal. The LPA have stated in their briefing note to counsel that:

- ‘given the funding deadlines for Phase 3, it is now intended that this will come forward separate to the outline planning application as a standalone full planning application’.
- ‘N.B. To prevent delay to the phase 3 development, Planning Officers have so far recommended that the full planning application be submitted and determined for phase 3 before an Outline Planning Application is submitted for the entire university campus (not part of this Business Case). This is to prevent phase 3 being caught by the Environmental Impact Assessment¹ * needing to consider cumulative impact of all phases. We are seeking clarification above as to whether this advice is correct.’

The strategy outlined at the 29 November 2021 meeting with the local planning authority states, based upon officers’ professional opinion, that the phase 3 application should be submitted and determined before the outline planning application (OPA) is submitted to prevent delays to the determination of phase 3. Phase 3 will need to mitigate its own impacts as a standalone application, and also be worked up so that it aligns with the wider strategy for the OPA. EIA Screening will need to be carried out for the phase 3 application and at the point of submitting the screening request it is recommended that a plan for mitigating its impacts will need to be established for highways, loss of sports facilities, etc to give it the best possible chance of being screened out as EIA development. The local planning authority will seek legal advice on any aspect of its approach that it feels requires a second opinion.

An option appraisal study has been undertaken to assess the preferred site for phase 3 as described in Chapter 2 of the Business Case. This Business Case assumes delivery of the phase 3 building to the east of the current development on the former Wirrina Carpark (option 1). Although the preferred option is to the south of the current development (option 2), option 1 forms the basis of this Business Case due to the potential programme and cost risk of option 2 arising from planning constraints. Option 1 is not without programme and risk and requires transport and parking strategy to be developed on appointment of the consultant team in February 2022. However, this is considered to present less risk to the required timeline.

The project plan for phase 3 is shown below which provides a comparison against the approved programme within the LUF (dated 17th June 2021). To meet the LUF timescales for opening in September 2024 the following key activities must be achieved. Ahead of approval of this Business Case, the Combined Authority will procure a consultant team to test the RIBA 1 design, develop design from RIBA 2 onwards including procurement of the main contractor, and act as contract administrator to deliver Phase 3 by Q4 2024.

The programme timeline assumes that the planning strategy and plot constraints are resolved in tandem with the selection of the preferred plot at the end of RIBA 1, alongside the resolution of the transport and parking strategy within the available budget. This will allow the planning strategy outline above to be implemented to ensure determination of full planning by January 2023 in tandem with an agreed contract sum, shareholders agreement and land transfer to allow contract award and mobilisation to commence in line with the LUF programme in March 2023.

The project plan has been developed around the following key dates:

1. Spade in the ground (commencement of phase 3) Q1 2023.
2. Structure, complete construction of the building structure by March 2024.

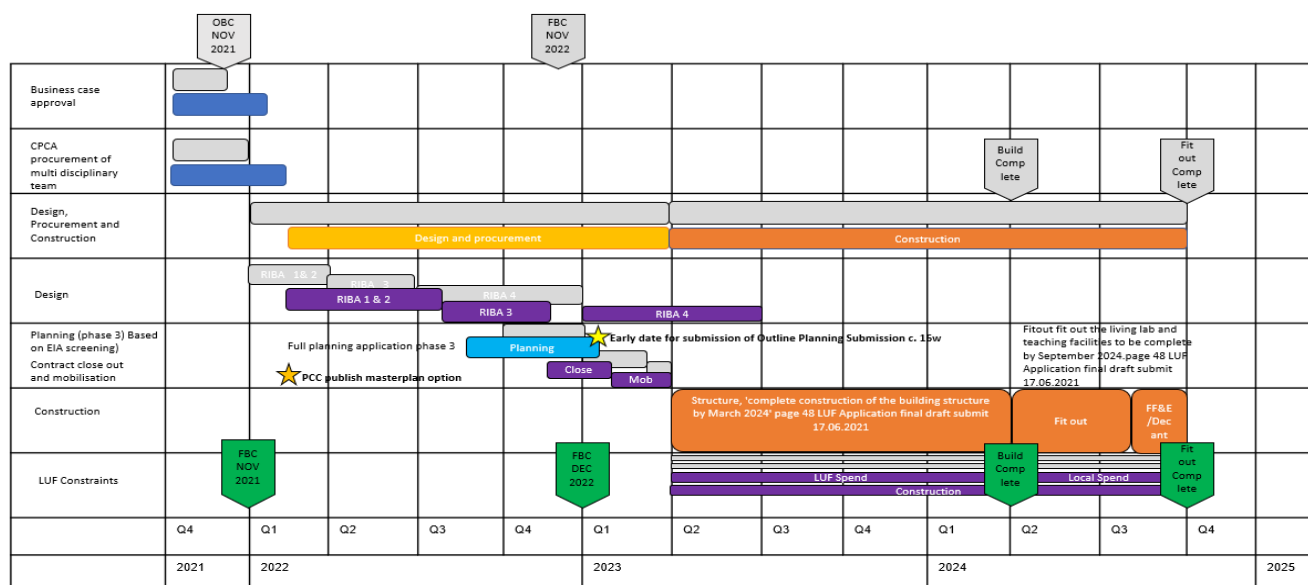
3. Fitout fit out the living lab and teaching facilities to be complete by September 2024.
4. Completion of phase 3 (for occupation) September 2024.

To achieve these milestones there are 5 key work streams:

1. Procurement of the consultant team by 15th February 2022.
2. Determination of full planning application by January 2023.
3. Develop, design and procure a Main Contractor to deliver phase 3 infrastructure. Q4 2022
4. Approval of this Business Case with delegated authority to develop the design and appoint the consultant team in February 2022 to develop the design, submit full planning application for phase 3 and procure a main contractor for award by the end of 2023.
5. PropCo1 to formalise legal agreements for land by Q4 2022 to align with award of the main contract and planning approval to allow commencement on site Q1 2023.

An updated Full Business Case will be presented alongside the approval of the Main Contractor in December 2023 to confirm the assumptions made in this submission which will provide approval to enter into the contract, transfer of land, shareholders agreement to deliver an operate the new Phase 3 development.

The critical path commences on the Combined Authority award of the consultant team contract on 15th February 2022 through to development of the design, and concurrent with planning approval procurement of the main contractor; such that Propco 1 can finalise legal agreements and the land deal in parallel with the determination of the full planning application for phase 3; and appointment of the main contractor to allow start on site Q4 2023 for completion by September 2024.



LUF programme comparison dated 17th June 2021

5.4 Change management

Change management will take place under two scenarios: delivery of phase 3 of the new university campus under delegated authority from PropCo1 to the Combined Authority and subsequently the occupation of the building by ARU Peterborough.

The key principles are that PropCo1 will delegate authority to the Combined Authority and its agent to manage the delivery of phase 3 under the Development Management Agreement, reporting to PropCo1. Should change be required then authority will need to be sought from PropCo1.

ARU Peterborough will occupy the Phase 3 building, reporting to PropCo1 on an annual basis in respect of the building condition and maintenance. ARU and ARU Peterborough will also monitor, review and report to the Combined Authority and PCC on its progress against the roadmap set out in the Collaboration Agreement between the Combined Authority, PCC and ARU which sets out the intended corporate and academic governance arrangements for delivery of higher education courses by ARU Peterborough (moving towards registration with the OfS degree awarding powers and University title). The parties agree to review each of the roadmap, milestones and steps towards them on an annual basis to consider whether the plan remains achievable and compliant and where it is not believed to be so, to agree changes to be made.

5.5 Benefits realisation

The benefits sought from the project are a critical element of the Combined Authority's investment programme under the Devolution Deal as well as monitoring and evaluation requirements set out by DLUHC through the LUF. Benefits realisation arrangements, within overall project governance, must, therefore, ensure benefits are realised over the life of the project.

The objectives and benefits of the project will be realised at key project milestones as follows:

1. Completion of the main transactional agreements including land transfer legal support will be procured by the Combined Authority to aid the Combined Authority to make the necessary changes to the Shareholders Agreement for PropCo1, to accommodate the additional investments and the use of those monies for the construction of the second teaching building.
2. Meeting the agreed milestones and targets for design and delivery of the physical Infrastructure. This will be managed via PropCo1 in line with the agreed programme for completion of the phase 3 building.

Responsibility for benefits realisation above will be for PropCo1. ARU Peterborough will be responsible for meeting the student headcount growth targets and for the quality of HE delivery.

Infrastructure

The agreed infrastructure milestones and targets will be reported against at monthly PropCo1 Board meetings by the Combined Authority who will be granted authority under the Development Management Agreement to act on behalf of PropCo1 to manage the delivery of phase 3 to practical completion and close out of 12 months defects.

Academic Delivery Partner Benefits Realisation

Milestones, targets are set out in the Collaboration Agreement. These will be audited under the terms of the Collaboration Agreement and will be reviewed on an annual basis. All milestones are outlined in the Collaboration Agreement master schedule and can be summarised as follows up to 2028 which will continue to be monitored and progress regularly reported against by ARU:

1. 2020 ARU Peterborough is incorporated – COMPLETE.
2. 2022 ARU Peterborough starts provision of education to students at the start of the academic year 2022.
3. 2025 ARU Peterborough is registered with OfS by the start of the Academic year 2025/26.
4. 2028 ARU Peterborough is granted unlimited TDAPs by the start of the academic year 2028/29.

5.6 Risk management

A detailed project risk register (including risk control strategies) has been developed (attached at Annex 6.1) based on the following risk categories:

1. Surveys and Site Constraints
2. Commercial Viability
3. Design
4. Legal
5. Procurement
6. Operational
7. Governance and changes to Brief
8. Construction Logistics
9. Programme

The top-level risks and control measures are outlined in preceding sections of this Business Case.

The responsibility for management of risk will lie with PropCo1 under the joint venture in respect of the development of the Phase 3 building and with ARU Peterborough for the operational delivery risks. As described above, it is intended that PropCo1 will delegate authority to the Combined Authority for the management of risk associated with the design, procurement and delivery of the phase 3 building.

Authority for the management of risk will remain with PropCo1 up to completion of the phase 3 building. Day to day responsibility for risk management will be the responsibility of the Project Manager, who will hold quarterly risk workshops with members of the project team. The risk register will be reviewed at least monthly by the PropCo1 Board of directors. These monthly risk reviews will be an integral part of monthly reporting to PropCo1.

Where management of risk requires interventions beyond the authority delegated to the Combined Authority by PropCo1, decisions will be referred by exception to PropCo1 for agreement on how risks are to be mitigated in line with the governance and agreed terms of reference outlined above and to be set out in the Development Management Agreement.

5.7 Project assurance

The Combined Authority's Assurance Framework can be found at cambridgeshirepeterborough-ca.gov.uk/assets/Combined-Authority/Cambridgeshire-and-Peterborough-Combined-Authority-Assurance-Frameworkv3final-002.pdf. It sets out how the seven principles of public life shape the culture, processes and practice within the Combined Authority in discharging its responsibilities in the administration of the Cambridgeshire and Peterborough Investment, incorporating the Single Pot funding.

5.8 Post-project evaluation

The project will adopt the BSRIA Soft Landings framework and follow the five Stages of the Soft Landings process. Stage 1: Inception and Briefing, Stage 2: Design Development is predicated on Stage one; while Stage 3: Pre-handover requires follow-through with Stage 4: Initial Aftercare.

The benefit of this approach is that it will help solve any performance gap between design intentions and operational outcomes by appointing soft landing champions who will agree the roles and responsibility of the client, contractor and professional team.

This process will commence from Royal Institute of British Architect (RIBA) stage 2 and run through to completion of the construction of phase 3 and into the occupation and aftercare stages.

Design

Workshops will be held with the project team to review learning from previous projects/phases and develop a design that will work from the point of view of the manager and users. This will include agreement and review of an energy strategy and commissioning (for incorporation into relevant tenders) as well as review of proposed systems for usability and maintainability.

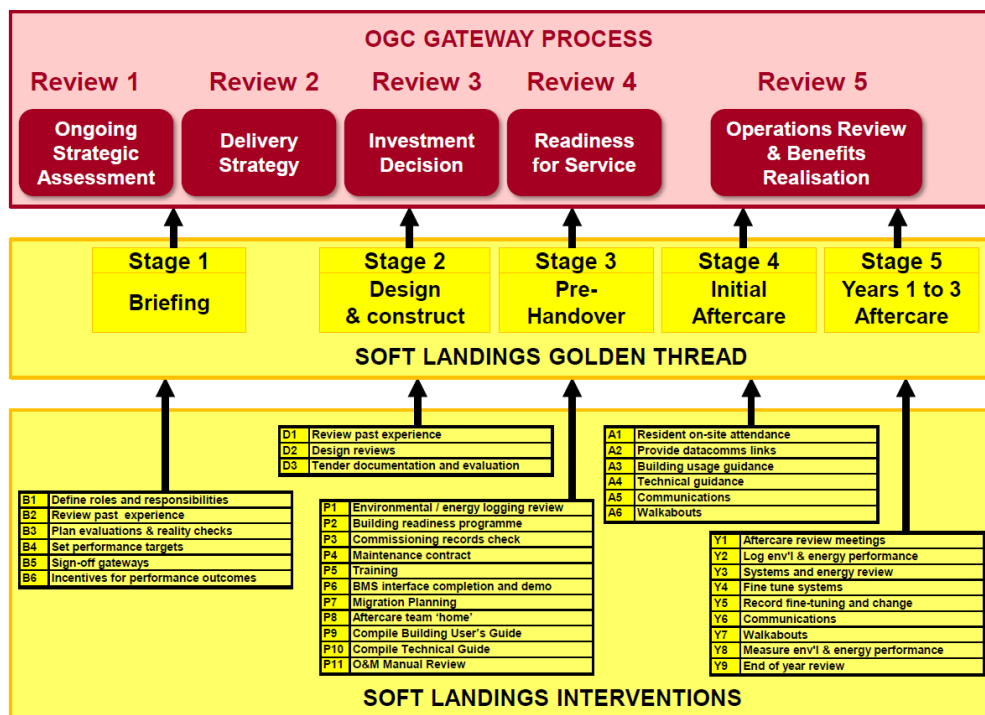
Construction

Soft landings considerations will be incorporated into the project plan, employer's requirements and the role and responsibilities of the contractor's soft-landing champion up to and following completion of the phase 3 building.

Operation in use

The contractor will be required to provide comprehensive operation and maintenance manuals; escorted tours of completed facilities to demonstrate functionality; Building Information Modelling models to assist with future maintenance; and aftercare for an agreed period post-handover. The contractor will carry out post occupancy evaluation.

Key Milestones for Stage reviews of the Soft-Landing Process



6 Annexes

6.1 Project risk register

Risk Register

Project: New University of Peterborough
Date: 22/12/2021
Version: 1

Effect	Probability	Cost (£)	Schedule (weeks)
1 (VL)	<10%	<5k	<2
2 (L)	10-25%	5-25k	2-4
3 (M)	26-50%	25-100k	4-8
4 (H)	51-75%	100-250k	8-16
5 (VH)	76-100%	>250k	>16



Risk Identification					Assessment					Mitigation	
ID	Title / Description (Cause)	Effect	Category	Risk Owner	Likelihood	Cost Effect	Time Effect	Quality	Assessment	Management Plan	Action Owner
009	Relocation of sports (football pitch) and associated planning not achievable in necessary timescale to release plot for development of phase 3	Delay to schemes ability to meet LUF Operational milestone Q4 2025 dependant on option used to be defined in Feb 2022	4. Programme	PropCo	4	3	5	1	100	a) Review planning strategy for OPA and Phase 3 in tandem and procure necessary amendments with consultants b) Look at options to reduce relocation of third party facilities to enable phase 3 plot c) Business case drafted to show option 1 location to avoid need to relocate football pitch for phase 4	a) CPCA & OPA consultant team b) PCC c) PropCo 2
004	Relocation of third party facilities cannot be achieved in time to start phase 3 development	Delay to schemes ability to meet LUF Operational milestone Q4 2024	4. Programme	CPCA	3	3	5	1	75	a) Review planning strategy for OPA and Phase 3 in tandem and procure necessary amendments with consultants b) Look at options to reduce relocation of third party facilities to enable phase 3 plot c) FBC drafted to show option 1 location to avoid need to relocate football pitch for phase 3	a) CPCA & OPA consultant team b) PCC c) PropCo 1
017	Change in option (site location) following approval of the business case as a result of third party change or issue	additional fee for abortive design, delay to programme or element of	4. Programme	PropCo	4	3	4	2	64	consider options to mitigate risk to cost and time in parallel with Business case approval	a) Propco 1
011	Outline planning permission delay preventing reserved matters application being made in accordance with timetable	Consider hybrid planning application	4. Programme	CPCA	3	3	4	1	48	Consider alternative strategy as part of OPA and procure changes to implement this change	a) CPCA & OPA consultant team

002	Numerous warranty for Infrastructure works between phases as a result of separate procurement routes	complexities of responsibility make it more difficult to manage	8. Procurement	PropCo	5	3	1	3	45	Defects responsibility difficult to manage by landlord and lead to additional operating cost	a) Propco 1
010	Carparking assumptions made without transport consultant to inform the cost plan and size of building are incorrect	Planning submission phase 3 responsibility of consultant team phase 3 - assumptions made in phase 3 based on current parking strategy being taken forward by OPA team. If change could impact on monies available for phase 3	15. Operational	PropCo	5	3	1	1	45	a) agree planning strategy as part of FBC acknowledge that assumptions at FBC will change as OPA develops b) align transport consultant ph 3 with OPA in development of ph 3 application	a) CPCA & OPA consultant team
016	Revisit to install services could mean patch work wearing course following re visit to install future phases servicing due to piecemeal phasing of phases as a result of funding release	aesthetic of installation	8. Procurement	PropCo	5	1	1	3	45	Consider bringing funding forward for early installation delay wearing course installation as part of phase 1 & 2	a) Propco 1
008	ARU curriculum development sufficient to make design assumptions delayed beyond February 2022 to inform design without abortive costs	Impacts on timeline of design and could incur cost of abortive design works / installation	6. Design	PropCo	4	3	3	3	36	Early assumptions to allow development of design in timeline	a) ARU
001	Increased infrastructure costs exceed available budget as a result of unknown scope to be determined in design RIBA 3 - current allowance based on phase 1 and 2 budgets	Reduces size of scheme below which is agreed in Business Case on which meet the LUF priorities.	2. Commercial - Viability	PropCo	2	4	4	4	32	a) Propco to consider implementing wider infrastructure interventions for University campus early aside from PH3 budget b) Place early orders with statutory authority and or incumbent contractor phase 1 & 2 c) Additional funding or reduce foot print of phase 3 development beyond viability or reduce quality of space / sustainability aspirations	a) Propco 1 b) PropCo 1 c) PropCo 1
007	Availability of power from local network not available in timescale or can be delivered in free space adjacent phase 1 & 2 services without major changes to current proposed site infrastructure as a result of delivery of each phase to affordable budget.	delay to power on or scheme unaffordable to meet requirements of funding	2. Commercial - Viability	CPCA	2	4	4	1	32	Consider early order to secure power for phase 3 // consider wider benefit of site wide application to avoid further infrastructure costs	a) Propco 1
003	Lack of surveys due to affordability at time of writing FBC on proposed plot increases capital cost of works reducing size of building for require additional investment as a result of site contamination, stability of ground or other unknown site condition	Lack of surveys due to affordability at time of writing FBC on proposed plot increases capital cost of works reducing size of building for require additional investment as a result of site contamination, stability of ground or other unknown site condition	7. Surveys & Site Conditions	PropCo	3	3	3	3	27	implement surveys on award of consultant in February 2022	a) PropCo 1
013	Limited float in programme to meet opening requirements outlined in LUF funding opening by Q4 2024	PropCo to review opportunity for programme float	4. Programme	PropCo	3	3	3	3	27	Consider opening after September 2024 and impact on operating model	a) ARU

018	Procurement of contractor to commence at RIBA 3 with overlap of client design adversely impact on contractor ability to influence design or results in client team led delay that impacts programme	Increased costs as a result of delay due to more complex interface between design team and contractor to agree contract sum	4. Programme	PropCo	3	2	3	2	27	review procurement strategy	a) PropCo 1
005	Due diligence on land /land value not available at the time of FBC which may add additional cost and or time affecting size of phase 3 building or require additional investment	Due diligence on land /land value not available at the time of Business case which may add additional cost and or time affecting size of phase 3 building or require additional investment	12. Legal	PropCo	2	3	3	2	18	Instruction PCC to review likely options on approval of Business case	a) PropCo 1
012	Delay to procurement of the professional team by CPCA to mobilise following approval of FBC	CPCA to ensure procurement in line with LUF programme and required scope to ensure team ready for mobilisation following approval of Business case	8. Procurement	CPCA	2	2	3	3	18	a) review procurement options/ internal resources	a) CPCA
015	Off plot section 278 works /section 106 contributions as a result of cumulative effect of phases exceed available budget scope of which is unknown at this time	Off plot section 278 works /section 106 contributions as a result of cumulative effect of phases exceed available budget scope of which is unknown at this time	2. Commercial - Viability	PropCo	2	3	3	1	18	Ensure consultant appointed 1 February 2022 progress early	a) PropCo 1
014	FBC not approved by CPCA Business board by end of January 2022	CPCA early discussion with internal members to ensure better likely hood of meeting their	2. Commercial - Viability	CPCA	2	2	2	2	8	Early consultation	a) CPCA
006	Availability of land to secure access for construction vehicles would disrupt phase 1 & 2 operations	Increases prelim cost / affects phase 1 & 2 operation	9. Construction/ Logistics	PropCo	3	1	1	1	3	Early review of construction logistics	a) PropCo 1