

# Innovation Centre (Phase 1) – University of Essex Knowledge Gateway

### The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

## The process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the LGF process. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government.



In the form that follows:

- **Applicants for funding for non-transport projects should complete the blue sections only**
- **Applicants for funding for transport projects should complete both the blue and the orange sections**

Version control	
Document ID	
Version	8
Author	Marc Albano
Document status	Submission to ECC July 2017
Authorised by	

**1. PROJECT SUMMARY**

1.1. Project name	<b>Innovation Centre (Phase 1) – University of Essex Knowledge Gateway</b>
1.2. Project type	<i>Non Transport (Innovation Centre)</i>
1.3. Location (inc. postal address and postcode)	<b>University of Essex Wivenhoe Park Colchester Essex CO4 3SQ</b>
1.4. Local authority area	<b>Colchester BC</b>
1.5. Description (max 300 words)	<p>The University has created the opportunity to build an Innovation Centre as the focal point on its Knowledge Gateway Research Park. This development and the way in which it will be operated going forward is designed to have the potential to significantly increase the University's ability to realise its ambition of driving local and regional economic growth through becoming a globally recognised centre for data analytics.</p> <p>The role of an Innovation Centre can be summarised as follows:</p> <ul style="list-style-type: none"> <li>▪ Attracting companies to come to the University of Essex to establish and grow their business. Companies will be attracted by the value-add of co-location and by the business support proposition and not just by the quality or pricing of the office space</li> <li>▪ Engage 'downstream' with the Entrepreneurship and Employability strategies supporting and encouraging research spin-outs and graduate/post graduate start-ups</li> <li>▪ Engage 'upstream' with move-on space in the Knowledge Gateway , Colchester and the wider region such that there is movement of companies through the Innovation Centre</li> <li>▪ Introduce, and lever in, regional and University of Essex business support capabilities and programmes</li> </ul> <p>The Innovation Centre will attract companies to come to the University of Essex to establish and grow their business, contributing to student employability strategies and enhancing the position of the University as a national centre for SMEs. It will also provide a benefit to the wider economy which will be measured in terms of new business starts/business growth, jobs created (423 net new jobs) and GVA added (£9.2 million) plus sectoral clustering. There will be additional benefits for the University in terms of increased business engagement, knowledge transfer and also a flow of expanding businesses to populate other "grow-on" units on the wider Knowledge Gateway (3 high growth businesses graduating each year).</p> <p>To meet current demand for excellent SME accommodation, Essex offers office space on the Parkside Office Village located in the Knowledge Gateway that now has 25 tenants. Drawing Essex's global reputation for analytics and data science and outstanding support for SMEs, it's set to employ more than 2,000 people. Knowledge Gateway was recognised in 'Essex County Council Commissioning Strategy 2014 – 2021' as a significant factor of Essex's development.</p> <p>Besides space for SMEs, Parkside Office Village also incubates Start-up Hub and Gameshub. Start-up Hub provides hot-desk space and hands-on business support for student and graduate start-up businesses and is supported by the University of Essex and Santander Universities. Games Hub offers an award-winning games development programme, expert tutoring, mentoring and various support including studio space.</p> <p>Since 2014 Games Hub has fostered the skills and creativity of more than 50 individuals, and five small businesses have been formed and spun-out of the hub. This includes Teaboy Games, who have successfully launched three new games with commercial success. Teaboy Games have also helped to shape the ongoing hub programme and have set a good benchmark for others taking part.</p>

	The Innovation Centre that will offer space and support for further 50+ new start-ups to grow and innovate on the Knowledge Gateway is currently under construction, ready for its opening in 2018
1.6. Lead applicant	University of Essex Knowledge Gateway Ltd, (a wholly owned trading arm of the University of Essex)
1.7. Total project value	£13.0m
1.8. SELEP funding request, including type (e.g. LGF, GPF etc.)	LGF - £2m
1.9. Rationale for SELEP request	<p>This project is to create the conditions for high skilled, local jobs in Essex. The proposal fits with Local Plan aspirations which mean there are jobs to support future proposed housing development. There are also proposals for three Garden Communities in Essex, one being in the East Tendring/West Colchester border. A key aspect of any proposed Garden Settlement is the provision of local jobs of which the Knowledge Gateway will undoubtedly do but importantly would create the conditions for a pipeline of growing businesses in the area. The development of an Innovation Centre at the University of Essex (UofE) Knowledge Gateway is at the heart of its strategy to create a successful research park at the Knowledge Gateway. The site is recognised by ECC as being a major contributor to economic growth in Essex and has been listed in its top ten strategic projects for the last few years. It is also a recognised 'Economic Zone' along the A120 one of our key growth corridors and recognised as such in the Strategic Economic Plan for the South East Local Enterprise Partnership (SELEP).</p> <p>The University does over £20 million of work with external organisations every year<sup>1</sup> with projects being delivered as contract research, consultancy and continued professional development.</p> <p>The University received government funding from HEFCE<sup>2</sup> to support Knowledge Exchange activities that are awarded based on performance. For 2014-15 the university was allocated £741k, rising to £1.11 million in 2015-16 and then £1.67 million in 2016-17. For 2017-18, this will rise to £1.83 million. In addition the University of Essex has received £680,000 in grant funding through an ESRC's Impact Acceleration Account (IAA) to deliver a number of impact-focused projects over four years IAA funding is awarded to research institutions with an impressive track record in delivering research in the social sciences. Essex was one of 24 research organisations that have been awarded IAAs.</p> <p>The launch of the government's Industrial Strategy in January 2017 and the associated Industrial Strategy Challenge Fund<sup>3</sup> marks a substantial change in government strategy for support of applied research and developed with £4.7 billion to be committed over 4 years. The research capability of the University is well aligned to the challenges being developed through this process and more broadly to evolving commercial needs such as business models changing to encompass the use of artificial intelligence.</p>

<sup>1</sup> Higher Education Business and Community Interaction (HEBCI) survey that is collected by the Higher Education Statistics Agency

<sup>2</sup> Higher Education Innovation fund

<sup>3</sup> <https://www.gov.uk/government/collections/industrial-strategy-challenge-fund-joint-research-and-innovation>

Companies working with the University of Essex range from global brands through to fast-growing start-ups and local established SMEs. Start-ups which Essex is working with include [Above Surveying](#), which is exploiting drone technology to monitor solar farm defects, and [Orbital Media](#), which is using artificial intelligence to create automated online GPs to revolutionise the way patients are treated. Well-known brands include: BT, Honda, Intel, HSBC, Unilever, UK Department of Health, UK Department of Work and Pensions, Essex County Council, Royal Haskoning DHV, NHS, Bayer Cropscience, ARM is also joining forces with the University of Essex to launch degree apprenticeships.

**Agritech:** Since 2012 we have been involved in a major \$25 million plant research project funded by the Bill & Melinda Gates Foundation to explore new ways to improve plant photosynthesis for increased food productivity for developing countries. We're also part of a multi-million-pound global research initiative with the International Wheat Yield Partnership to tackle the challenges of feeding a fast-growing global population. We have industrial partnership awards with the aim to find novel genes to improve yield in wheat. Our Plant Science group is also a key player in a €3 million EU-funded programme on the fast tracking of novel genes from model legumes to crops for breeding resistance to disease in combination with drought stress.

**Data Analytics:** Essex is a major world centre for advanced and big data analytics. Essex has a strong track record in helping businesses to understand what is behind trends and shifts in their data. Institute for Analytics and Data Science at the University of Essex brings together academic experts in analytics and data science from across the University to offer cutting-edge research, specialist courses and vital insights for business looking to innovate and grow through data science. It has secure data facilities for businesses and other organisations to securely deposit data for researchers to access.

#### KTPs – Emerging and Enabling Technology Partnerships

PricewaterhouseCoopers (PwC) recently analysed more than 150 emerging ICT areas to pinpoint the '[Essential Eight](#)' that will have the most significant global impact across sectors and have the strongest economic development capability. Essex has proven to have world-leading capabilities in 6 of the 'Essential Eight':

ICT Area	Business Collaborations	Total Collaborative Value
<b>AI/Machine Learning</b>	<ul style="list-style-type: none"> <li>• KTP with <i>Signal Media</i>: Exploited Natural Language Processing to build scalable technology architecture that will enable automated information provision. <b>Current UK KTP of the Year.</b></li> <li>• KTP with <i>Profusion Ltd</i>: To expand the company's data science capability, by developing cutting edge data science techniques using machine learning.</li> <li>• KTP with <i>Leonardo (formally SELEX Galileo)</i>: Computational intelligence based machine learning vision tools for dealing with uncertainty in decision making systems.</li> <li>• KTP with Port of Felixstowe – using AI to improve labour force deployment</li> <li>• KTP with Preqin PLC: The project will create new methods of capturing insight from current and future Preqin datasets by embedding AI and Machine Learning techniques across the unique Preqin investor</li> </ul>	<div style="background-color: black; width: 100px; height: 20px;"></div>

		<p>platform.</p> <ul style="list-style-type: none"> <li>KTP with <i>Hood Group</i>: To exploit the rapidly growing area of artificial intelligence (AI) to gain greater insight into insurance customers and embed artificial intelligence technology in the insurance customer journey.</li> </ul>		
	<b>Robotics</b>	<ul style="list-style-type: none"> <li>KTP with <i>PSL Rheotek</i>: The development of a robotic operated sample preparation and delivery system to an automated viscometer for petroleum, cellulose and other polymer samples.</li> <li>KTP with <i>Vacuumatic Ltd</i>: Application of robotics technology in a counting equipment specialist for the paper and print industries</li> <li>The Essex Robotics Group, led by Prof Huosheng Hu</li> </ul>		5
	<b>Augmented Reality</b>	<ul style="list-style-type: none"> <li>KTP with <i>BT</i>: The development of remote fault detection, diagnostic and field force instruction system and embed knowledge of advanced computational intelligence, intelligent environments and augmented reality.</li> <li>KTP with <i>Vitec Videocom</i>: The development of an absolute camera positioning system for television studios that is suitable for use in augmented reality</li> </ul>		5
	<b>Virtual Reality</b>	<ul style="list-style-type: none"> <li><i>Virtual Reality Suite</i>: The Centre for Brain Science has two virtual reality suites equipped with a Virtualis VR system. Environments and characters are built using software. The Centre has yielded a wealth of successful collaborative engagement.</li> </ul>		
	<b>Internet of Things (Embedded Electronics)</b>	<ul style="list-style-type: none"> <li>KTP with <i>Dicam Technology Ltd</i>: To design and develop embedded internet systems and peripherals for control and monitoring applications in an ambitious agritech company.</li> <li>KTP with <i>Raytel Group</i>: To develop a smart low-cost, flexible, IP based door access and entry system.</li> <li>KTP with <i>August International</i>: To develop the capability to design and produce intelligent wearable electronic products which can be used for health monitoring.</li> <li>KTP with <i>Poulten, Selfe and Lee Ltd</i>: To develop and embed knowledge of dedicated firmware, software and electronics to control an automated viscometer platform suitable for determining kinematic viscosity and solution viscosity of polymers.</li> </ul>		9
	<b>Drones</b>	<ul style="list-style-type: none"> <li>Collaboration with <i>Skyview Robotics</i>: Using advanced drone technology to identify weed amongst crops and other factors that impact plant productivity (soil compaction, land use etc).</li> <li><i>SwarMAV Drone Research Project</i>: Innovation regarding an autonomous swarm of Miniature Aerial Vehicles (MAVs)</li> <li>KTP with <i>Above Surveying Ltd</i>: <i>Embedding intelligent systems within an UAV thermographic solar energy inspection platform to reduce UAV weight, performance and flight time.</i></li> </ul>		

<b>1.10. Other funding sources</b>	University of Essex – Cash - £3m University of Essex – Proceeds from land sale/accommodation transaction - £6m Essex County Council – grant – £2m														
<b>1.11. Delivery partners</b>	<table border="1" data-bbox="376 421 1390 680"> <thead> <tr> <th data-bbox="376 421 762 495">Partner</th> <th data-bbox="762 421 1390 495">Nature and/or value of involvement (financial, operational etc.)</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 495 762 533">Essex County Council</td> <td data-bbox="762 495 1390 533">Grant Funding and Economic Development Links</td> </tr> <tr> <td data-bbox="376 533 762 571">Oxford Innovation</td> <td data-bbox="762 533 1390 571">Innovation Centre Operator</td> </tr> <tr> <td data-bbox="376 571 762 680">University of Essex</td> <td data-bbox="762 571 1390 680">Support from academic Depts. e.g. Data Analytics, Computer Science and the Essex Business School , plus Student Enterprise</td> </tr> </tbody> </table>			Partner	Nature and/or value of involvement (financial, operational etc.)	Essex County Council	Grant Funding and Economic Development Links	Oxford Innovation	Innovation Centre Operator	University of Essex	Support from academic Depts. e.g. Data Analytics, Computer Science and the Essex Business School , plus Student Enterprise				
Partner	Nature and/or value of involvement (financial, operational etc.)														
Essex County Council	Grant Funding and Economic Development Links														
Oxford Innovation	Innovation Centre Operator														
University of Essex	Support from academic Depts. e.g. Data Analytics, Computer Science and the Essex Business School , plus Student Enterprise														
<b>1.12. Key risks and mitigations</b>	<table border="1" data-bbox="376 752 1390 2065"> <thead> <tr> <th data-bbox="376 752 799 819">Risk</th> <th data-bbox="799 752 1139 819">Impact</th> <th data-bbox="1139 752 1390 819">Mitigation</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 819 799 1697">           a. Cost of original design exceeds budget once construction is tendered         </td> <td data-bbox="799 819 1139 1697">           Decision on whether to increase budget, reduce scope retender or cancel project         </td> <td data-bbox="1139 819 1390 1697">           Fixed Price Contracts for all design options given by contractor.             Use of procurement frameworks to ensure best value for money.             Value engineering options within the design to reduce costs             Optionality in the design to reduce scope             Defer some build elements to future phases of site developments         </td> </tr> <tr> <td data-bbox="376 1697 799 1899">           b. Changes to original design may result in a planning risk         </td> <td data-bbox="799 1697 1139 1899">           Delay to project while an amendment to planning is approved         </td> <td data-bbox="1139 1697 1390 1899">           Any changes are sensitive to the requirements of planning         </td> </tr> <tr> <td data-bbox="376 1899 799 2065">           c. Occupancy build up slow in first 2 years         </td> <td data-bbox="799 1899 1139 2065">           Major risk, with internal and external factors impacting the financial model         </td> <td data-bbox="1139 1899 1390 2065">           Clear marketing plan; early assessment of demand; keen pricing; well-         </td> </tr> </tbody> </table>			Risk	Impact	Mitigation	a. Cost of original design exceeds budget once construction is tendered	Decision on whether to increase budget, reduce scope retender or cancel project	Fixed Price Contracts for all design options given by contractor.  Use of procurement frameworks to ensure best value for money.  Value engineering options within the design to reduce costs  Optionality in the design to reduce scope  Defer some build elements to future phases of site developments	b. Changes to original design may result in a planning risk	Delay to project while an amendment to planning is approved	Any changes are sensitive to the requirements of planning	c. Occupancy build up slow in first 2 years	Major risk, with internal and external factors impacting the financial model	Clear marketing plan; early assessment of demand; keen pricing; well-
Risk	Impact	Mitigation													
a. Cost of original design exceeds budget once construction is tendered	Decision on whether to increase budget, reduce scope retender or cancel project	Fixed Price Contracts for all design options given by contractor.  Use of procurement frameworks to ensure best value for money.  Value engineering options within the design to reduce costs  Optionality in the design to reduce scope  Defer some build elements to future phases of site developments													
b. Changes to original design may result in a planning risk	Delay to project while an amendment to planning is approved	Any changes are sensitive to the requirements of planning													
c. Occupancy build up slow in first 2 years	Major risk, with internal and external factors impacting the financial model	Clear marketing plan; early assessment of demand; keen pricing; well-													

			designed services
	d. Problems with operating the building	Major risk, but internally controllable within the project impacting the experience of the tenants	Operator control over final design and fit-out; careful attention to snagging and acceptance of the building  Oxford Innovation now appointed
	e. Economic Model unsustainable	Major risk, with internal and external factors impacting the affordability	Early analysis and refinement of the model. Regular reviews of risk. Regular reviews of potential for additional services to enhance the model.  Oxford Innovation now appointed with a risk sharing financial model where the University receive a guaranteed level of income regardless of occupancy levels
	f. Security and Access Control	Medium risk impacting the experience of the tenants	Early review of security plans
	g. Health and Safety	Medium risk impacting the experience of the tenants	Early establishment of policies; special attention to Innovation Laboratory and communal spaces
	h. Ensuring that the building is fully attuned to the needs of the innovation cluster being developed.	Medium risk impacting the experience of the tenants and the achievement of the objectives	We will work closely with the Design Team during construction.
<b>1.13. Start date</b>	In Progress		
<b>1.14. Practical completion</b>	Between July 2018 and December 2018 subject to the construction contract and lead time for steel design/delivery.		

<p><b>date</b></p>	<p>Oxford Innovation have commenced pre opening engagement and marketing and will mobilise with 4 weeks of centre handover.</p>
<p><b>1.15. Project development stage</b></p>	<p><i>Planning permission for the Innovation Centre Granted</i>  <i>Operator Procurement – Appointed</i>  <i>Construction Procurement – In negotiation</i></p> <p><i>Construction Period for Groundworks and Foundation Slab – February 2017 to April 2017 (completed)</i></p> <p><i>Construction Period for Building – August 2017 to between July 2018 and December 2018 subject construction contract and lead time for materials. Steel design is an issue at 14 week lead time.</i></p>
<p><b>1.16. Proposed completion of outputs</b></p>	<p>Once the building is complete it will be handed over to a third party Innovation Centre operator (Oxford Innovation appointed) on a 15 year lease. It will be a contractual obligation to deliver a pre-determined set of outcomes linked to the project.</p>
<p><b>1.17. Links to other SELEP projects, if applicable</b></p>	<p>The SELEP has previously given funding to the Knowledge Gateway Parkside Phase 1 (£2.4m) and Parkside Phase 1a (£850k).</p> <p>Parkside Phase 1 is operational and about to become 100% occupied. Parkside Phase 1a is operational and is 100% let.</p>

## 2. STRATEGIC CASE

*The strategic case determines whether the scheme presents a robust case for change, and how it contributes to delivery of the SEP and SELEP's wider policy and strategic objectives.*

### 2.1. Challenge or opportunity to be addressed

*Describe the key characteristics of the challenge to be addressed and the opportunity presented. Provide an overview of the evidence supporting this and the impact of not progressing the scheme.*

*What is the need?*

*Why now?*

*What is the need?*

*Why now?*

The University's vision for the Knowledge Gateway is for it to become a national centre of excellence for SMEs and a global centre for data analytics employing over 2,000 people. The Innovation Centre facility is intended to form the cornerstone of the Knowledge Gateway as a driver of business growth harnessing the know-how and talent of a world class research intensive university. It will provide the first step for new businesses which will then be able to flourish and grow into the range of follow-on accommodation provided on the site and drive growth in the wider economy.

If not progressed, then as Parkside is full, potential new businesses will have to be turned away. Indeed, the need for business start-up and grow-on space is demonstrable in the Colchester area. The Colchester Creative Business Centre opened in December 2016 for start-up businesses specifically in the creative sector. The facility was full straight away and currently has a waiting list of some 25 companies. In addition, Essex County Council commissioned SQW to undertake a Grow on Space study in 2016. The reality is that there is not enough grow-on space in the county but also that in order for business to flourish in an area the whole cycle of provision from start-up to grow on and then further expansion are required. The Knowledge Gateway complex addresses both.

Parkside Phase 1 completed Summer 2014 has been a major success and has been a home to nearly 20 businesses. When a brief survey was undertaken in 2015, 50 people were on site, 17 of them current or ex-students, confirming that the key attraction of the Knowledge Gateway is the ability to locate on a University campus and engage with the student and academic community. This is creating exciting new companies.

The University believes this is the right time for the development because there is proven demand and this is a key opportunity to signal the University's intent to drive greater business engagement and economic growth on a site adjacent to its new £21 million Business School.

### 2.2. Description of project aims and SMART objectives

*Please outline primary aims and objectives*

*Please present the SMART (specific, measurable, achievable, realistic and time-bound) benefits and outcomes on the local economy that will arise following delivery of the scheme in terms of numbers of jobs, new homes, GVA).*

1. The Innovation Centre will be operational by the first quarter of 2018
2. The Innovation Centre will have occupancy in excess of 85% during the fourth year of operation

	<ol style="list-style-type: none"> <li>3. The Innovation Centre will create 423 net new jobs in the first ten years</li> <li>4. The Innovation Centre will facilitate at least 3 high growth businesses to graduate from the centre each year</li> <li>5. The Innovation Centre will achieve a GVA of £9.2m in the first ten years</li> <li>6. The Innovation Centre will be financially sustainable during the first ten years of operation</li> </ol>
<p><b>2.3. Strategic fit</b></p>	<p><i>Please detail the SELEP and local objectives/strategies/work programmes/ services which the investment will support</i></p> <p>Government has confirmed an allocation of investment into the South East LEP (SELEP) area of £102.65 million as part of the Growth Deal Programme Round Three. The funding is to help create jobs, support businesses and create new growth opportunities. The investment of £102.65 million will deliver an additional 6,129 new homes, create or safeguard 30,785 jobs and secure a further £141 million of private sector investment into the area.</p> <p>The University believe that the Innovation Centre is squarely in two of the SELEP thematic investment priorities – ‘Job Creation and Enterprise Zones’ and ‘Employability &amp; Skills’</p>  <p><i>From ‘Growth Deal Round 3’ SELEP February 2017</i></p> <p>The document ‘Growth Deal Round 3’ published by the SELEP in February 2017 states key objectives as <i>“Enabling the private sector’s creation of jobs is right at the heart of everything that SELEP does. We prioritise all of our interventions and programmes of activity on the basis of their impact on the real economy”</i> and <i>“Improve the talent pool in support of priority sectors, particularly higher level skills”</i>. The Innovation Centre supports these objectives.</p> <p>ECC consultants Regeneris identified the University of Essex/Knowledge Gateway as a key asset which could be used to leverage growth in key sectors and increase Knowledge Transfer to drive higher productivity and Gross Value Added (GVA) in Essex. The Knowledge Gateway has been listed in ECC’s top ten strategic projects for the last two years and it is also a recognised ‘Economic Zone’ along the A120 one of the key growth corridors recognised in the SE LEP Strategic Economic Plan.</p> <p>This is a specialist facility which will be rooted in the campus to which it is attached but there is no reason why it could not form part of a programme of incubation and innovation centres across Essex each directed towards a local need. The basic issues are common.</p> <p>The decision to involve a specialist Innovation Centre operator to run the facility for</p>

a fifteen year period further enhances the leverage to develop a wide network of opportunities attracting businesses from other centres from around the country drawn to Essex for the unique skill set that the combined offer of academic excellence and supported start-up businesses.

The combined impact of the University’s investment, backing from ECC and the SELEP, the availability of land, the flow of students as either highly skilled employees or business creators and the technical academic expertise on site are a powerful driver for economic growth in the region

**2.4. Summary outputs (3.2 will contain more detail)**

	16/17	17/18	18/19	19/20	20/21	21/22
<b>Jobs</b>		8	46	138	233	288
<b>Businesses in Occupation of the Centre</b>	0	0	9	29	49	58

*Note: 1 FTE job = 30 hours per week or more; Permanent job = 12 months or more*

Non Quantifiable	Quantifiable
<p><b>Health and Social:</b></p> <ul style="list-style-type: none"> <li>• New technology developments, medicines and devices in healthcare and robotics</li> <li>• Public funding opportunities</li> </ul>	<p><b>Employment:</b></p> <ul style="list-style-type: none"> <li>• Tenant employment</li> <li>• University employment</li> <li>• Virtual tenant employment</li> <li>• Post-graduation employment</li> <li>• Supply chain employment</li> </ul>
<p><b>Additional Economic Benefits:</b></p> <ul style="list-style-type: none"> <li>• New demand for grow on space in Colchester and Essex as more high growth businesses are created</li> <li>• Inward Investment</li> <li>• IP and Patents developed</li> <li>• Additional revenue streams for UoE created</li> </ul>	<p><b>Economic Benefits:</b></p> <ul style="list-style-type: none"> <li>• GVA</li> <li>• Investment raised</li> </ul>

**2.5. Planning policy context, consents and permissions**

Planning Consent granted under application number 152219 granted on 16 December 2016. Decision below



Adobe Acrobat Document

<p><b>2.6. Delivery constraints</b></p>	<p>The biggest constraint on delivery is finding a construction partner who can deliver to budget and timeline in the current buoyant construction market. This risk has materialised and the initial tender submissions are significantly over budget. The University is committed to the construction of the Innovation Centre and its design. As a result it has split the construction into two phases; the ground works and foundation slab which has been completed, followed by the main building construction. Significant work is being undertaken by the University, the architects, the QS team and the contractor to reduce the construction cost and the University has increased its funding contribution to a total of £9m. The contractor has given the University fixed price construction contracts for three options to eliminate cost inflation risk. The final constraint is to be sensitive to the original and approved planning permission and ensure that changes made to the design which reduce costs doesn't impact on the planning determination and require a resubmission which would introduce a six month delay into the project.</p>
<p><b>2.7. Scheme dependencies</b></p>	<p>The scheme outcomes are contingent on the combined delivery of the building as a functional workspace, the Innovation Centre operator to drive growth and the University academic community to contribute to research and Knowledge Exchange</p>
<p><b>2.8. Scope of scheme and scalability</b></p>	<p>This project proposes to deliver the first phase of an Innovation Centre. The first phase provides a reception area, cafe and meeting rooms, together with a first range of lettable units and provide the basis for the later construction of two further wings of lettable units as demand grows. Experience from other mature science and research parks (such as Surrey and Warwick) suggest that properly run innovation centres are the real motors of business development and their success can drive up to 70% of the demand for follow on space.</p>
<p><b>2.9. Options if funding is not secured</b></p>	<p>The Innovation Centre is a key strategic development for the University and will be funded from other external sources or as a last resort, internal funds. The commitment to the project is evidenced by providing total funding of £9m</p>

### 3. ECONOMIC CASE

*The economic case determines whether the scheme demonstrates value for money. It presents evidence on the impact of the scheme on the economy as well as its environmental, social and spatial impacts.*

*For projects requesting over £5m of SELEP directed funding, a separate economic appraisal should be undertaken and supplied alongside this application form. This should provide:*

- *A calculation of Benefit Cost Ratio according to Government guidelines*
- *Proper inclusion of optimism bias and contingency linked to a quantified risk assessment*
- *Inclusion of deadweight, leakages, displacement and multipliers*
- *An appraisal spreadsheet with clearly identified, justified and sensitivity-tested assumptions and costs*  
(note: alignment with ITE expectation down the line?)

**3.1. Impact Assessment**

*Please provide a description of the impact assessment of the scheme with some narrative as to why other options have been discounted.*

*This should include a list of significant positive and negative impacts and a short description of the modelling approach used to forecast the impact of the scheme and the checks that have been undertaken to ensure that the approach taken is fit for purpose.*

An impact assessment has been carried out by Oxford Innovation as subject matter experts in

this specialist field. This was considered the only true way to get an impartial view of the feasibility and desirability of the scheme and as a justification of the investment.

**3.2. Outputs [check LOGASnet compatibility]**

*Identify jobs, floor space and housing starts connected to the intervention, quantify the outputs in tabular format and provide a short narrative for each theme (i.e. jobs/homes/floorspace) explaining how the project will support the number identified. **Please describe the methodology used for calculating jobs and homes numbers.***

**Economic Outputs achieved by the Innovation Centre**

Alongside the financial objectives of the Innovation Centre, one of the key measures of success is the delivery of wider benefits to the business community and district. Innovation Centres accelerate and stimulate enterprise, increase the survival and growth rates of early stage businesses, and play a vital role in building and driving cluster development. Economic impacts from a centre will tend to be viewed in terms of business creation and growth (output or sales), jobs created and value added (GVA). These impacts can be direct or indirect and could extend to broader social impacts, such as changes in amenity or quality of life factors. These tend to follow on from the creation of higher value jobs in the local area, enabling a greater spending power of consumers.

Oxford Innovation published a report in 2014 which assessed and evaluated business growth and survival at 15 Innovation Centres across a 10 year period (2003 – 2013) *Business Survival and Growth*. From this data we have been able to create some assumptions about a typical innovation centre customer, growth and job creation. These assumptions are:

- 58% of companies were previously working from home and had no prior office (this therefore reduces the likely displacement effect of an Centre)
- The average size of office occupied is 314 ft<sup>2</sup>
- The average length of occupancy is just under 2 years
- On graduation the average number of employees is 7.5 per company

**Direct Economic Impact**

Taking this data, plus using the assumptions from the business plan on occupancy growth we can therefore calculate gross and net job creation for the planned innovation centre over a 10 year period, as shown in the table below.

Forecast for University of Essex KG IC - Phase 1														
Size of new centre (sq.ft.)	34,437													
Net lettable	21,699													
Average occupancy at 86%	18,444													
Forecast companies in occupation	59													
Forecast virtual companies	18													
<b>Total companies</b>	<b>77</b>													
FTE jobs at 3.65 per occupier, 1.0	237													
<b>Churn and Graduation</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Year 7</b>	<b>Year 8</b>	<b>Year 9</b>	<b>Year 10</b>	<b>Year 11</b>	<b>Year 12</b>	<b>Year 13</b>	<b>Year 14</b>
Year average occupancy	37.0%	74.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Let space	8,029	16,057	19,529	19,529	19,529	19,529	19,529	19,529	19,529	19,529	19,529	19,529	19,529	19,529
Average companies in occupation	25	51	62	62	62	62	62	62	62	62	62	62	62	62
Average Virtual / Hot Desk Users	9	20	20	20	20	20	20	20	20	20	20	20	20	20
Graduations to Move-on Space (companies) - research provides evidence that 5% of current year occupiers (rounded up) graduate from the centre. Start Year 2.	0	1	4	4	4	4	4	4	4	4	4	4	4	4
FTE jobs at 3.65 per occupying company plus 1 per virtual	100	206	246	246	246	246	246	246	246	246	246	246	246	246
Cumulative FTE jobs at 7.5 per graduating company	-	7	37	67	97	127	157	187	217	247	276	306	336	366
Centre Staff	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>UoE IC - Phase 1 - gross jobs</b>	<b>105</b>	<b>218</b>	<b>288</b>	<b>318</b>	<b>348</b>	<b>378</b>	<b>408</b>	<b>437</b>	<b>467</b>	<b>497</b>	<b>527</b>	<b>557</b>	<b>587</b>	<b>617</b>
<b>UoE IC - Phase 1 - net jobs</b>	<b>63</b>	<b>131</b>	<b>173</b>	<b>191</b>	<b>209</b>	<b>227</b>	<b>245</b>	<b>262</b>	<b>280</b>	<b>298</b>	<b>316</b>	<b>334</b>	<b>352</b>	<b>370</b>

We forecast that a total of 647 gross jobs will be created directly through the UoE KG IC, with net jobs of 388 over 15 years. This would result in an increased GVA of £14<sup>4</sup> million for the local

<sup>4</sup> GVA is calculated based on £36,400 per worker (for Colchester Borough Council)

economy. This model does not take into account the additional jobs created through the DCCSS as more research would need to be undertaken to determine the direct and indirect impacts of this exciting element of the UoE KG IC.

Although our research shows that the average stay at a centre is shorter than at most incubators and the companies based in an Oxford Innovation centre are marginally smaller, a higher proportion of companies achieved high growth (>20% annual growth) and they also achieved a higher growth rate than recorded at other incubators – 32% vs 24%.

### **Indirect Economic Impact**

Some of the wider benefits of a centre can be seen in an improvement in the attractiveness of an area for business growth and retention and for business investment. A key spill over from creating a supportive business environment in the form of the Innovation Centre within the wider Knowledge Gateway is to build a more resilient business community. Research<sup>5</sup> indicates that high growth businesses are more resilient to downturns and continue to grow despite worsening economic conditions. Because of this it is widely accepted that greater value is generated from business support programmes that focus on innovation, rather than simply broad support programmes for SMEs and start-ups.

In this model the jobs (and therefore GVA) calculated are *gross* jobs not *net* – the implication is that there will likely be some *displacement* (some firms will move to the facility from elsewhere in the regional economy or take employment from other regional firms) and *deadweight* (some firms would have started up and grown in any case), that would need to be accounted for to calculate the net contribution of the Knowledge Gateway Innovation Centre.

The benefits derived from an Innovation Centre can be seen to be split into quantifiable and non-quantifiable as outlined in the table below.

<b>Non Quantifiable</b>	<b>Quantifiable</b>
<b>Health and Social:</b> <ul style="list-style-type: none"> <li>• <b>New technology developments, medicines and devices in healthcare and robotics</b></li> <li>• <b>Public funding opportunities</b></li> </ul>	<b>Employment:</b> <ul style="list-style-type: none"> <li>• Tenant employment</li> <li>• University employment</li> <li>• Virtual tenant employment</li> <li>• Post-graduation employment</li> <li>• Supply chain employment</li> </ul>
<b>Additional Economic Benefits:</b> <ul style="list-style-type: none"> <li>• <b>New demand for grow on space in Colchester and Essex as more high growth businesses are created</b></li> <li>• <b>Inward Investment</b></li> <li>• <b>IP and Patents developed</b></li> <li>• <b>Additional revenue streams for UoE created</b></li> </ul>	<b>Economic Benefits:</b> <ul style="list-style-type: none"> <li>• GVA</li> <li>• Investment raised</li> </ul>

### **Additional jobs created in the economy**

As detailed above, the businesses supported by the Innovation Centre will create 647 jobs gross and 388 net directly. A project of this type and scale also creates employment ‘outside’ of the Centre.

#### **Construction**

The actual construction of the Knowledge Gateway Innovation Centre itself will create employment in the region. A recognised measurement is: 1 FTE job per £1 million construction cost. As the current projected cost to construct the Innovation Centre is £8.8 million, we forecast an additional 8.8 FTE jobs will be created prior to the Centre opening.

<sup>5</sup> ‘The vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs’ Nesta, October 2009

### Additionality

An English Partnerships report<sup>6</sup> *Additionality Guide (2008)* provides guidance on the typical multiplier effect (additionality) of the development of this kind of public sector intervention. The Homes and Communities Agency issued guidance in 2014<sup>7</sup> which gives further direction on the measurement of the likely creation of jobs in addition to those directly created through an intervention. The multiplier effect most commonly used for this type of intervention is 1.5<sup>8</sup> in regional impact. If we apply this to the net jobs forecast to be created through the Knowledge Gateway Innovation Centre this would indicate an additional 258 jobs in the regional economy.

### Jobs created by graduated businesses

In the table above, we identify the number of jobs created within the Innovation Centre and forecast the number of businesses that would graduate out into the wider business community. Our research shows that on average graduated businesses continue to add 3 members of staff per year. There are, of course, wide variations in the actual increase/decreases in staff numbers and the following forecast should be used as an indicative number rather than a scientifically tested number.

The table below details the potential employment growth in graduated businesses within the 10 year timeframe of our business plan:

Churn and Graduation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Graduations to Move-on Space (companies) - research provides evidence that 5% of current year occupiers (rounded up) graduate from the centre. Start Year 2.	0	1	3	3	3	3	3	3	3	3
Cumulative number of graduations	0	1	4	7	10	13	16	19	22	25
Ave jobs created by graduations - 3 per year	0	3	12	21	30	39	48	57	66	75
Cumulative jobs created by graduations	0	3	15	36	66	105	153	210	276	351

Our research in 2014 identified the impact that an Innovation Centre, with a tailored business support offering, has on the businesses that have graduated from the centre.

### 3.3. Wider benefits

*Please describe below any wider economic benefits that the scheme will achieved that will help to contribute to the overall value for money of the scheme.*

Some of the wider benefits of a centre can be seen in an improvement in the attractiveness of an area for business growth and retention and for business investment. A key spill over from creating a supportive business environment in the form of the Innovation Centre within the wider Knowledge Gateway is to build a more resilient business community. Research<sup>9</sup> indicates that high growth businesses are more resilient to downturns and continue to grow despite worsening economic conditions. Because of this it is widely accepted that greater value is generated from business support programmes that focus on innovation, rather than simply broad support programmes for SMEs and start-ups.

In this model the jobs (and therefore GVA) calculated are *gross* jobs not *net* – the implication is that in all likelihood there might be some displacement (some firms will move to the facility from elsewhere in the regional economy or take employment from other regional firms) and deadweight (some firms would have started up and grown in any case), that would need to be accounted for to calculate the net contribution of the Knowledge Gateway Innovation Centre.

<sup>6</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/191511/Additionality\\_Guide\\_0.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191511/Additionality_Guide_0.pdf)

<sup>7</sup> <https://www.gov.uk/government/publications/additionality-guide>

<sup>8</sup> From Forth Edition of Additionality Guide – Table 4.5.6

<sup>9</sup> 'The vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs' Nesta, October 2009

The benefits derived from an Innovation Centre can be seen to be split into quantifiable and non-quantifiable as outlined in the table below.

Non Quantifiable	Quantifiable
<b>Health and Social:</b> <ul style="list-style-type: none"> <li>• <b>New technology developments, medicines and devices in healthcare and robotics</b></li> <li>• <b>Public funding opportunities</b></li> </ul>	<b>Employment:</b> <ul style="list-style-type: none"> <li>• Tenant employment</li> <li>• University employment</li> <li>• Virtual tenant employment</li> <li>• Post-graduation employment</li> <li>• Supply chain employment</li> </ul>
<b>Additional Economic Benefits:</b> <ul style="list-style-type: none"> <li>• <b>New demand for grow on space in Colchester and Essex as more high growth businesses are created</b></li> <li>• <b>Inward Investment</b></li> <li>• <b>IP and Patents developed</b></li> <li>• <b>Additional revenue streams for UoE created</b></li> </ul>	<b>Economic Benefits:</b> <ul style="list-style-type: none"> <li>• GVA</li> <li>• Investment raised</li> </ul>

An English Partnerships report<sup>10</sup> *Additionality Guide (2008)* provides guidance on the typical multiplier effect (additionality) of the development of this kind of public sector intervention. The Homes and Communities Agency issued guidance in 2014<sup>11</sup> which gives further direction on the measurement of the likely creation of jobs in addition to those directly created through an intervention. The multiplier effect most commonly used for this type of intervention is 1.5 in regional impact. If we apply this to the net jobs forecast to be created through the Knowledge Gateway Innovation Centre this would indicate an additional 127 jobs in the regional economy.

In Section 3.2 above, we identify the number of jobs created within the Innovation Centre and forecast the number of businesses that would graduate out into the wider business community. Research<sup>12</sup> shows that on average graduated businesses continue to add 3 members of staff per year. There are, of course, wide variations in the actual increase/decreases in staff numbers and the following forecast should be used as an indicative number rather than a scientifically tested number.

The table below details the potential employment growth in graduated businesses within the 10 year timeframe of our business plan:

Churn and Graduation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Graduations to Move-on Space (companies) - research provides evidence that 5% of current year occupiers (rounded up) graduate from the centre. Start Year 2.	0	1	3	3	3	3	3	3	3	3
Cumulative number of graduations	0	1	4	7	10	13	16	19	22	25
Ave jobs created by graduations - 3 per year	0	3	12	21	30	39	48	57	66	75
Cumulative jobs created by graduations	0	3	15	36	66	105	153	210	276	351

<sup>10</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/191511/Additionality\\_Guide\\_0.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191511/Additionality_Guide_0.pdf)

<sup>11</sup> <https://www.gov.uk/government/publications/additionality-guide>

<sup>12</sup> Oxford Innovation 2014

	<p>Using the same GVA calculation as above, these additional indirect jobs could contribute in excess of £12 million to the local economy.</p> <p>There are a number of indirect ‘softer’ impacts of a University Innovation Centre that are more difficult to measure but have a marked economic impact:</p> <ul style="list-style-type: none"> <li>• Opening up academic staff to enterprise and innovation through interaction with early stage and growth businesses creates a more dynamic and entrepreneurial culture within the university and gives them closer proximity to innovations and disruptive technologies that can support research activities.</li> <li>• The Innovation Centre itself will be developed to ensure maximum collaboration between Centre customers, University staff and the wider business community, further deepening the relationships members of University staff have. The development of supply chains within and surrounding the Innovation Centre (whereby centre customers inter-trade, collaborate and create joint ventures) and also buy goods and services from the surrounding business community in Colchester and across Essex.</li> <li>• The Innovation Centre will be a very visible hub of innovative business growth and will act as an aspirational ‘landmark’ to students, graduates, staff and the wider community, driving forward innovation and enterprise activity on and around the Knowledge Gateway.</li> </ul>
<p><b>3.4. Standards</b></p>	<p><i>Provide details of anticipated standards (such as BREEAM) that the project will achieve.</i></p> <p>The building will be constructed to BREEAM – Very Good Standards</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Architect Specification.pdf</p> </div> <div style="text-align: center;">  <p>Adobe Acrobat Document</p> </div> </div>
<p><b>3.5. Value for money assessment</b></p>	<p><i>Please consider value for money in broad terms, e.g.:</i></p> <ul style="list-style-type: none"> <li>• <i>Cost per job</i></li> <li>• <i>Cost per housing unit</i></li> <li>• <i>Leverage ratio against SELEP investment and as a percentage of total scheme cost</i></li> </ul> <p>It is difficult to measure this project in pure value for money terms. Over a ten year period the Innovation Centre is financially sustainable at an operational level but struggles to ‘repay’ the capital deployed. As a result normal financial metrics do not make sense but this further exemplifies that this project is about the wider benefits to the University and the economy and not a ‘cash cow’ investment. The University has a risk sharing arrangement with the Innovation Centre operator where there are guaranteed income levels regardless of occupation and a sharing mechanism based on income and cost drivers. The University is giving the operator a two year loan to cover fit out costs as an incentive, while the operator is covering the early year losses in its cash flow. The University is willing to fund a large proportion of the initial investment (at least 65 %) but is seeking funding from likeminded partners who acknowledge the potential benefits which cannot be measured in financial terms.</p>
<p><b>3.6. Options assessed</b></p>	<p>The University considered the following alternatives:</p>

	<ol style="list-style-type: none"> <li>1. To seek a development partner who will fund, build and operate such a centre – several reputable operators were approached including Oxford Innovation and NWES but the clear response was that these facilities cannot support substantial financing costs – if the building is pre-funded then they are happy to operate it. Oxford Innovation has been examining partial loan funding options but these are limited and require to be fully underwritten by guarantees.</li> <li>2. To continue building phases of Parkside on an ad hoc basis but adapt the design to meet the market need – Parkside Phase 1 was built as self-contained office units. Experience of letting these showed that there is a stronger interest for smaller cellular offices and individual hot desks with supporting facilities such as meeting rooms. For this reason, Parkside Phase 1a has been built with more flexibility to create separate lettable spaces. It also contains a lift and meeting room/s. Whilst this will offer a stop-gap solution, it does not provide a purpose built building as seen on all other successful science and research parks; hence this option will not enable a properly supported innovation environment to be created on a viable scale.</li> <li>3. Alternative use of land – While land availability is finite, the University has 43 acres to develop for the Knowledge Gateway. The Masterplan for the site includes future construction of office, research and technical buildings. It is key that the tenant pipeline is not solely driven by attracting new companies to the area but rather a growth from a new business starting in an innovation centre and growing through the various offers available until ultimately they have a building of their own. As stated elsewhere in this case, the investment in the Innovation Centre does not generate a financial payback but acts as a springboard for economic growth and business development</li> <li>4. To do nothing – Being committed to drive local economic growth, having made a substantial investment in the infrastructure and new Essex Business School and having delivered and seen the success of Parkside, doing nothing is not an option for the University - momentum will be lost. This is why it is proceeding with a full design and planning application and has allocated £3 million its capital programme to demonstrate intent.</li> <li>5. Preferred Option – to build an Innovation Centre using internal resources supplemented by partner funding via grant. Once constructed, the building will be operated by a third party operator, Oxford Innovation, for 15 years.</li> </ol>
<p><b>3.7. Scheme assessment</b></p>	<p>The University Strategic Plan has excellence in research as a key objective and assessment of the Innovation Centre project is driven by that outcome. The national assessment of research quality and impact, the REF, in 2014 reconfirmed the University’s strength in conducting world-leading research and was ranked:</p> <ul style="list-style-type: none"> <li>• 19<sup>th</sup> in the UK for research excellence</li> <li>• Top in the UK for research in political science and international relations</li> <li>• In the top 4 for social science research (Oxford, LSE, UCL)</li> <li>• 98% of our research is rated as being internationally recognised, 78% internationally excellent</li> <li>• 9 of our departments are in the top 25 of their discipline for research</li> </ul> <p>The University submitted 339 staff to the last Research Assessment Exercise and plan to submit to 627 for the next assessment in 2021.</p>

The University is applying its research and therefore working with businesses is a priority for the university to be 'of' and 'for' the real world. The Knowledge Gateway will support business engagement. The University have moved its Business School next to Knowledge Gateway and relocated the world leading Institute of Analytics and Data Science onto the Knowledge Gateway to share our expertise in business analytics. The University has been ranked in the top 10 of all universities in the UK for engagement with businesses through Knowledge Transfer Partnerships and have a portfolio of 17 different projects worth more than £3m drawing on our research base to address key business issues, to help companies and organisations boost innovation and productivity and ultimately grow.

The University employed the consultancy services of Oxford Innovation as experts in Innovation Centre design and operation.

Oxford Innovation has created a 'concept' innovation centre which they believe to be of optimum design in terms of efficiency, costs and delivery of outputs.

They then advised on the design of the Knowledge Gateway Innovation which has now received planning consent

### 3.8. Transport KPIs

Key performance indicators	Unit	AM Peak – Weekday	PM Peak – Weekday	Interpeak - Weekday
Congestion relief road schemes				
Congestion relief through public transport, demand management and others				
Access to development site schemes				
Structural maintenance schemes				

### 3.9. Assumptions

List all assumptions made for transport modelling and approach. WebTAG sets out assumptions that should be used in the conduct of transport studies.

In addition, please list any further assumptions supporting the analysis.

### 3.10. Sensitivity tests

Set out your sensitivity tests considering risks, uncertainties and sensitivities associated with the project

### 3.11. Appraisal summary

Provide positive and negative impacts of the scheme in the table below. Please adhere to WebTAG guidance.

Category of impact	Impacts typically monetised	Impacts that can be monetised	Impacts currently normally monetised
Economy	Business users and providers	Reliability regeneration Wider impacts	Townscape heritage Biodiversity Water Security Access to Services Affordability Severance
Environment	Noise; Air Quality Greenhouse Gas	Landscape	
Social	Commuting and other users Accidents Physical activity and journey quality	Reliability option and non-use values	
Public accounts	Cost to broad transport budget Indirect tax		

### 3.12. Transport value for money statement – See guidance

	Present values in 2010 prices and values
PVB	
PVC	
NPV = PVB – PVC	

Initial BCR = PVB/PVC

### 3.13. Value for money summary - worked example

Please identify the category of VfM based on Benefit Cost Ratio (BCR) of the scheme using monetised impacts in line with WebTAG guidance.

VfM assessment should take into account qualitative and quantitative impacts in 2 stages:

- I) Construct 'adjusted' BCR
- II) Take into account all impacts that could not be monetised

VfM statement report should include:

- I) VfM category
- II) PV of benefits, costs and range around BCR
- III) Summary of assessed benefits and costs, including assumptions that influenced the results
- IV) Assessment of non-monetised impact
- V) Key risks, sensitivities and uncertainties

	<b>Assessment</b>	<b>Detail</b>
Initial BCR	1.5 (BCR)	Estimated using WebTAG guidance
Adjusted BCR	1.9 (BCR)	Includes estimates for reliability impacts
Qualitative Assessment	Largely beneficial	There is strong evidence of impacts relating to severance and security benefits
Key risks, sensitivities	Risks reflected in VfM conclusion	Cost estimates are not final. Higher optimism bias rate applied to account for uncertainty in cost estimates
VfM category	Medium/high	Qualitative assessment suggests BCR may be high. Medium/high value for money is judged appropriate as it is not possible to distinguish between the two categories with any certainty.

## 4. COMMERCIAL CASE

*The commercial case determines whether the scheme is commercially viable. It presents evidence on risk allocation and transfer, contract timescales, implementation timescales and details of the capability and skills of the team delivering the project.*

### 4.1. Procurement

The project has undertaken two separate procurement exercises which have come together to ensure successful completion of the objectives.

There is a construction element for the building and an operator element to run the building on behalf of Knowledge Gateway Ltd. The construction tender has been procured via a framework. Once the building is complete, it will be handed over to a third party operator specialising in Innovation Centres to run and achieve the objectives.

The procurement of the operator has been decided on an outcomes basis as well as financial model. The operation of the building will influence the final design and internal layout.

Oxford Innovation were successful in winning the operator tender and have also been involved as expert consultants to inform the final layout of the building. They have had the opportunity to comment on the design and have not requested any changes to the internal layout.

The construction phase has been tendered by an in house procurement team using an ECC approved NHC framework and the initial submissions are significantly over budget. The University is committed to the construction of the Innovation Centre and its design. As a result it has split the construction into two phases; the ground works and foundation slab which has been completed, followed by the main building construction. Significant work is being undertaken by the University, the architects, the QS team and the contractor to reduce the construction cost and the University has increased its funding contribution by £2.5m. The contractor has given the University fixed price construction contracts for three options to eliminate cost inflation risk. The final constraint is to be sensitive to the original and approved planning permission and ensure that changes made to the design which reduces costs doesn't impact on the planning determination and require a resubmission which would introduce a six month delay into the project.

### 4.2. Commercial dependencies

The project is commercially dependent on finding a suitable construction company to build the Innovation Centre and a suitable company to operate it.

The management of the facility and the tenants passes to the operator, Oxford Innovation. The University takes on some of the financial risk but also the management of the operator to deliver outcomes in accordance to the contract. The contract with Oxford Innovation is based on the delivery of economic and regeneration metrics in this business case but also a financial model which has a high risk sharing element to it where the University are guaranteed a minimum return regardless of occupation levels and a sharing mechanism for additional revenues being generated.

### 4.3. Commercial sustainability

*Please can you identify how the project will be commercially sustainable? Will the project require on going revenue support? If so how will this be funded?*

*Please verify the project's sustainability by including cash flow projections post-completion.*

	<p>Over a fifteen year period the Innovation Centre is financially sustainable at an operational level but struggles to 'repay' the capital deployed. The University accepts this due to the wider benefits enabling its strategic objectives and local benefit. The University of Essex is giving an interest free loan to Oxford Innovation for fit out costs and in return OI is willing to subsidise the early year losses and sharing the risk.</p> <div data-bbox="485 349 1442 775" style="background-color: black; width: 100%; height: 100%;"></div> <div data-bbox="491 792 1442 1160" style="background-color: black; width: 100%; height: 100%;"></div> <p>As noted above, this investment is not commercially viable as it has a negative IRR – calculation attached.</p> <div data-bbox="475 1346 721 1384" style="background-color: black; width: 100%; height: 100%;"></div> <p>All Capital Costs are at July 2017 prices</p>
<p><b>4.4. Compatibility with State Aid rules</b></p>	<p><i>Does funding this scheme constitute state aid?</i></p> <p><i>If so, what regulations are being applied and what advice has been received to demonstrate compatibility? Are you eligible to receive grant aid at the level requested within the State Aid Regulations?</i></p> <p>State Aid advice suggests there are no issues due to a block exemption.</p> <div data-bbox="549 1783 609 1841" style="text-align: center;">  </div> <p>Note on State Aid Implications 17 11 15.</p>
<p><b>4.5. Commercial viability</b></p>	<p><i>Please provide:</i></p>

1. *Evidence to show the risk allocation and transfer between the promoter and contractor and timescales identified in procurement and/or contract management strategy*
2. *Definition of approach taken to assess commercial viability*
3. *Arrangements for cost overrun*
4. *Letter from local authority S151 officer.*

We have letters of support from the University, decisions from the Knowledge Gateway Board to support the project and a letter of support from the independent advisors, Oxford Innovation.



Oxford Letter of Support - 10 August ;



Letter of Support

## 5. FINANCIAL CASE

*To be completed in conjunction with the spreadsheet in **Part B***

### 5.1. Total project cost and basis for estimates

£13m project cost is being validated through the procurement process.

The University is currently assessing 3 options:



The preferred option is Option 2.

Keir, the preferred contractor, has given fixed and guaranteed construction prices for all options to August 2017 therefore eliminating cost risk exposure

### 5.2. Total SELEP funding request

*Revenue or capital?  
Grant or loan?  
Repayment schedule*

A project such as this which focuses on the wider economic benefits rather than bottom line profits is best enabled by the introduction of grant funding as this does not impose a further financial burden.

### 5.3. Other sources of funding

The University of Essex is committing substantial resources (£3m) and Essex County Council has committed grant funding of £2m. The University of Essex Knowledge Gateway limited is using land with a value of £1m for the scheme and proceeds from another land disposal of £6m

#### 5.4. Summary financial profile – expand as appropriate

(£m)	15/16	16/17	17/18	18/19	19/20	20/21	Total
<b>Source of funding – List here the amount of funding sought</b>							
SELEP request			1.000	1.000			2.000
Applicant contribution		0.500	1.750	6.750			9.000
Third party & other contributions (Essex County Council)	0.250	1.750					2.000
Borrowing							
Local contribution total (leverage)							
<b>Total</b>	0.250	2.250	2.750	7.750			13.000
<b>Costs - List here the elements of gross costs, excluding optimism bias.</b>							
e.g.							
Procurement							
Feasibility		0.080					0.080
Detailed design	0.250	0.610					0.860
Management							
Construction		1.560	2.750	6.930			11.240
Contingency				0.500			0.500
Other cost elements – Fit out				0.320			0.320
VAT							
<b>Total</b>	0.250	2.250	2.750	7.750			13.000

#### 5.5. Viability: How secure are the external sources of funding?

Please provide evidence of the security of the specified third party contributions

Type	Source	How secure?	When will the money be available?
Public	SELEP LGF	This bid	£1m 10/17/18, £1m 2018/19
	Essex County Council	Grant Agreement signed and payment made	March 2016 (£250k) March 2017 (£1.750m)
Private	University of Essex	Confirmed	July 2014
	University of Essex Knowledge Gateway	Confirmed use of land disposal proceeds	May 2017

#### 5.6. Cost overruns

Please describe how cost overruns will be met by other funding sources given that SELEP contributions will be capped at the offer awarded

The project includes contingency of upto £500k and the University have agreed to increase the overall budget to £13m

<p><b>5.7. Delivery timescales</b></p>	<p><i>What are the main risks associated with the delivery timescales of the project? Please identify how this will impact on the cost of the project</i></p> <p>The procurement and final tender price of the construction element is the key risk to delivery timescales. This risk has materialised and the initial tender submissions are significantly over budget. The University is committed to the construction of the Innovation Centre and its design. As a result it has split the construction into two phases; the ground works and foundation slab which has been completed, followed by the main building construction. Significant work is being undertaken by the University, the architects, the QS team and the contractor to reduce the construction cost and the University has increased the budget by £2.5m. The contractor has given the University fixed price construction contracts for three options to eliminate cost inflation risk. The final constraint is to be sensitive to the original and approved planning permission and ensure that changes made to the design which reduces costs doesn't impact on the planning determination and require a resubmission which would introduce a six month delay into the project.</p>
<p><b>5.8. Financial risk management</b></p>	<p><i>Identify key risks to the scheme funding and any mitigations</i></p> <ul style="list-style-type: none"> <li>• Costs of Construction mitigated by fixed price contracts for a range of options</li> </ul>
<p><b>5.9. Alternative funding mechanisms</b></p>	<p><i>If loan funding is requested how will it be repaid?</i></p> <p><i>Do you anticipate that the total value of the investment will be repaid? If not, how much will be repaid?</i></p> <p>A project such as this which focuses on the wider economic benefits rather than bottom line profits is best enabled by the introduction of grant funding as this does not impose a further financial burden on the project.</p>

## 6. DELIVERY/MANAGEMENT CASE

The management case determines whether the scheme is achievable. It provides evidence of project planning, governance structure, risk management, communications and stakeholder management, benefits realisation and assurance.

### 6.1. Project management

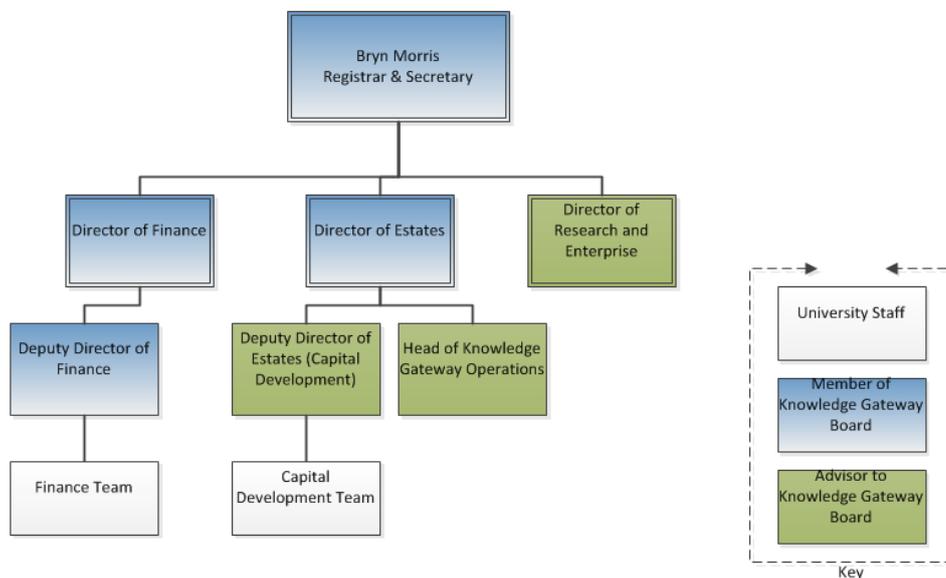
Please provide details of who will be Senior Responsible Officer for delivering the scheme and the different roles and responsibilities they will play. Please also detail the governance structure for the project identifying how key decisions have or will be made, how the scheme will be monitored and details of the contract management arrangements. Please provide an organogram if available.

The Innovation Centre is managed under the governance arrangements of the University of Essex Knowledge Gateway Ltd. However, KG Ltd do not employ staff directly, instead University of Essex staff act on behalf of the company as agents.

The KG Ltd board is made up from external members, members of the University Council and members of staff.

Bryn Morris acts as SRO in his role as board member and the University Registrar and Secretary. There are distinct work streams reporting to the SRO led by board members and senior members of staff who act as advisors to the board.

The KG Ltd board make key decisions over the design and outcomes of the scheme but have delegated operational decisions to an 'Innovation Centre Programme Board'



The construction contract will be the responsibility of the Deputy Director of Estates (Capital Development) and the operator contract the responsibility of the Deputy Director of Finance

Once Oxford Innovation are managing the centre, they will be required to report progress the KG Ltd Board.

**6.2. Outputs**

Please identify how the outputs for the scheme will be achieved within the programme timescales and details of how the project will be monitored and evaluated. Please also complete the outputs delivery table.

Please complete with any baseline information.

Output	16/17	17/18	18/19	19/20	20/21	21/22
Direct jobs	9	46	138	233	288	311
Indirect jobs		23	69	116	144	155
Jobs safeguarded						
Employment space	21,707 sq ft					
Housing starts						
Housing completions						
Learners supported						

Output	22/23	23/24	24/25	25/26	26/27	Total
Direct jobs	333	256	378	400	423	423
Indirect jobs	166	128	189	200	211	211
Jobs safeguarded						
Employment space	21,707 sq ft					
Housing starts						
Housing completions						
Learners supported						

**6.3. How will outputs be monitored?**

Outcomes will be monitored as a KPI and contractual obligation for the Innovation Centre Operator

**6.4. Milestones**

Please identify the key milestones and projects stages relating to the delivery of this project in the table below. Please ensure a Gantt chart has been attached to this application form, clearly identifying the milestones for the project, the key construction stages, the critical path and all interdependencies.

Activity	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Technical Design																			
Operational Tender																			
Construction Tender																			
Final Business Case																			
University Sign-off																			
ECC/SE LEP sign-off																			
Contract award																			
Mobilisation																			
Start on site																			

A full Gantt chart for the project will be supplied once the procurement of the contractor

	and operator is complete
<p><b>6.5. Stakeholder management &amp; governance</b></p>	<p><i>Please provide a summary of the stakeholder management plan for the scheme. Include any governance arrangements which will materially impact on the delivery of the scheme.</i></p> <p><i>Provide brief description of how key statutory stakeholders will be managed and engaged, in line with Communication and Stakeholder Management Strategy.</i></p> <p><i>In broad terms consider: supplier, owner, customer, competitor, employee, regulator, partner and management. Specifically consider: local authorities, the Highways Agency, statutory consultees, landowners, transport operators, local residents, utility companies, train operating companies, external campaigns, etc.</i></p> <p><i>Identify champion, supporter, neutral, critic, opponent and potential objections</i></p> <p><i>Define stakeholder's involvement (response, accountable, consulted, support, informed)</i></p> <p>The University has proactively worked with Essex County Council, Colchester BC, SELEP, the Haven Gateway and well as its own internal stakeholders to get the project to this stage.</p> <p>Once the centre is constructed it will be handed over to an operator. As part of the operator procurement process, a key selection criterion was the engagement plan with all stakeholders.</p> <p>The University stakeholder strategy is attached</p> <div style="text-align: center;">  <p>Stakeholder engagement plan 17.1</p> </div> <p>An extract from the Oxford Innovation bid is also attached</p> <div style="background-color: black; width: 150px; height: 15px; margin: 5px auto;"></div>
<p><b>6.6. Organisation track record</b></p>	<p><i>Please briefly describe the track record of the organisation in delivering schemes of this type, including whether they were completed to time and budget.</i></p> <p>The SELEP has previously given funding to the Knowledge Gateway Parkside Phase 1 (£2.4m) and Parkside Phase 1a (£850k). Both of these projects were/are on time and on budget.</p> <p>Parkside Phase 1 is operational is about to become 100% occupied. Parkside Phase 1a is also operational and 100% let.</p>
<p><b>6.7. Assurance</b></p>	<p><i>Please provide s151 Officer confirmation that adequate assurance systems are in place. Please also provide evidence of financial performance over 3 years.</i></p> <p>Not applicable</p>
<p><b>6.8. Equalities</b></p>	<p><i>Please provide evidence of your Equalities Impact Assessment here.</i></p>

<p><b>Impact Assessment</b></p>	<p>Once the centre is constructed it will be handed over to an operator. As part of the operator procurement process, the proposal was tested for equality and an Equalities Impact Assessment undertaken.</p>
<p><b>6.9. Monitoring and evaluation</b></p>	<p><i>Please explain how you will monitor and evaluate the project, referring to the use of key performance indicators as appropriate.</i></p> <p><i>Will an Evaluation Plan be put in place? Will it be standalone; how will it be disseminated; how will lessons learned be incorporated into future projects?</i></p> <p>There will be a contractual obligation for the Innovation Centre operator to deliver the specific outcomes of the centre. Failure to deliver against these objectives will be considered a breach of contract and remedied as required. Both the operator and the University will monitor the outcomes and these can be reported to stakeholders and funders as required to validate the investment.</p> <p>The construction tender will be managed by an in house procurement team, a capital development team with support from external QS advice.</p>
<p><b>6.10. Post completion</b></p>	<p><i>What are the plans for the project on completion? Will there be a change of ownership, will the project be refinanced? How will this be managed?</i></p> <p>The Innovation Centre is built within the University Campus and as such the land has a restrictive covenant which only allows activity related to education and academic research. The Innovation Centre is a key facilitator for student and academic engagement with the business community. It is therefore impossible to leave the ownership of the University.</p> <p>Refinancing is only relevant in the context of repaying the ECC as the University is using cash reserves and not borrowing.</p>

## 7. RISK ANALYSIS

### Likelihood and impact scores:

5: Very high; 4: High; 3: Medium; 2: Low; 1: Very low

Risk	Likelihood*	Impact*	Mitigation
Failure to secure full funding of the project	1	5	The business case outlines plans to secure full funding. Unless this is achieved the project may not go ahead. £2.5m of additional funding has already been secured.
Cost of development exceeds forecasts	4	2	Cost plan with suitable contingencies and proper management arrangements will be put in place by the University.
Development is slow to reach full occupancy	2	1	This has been mitigated by the appointment of Oxford Innovation to manage the centre and their financial models which transfers operating risk to them for 15 years. The project will not have to bridge a credibility gap unlike Parkside which was a completely new concept in the market.  In particular there will be strong interest from current hot desk users who want to graduate up to having their own rooms.
Operating costs greater than forecast	2	1	Expert advice taken during design phase and a business case prepared.  This has been mitigated by the appointment of Oxford Innovation to manage the centre and their financial models which transfers operating risk to them for 15 years.
Job forecasts are not achieved	2	3	The evidence from Phase 1 of Parkside is that the demand is currently there and should increase as a more tailored product is made available as this project intends
Health & Safety legal obligations met	1	3	Health & Safety risk and mitigation would form part of the construction contract build.

The financial model proposed by Oxford Innovation has a high degree of risk transfer as its core. The University receive a fixed rental payment and an Income Share.

Due to the nature of a lease model, Oxford Innovation will not take any fixed management fee to operate the centre; instead all our remuneration will be based on profit generated by the centre after rent has been paid to UoE. The key drivers of profit in our model are: licence fee level and occupancy achieved.

The model assumes that 90% occupancy will be achieved by the end of Year 2 |

[REDACTED]

[REDACTED]

## 8. DECLARATIONS

8.1. Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?

No

8.2. Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors

No

8.3. Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?

No

If the answer is "yes" to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.

I am content for information supplied here to be stored electronically and shared in confidence with other public sector bodies, who may be involved in considering the business case.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. I also declare that, except as otherwise stated on this form, I have not started the project which forms the basis of this application and no expenditure has been committed or defrayed on it. I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

8.4. Signature of Applicant



8.5. Print Full Name

Marc Albano

8.6. Designation

Company Secretary – University of Essex Knowledge Gateway Limited

8.7. Date

21 July 2017