

Triple Helix in a spatial perspective: Perspectives from Oxford and Cambridge

Christine Doel, SQW

Our evidence base

- “*Cambridge Cluster at 50: the Cambridge economy in retrospect and prospect*”
 - Commissioned by EEDA and partners, completed in 2011 by SQW
 - Based on in-depth consultations with local high tech firms, a review of secondary data, consultations with local stakeholders
 - Available at http://www.sqw.co.uk/file_download/284
- “Oxfordshire high tech cluster study” (working title)
 - Commissioned by the University of Oxford and Oxford Trust
 - Based on in-depth consultations with local high tech firms and a wider high tech firms survey, a review of secondary data, consultations with local stakeholders
 - On-going, although nearing completion – to be published in the Autumn

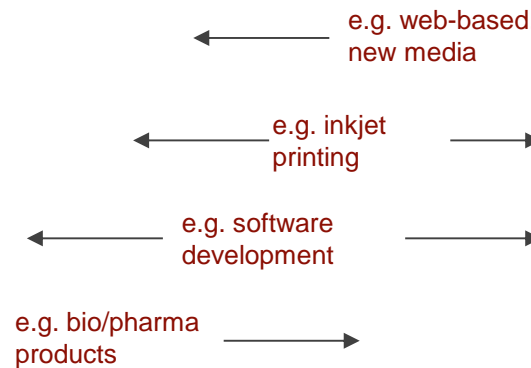
Oxford and Cambridge both have substantial – and evolving – knowledge-based ecosystems

	Oxford/shire	Cambridge and sub-region
HEIs	<ul style="list-style-type: none"> University of Oxford Oxford Brookes University 	<ul style="list-style-type: none"> University of Cambridge Anglia Ruskin University
Research institutes	<ul style="list-style-type: none"> Harwell Science and Innovation Campus – Rutherford Appleton Laboratory Culham Centre for Fusion Energy 	<ul style="list-style-type: none"> MRC's Laboratory of Molecular Biology The Genome Campus – Wellcome Trust Sanger Institute Babraham Research Institute
Specialist tech-based sectors	<ul style="list-style-type: none"> Bioscience Cyrogenics / instruments Space-related 	<ul style="list-style-type: none"> Bioscience IT/digital
Specialist “soft” infrastructure	<ul style="list-style-type: none"> OBN Oxford Investment Opportunity Network (OION) 	<ul style="list-style-type: none"> Cambridge Angels and some VC provision Cambridge Network
Specialist “hard” infrastructure	<ul style="list-style-type: none"> Oxford Science Park Magdalen Science Park Begbroke Science Park 	<ul style="list-style-type: none"> St John's Innovation Centre Cambridge Science Park Cambridge Biomedical Campus
High tech economy	<ul style="list-style-type: none"> c. 20,000 high tech jobs (6.2% of total) 	<ul style="list-style-type: none"> c. 30,700 high tech jobs (8.7% of total)

Evolving business models at the heart of the Triple Helix...

- Traditional sectoral boundaries are increasingly unhelpful...
- Business “models” are becoming more complex, differentiated and fluid...

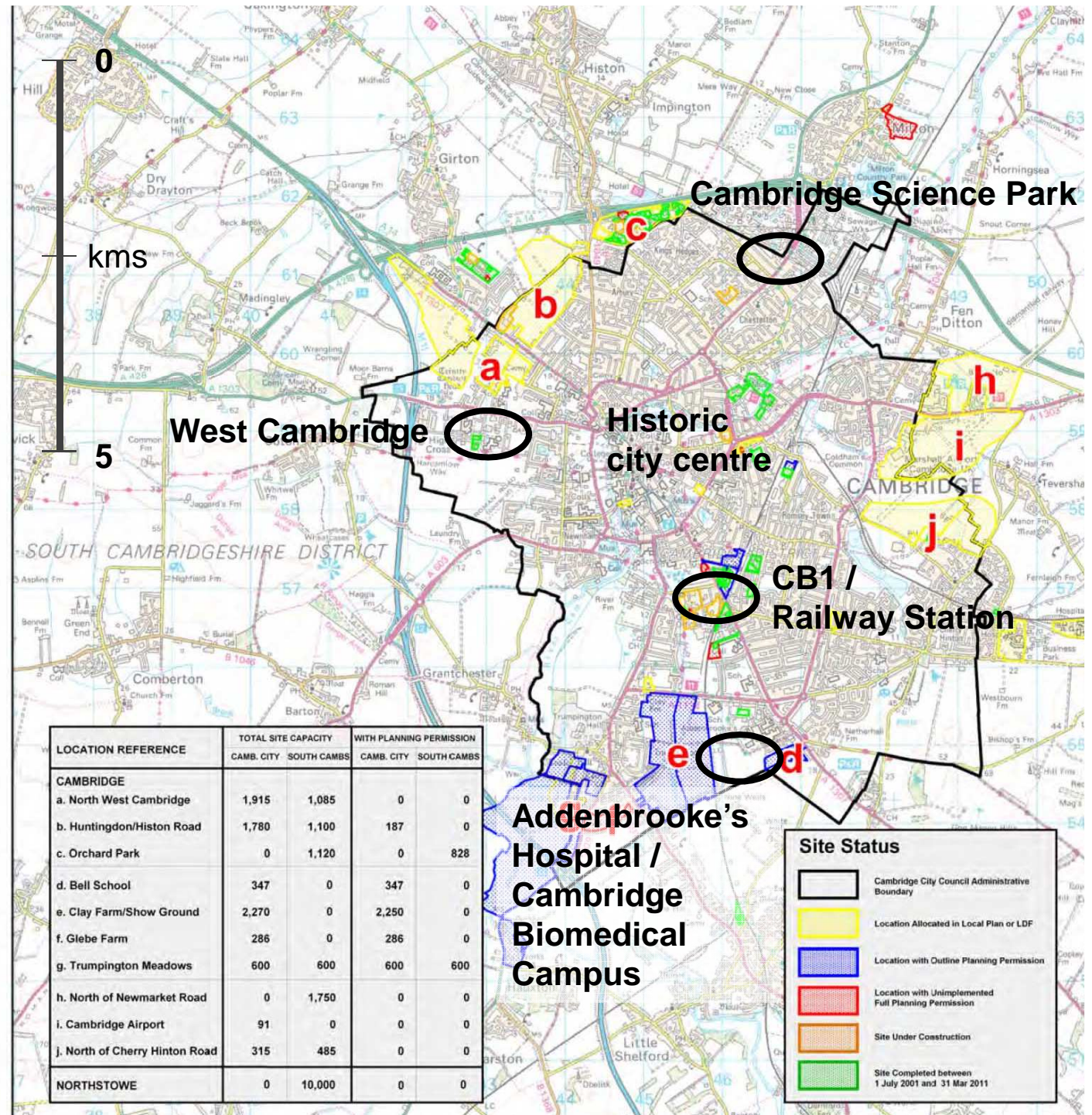
- Rely on external finance – VC, angels, etc.
- Protection of IP is a key milestone in value creation
- Many years before a viable revenue stream is established – hastens need for exit
- “Cutting edge” in terms of R&D
- High barriers to entry



- Rely on own finance, sweat equity, etc.
- Knowledge is created by sharing it, not protecting it
- Value is created quickly – which may mean quick exit
- Clever applications – but more D than R
- Low barriers to entry

- ...with implications for the relationship to “place” and “space”

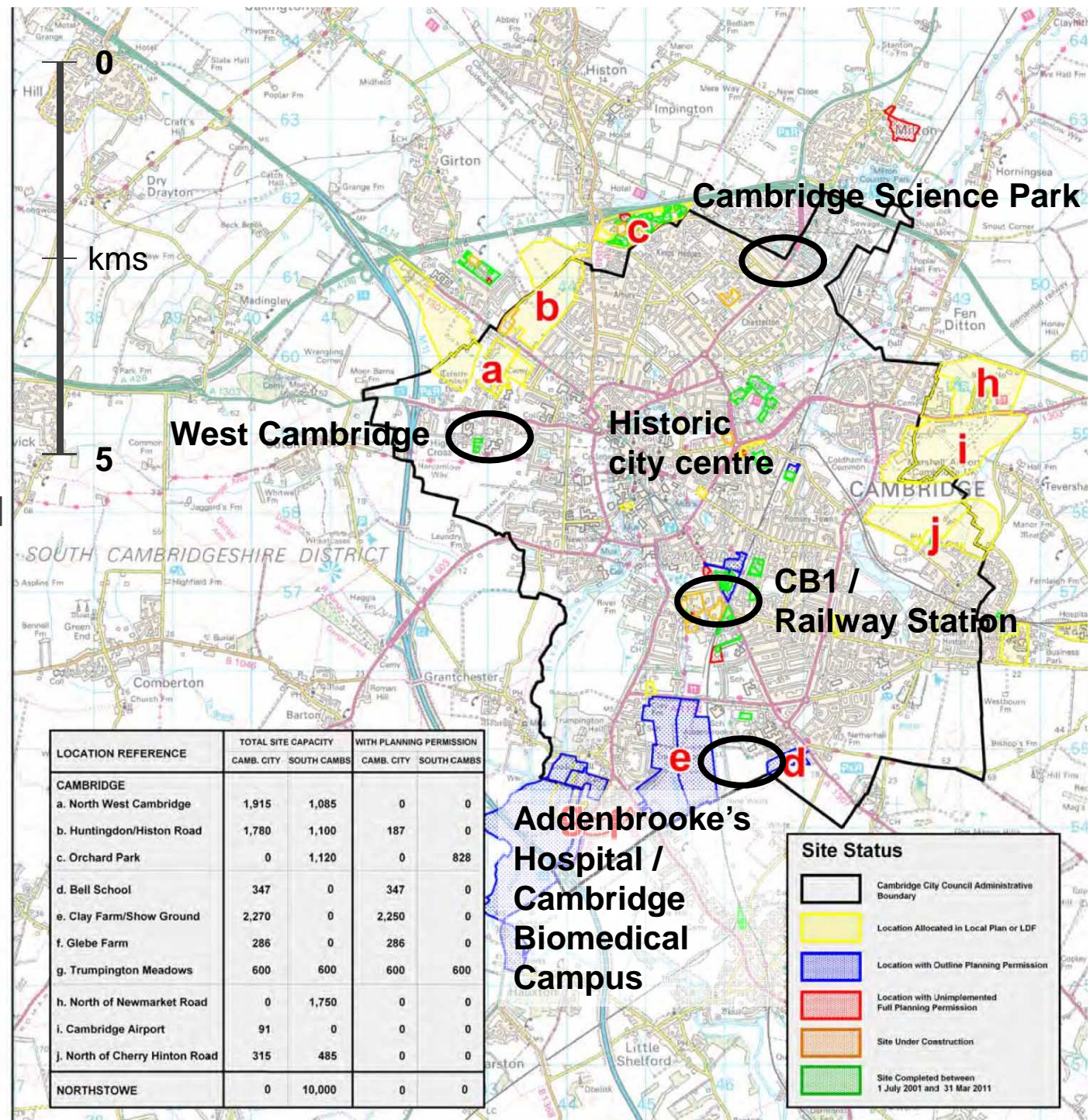
Geography matters



Geography matters

In Cambridge, many tech-based firms want a “city-centre” location:

- West Cambridge and SJIC/CSP are “a very long way apart”, and Addenbrooke’s is also “very remote”
- proximity to London is very important for many firms



Some high profile responses: Microsoft

- Microsoft occupied a major, purpose-built, R&D facility within West Cambridge, next door to the Computer Laboratory
- But it chose to relocate within Cambridge...
- ...to Station Road, part of CB1
- Why?
 - better access to London
 - staff prefer “town centre location”
 - more space

Microsoft's current facility within West Cambridge



New Microsoft building, on Station Road, within CB1



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Politics and spatial responses to growth have changed in Cambridge

- In the late 1990s/early 2000s:
 - “Cambridge is full”
 - Spatial policy was one of dispersal
- Since 2003:
 - Development of a new Spatial Plan and a review of Green Belt boundaries, allowing Cambridge to grow
 - Investment for growth – particularly the new £180m Cambridgeshire Guided Busway which opened in 2011
 - > will it change perceptions of distance within Cambridge?
 - Announcement of AstraZeneca’s relocation to the Cambridge Biomedical Campus in the south of the city
 - > part of a major development of biomedical R&D and new housing, much of it on land that was previously Green Belt
 - > linked to the railway station and city centre by the Cambridgeshire Guided Busway

Implications for high tech cluster growth

- Cambridge has allowed three geographies to continue to function: *all three are crucial for high tech growth*
 - within cycling distance
 - within an hour of Cambridge (including London)
 - anywhere around the globe
- As business models become more “networked” and “permeable”, “flexing” these spatial “layers” through spatial planning will be a catalyst for economic growth
- For Oxford/shire, the same debate is underway, but
 - politically difficult
 - now very challenging in relation to infrastructure investment
- The future of knowledge hubs depends on
 - “getting the spatial plan right”
 - investing in infrastructure to help make it happen

Contact

Christine Doel

Director

SQW

t. 01223 209400

e. cmdoel@sqw.co.uk

w. www.sqw.co.uk

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