Commercialising Health: The Future of Productive Neighbourhoods
Where Today Meets Tomorrow

GENERAL MOTORS TECHNICAL CENTER

1956 brochure advertising General Motors' new Technical Center in Warren, Michigan
An Urban Morphology Phenomenon
A short history in the UK

TIMELINE

1950
- New space for research (CSP)
- Move to the suburbs
- Land Availability from MOD and Rail Closures

1987
- Private car affordability
- Introduction of B1 Use Class

2000
- Enterprize Zone Policy
- Urban Renaissance

Growth in the knowledge economy

Second garden town movement

“...Employment opportunity figures a great deal in the percentage of those who wish to escape the inconvenience of today’s crowded metropolitan areas”

US influence
Was this the future utopia?
Abandon to challenges vs Expand to opportunities
Suburban Business Park

Evolve to challenges

Urban Innovation District

Dispersed opportunities

- Increase density
- Increased flexibility
- Mobility choices
- Additional amenities
Leading Change or Following Trend
Broad trends observed in the UK

- Creating tenant portfolio
- More amenities
- Increasing leases in return for greater service
- Increasing density
- Smaller companies
- More mobility choices
The Future is....Transformational

- Mobility choices are fast becoming a key aspect of both consumer preference and branding.

Car-dependant mobility
The Future is....Transformational

- Mobility choices and mix of uses support the desire for increased interaction and networking between companies.

Multiple-choice mobility
The Future is....Transformational

- Providing varied, interesting, and continually updating amenities adds value and culture that employees are businesses are looking for.
The Future is....Transformational

- Recruitment and retention has, in recent years, started to rise up the list of factors important to site selection and business location.

An explanation of employee welfare programs used at the National Cash Register Company's factory in Dayton, Ohio, 1903. Via the Harvard Art Museums.

Research
From trends to data focus

- Collocation/Convergence/Collaboration.
- Nurturing Ecosystem.
- Functional Habitat.
Research
What we need to know?

1. Drivers
Which are the economy drivers in your area?
Is there affordable housing accessible from these drivers?

2. Mobility
Where do people come from?
How do people commute?
What is the public transport service?
Are there enough transport choices?

3. Market
How affordable is the commercial space?
How affordable is the residential market?
Is the housing offer meeting different people’s demands?

4. Talentshed
What are the qualifications of the population?
Do these match the employment opportunities?
What are the services people have access to?
Research
What metrics do we need?
This is a sample area of the south east to demonstrate the area of investigation.
Research
Average House Prices &
Office Lease Prices
Research
Average House Prices & Office Lease Prices & Access to Rail-based Transport System
The People Perspective: Milton park case study
The People Perspective
Milton Park case study

20 Spin-outs

Source: Oxford to Cambridge Express-way Strategic Study Stage 3 Report
Park Wide Survey: Opinion and Ideas
Mixing people opinions with quantitative data

- Four groups of survey responses, self classification, open to all employees within Milton Park.
- 168 respondents identified themselves as living locally as their primary relationship with Milton Park.
- Those identified as Other include Milton Park stakeholders, agents, partners, suppliers, etc.

1119 respondent sample.

- 71% work in Milton Park (795 respondents)
- 15% live locally or near Milton Park (168 respondents)
- 6% are a business leader in Milton Park (84 respondents)
- Other (68 respondents)
Affordability + Demographics
Livability: House Prices

Employee origin and house price bands

The employee postcode origin data from the travel survey can be mapped against house price bands to understand livability patterns.

Average house sale prices
Housing price index adjusted
All transactions, 1995-2017

- Bottom 20% quantile (£213,000 - £402,000)
- 21%-40% quantile (£402,000 - £486,000)
- 41%-60% quantile (£486,000 - £595,000)
- 61%-80% quantile (£595,000 - £760,000)
- Top 20% quantile (£760,000 - £2,036,000)

Local Authority Boundaries
10KM*10KM grid
5KM*5KM grid
Milton Park
Zone around a 10-mile radius from Milton Park
Travel Survey Respondent JourneyOrigins

Data Source: Milton Park Travel Survey 2017
Connectivity Analysis

Movement

Existing cycling network

The cycling network has been built based on biker experience as shown in Strava Heatmaps as a representative of avid cyclists.

Employees

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<tr>
<th>Density by Grid Cell</th>
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<tr>
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<td>30-40</td>
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<td>40-55</td>
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</tbody>
</table>

Data Source: Milton Park Travel Survey 2017 / OS Local Map / Strava Heatmap
Connectivity Analysis

Movement
Existing cycling network

Existing cycling network + LIVABILITY
Main activities mentioned in Stakeholder Survey

Employees
- 1
- 1-5
- 5-10
- 10-20
- 20-30
- 30-40
- 40-55

Data Source: Milton Park Travel Survey 2017 / OS Local Map / Strava Heatmap
Survey Results
How easy is it to get to Milton Park?

- Walking to Milton Park is perceived to be very difficult whilst cycling is seen as neutral.
- Similar questions in relation to driving identified the site as easy to access by car.
Connectivity Analysis
Movement

Active commuting
+ USER EXPERIENCE

Data Source: Milton park Vision 2040 Survey/
OS Local Map / Strava Heatmap
Masterplan
Creating a framework for future growth

ACCESSIBILITY

STEWARDSHIP

IDENTITY

EXPERIENCE

ADAPTABILITY

IMPLEMENTATION
Sustainable Growth
Applying Design Principles

*Connectivity calculated as length on the network within a walkable radius.
Resiliency
Landscape Identity

Maximize landscape value
Community engagement “changer”
Increase live-work-play balance
Minimize peak hour effect
Minimize flooding risks
Resiliency
Energy/Resources

Reduce peak runoff
Reduce external energy demand
Reduce water for demand for non-potable uses
Offset clean energy back to the grid
New energy centre both generator and back-up source
Near Term
Mobility and community projects
Aims for the future
Data to inform design

Aim is to reduce single occupancy car mode to no more than 35% by 2040 and 65% of journeys to be sustainable modes.

- Grow cycling mode share to 25%
- Grow bus use to 25%
- Car share, new demand-responsive bus services, autonomous taxis and pods – 15%
- Parking strategy
- Incentives and rewards
Data to inform design

3 years of travel surveys

Modal Shift

- Car share: 5%, 8% (2016, 2017, 2018)
Data to inform design

New sensor data

Cyclist Count Trends Across A Day

- direction: in, out

- Time Period

- Sum of Mean Cyclist Counts Across All Count Lines
Data to inform management

New sensor data

Cyclist Behaviour vs. Rainfall

Mean Cyclist Count Out  Mean Cyclist Count In  Precipitation (mm)

Mean Cyclist Count

0  50  100  150


Weeks

Mean Precipitation (mm)

0  2  4  6
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Happier & healthier places to:
Attract and retain employees
Facilitate investment and funding
Strengthen communities & improve productivity
Be a part of the conversation