

Midlands Engine Economic Observatory, delivered by:



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The Midlands Engine Independent Economic Review Project Board, 14 May 2019

Emerging findings from literature review exercise

Outline of slide deck

- Purpose and approach
 - Overview of the review process
 - Coverage of the material
- Emerging findings framed against the core IER research questions defined by the Board
- Implications and reflections, including for deep dive research
- Next steps

PURPOSE AND APPROACH

Purpose

- Provide an overview of key emerging messages from our review of existing evidence
- Two main elements:
 - Coverage: Mapping and gapping of existing evidence (to inform deep dive research)
 - Substance: Headline messages against the 4 research questions

Approach

- Documents gathered through C4E and Observatory team
 - LEP and Midlands-wide evidence
 - Latest national thinking on productivity
- Literature review undertaken in Eppi Reviewer
 - Developed a “coding tree” aligned to the 4 research questions

Coding tree

1. Understanding the factors driving productivity performance across the Midlands

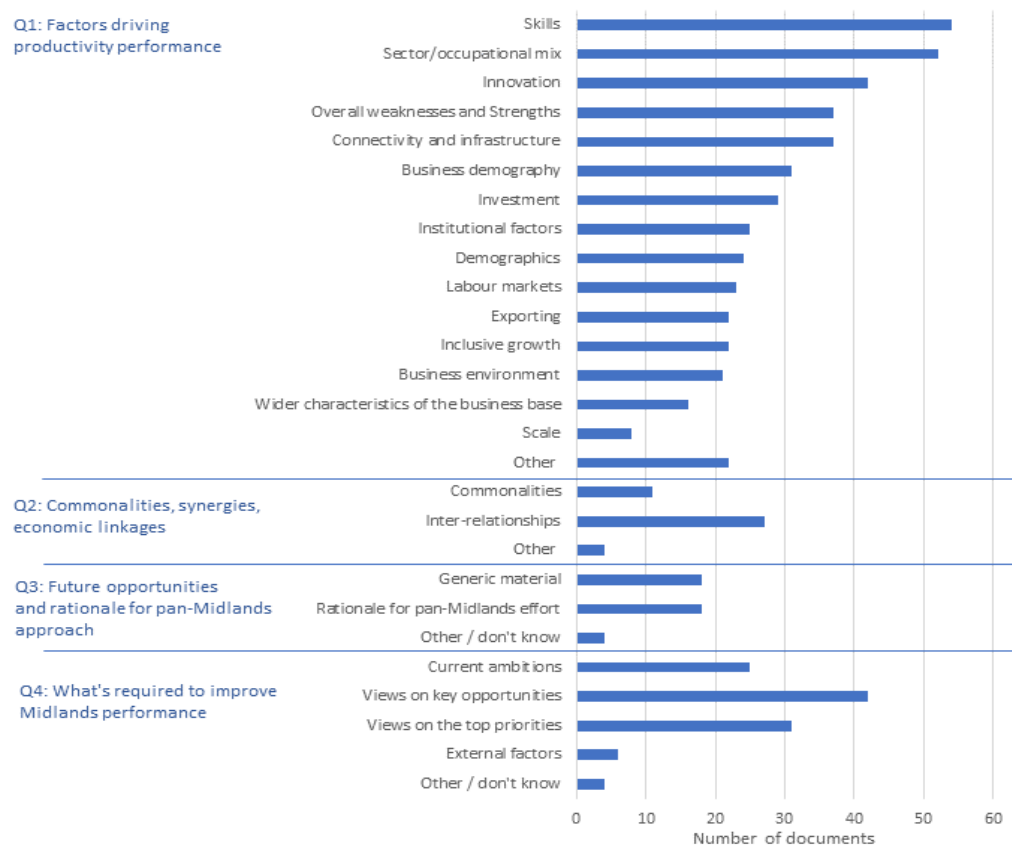
- a. Evidence on productivity **weaknesses and strengths** (i.e. describing the nature/scale of the problem or strength)

Note the following focus on drivers / factors / causes of productivity (so focus on material that gives us insight as to why performance is how it is and the implications for productivity performance – the link between the factors below and productivity might be implicit or explicit in the documents)

- b. **Innovation, R&D, knowledge, commercialisation** (i.e. the generation/development of new technologies/processes/products and services) and **diffusion and adoption of new technologies/innovation** within business/other organisations (i.e. absorptive capacity, take up of new processes, products and services, ability to translate knowledge into better performance/increased competitiveness). *[Note: process innovation is particularly important for productivity performance]*
- c. **Sector/occupational mix**: sectors, capabilities and functions undertaken in the Midlands (including tradeable vs non-tradeable activities, distinctive strengths), any evidence on the importance on specific Tier 1 firms and their supply chains
- d. **Exporting**, including markets beyond locality/ME and international trade
- e. **Investment**, including inward investment
- f. **Business: demography, enterprise start-up and scale-up** – business demography/density, HGFs/frontier firms, triggers/barriers to growth within firms¹, entrepreneurial dynamism (i.e. new start ups/scale ups driving improvement/failure of laggard firms/specific issues around family-owned firms not able to scale-up?)
- g. **Wider characteristics of the business base** not covered above (e.g. growth ambition, confidence, cultures, attitudes to risk, adaptability, leadership and management capability – particularly around innovation, networking behaviours, diversity and resilience)
- h. **Business: environment**, including hard infrastructure such as sites and premises (offices/labs/workshops/incubation & grow-on space), and soft infrastructure, such as business support, access to finance
- i. **Connectivity and infrastructure** (incl. transport, digital, energy supply)
- j. **Skills gaps and shortages**, including business/sector needs, graduate retention
- k. **Demographics**, including ageing workforce *[Note: this also has implications for increased demand for low productivity service sectors such as healthcare, as well as implications for the productive potential of the population], health [including mental health and the impact on productivity] and the role of the millennials...*
- l. **Economic participation and labour markets** – labour market participation, barriers to work, labour market churn, work security, quality of jobs
- m. **Inclusive growth** – track record of inclusive growth across the Midlands, what this means in the Midlands, issues causing unequal access to growth opportunities, and opportunities to ensure that all communities benefit from and contribute to growth
- n. **Scale, business density and agglomeration**
- o. **Institutional factors**, governance and leadership (leaders in the community, rather than leadership at the level of an individual firm – could include civic leadership and business leaders that make things happen etc)

Coverage

- For the literature review, filtered 230 documents (relevance, robustness) → 130+ reviewed



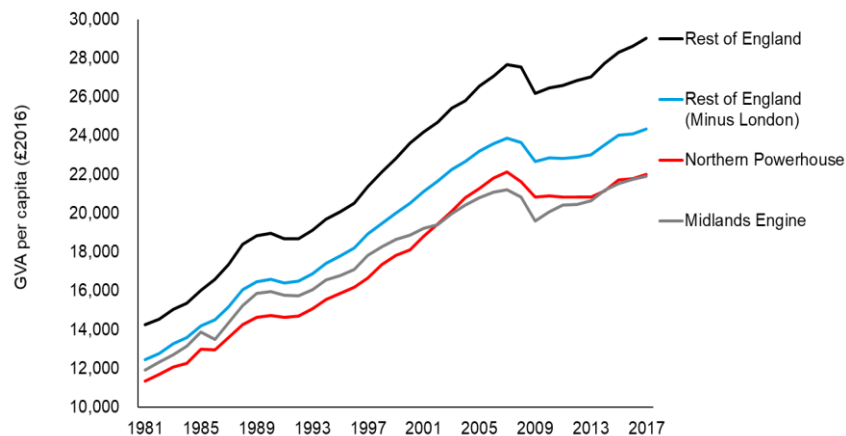
Caveats and notes of caution

- This is a synthesis of the evidence presented in the 130 reports – not SQW's or the MEO's views/answers to the research questions!
- Covers both generic issues (applicable elsewhere in UK) and Midlands-specific/distinctive challenges and opportunities
- Based on *existing* evidence – so much of this will inevitably be already known across the region (but not always presented at a Midlands wide level)
- Availability of good quality/insightful evidence variable across the Midlands, and areas at varying stages of maturity in policy development terms e.g. LIS processes – will need to draw in latest thinking over summer
- Not expecting existing evidence to answer all 4 research questions in equal measure

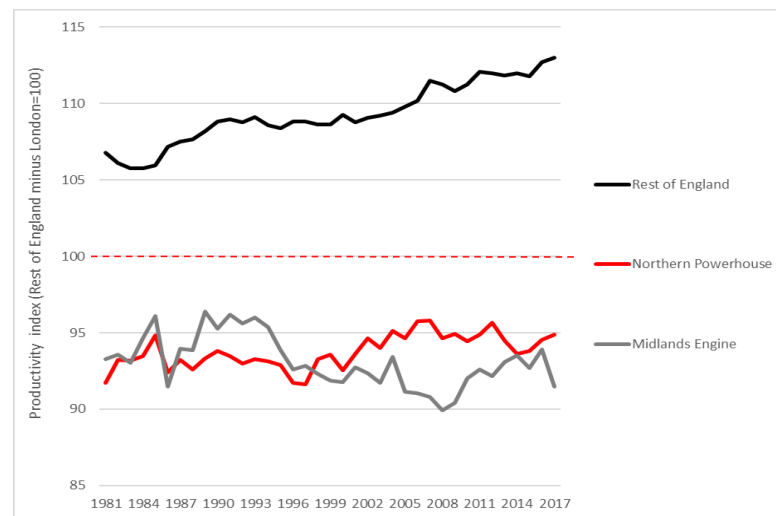
EMERGING FINDINGS

Context – headlines from data

- The Performance Gap has widened between the Midlands and the Rest of England after late 1990s



- The Midlands' productivity deficit with the comparator areas was narrowing post-recession, until quite recently



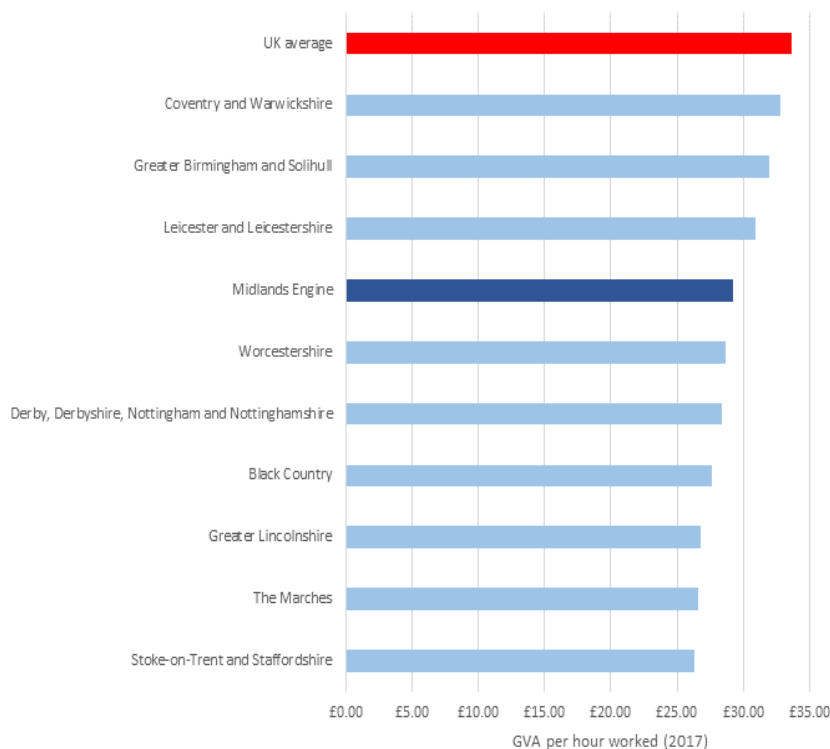
Note, a separate, detailed slide pack produced by CE on “top down” data analysis

Note: GVA measure in real terms, £2016 prices
Source: Cambridge Econometrics

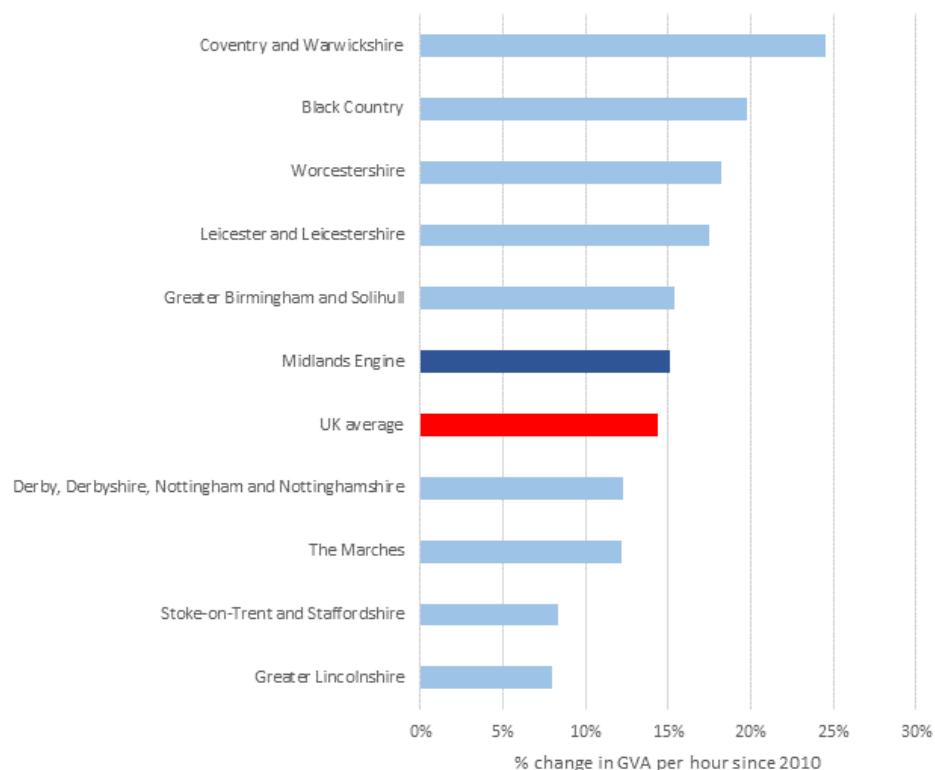
Context – headlines from data

- As much variation in productivity *within* regions as between them ...

GVA per hour (2017)



% change in GVA per hour (2010-2017)



Source: ONS presented in QEC

Note, the sub-regional picture is influenced to some extent by sectoral composition and the productivity within sectors – further detail on this is covered by CE's top down data analysis

1. Factors influencing ME's productivity performance

● Evidence from LEP and pan-Midlands literature

*Note: some strengths/challenges are common across the Midlands/apply to Midlands on aggregate, but for others there's considerable variation across the region

| | Strengths | Challenges | Gaps in evidence |
|-----------------------------------|---|---|---|
| Sectors & capabilities | <ul style="list-style-type: none"> Specialisms in highly productive sectors (e.g. PFS, life sciences, manufacturing) Nationally significant clusters with deep & diverse supply chains in automotive (e.g. WM) <i>Note: lots more detail available on this aspect</i> | <ul style="list-style-type: none"> Structural issues (low skill/pay job equilibrium) Lack of growth in knowledge intensive sectors (e.g. C&W) Many businesses reliant on foreign located supply chains, often because local businesses cannot meet quality standards (e.g. WM) Assets not "joined up" | <ul style="list-style-type: none"> Very little on supply chain linkages (local/Midlands → international) |
| Innovation | <ul style="list-style-type: none"> Major world-class R&D assets, magnet for inward investment High % of firms that are product and process innovators (E&W Mids) ... but other evidence suggesting process innovation lower | <ul style="list-style-type: none"> R&D spend per head below UK av, often concentrated in small number of highly innovative firms Need to improve collaboration – create seamless pathways for innovators Slow diffusion of innovation from assets Absorptive capacity issues across broader business base/SMEs (incl. for process innovation) Lack of SME engagement in Innovate UK funding | <ul style="list-style-type: none"> Innovation ecosystems and behaviour, potential to strengthen (local/Midlands → international) |
| Exporting | <ul style="list-style-type: none"> Strong performance/growth in exports (e.g. WM 3rd highest region by value, EM 6th. esp. goods but also services) | <ul style="list-style-type: none"> Not enough SMEs export – issues around awareness (routes to market), lower tier (so firms up the chain export (e.g. BC)) Lack of leadership and innovation skills to enable businesses to engage in new markets (e.g. Marches, BC) | <ul style="list-style-type: none"> Detailed/Mids-specific understanding of international relationships/barriers |
| Investment (incl. FDI) | <ul style="list-style-type: none"> Strong performance in attracting FDI, including in high productivity sectors with spillovers into supply chains (e.g. WMCA, driven by advanced manufacturing, BPFs, digital/creative) Investor sentiment strong – e.g. WM recognised as excellent place to do business | <ul style="list-style-type: none"> Lack of long term investment (e.g. BC) Awareness of finance available (e.g. C&W) Risk aversion in terms of debt/gearing/external finance Investment readiness, leadership and management skills to access finance Low quality of PFS supporting infrastructure weak (in places) Access to finance a barrier to investment/innovation | |
| Business demography | <ul style="list-style-type: none"> Presence of large global businesses (although many controlled outside the Midlands/UK) | <ul style="list-style-type: none"> Low business density in places (e.g. D2N2) Variable growth in business stock Lack of business dynamism (e.g. WMCA) and variable growth ambition amongst early stage entrepreneurs (WM) GVA concentrated in small number of large firms Firm level productivity below average (e.g. WM) Lack of growth in SMEs (e.g. C&W), low number of scale up HQs (except D2N2) Areas of high business failure rates (esp where new starts in low margin, locally competitive service sectors) (e.g. Leic) | <ul style="list-style-type: none"> Barriers to within-firm productivity / growth is patchy |
| Business environment | <ul style="list-style-type: none"> Low cost offer Presence of high tech business parks, incubators etc (but some areas lacking R&D space) | <ul style="list-style-type: none"> Lack of readily available commercial sites and high quality premises restricts investment and expansion (e.g. BC, Stoke/Staffs) Lack of flexible workspace (e.g. C&W) and grow-on space for SMEs (often emerging from incubators/accelerators) | |

1. Factors influencing ME's productivity performance

● Evidence from LEP and pan-Midlands literature

**Note: some strengths/challenges are common across the Midlands/apply to Midlands on aggregate, but for others there's considerable variation across the region*

| | Strengths | Challenges | Gaps |
|--|---|--|--|
| Connectivity and infrastructure | <ul style="list-style-type: none"> Excellent strategic location at heart of UK North/south connections good Well-linked internationally (but surface connectivity issues surrounding airports) Strategic opportunity associated with HS2, including opportunities for strong partnerships outside Midlands to attract global investment | <ul style="list-style-type: none"> Fragmented economy into small, poorly connected areas, and dispersed populations, incl. across rural areas Labour flows impeded by inadequate infrastructure Connections east/west and between urban centres are poor High levels of congestion, slow and unreliable travel times on major road network and local public transport networks (even within cities) – major barriers to productivity and agglomeration benefits (esp. given over-reliance on roads) Poor rail connectivity between cities and to rural areas – slow and infrequent Digital connectivity variable (even in cities, eg. GB), poor mobile connectivity in rural areas (e.g. Marches) Energy infrastructure limiting firms operating at maximum capacity (e.g. BC) Low transport funding per capita | |
| Occupations | <ul style="list-style-type: none"> Strong growth in private sector jobs (in some areas, e.g. GB) Areas with higher skilled occupations within sector (e.g. GB/WM digital) | <ul style="list-style-type: none"> Across the region, fewer managerial/ professional jobs, more low skilled jobs (with exceptions) | |
| Skills | <ul style="list-style-type: none"> Central location helpful in attracting flexible, skilled and ambitious workers Excellent schools and attainment in places (e.g. Lincs, Shropshire) | <ul style="list-style-type: none"> Insufficient high level qualifications, too many with no qualifications Low early years and primary school outcomes Persistent skills gaps and shortages – technical, digital, maths, life sciences, engineers, middle management Skills under-utilisation and under-employment (e.g. WM, Marches) Leaderships and management skills lacking – important for innovation, investment, access to finance, new markets/exporting etc Work readiness and employability skills, awareness of career opportunities Variable graduate retention rates (esp. low in EM, but also parts of WM), performance at GCSE level, investment in training (e.g. Shropshire) | |
| Demographics | <ul style="list-style-type: none"> Diversity of population a key strength Young population (e.g. WM) | <ul style="list-style-type: none"> Health inequalities (with implications for curtailed working lives) Life expectancy lags behind UK (e.g. WM) Mental health issues (including in work) | |
| Labour markets | | <ul style="list-style-type: none"> Too few residents in employment Below average earnings, low skills/pay equilibrium in places, and high gender pay gaps Issues around attracting talent (e.g. to WM) and managing wage driven poaching | |
| Inclusive growth | <ul style="list-style-type: none"> Social capital a strength amongst some communities | <ul style="list-style-type: none"> Significant pockets of deprivation (urban and rural areas) | <ul style="list-style-type: none"> Limited evidence on inclusive growth |
| Other topics | <ul style="list-style-type: none"> Quality natural environment, Peak District etc Tourism offer Housing affordability | <ul style="list-style-type: none"> Fragmented funding and support landscape Supply/diversity of homes (and associated transport infrastructure), especially in context of attracting skilled workers (e.g. BC, Lincs) and social housing (e.g. WM) | |

1. Factors influencing ME's productivity performance

- National thinking (e.g. PIN, CfC etc)
 - Firm level productivity performance – gap between leader and a long tail of laggard firms (and a longer tail than competitor countries)
 - > Factors include:
 - Low demand post-Global Financial Crisis, increased uncertainty, low investment
 - Tech/knowledge diffusion, limited understanding/constraints on pace of digitisation, absorptive capacity
 - Personality/cultural traits (in context of innovation, entrepreneurship and growth)
 - Declining business dynamism (and reluctance to change firms post-recession), survival of zombie firms
 - Growth ambition and scaleability
 - Lack of effective leadership and management, entrepreneurial experience
 - Growth in high productivity sectors = low job creation
 - Rising tides: growth in 'advanced industries' (digital, high-tech, creative, finance) can create employment in 'untraded services' (locally consumed services such as hairdressers & restaurants)
 - > but this can have a deflationary effect on pay within the non-tradeable sector
 - Under-leveraged innovation assets, insufficiently focused on commercialisation
 - Positive relationship between inward investment, exports and productivity (e.g. automotives)
 - The service sector
 - > Local service businesses much less productive than exporters
 - > Difficulties in absorption of new innovations in local service businesses
 - > Difficulties in achieving big improvements in productivity in labour intensive services
 - > Ageing population – increase demand for labour intensive services
 - Where to focus attention?
 - > Improving performance of already highly productive businesses (rather than the long tail of local services)
 - > Focus on exporting businesses (and those with potential to) rather than all businesses

2. ME commonalities, synergies and linkages

- Some evidence of commonalities across Midlands (either explicitly pan-Midlands, or reading across sub-regional material), e.g.
 - Sectoral capabilities in the SIA, transport/connectivity, skills issues
 - Areas that share common socio-economic characteristics
 - Shared strategic objectives
- ...but very little evidence on cross-border economic linkages
 - A willingness to collaborate, but very little evidence on economic linkages beyond each LEP geography (and in some cases, their neighbours)
 - Some (very limited) sector-specific evidence on linkages but narrow

3. Rationale for pan-Midlands approach

- Generic rationales for strategic intervention at larger geographies, e.g.
 - Some policy domains (e.g. strategic transport planning) better suited to larger areas
 - Ability to scale-up what works across a larger area
 - Ability to pool resources/expertise to maximise the impact of interventions
 - Co-operate across boundaries where both areas face similar challenges
 - Larger areas better able to act as ‘counterweights’ to London and increase visibility at the global level

- However, note of caution - most material under Q3 relates to smaller geographies than the ME
 - LEPs (should) reflect ‘real’ economic geographies, importance of metro-regions in driving growth etc.
 - Benchmarking Low Productivity, 2018 - *“By looking at the factors involved in productivity differences it is possible to partition the country into larger regions with similar common problems and where plausibly LEPs could cooperate for maximum impact”*
 - Analysis of Regional Aggregations of LEPs, 2019 – *“NPH and ME appear “to be based more on geographical proximity than on similarity of the constituent LEPs”,*
 - > Nevertheless there are some differences between them and the rest of England which “may show reason for **cooperation across LEP boundaries that face similar problems and opportunities**”
 - > “cooperation across defined geographies is likely to be **limited across innovation** but **clearly can work for areas of policy that are inherently geographic such as planning transport and infrastructure**”



3. Rationale for pan-Midlands approach

Midlands Engine Vision for Growth

- “Delivery should always be at the appropriate level and Local Authorities, Combined Authorities and LEPs will often be the delivery vehicles”
 - Refers to skills and devolution – “there is no one-size-fits-all solution to the skills challenge”
- ME “is about additionality” so identifies five areas where it can “generate added-value through collaboration” ...
 - Connect the Midlands
 - Invest in Strategic Infrastructure
 - Grow International Trade and Investment
 - Increase Innovation and Enterprise
 - Shape Great Places

3. Rationale for pan-Midlands approach

- Evidence from within the Midlands mainly echoes the generic rationale for interventions at a higher spatial scale
 - e.g. “*infrastructure rarely stops within local authority or LEP administrative boundaries*” (G. Lincs SEP)
 - “*It is important for our future economic prosperity that we work with neighbouring LEPs on cross-boundary issues*” – e.g. supply chains, innovation, skills and transport infrastructure (Leic. SEP)
- Some documents make the case for pan-ME (or cross-LEP) effort, including:
 - Capitalising on **common innovation strengths and collaboration opportunities, and support for sectors/clusters** that occur in more than one area
 - Consolidate public spending to provide greater **demand-side support for innovation**
 - **Transport connectivity and infrastructure**, esp. in context of business supply chains/collaborations and access to employment opportunities
 - Pooling **supply of finance** to enable EIB leverage and efficiencies
 - Ability to deliver interventions **supporting entire supply chains**
 - More suitable scale for **energy** generation/distribution than local levels
 - **International marketing/branding and co-ordination** to attract inward investment
 - Promote **exports** by coordinating currently disparate initiatives
 - Tackling generic **skills** challenges via transfer of good practice
- But the evidence underpinning these arguments is variable

4. Priorities for improving ME's performance

- Wide range of themes, issues and geographies... with varying levels of detail
 - Some framed by specific top-down parameters e.g. GCs and Foundations in relation to emerging LIS thinking
- However, the following reappear frequently:
 - Create a world-class skills system
 - > characterised by strong employer engagement and effective partnerships between supply-side institutions
 - Maximise short and long-term economic benefits of HS2
 - > (UK Central, Curzon Street & Toton), plus the 2022 Commonwealth Games
 - Embed a more pervasive culture of innovation
 - > including IT/tech adoption and training (particularly for L&M teams) within SMEs
 - > Note, the Midlands is a diverse region with differing strengths and weaknesses in different areas on this front

4. Priorities for improving ME's performance

- Address weaknesses in strategic and local transport network(s)
 - > E-W links between the core cities (mainly connections to Birmingham)
 - > enlarge labour market catchment areas
 - > drive supply chain efficiencies
- Successfully navigate the challenges of industrial digitalisation to maintain the global competitiveness of ME's future/smart mobility sectors
 - > Strengthen links between key S&I assets and networking across ecosystems
 - > Unlock cross sectoral/technology growth opportunities
 - > Build on the UK's first multi city 5G test bed to trial new apps and services, helping firms to develop dynamic business models

4. Priorities for improving ME's performance

- Tackle worklessness and create the right conditions for more inclusive/sustainable patterns of economic growth
- Promote the ME as an attractive and exciting place to live, work and invest – “shape” high quality places
- Support the continued growth and development of other key ME sectors - increase specialisation and international business
 - > **Digital** – cyber security related opportunities at Malvern, games in Leamington, plus wider digital tech in Nottingham and Birmingham – could be part of the IDTs solution for ME manufacturers
 - > **PFS** – exploit enhanced connectivity between Birmingham and London, leading management/business schools, recent HSBC/Deutsche Bank investments and leverage cyber security related growth opportunities
 - > **Advanced manufacturing**, esp. aerospace, automotives
 - > **Construction** – enhance innovation and productivity gains through the use of Modern Methods of Construction (MMC)

4. Priorities for improving ME's performance

- > **Life sciences** – next phase(s) of cluster dev't in Nottingham (BioCity) and Birmingham (Battery Park opportunity) in particular
 - emphasis on data driven healthcare and MedTech, Charnwood Life Sciences Opportunities Zone
- > **Space technologies** – create a new space tech hub in Leicester
- > **Energy** – develop innovative ways to generate, store, integrate/distribute energy so as to increase resilience and support clean(er) growth
 - using key assets such as ERA and ESC
- > **Food & Drink** – presence of major corporates combined with a significant indigenous SME base and a strong supporting research offer is driving innovation-led growth from 'farm to fork'
 - Strong concentrations in Lincolnshire, the Marches and Leicestershire
- > **Logistics and distribution** - East Midlands Gateway next to the airport will become the UK's largest multi modal hub (7k jobs)
- > **Visitor economy** – Commonwealth Games and City of Culture highlighted
 - Ambition to develop Midlands-wide propositions and create itineraries which showcase the best of the region

Implications for deep dive research (1)

- Evidence gaps (set against the 4 research questions) in the following main areas:
 - Economic relationships across the Midlands – where these matter in the context of productivity e.g.
 - > labour market flows
 - > integrating assets/connecting ecosystems to support cluster development agendas
 - > R&D and knowledge flows etc.
 - > Trade flows/supply chain linkages
 - Entrepreneurial and innovation behaviours e.g.
 - > strength and coverage of key innovation networks
 - > leadership and management styles/capabilities – willingness to take risks
 - The “D” component in R&D
 - > less of an emphasis on process innovation, plus in-firm productivity barriers within the evidence

Implications for deep dive research (2)

- Cross sectoral and technology area opportunities for growth
 - > Industrial digitisation and key market/technology drivers of change are highlighted, but there is little on specific areas where sector “A” can learn from sector “B”
- International business connections
 - > Wider relationships, not just exports
 - > Latest materials from ME internationalization strategy?
- And on the edge of our scope... growth corridors / opps linked to areas outside of the ME e.g.
 - > NPH, GWC, Scotland, London or wider Golden Triangle
 - > urban – rural links
- Clear rationale for a pan-Midlands effort
 - > across different policy domains
 - > where coordination across administrative boundaries is key
 - > where effort will give rise to local additionality

Implications for deep dive research (3)

- SQW's learning from elsewhere suggests the following likely to be most appropriate for a pan regional approach (note these may or may not be suitable for the ME)
 1. Strategic transport links between key economic centres
 - > e.g. NPN IER, where the focus was on reducing journey times so as to boost agglomeration benefits – TfN now has statutory powers
 - > also a strong focus for the Great Western Cities
 2. Innovation, R&D networks
 - > e.g. as evidenced by the various SIA processes
 3. Inward Investment
 - > e.g. Scotland Development International, which leverages the international image/profile of Scotland and “Scottishness” to drive investment, plus NPH sector narratives
 4. Housing and employment land / spatial planning more broadly
 - > e.g. Cambridge - MK - Oxford corridor

Guiding principles for the Deep Dive research

- A starter for ten. . .
 - Robust and technically sound
 - Genuinely adds value to existing knowledge base and is aligned with ME partnership thinking / agendas
 - Complements other research in the pipeline e.g. LIS related
 - Not driven by short-term public funding opportunities
- ... and working within the existing budget envelope

Next steps

- Written synthesis of existing evidence
 - Drawing together literature review, QEC and CE data
 - Drafted in a highly accessible style / format
- Stakeholder engagement
 - ME Ops Board and Sub-Groups - inputs/task and finish?
 - Wider stakeholders
- Other aspects of IER over the summer
 - Deep dive research
 - Brexit research
 - Scenario development/testing
 - Adding emerging LIS evidence
 - Hard thinking and reflection

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