MIDLANDS ENGINE

ADVANCED MANUFACTURING
AUTOMOTIVE
MIDLANDS CLUSTER SNAPSHOT 2023

Advanced Manufacturing: Automotive

Midlands Established Cluster

Automotive Advanced Manufacturing clusters heavily around the West Midlands, as well as in South Derbyshire. With major Original Equipment Manufacturers (OEM) such as Jaguar Land Rover, Aston Martin Lagonda and Toyota UK based in the region, there are significant supply chains of some 1,457 companies in the region - critical company representation throughout all tiers of production.

Given the opportunities of electrification and autonomous vehicles, this is a constantly evolving and growing cluster, with 61 high growth companies, and significant foreign investment in young companies (40% of investments from international sources).

The cluster is particularly strong in innovation, with major sites such as the MIRA Technology Park and the UK Battery Industrialisation Centre sure to catalyse further growth, and the high number of grant awards (many featuring university collaboration) - which make up shortfalls in equity funding at early stages. These strengths are recognised internationally with 38% (£1.95bn) of all FDI into the UK automotive sector going to the Midlands 2017-21.

Current significant investment opportunities include a possible West Midlands Gigafactory, MIRA Technology Park, Infinity Park Derby, and more. The Midlands automotive cluster overall also has a higher average annual wage than the national average.

Cluster in context

Over 51,000 jobs; 25% of UK total and the most of any region.

6% of Midlands university graduates studied relevant subjects to automotive, including from 4 of top 25 UK universities for Engineering & Technology.

Over 1,400 businesses; 25% of UK total and most of all regions. 172% growth since 2013.

61 high growth companies (29% of UK) and 29 £100m+ turnover companies (51% of UK).

60% of Innovate UK funding to automotive businesses since 2005 has been awarded to those with a Midlands address.

38% of UK automotive Foreign Direct Investment Capex and 21% of UK automotive Domestic Direct Investment Capex 2017-2021.

Business Ecosystem

Total Cluster Business Count: 1,457

25% of UK; the most of any region; 172% growth since 2013.[1]

£100m+ Turnover Companies: 29

51% of all in the UK have a Midlands location.[2]

High Growth Companies: 61

29% of all in the UK have a Midlands location.[3]

Incorporations 2017-22: 757

22% of UK automotive incorporations between 2017 and 2022 have a Midlands location.[4]

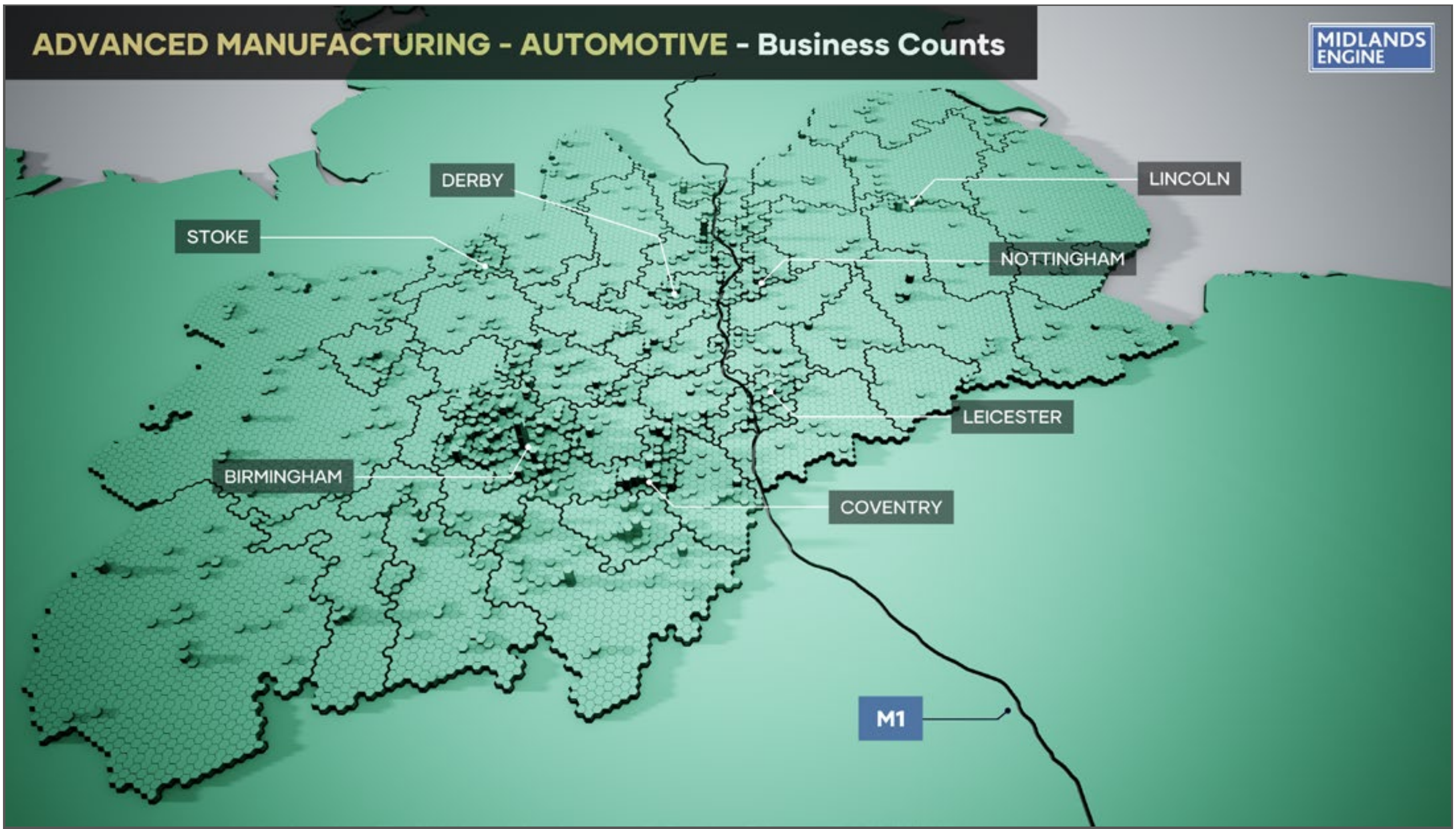
Foreign-owned enterprises: 7%

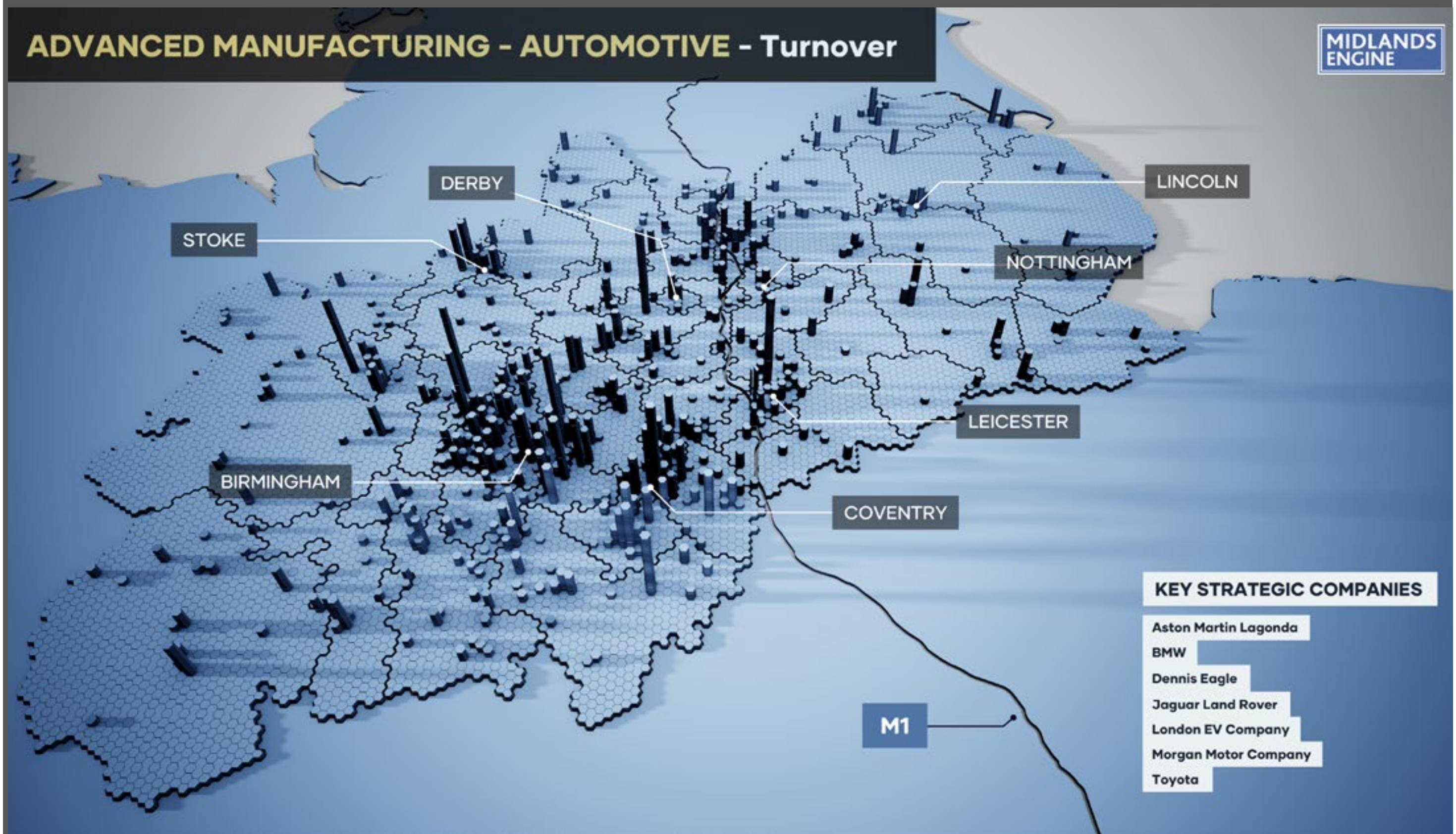
104 known to be foreign owned; Higher proportion of foreign-owned than national average (4%).[5]

MIDLANDS ENGINE OBSERVATORY

The data presented here is relatively similar to the raw ONS data for the automotive sector (using SIC code 29 – as used in this project too). However, there is a 10,000 employees difference (just over 50,000 in Data City vs just over 60,000 with ONS): this reflects differences in micro and macro level data and the lack of company-site level information through company-level Companies House data (requiring the Data City methodology of splitting employees by trading address). In this case, it has resulted in a slight underestimation in the data in the Midlands' automotive cluster.

[1,3,4,5]Data City 2023, [2]Data City 2023: 20%+ company growth percentage per year.





MIDLANDS ENGINE OBSERVATORY

The height of the graph in a single postcode within Telford & Wrekin is likely to be exaggerated by a single large company, which is unlikely to generate the level of turnover accounted for just in this location, and indeed unlikely to all be related to automotive. So, while Telford and Wrekin retain a notable, “real” level of automotive activity, the level of automotive turnover identified to this specific postcode (the highest spike) should be disregarded.

Advanced Manufacturing: Automotive

Innovation Ecosystem

Accelerator Engagement:[1] 29

Relevant Cluster Organisations:

Society of Motor Manufacturers and Traders; MakeUK; Motorsport Industry Association; Innovation Alliance for the West Midlands; Automotive Council

Relevant spinouts:[2] 33

Relevant high performing HEI research:

Universities of Keele; Loughborough; Nottingham Trent; Birmingham; Leicester; Nottingham; Warwick

7 Midlands universities with high research ranking in relevant subjects.[3]

Significant Innovation Hubs:

MIRA Technology Park; Manufacturing Technology Centre; Infinity Park Derby; Warwick Manufacturing Group; Power Electronics, Machines and Control Group; National Automotive Innovation Centre; Advanced Propulsion Centre.

High Growth Company Grants:[4] 75

Innovate UK funding: £195m since 2005

60% of Innovate UK funding to automotive businesses had a Midlands location.[5]

[1]Beauhurst 2022: High growth companies utilised accelerators,
[2]Beauhurst, 2022, [3]REF 2021 GPA >3.0 in Physics; Engineering
[4]Beauhurst, 2022, [5]Data City, 2023.

Advanced Manufacturing: Automotive

Talent Ecosystem

Estimated Employees: 51,377

25% of UK total; the most of any region.[1]

Earnings: Average salary £39,355

National average £38,684 (1.7% higher in Midlands).[2]

Further Education Leavers: 15,230

More FE leavers (including higher level) in relevant subjects than in any other regions.[3]

Relevant HEI High-Ranking Department:

Universities of Nottingham; Birmingham; Warwick; Loughborough

4 universities high ranked: international presence and expertise.[4]

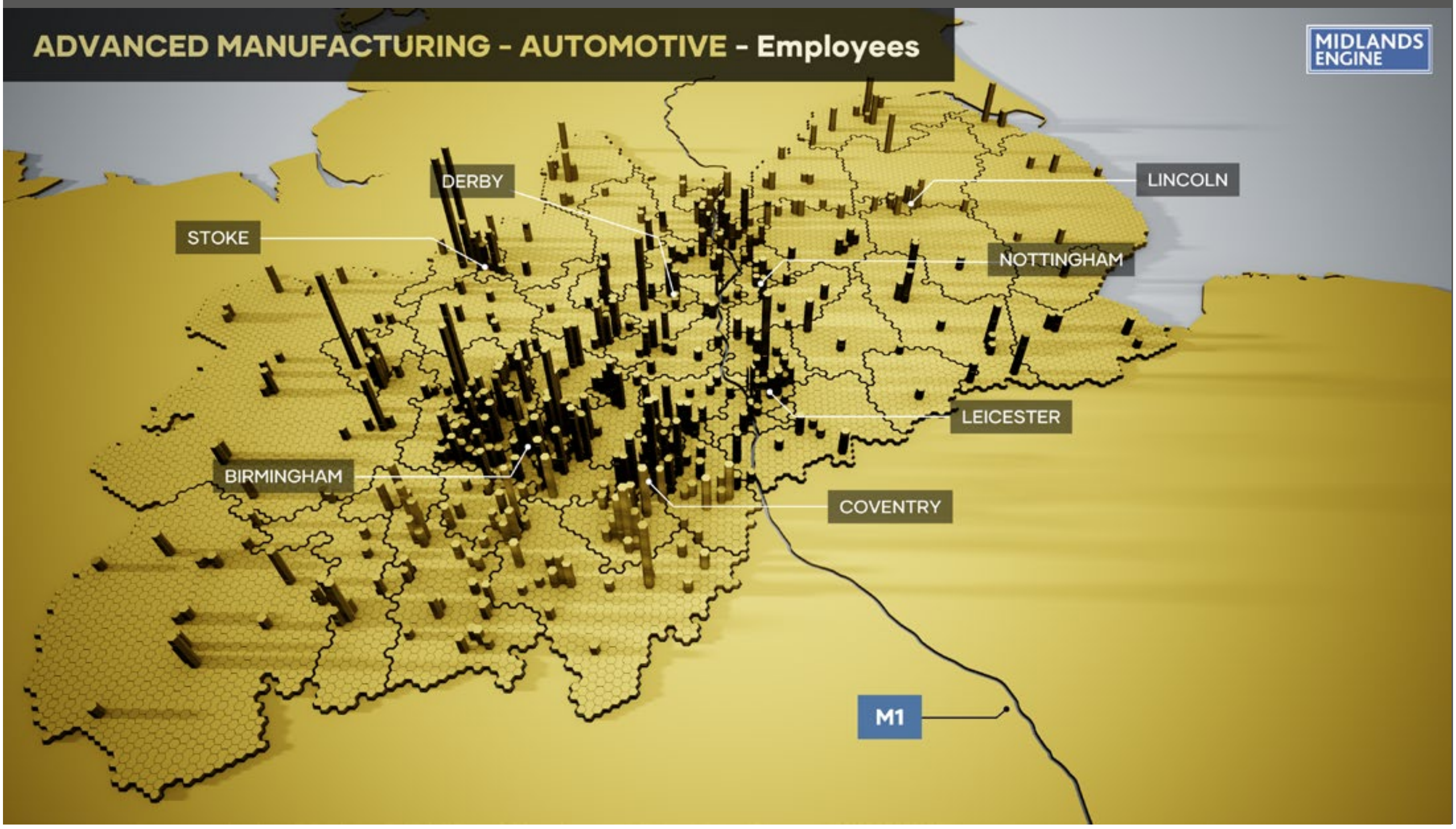
University Graduates: 8,055

6% of ME graduates studied relevant subjects to automotive.[5]

Graduate Retention: change over 3 years: 97.3%

West Midlands has the highest rate of manufacturing graduate retention outside of London and the East regions.[6]

[1]Data City, 2023, [2]ONS ASHE, 2021, [3]DfE DfE Unit for Future Skills: Further Education leavers 18/19 in relevant fields, [4]QS 'Engineering and Technology' world subject ranking 2022 - institutions appearing in UK top 25, [5]Graduates from relevant subjects 2021 (HESA), [6]2,015/2,070 graduates trained in region remain in 'Manufacturing' 3 years of graduating in 2019. First degree only. (DfE Graduate Outcomes by Industry)



Advanced Manufacturing: Automotive

Investment Ecosystem

Investment/Venture Capital Firms:
Funds HQ'd in Midlands Engine area 200
313 Funds have offices in region.[1]

FDI into High Growth Companies: 40%
63 of 156 investments in High Growth Companies.[2]

FDI Capex 2017-21: $1.95bn
38% of UK total.[3]

DDI Capex 2017-21: $721.21m
21% of UK total.[4]

Fundraising Volumes:

Mean av. £495,837 fundraising investment
£77.3m in 156 investments (inc. £7.7m across 65 seed investments; £18.6m across 47 investments venture).[5]

FDI Jobs 2017-2021: 5,535 jobs
43% of UK total.[6]

DDI Jobs 2017-2021: 3,970 jobs
23% of UK total.[7]

FDI Projects 2017-2021: 49 projects
35% of UK total.[8]

DDI projects 2017-2021: 67 projects
24% of UK total.[9]

[1]Beauhurst 2022, [2]Beauhurst 2022, [3]Wavteq 2022, [4]Wavteq 2022, [5]Beauhurst 2022, [6]Wavteq 2022, [7]Wavteq 2022, [8]Wavteq 2022, [9]Wavteq 2022.

COMMENTARY

- Midlands-based automotive businesses received 7% of the total equity received in the UK from 2017 to 2021 by high-growth companies in this sector, despite making up 26.0% of the sector's business population. However, they received 32.5% of all grant money received by companies in this sector. Similar to the wider manufacturing and engineering sector, companies in this sector appear to be underfunded from an equity finance perspective but may be securing necessary finance through grant programmes, suggesting a high level of innovation. An additional explanation may be that the technical know-how, facilities and talent available for high-growth automotive companies in the Midlands may reduce the total equity finance requirements for these companies.
- Wavteq forecast $1.38bn FDI capex in this sector in the UK in 2025.

This data has been compiled from multiple sources, using classifications based on clusters as proposed by Midlands Engine Partners. Where necessary wider sector data has been used as a 'best proxy'. Unless otherwise stated, all data is contemporary as of May 2023, and is an aggregation of all known counts/data within the Midlands Engine's 65 Local Authorities. Unless otherwise stated, business, employee and turnover figures have been calculated via DataCity based on trading addresses within the Midlands Engine.