



West Midlands
Combined Authority

Housing & Land Delivery Board

Date	6 July 2020
Report title	Advanced Manufacturing in Construction (AMC): Update
Portfolio Lead	Councillor Mike Bird, Leader, Walsall Council
Accountable Employee	Gareth Bradford, Director of Housing & Regeneration, WMCA Patricia Willoughby, Head of Policy (Housing & Regeneration) Senior Reporting Officer, WMCA Rachel-Ann Atterbury, Policy Advisor, Report Author
Report has been considered by	A discussion on AMC research took place and the direction of travel presented to the Board today was endorsed by the Delivery Steering Group. (10 th June 2020)

Recommendation(s) for action or decision:

The Housing & Land Delivery Board is asked to:

- 1) **Note** the update on the AMC research undertaken to date, which informs the development of a comprehensive AMC routemap and strategy, which is planned to be agreed at the next Housing and Land Board.
- 2) **Note** the excellent collaboration and support from the AMC working group of local authority officials and the AMC Expert Panel chaired by Mark Farmer on this research and the joint development of the wider regional AMC routemap and strategy, which is planned to be agreed at the next Housing and Land Board.
- 3) **Note** the “ask” of HMG for £50m ‘enabling funding’ to support the development of the AMC Industry in the West Midlands (land, skills and facilities), as set out in the Investment Case Document submitted to Government by the West Midlands on 23rd June 2020.

1.0 Purpose

- 1.1 The purpose of this paper is to update the Housing & Land Delivery Board on research that is being undertaken as part of the joint work by public and private sector partners to develop a comprehensive AMC strategy and routemap throughout 2020.

2.0 Background

- 2.1 At its 15 January 2020 meeting, the Housing & Land Delivery Board received an update on the work on AMC in the region - a key programme under the Board's Annual Business Plan and central to delivery of other programmes such as brownfield regeneration, inclusive growth and zero carbon homes. The Board welcomed the progress to date, the role of the AMC Panel (chaired by Mark Farmer) and endorsed a programme of work in this crucial policy area. This included agreement to the development of a comprehensive AMC routemap and strategy.

- 2.2 As a reminder, the primary purpose of the routemap was to ensure that AMC delivers housing and job numbers, but also social value, inclusive growth and environmental benefits.

- 2.3 At the 27 April 2020 meeting, it was agreed that AMC must sit at the heart of our Covid19 recovery planning work and the region's ask for support from HMG (see Rob Lamond's separate paper to this Board). The Board also agreed that it would be helpful for it to receive further market intelligence to better understand the region's position in the national AMC industry.

- 2.4 Throughout May and June 2020, research across 3 strands of work has been undertaken by Cast Consultancy, Harlow Consulting, Hatch Regeneris and Arcadis within the wider AMC programme - working closely with the AMC Working Group and AMC Panel. This research forms is central to the routemap and strategy. The research strands cover the following areas:

- **Economics:** Collating information on the current size and potential growth of the AMC sector, scale of the local proposition, understanding the local construction sector and quantifying potential AMC benefits.
- **Local supply chain:** High-level mapping of the local AMC eco-system, including manufacturers, contractors and supply chain partners.
- **AMC/MMC skills:** Analysis of the local skills and training environment with a focus on current AMC/MMC provision.

Good progress has been made on all these areas. A supporting presentation that explains these areas and emerging findings in more detail will be presented to the Housing and Land Delivery Board on 6th July and circulated after the meeting.

- 2.5 In reviewing this research and progress to date, one area which has emerged is the importance of clarifying terminology especially between AMC, and broader terms often

used by the industry and policy makers such as Modern Methods of Construction (MMC) or Off-site construction:

- **MMC** covers a *broad range* of off-site manufacturing and onsite techniques that are *alternatives to traditional housebuilding*. These seek to improve quality, programme efficiency and reduce waste.
- **AMC** refers to a *sub-set of MMC technologies* which use digital technology throughout the process (design, component manufacture and assembly), automation and high-performance materials to drive quality, performance and mass-customisation through standardised processes.

In simple terms AMC goes further than MMC in terms of use of technology, precision engineering and digitalisation.

2.6 Whilst the Housing and Land Board, with the support of the AMC working group and expert AMC Panel, has agreed to champion and drive AMC across the region (eg through the Single Commissioning Framework, Covid19 recovery work etc) as the most suitable approach for accelerating housing delivery, improving quality and providing wider economic and inclusive growth benefits, it is still an emerging sector. This nascence is particularly reflected in the skills and economics strands, where limited case studies or data specific to AMC (as opposed to MMC) is available. For this reason, this research looks at both MMC and AMC related sectors, to provide a broader picture of the region's current position and growth potential.

3.0 Next steps

- 3.1 The research work outlined in this paper is ongoing and so at this stage we are presenting to the Board *emerging findings*. The final report is due for completion by the *end of June/early July 2020*.
- 3.2 The findings will directly inform a SWOT analysis for the sector in the West Midlands throughout July, with recommendations for a short, medium and long-term approach to accelerating AMC in the region developed in July and August. The findings will directly inform further work on the Covid19 recovery plan and business cases to HMG for funding support for AMC throughout 2019.
- 3.3 Research findings and the final report will be included in the full version of the AMC strategy and routemap which is due to come to the next Housing and Land Board in September 2020. A shorter, more accessible version of the routemap will also be produced, and include key findings from the research.

4.0 Financial Implications

- 4.1 There are no direct financial implications from the information contained in the report. The Single Commissioning Framework provides a single set of criteria and governance

systems that will be applied to all applications for available devolved WMCA Housing, Land and Property Development funds, together with a consistent process and timelines for decision.

- 4.2 WMCA investment in any proposed Advanced Manufacturing in Construction projects would be governed and administered through the Single Commissioning Framework, WMCA Assurance Framework and in line with the accounting and taxation policies of the WMCA and HMRC.

5.0 Legal Implications

- 5.1 Section 113A(1)(a) of the Local Democracy, Economic Development and Construction Act 2009 gives WMCA a power of competence appropriate for the purposes of carrying-out any of its functions. Part 4 of The West Midlands Combined Authority Order 2016 (2016 No 653) confers that the functions relating to any economic development and regeneration in the constituent councils are exercisable by WMCA. Part 3 of The West Midlands Combined Authority (Functions and Amendment) Order 2017 confers functions corresponding to the functions of the Homes and Communities Agency has in relation to the combined area. Paragraph 10 (2) (a) of the 2017 Order confers the function of improving the supply and quality of housing to the Combined Authority, 10 (2) (b) to secure the regeneration or development of land or infrastructure in the combined area, 10 (2)(c) to support in other ways the creation, regeneration or development of communities in the combined area or their continued well-being and 10 (2)(d) confers the function of contributing to the achievement of sustainable development and good design.
- 5.2 It is noted that the purpose of this paper is to update the Housing & Land Delivery Board on its decision to move towards mainstreaming AMC on sites coming through the Single Commissioning Framework for WMCA investment and the decision to produce a new regional AMC strategy and routemap. Legal advice should be sought as and when required in the development of the AMC strategy and routemap. Any additional requirements identified as a result of the research and analysis on the effectiveness of the AMC requirements in the Single Commissioning Framework should be reflected in the relevant funding agreements on a case by case basis through agreed wording.

6.0 Equalities Implications

- 6.1 There is no equality impact in relation to this report.

7.0 Inclusive Growth Implications

- 7.1 The research presented at this meeting will be used to inform WMCA's approach to growing the AMC sector in an equitable way, maximising economic benefits, housing quality and job/skills opportunities across the region's communities.

8.0 Geographical Area of Report's Implications

8.1 The research presented applies to the whole WMCA geography. The proposed AMC Charter and routemap would be used to guide WMCA investment decisions across the whole geography of the WMCA area.

9.0 Other Implications

9.1 There are no other implications.

10.0 Schedule of Background Papers

10.1 There are no background papers.