

Lancashire's Aerospace Task Force

- ✂ The Lancashire Aerospace Task Force identifies 15 possible interventions that can support Lancashire's aerospace businesses and jobs threatened by the Covid-19 pandemic.
- ✂ The 15 interventions range in scope and complexity and can be broadly placed in four themes of - **winning new work, competitiveness, skills** and new **financial instruments**.
- ✂ The interventions are prioritised by the members of the task force based on their potential impact and ease of implementation.



1 Problem Statement

The Covid-19 pandemic threatens the supply chain and high-value manufacturing jobs that have been built on the rich heritage of over 100 years of aircraft production in Lancashire.

2 Key Numbers

- Lancashire has the highest concentration of Aerospace and Defence jobs of any of the English LEPs.
- 84 companies in Lancashire are members of the North West Aerospace Alliance.
- These companies have a collective turnover in excess of £3.6 Billion and employ more than 17,000 highly skilled people.

3 Competitive Advantage

1. Lancashire is home to a number of Aerospace & Defence Primes / OEMs (BAE Systems, Rolls Royce, Safran).
2. A rich and diverse supply chain has been developed in Lancashire to support UK and International customers.
3. A critical mass of companies have established themselves in Lancashire providing over 17,000 high-value manufacturing jobs.
4. Lancashire contributes to all of the major civil aircraft programmes led by Airbus, Boeing and Bombardier and plays a leading role in international defence programmes such as Eurofighter Typhoon and the F-35 Lightning II aircraft.
5. The Aerospace and Defence Supply Chain has core capabilities around hard metal machining (titanium, Inconel etc.) and carbon fibre reinforced polymers for both aircraft structures and aircraft engines.

4 Vision Statement

To support Aerospace and Defence companies in Lancashire to stabilise and recover from the Covid-19 crisis and re-establish as globally competitive in order to be ready to benefit from the return of growth in the Civil Aerospace market. To position Lancashire as a leading region for the development of low-carbon technology thereby ensuring that Lancashire continues to benefit and grow prosperity from highly skilled and valuable manufacturing jobs across the next century.

Strategic Objectives

<p>5 New Business</p>	<p>6 Competitiveness</p>	<p>7 Skills</p>
<p>Influence procurement decisions by both UK Government and UK Primes to pull forward and prioritise spend in the UK supply chain.</p>	<p>Ensure that companies are supported to improve their competitiveness through innovation, automation and digital transformation.</p>	<p>Support the attraction, development, redeployment, retention and upskilling of people as we transition through the crisis. Support new entrants and the completion of apprenticeships.</p>
<p>8 Interventions</p>	<p>9 Interventions</p>	<p>10 Interventions</p>
<p>A. Pull forward UK defence spending on key aircraft programmes (F35, Typhoon) to increase production.</p> <p>B. Pull forward UK defence spending on key development programmes (Tempest).</p> <p>C. Encourage those UK Primes that have received significant taxpayers support to prioritise future spend in UK supply chains and bring back work from overseas.</p> <p>D. To research adjacent markets in Medical, Rail and Nuclear Sectors and to provide opportunities for companies to engage with new customers.</p> <p>E. To increase the international recognition of Lancashire's Aerospace offer.</p>	<p>F. To increase engagement of the supply chain with Lancashire's existing investments in the innovation eco-system (e.g. EIC and AMRC NW).</p> <p>G. To increase engagement of the supply chain with national investments (e.g. SIG, SC21 C&G, NATEP, Be the Business).</p> <p>H. To provide funding for both short-term business support for competitiveness & productivity as well as long-term research & technology especially low carbon tech.</p> <p>I. Develop cross-sector peer-to-peer learning networks for Automation and Digital Transformation in partnership with organisations such as Made Smarter NW and IN4.0</p>	<p>J. Establish a redeployment system to track and trace the highly skilled people made redundant and help them find alternative employment with companies who may be looking to recruit those skills.</p> <p>K. Consider ways in which the industry and government can work together to support the completion of apprenticeships.</p> <p>L. To develop innovative approaches to supporting new entrants to the industry.</p> <p>M. To support upskilling of people within the supply chain in support of competitiveness objectives.</p> <p>N. To develop demand signals for the new skills required in the "new normal".</p>
<p>11 LEP Stakeholders</p>	<p>12 LEP Stakeholders</p>	<p>13 LEP Stakeholders</p>
<ul style="list-style-type: none"> • BAE Systems • North West MPs • Ministry of Defence (MOD) • Department for Business Energy and Industrial Strategy (BEIS) • North West Aerospace Alliance • Department for International Trade (DIT) 	<ul style="list-style-type: none"> • Aerospace Sector Primes • ADS – National Trade Body • North West Aerospace Alliance • Made Smarter NW / IN4.0 • AMRC NW • University of Central Lancashire 	<ul style="list-style-type: none"> • Lancashire Skills & Employment Hub • tlc – The Lancashire Colleges • University of Central Lancashire • Lancaster University • Edge Hill University • North West Aerospace Alliance



Prioritisation of Potential Interventions

Boston Matrix – “Effort vs Impact”

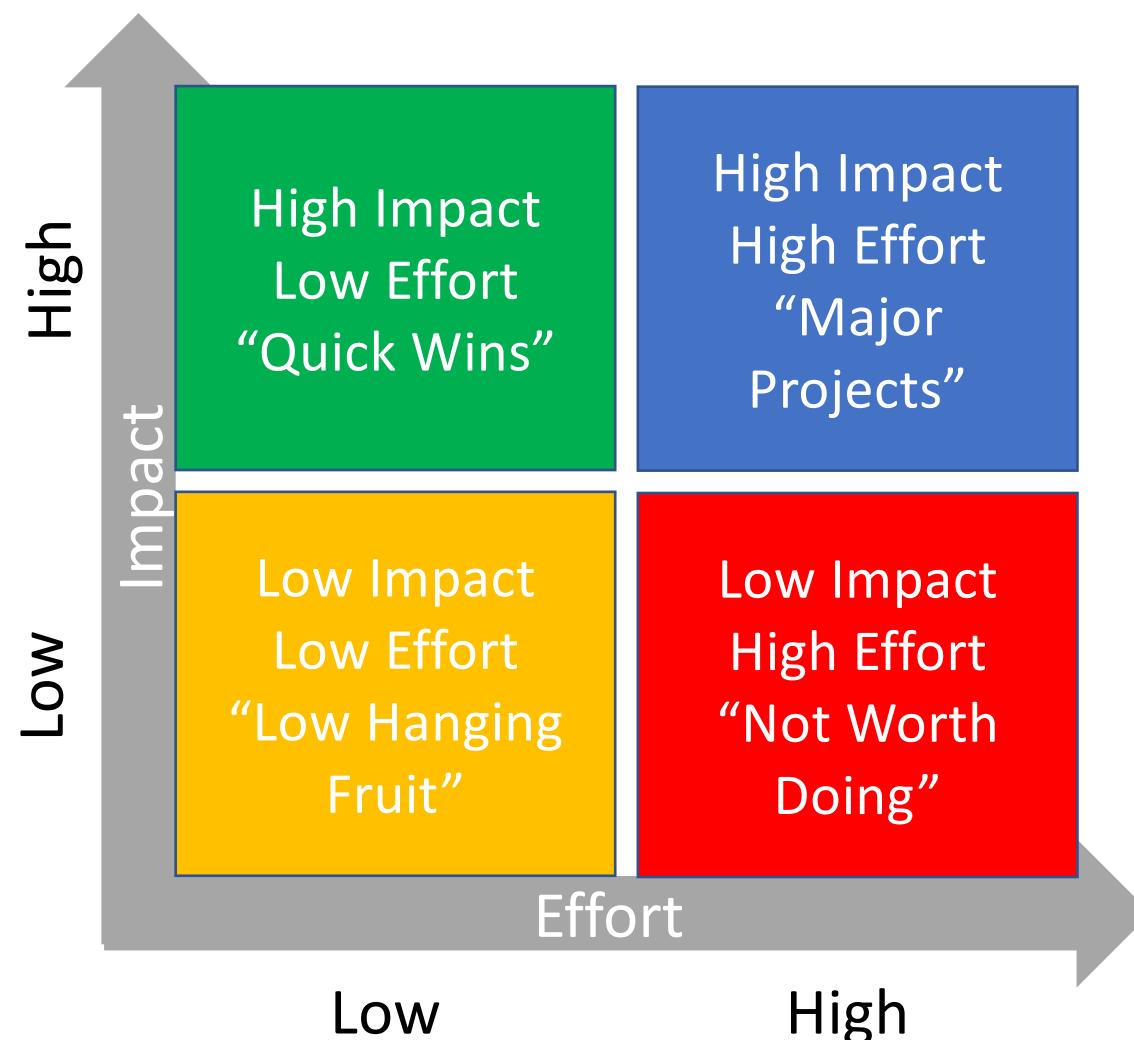
Fifteen interventions are identified to address the strategic objectives of identifying new business, improving competitiveness and skills retention, and redeployment. Consideration is given to how much effort would be required to deliver each one and what level of impact on our overall objective:

Effort:

- Resources (people, funding, facilities, knowhow)
- Stakeholder influence

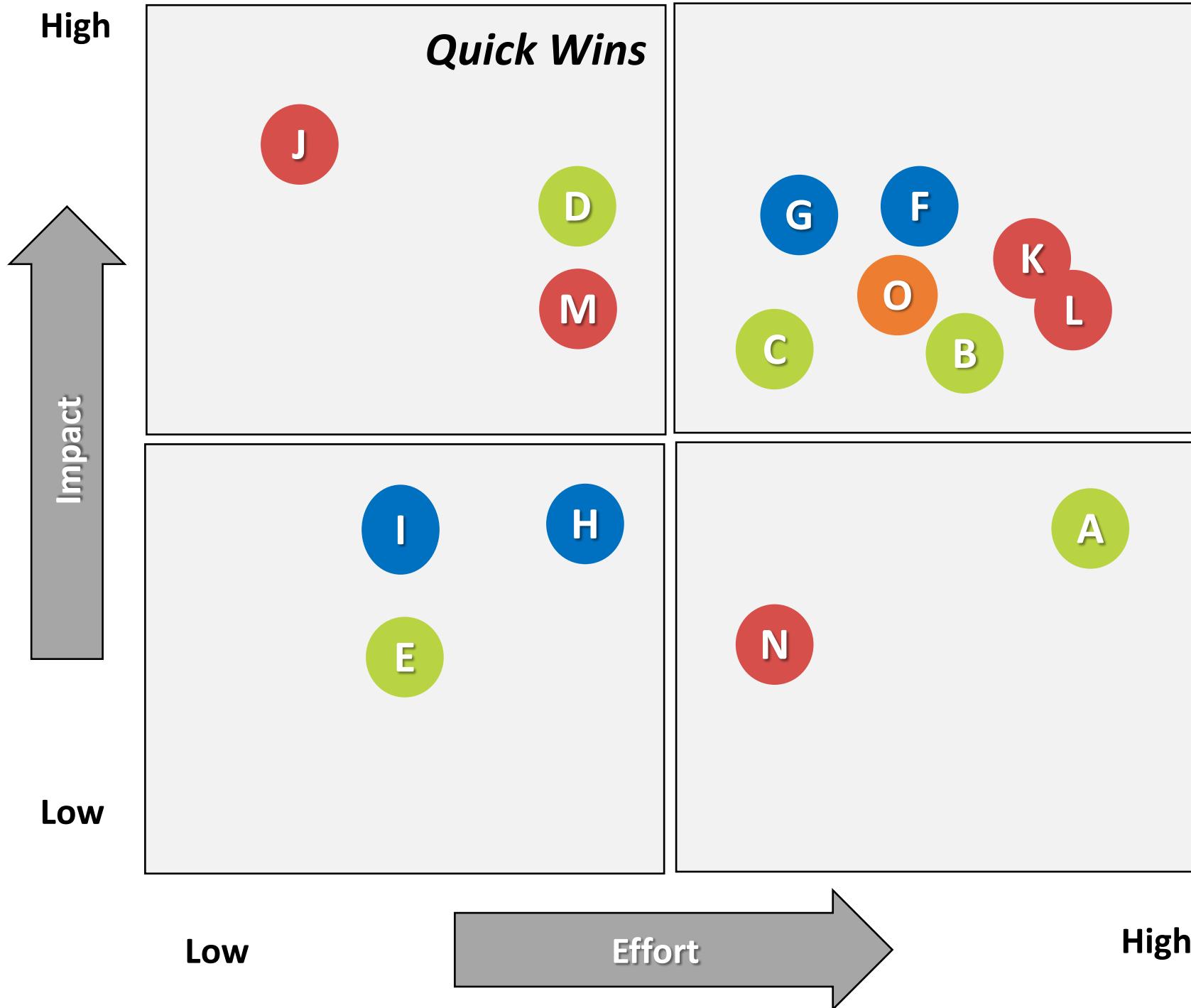
Impact:

- On jobs
- On survival of businesses
- On growth
- On preparation for the “new normal”



Aerospace Task Force Prioritisation of Potential Interventions

VISION - To support Aerospace and Defence companies in Lancashire to stabilise and recover from the Covid-19 crisis and re-establish as globally competitive in order to be ready to benefit from the return of growth in the Civil Aerospace market. To position Lancashire as a leading region for the development of low-carbon technology thereby ensuring that Lancashire continues to benefit and grow and prosper from highly skilled and valuable manufacturing jobs across the next century.



New Business

- A. Pull forward UK defence spending on key aircraft programmes (F35, Typhoon) to increase production.
- B. Pull forward UK defence spending on key development programmes (Tempest).
- C. Encourage those UK Primes that have received significant taxpayers support to prioritise future spend in UK supply chains and bring back work from overseas.
- D. To research adjacent markets in Medical, Rail and Nuclear Sectors and to provide opportunities for companies to engage with new customers.
- E. To increase the international recognition of Lancashire's Aerospace offer.

Competitiveness

- F. To increase engagement of the supply chain with Lancashire's existing investments in the innovation eco-system (e.g. EIC and AMRC NW).
- G. To increase engagement of the supply chain with national investments (e.g. SIG, SC21 C&G, NATEP, Be the Business).
- H. To provide funding for both short-term business support for competitiveness & productivity as well as long-term research & technology especially low carbon tech.
- I. Develop cross-sector peer-to-peer learning networks for Automation and Digital Transformation in partnership with organisations such as Made Smarter NW and IN4.0

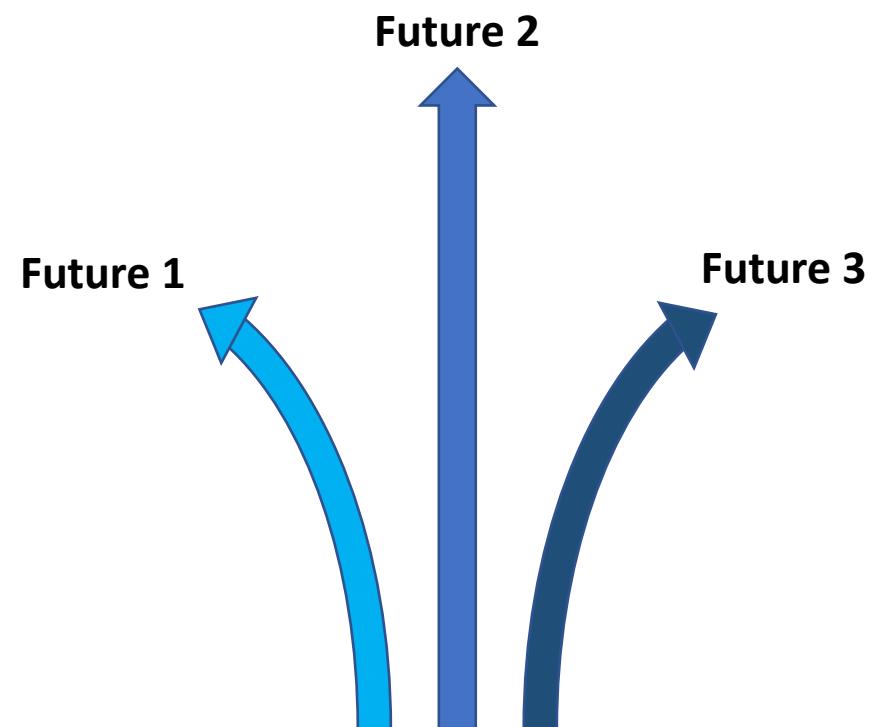
Skills

- J. Establish a redeployment system to track and trace the highly skilled people made redundant and help them find alternative employment with companies who may be looking to recruit those skills.
- K. Consider ways in which the industry and government can work together to support the completion of apprenticeships.
- L. To develop innovative approaches to supporting new entrants to the industry.
- M. To support upskilling of people within the supply chain in support of competitiveness objectives.
- N. To develop demand signals for the new skills required in the "new normal".

Finance

- O. Potential need for patient capital to support recapitalisation of the supply chain and ward off unwelcome take-overs. Further opportunity around investments in Automation and Digital Transformation.

A Scenario Based Delivery Plan
“Rebound”
“Gradual Recovery”
“Prolongated Recovery”





Lancashire's Aerospace Task Force

- ✂ Scenario planning is a strategic business tool that organisations use to make flexible long-term plans.
- ✂ Each scenario describes a plausible set of circumstances, that could happen, in order to define the potential impacts and the required responses. If an organisation is aware of what could happen, they are more likely to deal with what will happen.
- ✂ The Lancashire Aerospace Task Force describes three possible scenarios for the aviation sector and what they might mean to aircraft production rates and therefore industry revenues.
- ✂ The Task Force identifies the potential impacts of each scenario and how the 15 interventions can be used to deliver a flexible response.





Three possible scenarios are widely* considered:

-  **Rebound** – The civil aerospace market bounces back to 2019 levels of production by January 2022. A widely available vaccine and/or effective treatment is made available early in 2021 and provides the public and business passengers with the confidence to travel; airline finances recover sufficiently, to re-instate delayed orders for new aircraft. Aerospace manufacturers increase production rates in the second half of 2021. Air travel returns to long term growth rate of 4.5% per annum post 2022.
-  **Gradual Recovery** – The civil aerospace market takes until January 2023 to return to 2019 levels of production. Passenger demand recovers gradually across 2020 and 2021 as countries become more confident in managing safe corridors and controlling infections. The demand for new aircraft is led by single aisle aircraft as domestic and regional travel grows quicker than long haul routes. Aerospace manufacturers hold production rates across 2021.
-  **Prolongated Recovery** – The civil aerospace market takes until January 2024 to return to 90% of 2019 levels of production. Airlines have a difficult autumn and winter season across 2020 and 2021 and require a second round of government bailouts. Markets are further impacted by widespread recessions and unemployment. Aerospace manufacturers cut production rates even further.

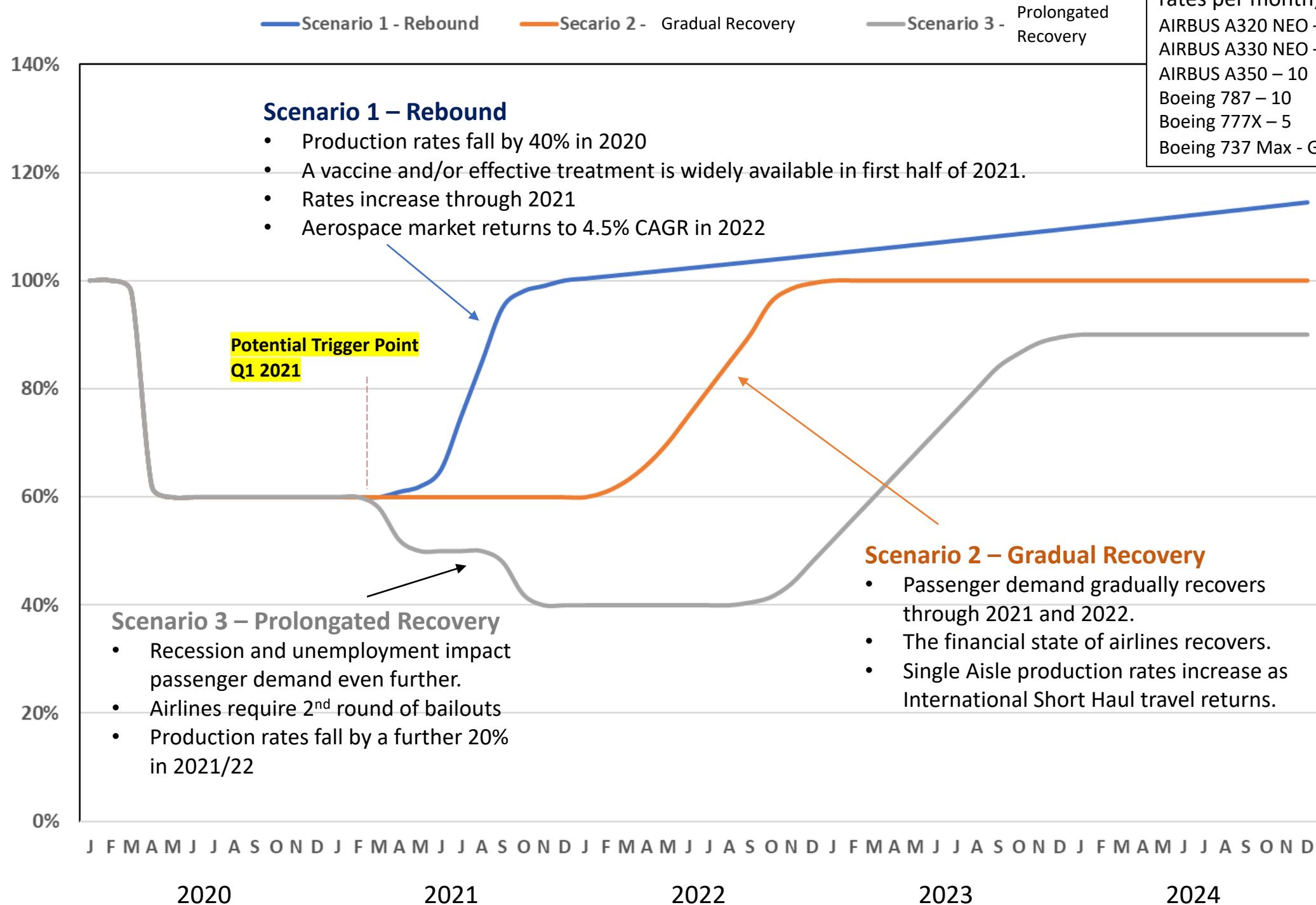


**ADS, Roland Berger, Avascent, Alix Partners have all produced scenario based analyses similar to the approach above.*



A Scenario Based Delivery Plan

Pre-crisis aircraft production rates per month;
 AIRBUS A320 NEO – 63
 AIRBUS A330 NEO – 4
 AIRBUS A350 – 10
 Boeing 787 – 10
 Boeing 777X – 5
 Boeing 737 Max - Grounded

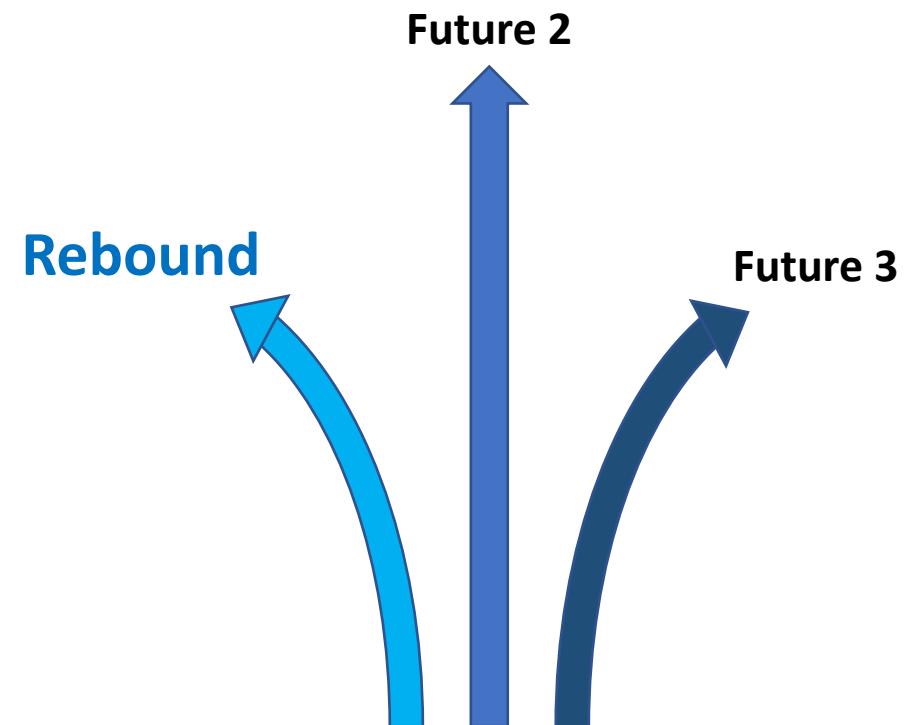


Note – The scenarios assume a linkage between aircraft production rates and industry revenues.



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A Scenario Based Delivery Plan "Rebound"





A Scenario Based Delivery Plan

Rebound

An Agile response to support redeployment of jobs, gap-bridging work and quick wins on competitiveness through peer-to-peer learning



- ✚ Requires a quick response to the redundancies that will take place to ensure that highly skilled people are redeployed in Lancashire. Tracking of aerospace alumni so that future growth can be supported. Potential to create a **Lancashire Advanced Engineering & Manufacturing Talent Retention Solution**.
- ✚ **Lancashire Advanced Engineering & Manufacturing Champions** help in the short-term to access new work (such as in the medical sector) to plug gaps until the civil aerospace market returns to growth in the second half of 2021.
- ✚ **Individuals made redundant** are supported through existing programmes and training provision to **improve employability skills** and to **up-skill** where required to enter **new sectors**.
- ✚ Use **peer-to-peer learning networks** to support companies to recover and grow in areas such as;
 - ✚ **Automation and Digital Transformation**
 - ✚ **Leadership Skills** – and especially frontline management skills for supervisors and team leaders.

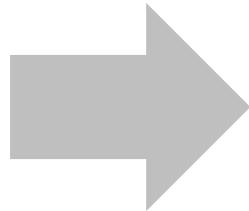


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Lancashire AEM Talent Retention Solution

Approximately 1,760 individual candidates with employment history, skills profiles, qualifications etc.

55
Lancashire
Aerospace
Suppliers

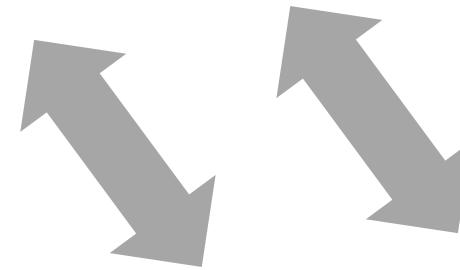


TALENT RETENTION SOLUTIONS

95
Lancashire
Companies
in Chemicals

250
Lancashire
Companies
in Food &
Drink

105
Lancashire
Companies
in
Automotive



185
Lancashire
Companies
in Rubber &
Plastics

780
Lancashire
Companies
in
Fabrication

Up to 1,400 companies from across the Lancashire AEM Sector with new job opportunities looking for highly skilled candidates.

Numbers based on Business and Employment Register 2018





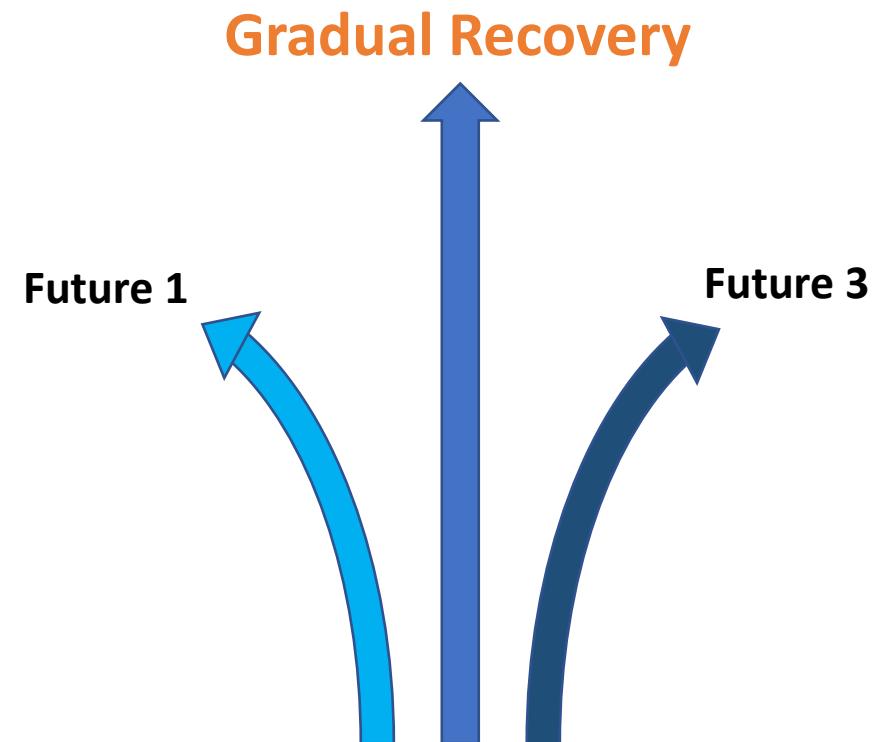
Requirements

1. To develop a multi-B2B and B2C platform capable of digitally connecting hundreds of companies and individuals in order to track and trace the highly skilled people made redundant from Lancashire's aerospace sector and help them find alternative employment with companies who may be looking to recruit those skills.
2. To work with up to 55 Aerospace Suppliers in Lancashire (a mixture of SMEs and Mid-Caps) who we estimate may make 1,760 highly skilled people redundant over the next year (some have already been made redundant and we want to capture those people too).
3. To offer these highly skilled candidates from Lancashire's Aerospace Sector to the much wider Advanced Engineering and Manufacturing Sector who may be able to provide new job opportunities.
4. Place special emphasis on under 24 year olds and especially on helping apprentices made redundant, back into new roles in order to complete apprenticeships.
5. Be able to track and trace individuals and create an Alumni of experienced Aerospace Sector workers who may wish to return to the industry when work picks up in several years time.
6. Protect £6 million of employee salaries by supporting 200 people into new employment with jobs ranging from machinists (typically £26,000+) to engineers (£47,000+).



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A Scenario Based Delivery Plan "Gradual Recovery"





Gradual Recovery

A central Lancashire Aerospace Watchtower identifying and engaging with businesses to provide support for diversification, internationalisation, and investment in technology and competitiveness for the medium and long term.



- ✚ A **Lancashire Aerospace Watchtower** is established with a dashboard to help identify companies in difficulty and to signpost to corresponding business support service providers.
- ✚ A **Lancashire Aerospace Diversification Agency** is developed to support companies to diversify into new sectors and to broaden portfolios of work.
- ✚ A **Lancashire Innovation Ecosystem Accelerator Programme** supports companies to engage with Lancashire's existing business support structures (Boost) and innovation ecosystem (Engineering Innovation Centre, AMRC North West, AMAC etc) to improve technology and competitiveness.
- ✚ A **Lancashire AEM Internationalisation Strategy** and Delivery Plan is developed to drive local government and industry to work together to raise awareness and knowledge of Lancashire's AEM and Aerospace capability both nationally and internationally (as part of a wider internationalisation strategy) in order to develop new markets and new customers.



Watchtower

- ✚ As the Covid-19 crisis unfolds there will be a need to watch out for companies in distress and particularly if:
 - ✚ The companies are strategically important to the region.
 - ✚ The companies are strategically important to aerospace supply chains.
 - ✚ The companies have a shared ambition and future opportunity to grow in Lancashire
- ✚ The Watchtower will develop a dashboard of indicators which point to the health of the companies identified above.
- ✚ The Watchtower will have access to a range of financial tools (including credit and risk scoring) along with a whole range of relationship driven inputs & stakeholder views, which can help to provide a picture of the health of key Lancashire Aerospace Companies.
- ✚ The Watchtower will identify those organisation that need and will benefit most from tailored coordinated business support interventions across the different phases of the Coronavirus crisis.





Aerospace Diversification Agency

- ✚ In the case of the “**Rebound**” scenario, there will be a requirement to provide short term cross-sector opportunities to plug gaps in work, across a 12 month period.
- ✚ However, in the case of **Gradual** and Prolongated Recovery Scenarios, the reduction in work is forecast to stretch over a 2 to 3 year period and this requires a more robust approach to diversification.
- ✚ The Aerospace Diversification Agency will provide Aerospace Companies with a programme of support to help them to understand:
 - ✚ The supply chains in new sectors.
 - ✚ How their capabilities fit with other sectors.
 - ✚ The levels of competitiveness in new sectors.
- ✚ The Aerospace Diversification Agency will work with a cross sector of AEM customers to develop a “shopping list” of product that is currently procured from overseas, but there is benefit in bringing back to the UK. (Similar to the strategy deployed by DIT to counteract the hollowing out of the UK’s automotive supply chain).



Innovation Eco-System Accelerator

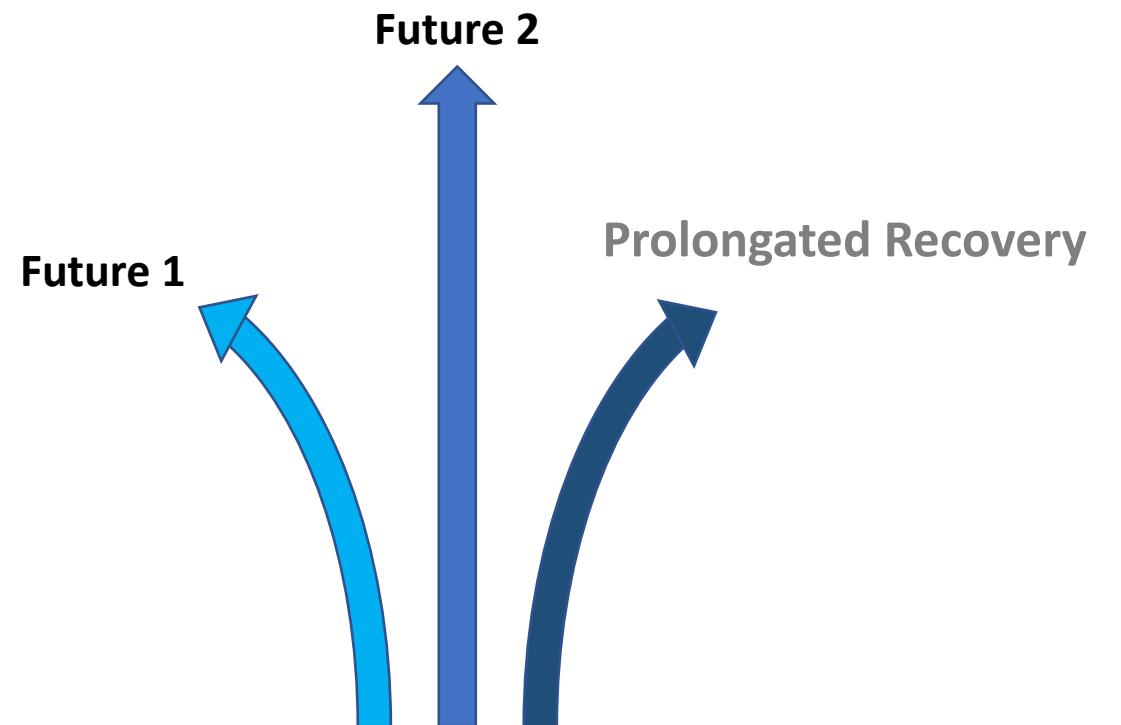
- ✚ The Task Force has identified that there is insufficient awareness in companies of the significant investments made by Lancashire in the innovation eco-system.
- ✚ The proposal is to use existing stakeholder relationships with business leaders to accelerate engagement with key organisations and programmes in Lancashire such as AMRC North West, the Engineering Innovation Centre at UCLan, the Advanced Manufacturing and Automation Centre at Training 2000, IN4.0 and Made Smarter.
- ✚ The Innovation Eco-System Accelerator will help companies to understand the support they need to develop a new product, process or service innovation and where they require support in terms of upskilling and improving the competitiveness of their businesses. The Innovation Eco-System Accelerator can then broker support from the appropriate organisations.
- ✚ The Innovation Eco-System Accelerator will work with key stakeholders to identify funding for the shorter-term interventions that many SMEs, in particular, currently need help with.





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A Scenario Based Delivery Plan “Prolongated Recovery”





Prolongated Recovery

Lancashire Enterprise Partnership leads a “Campaign for Lancashire” and a Skills Strategy for Apprentices and Graduates.



✚ Lancashire Enterprise Partnership will lead a “**Campaign for Lancashire**” to raise the awareness and knowledge within national government and industry, of the rich ecosystem of advanced manufacturing capability in the region. The aim of the Campaign is to ensure that Lancashire is the preferred choice for new investment and customers. The Campaign could consider:

- ✚ How to influence key decision makers to pull forward UK defence spending on key aircraft programmes (F35, Typhoon) to increase production in Lancashire.
 - ✚ The possibility to pull forward UK defence spending on key development programmes (Tempest) to increase engagement with Lancashire suppliers.
 - ✚ How we might encourage those UK Primes inside and outside of the region that have received significant taxpayers support to prioritise investment in Lancashire, future spend in Lancashire supply chains and bring back work from overseas.
- ✚ We will work with Industry and Government to develop a Skills Strategy for how we support the continuity of the apprentice and graduate routes into the Aerospace Sector at a time when the Supply Chain is unable to invest and perceptions of the industry have been impacted.



Lancashire Aerospace Task Force Campaign Strategy

✚ ***What do we want to achieve?*** – National government and industry understand in detail the rich ecosystem of advanced manufacturing capability in the region and commit to increasing opportunities for Lancashire companies to win more work.

✚ *By way of comparator, the UK Government has worked with Boeing (USA) to increase investment and new work placed in the UK. Emphasis has been on raising awareness and knowledge, and measuring new opportunities created.*



✚ The LEP has a range of key stakeholders who could support the delivery of the Campaign Strategy. These include (but are not limited to):

- ✚ Lancashire Members of Parliament
- ✚ Local Authority Partners
- ✚ North West Aerospace Alliance
- ✚ Marketing Lancashire



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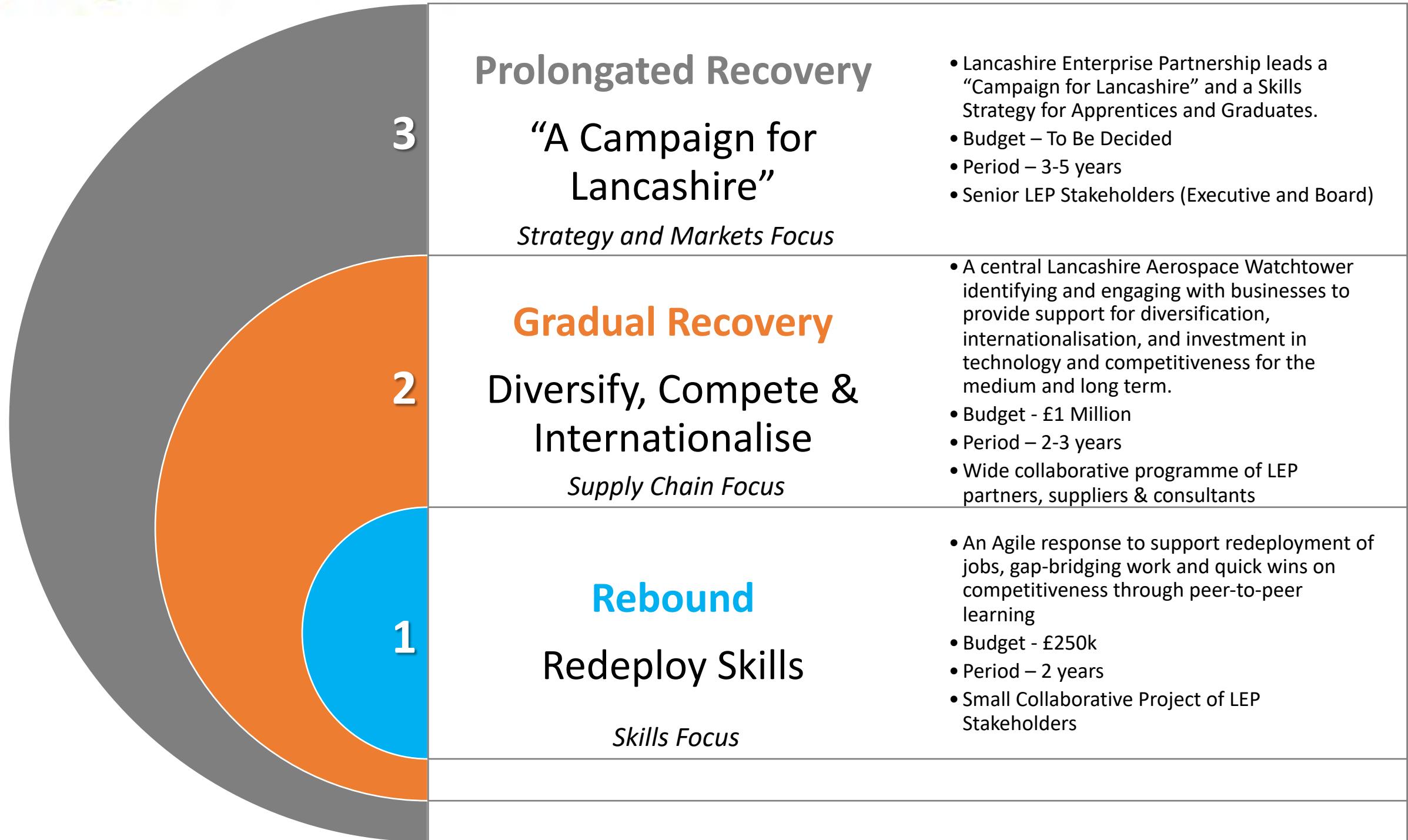
**The Recommendations
of the Lancashire
Aerospace Task Force**



Summary

- ✚ Lancashire's globally significant aerospace sector is under threat from the temporary collapse in air travel caused by the Covid-19 pandemic.
- ✚ To ensure Lancashire' Aerospace Sector can recover and grow, it is necessary to protect the core capability and its competitiveness to innovate and win market share as demand returns. It is also vital to safeguard the supply chain to serve the needs of UK military aircraft capability.
- ✚ The Lancashire Aerospace Task Force puts forward an evidence base for a number of highly credible interventions to support businesses impacted by the pandemic.
- ✚ The Task Force identifies three scenarios that are felt to be the best proxy indicators of what could happen to the aviation sector.
- ✚ The continued fluidity of understanding of the pandemic, requires a flexible multi-scenario approach to be resilient and minimise risk.
- ✚ The Task Force recommends that there is a need to develop a flexible response to all three scenarios simultaneously and to provide increasing focus and effort to the proposed solutions as we sense the real impact of the covid-19 pandemic over time.
- ✚ The Task Force is convinced that whilst we develop the solutions to support both Lancashire Aerospace Businesses and the people made redundant as a result of the crisis, we must not wait to build the "Campaign for Lancashire" to ensure the attractiveness of its offer in an even more competitive world.







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Next Steps

Next Steps

- ✚ Lancashire Enterprise Partnership will produce a detailed delivery plan that sets out how we will implement the recommendations of the Aerospace Task Force.
- ✚ The delivery plan will identify how the vision will be achieved by setting out key actions along with a range of performance indicators to enable progress to be monitored and reported.
- ✚ The LEP will engage with partners and key stakeholders to leverage resources and capabilities to execute the delivery plan.

Contact

- ✚ For further information please contact:

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Lancashire Aerospace Task Force
A Recovery Plan for Lancashire
October 2020



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