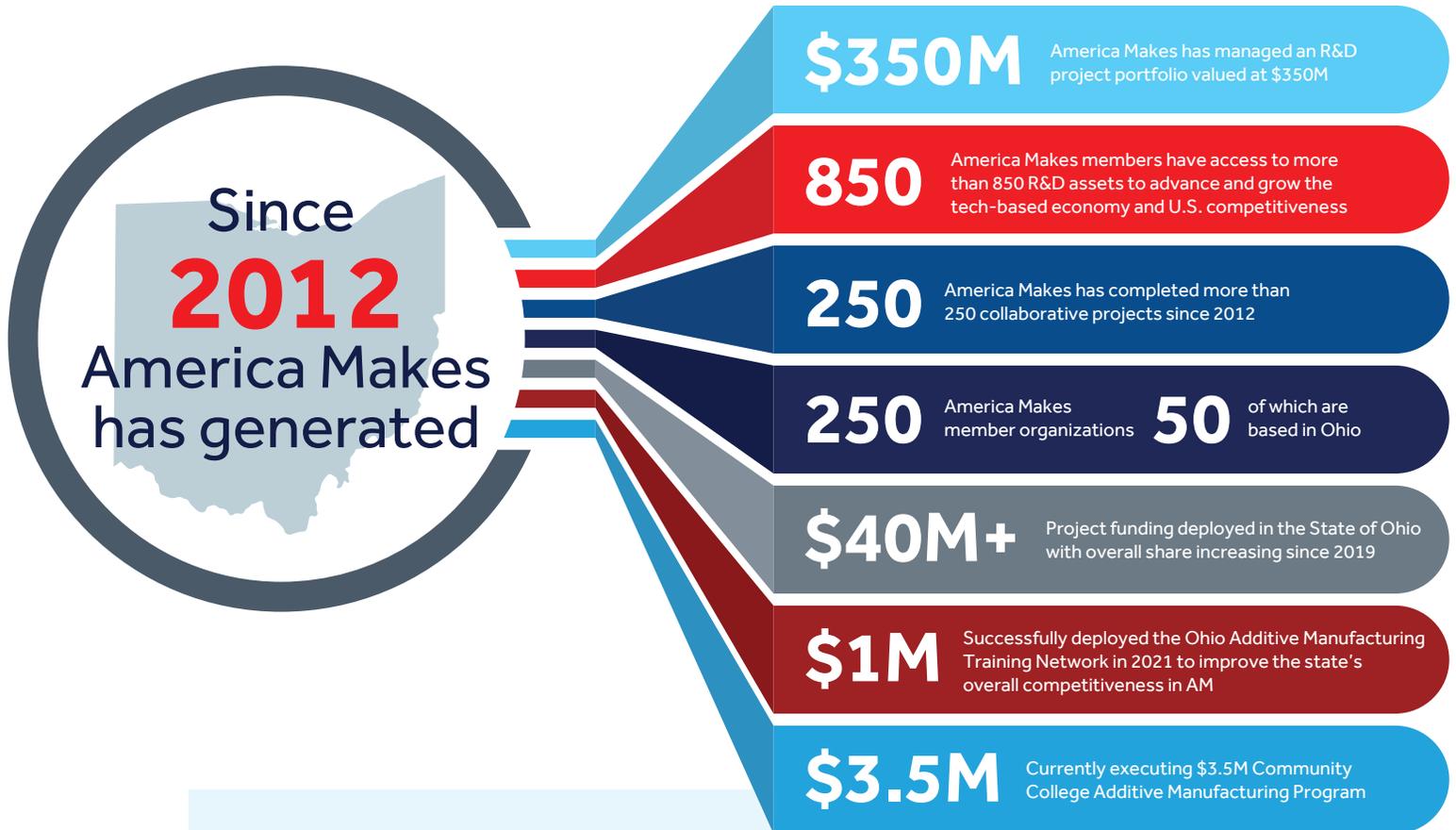


## State of Ohio Additive Manufacturing Innovation Hub Driving Economic Growth



### Why Focus on the Youngstown Region for an Innovation Hub Related to Additive Manufacturing?

- As the federally designated hub of innovation for additive manufacturing, America Makes provides Ohio with a sustainable, competitive advantage to grow its economy through the additive manufacturing technology.
- The diverse membership of America Makes – currently at 250 members, 50 of which are based in Ohio – includes small, medium, and large businesses, academic institutions, community colleges, business incubators, Manufacturing Extension Partnerships (MEP) and representatives from many government agencies and defense-related organizations.
- The Ohio-based members of America Makes represent a broad range of industry sectors from automotive, agriculture, energy, electronics, consumer products, and medical with aerospace and defense as the largest sectors.

# Driving economic growth across Ohio with \$20M Innovation Hub funding

## Commercialization

### Entrepreneurship and Commercialization

In partnership with Ohio regional economic development and business accelerator organizations, America Makes will foster entrepreneurial pathways enabled by additive technology including support for start-ups to commercialize technology that has been funded through America Makes as well as opportunities for investment in Ohio-based manufacturers.

## Supplier Development

### Focus on Small and Medium Manufacturers

America Makes will lead a dedicated effort with its largest prime contractors to support the adoption of additive manufacturing by a new generation of Ohio-based suppliers capable of using additive and related digital technologies to build the next series of aircraft, auto parts, and defense system designs.

## Workforce Development

### Tailored Workforce Development

America Makes will deploy tailored regional workforce development pathways for K through Grey learning by collaborating with local manufacturers, MEPs, community colleges, and technical schools by leveraging industry best practice and programs — building community-based support networks to ensure enduring support and access to talent pipelines.

## Modernization

### Supporting Ohio's Industrial Base

Ohio is one of the top states with the most casting and forging related companies. America Makes brings 10 years of applied research results along with their technology roadmaps to drive future investment in additive manufacturing and further digitization to support a modern supply chain in Ohio.

## WHY AMERICA MAKES?

- Leverage funding for Innovation Hub together with millions of federal dollars to advance additive technologies and support adoption by Ohio's broader manufacturing industry.
- Additive manufacturing is a State of Ohio technology priority.
- Leverage existing collaborative business model of America Makes to drive cross-cutting value for Ohio constituents.
- Successful execution of multi-million dollar, high-impact projects for the State of Ohio.
- Extending the America Makes mission from applied research through technology transition and commercialization.

## ADDITIVE DELIVERS IMPACT!

Additive manufacturing is now part of the automobile evolution:

- *GM made 60,000 weatherproof seals using 3D printing to make sure it could deliver its 2022 Chevy Tahoe on time.*
- *The forthcoming Cadillac Celestiq will include more than 100 3D printed parts.*
- *BMW is making broad use of 3D printed parts throughout its lineup.*

The additive manufacturing market grew from \$5.7B in 2016 to \$13.3B in 2022. The growth will accelerate reaching \$37.2B in 2026.

Source: Context, a market-intelligence firm.



Driven by

