

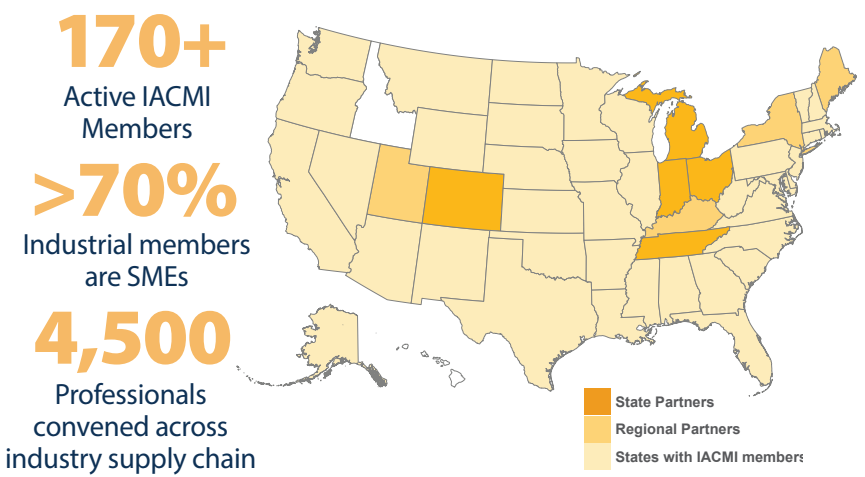
A DECADE OF INNOVATION *IACMI's Impact*





Economic Growth

For 10 years, IACMI has implemented a formula that works. **Technical Innovation + Workforce Development = Economic Growth.** IACMI has catalyzed the creation of research-at-scale, production-relevant, shared spaces for innovation and workforce development. IACMI is a Manufacturing USA institute with a 170+ member community of industry, academia, national laboratories, and government agencies



- ### Benefits of Composites
- ✓ Enhanced Strength and Durability
 - ✓ Lightweight and Stiff Performance
 - ✓ Corrosion Resistance
 - ✓ Aesthetics and Design Flexibility
 - ✓ Versatility in Transportation, Energy, and Infrastructure

Advanced composites can make aerostructures lighter, cars safer, and bridges last longer.

Discussions through IACMI trigger thoughts, help connect and formulate relationships. IACMI helped us understand customer pain points and the need for scale.

—Kevin Retz, NAWA America
N A W A H



SUPPORTED BY



IACMI was established in 2015 and renewed in 2023 by the Advanced Materials & Manufacturing Technologies Office (AMMTO) in the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE).



Since 2019, IACMI has scaled up workforce programs for the U.S. Department of Defense including for the Industrial Base Analysis and Sustainment (IBAS) program within the Innovation Capability and Modernization (ICAM) office.



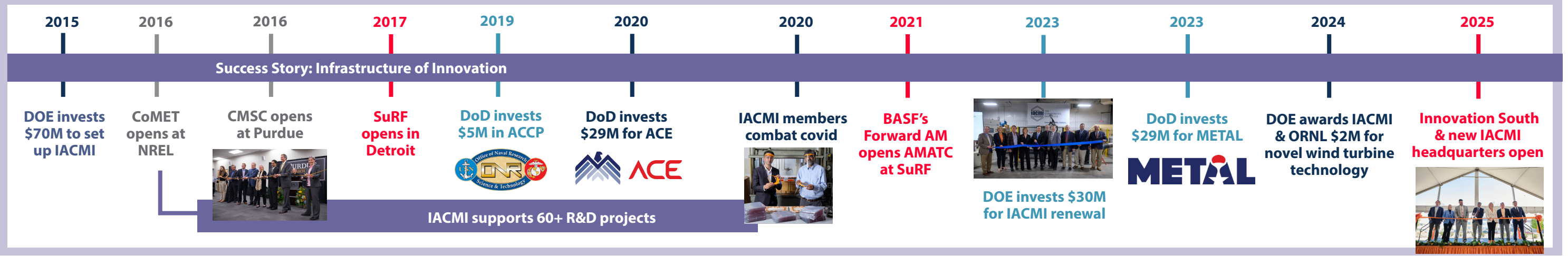
Impacting Economic Development Across the U.S.

\$400M Value of scale up facilities across 8 states

3,000 new manufacturing jobs announced

\$150M in Research & Development value

Through investments in facilities across the country, IACMI has catalyzed shared spaces to scale up innovation and workforce development.



Public-Private Collaborations



“IACMI has a collaborative culture that increases the speed of innovation.”

—Steve Bassetti, Michelman
MICHELMAN



What happens when IACMI *convenes, connects, and catalyzes*? Effective collaborations. Networking is the heart of IACMI’s purpose, bringing together 4,500+ people through Members Meetings. Members and IACMI technical experts tackle the composites industry’s toughest challenges through Working Groups focused on key sectors. Together, members forge partnerships, create new supply chains, and build an network of innovation.

IACMI has created an ecosystem where Small Medium Enterprises (SMEs) can thrive.

- ✓ Visibility, exposure to OEMs through projects
- ✓ Access to expertise and specialized equipment
- ✓ Help navigating the “valley of death”
- ✓ Cost-effective demonstration projects
- ✓ De-risking of new technology
- ✓ Validation of business models
- ✓ Recognition and awards

Relationships
Navigating the Valley of Death Leads Cooperative Competition Exposure
De-risking **Collaboration**
Networking
leaving resources Partnerships
New Opportunities

IACMI Working Groups

Robust model of involvement for members



High Rate Aerostructures Fabrication



Future Mobility/Vehicles Technology



Wind Energy

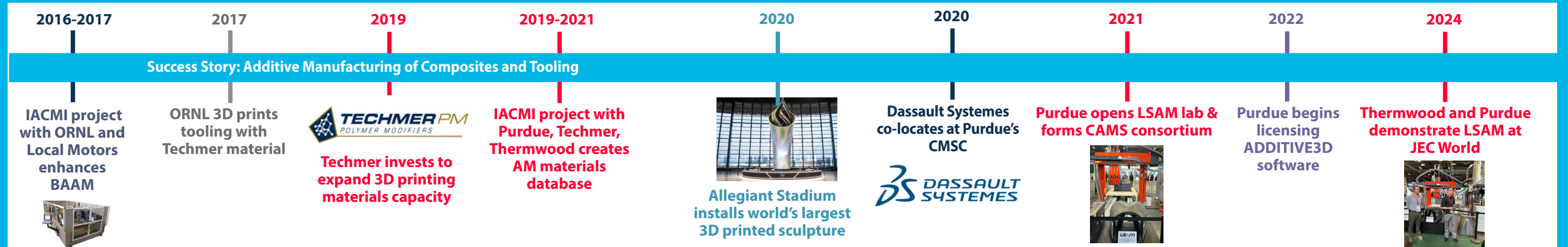


Infrastructure and Construction



Recycling/Circular Economy

IACMI projects in large-scale additive technology have led to the world’s largest 3D printed sculpture and fueled investments in additive materials, databases, software, and laboratories.





Technical Innovation



Technical innovation has been central to IACMI's mission from the beginning, including investments in diverse, scalable composites manufacturing facilities across eight states. Our current focus is leveraging these resources to drive advancements in aerospace, automotive, and infrastructure projects to make energy more affordable, reliable, and secure.

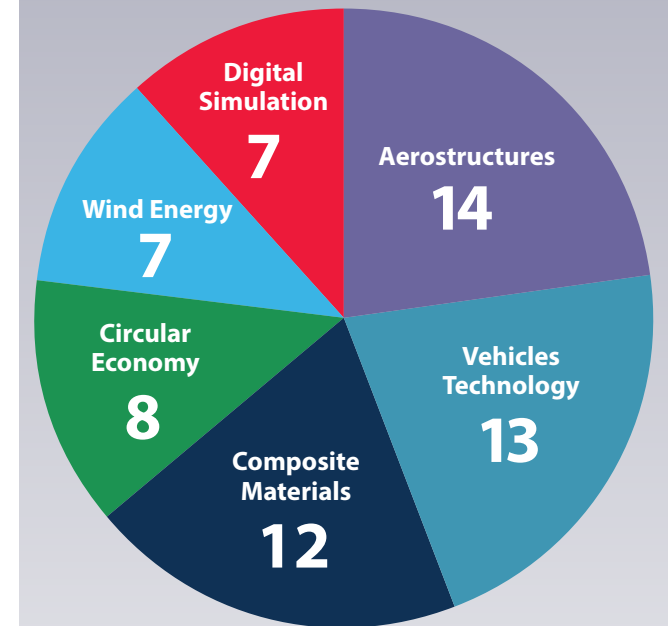
60+ Collaborative and industry-led technical projects

90+ IACMI members participating on technical projects

25 new products and technologies commercially available

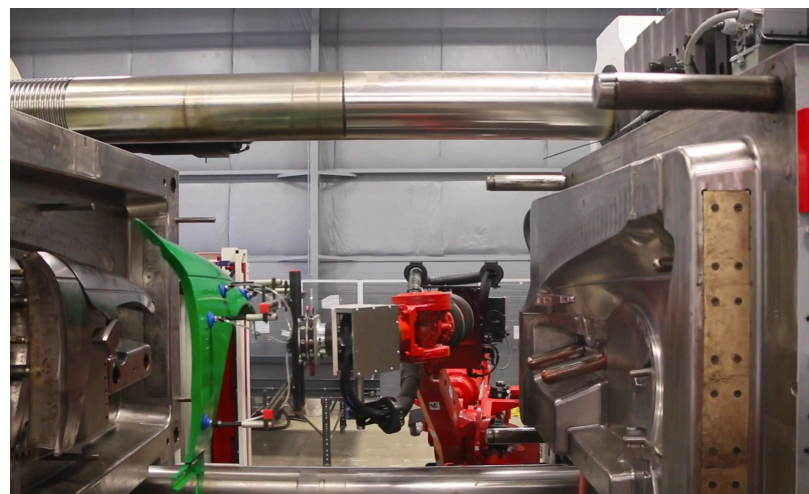
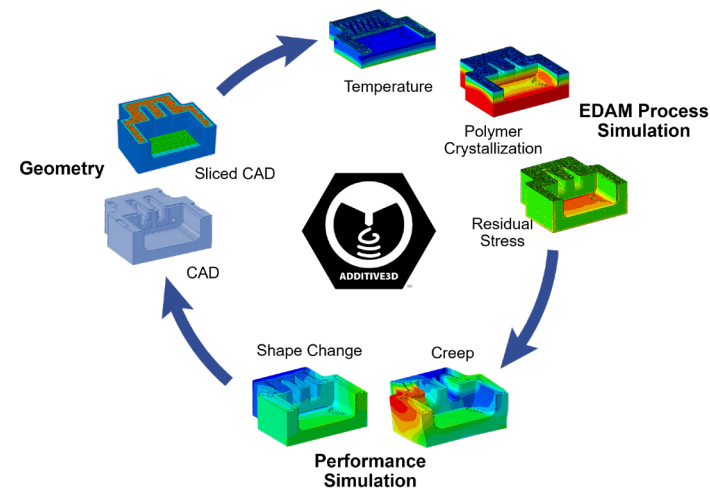
\$150M in research and development value

IACMI 1.0 projects



“IACMI's SuRF facility gave us access to equipment and tooling we would never have been able to afford on our own.”

—Andrew Maxey, Vartega

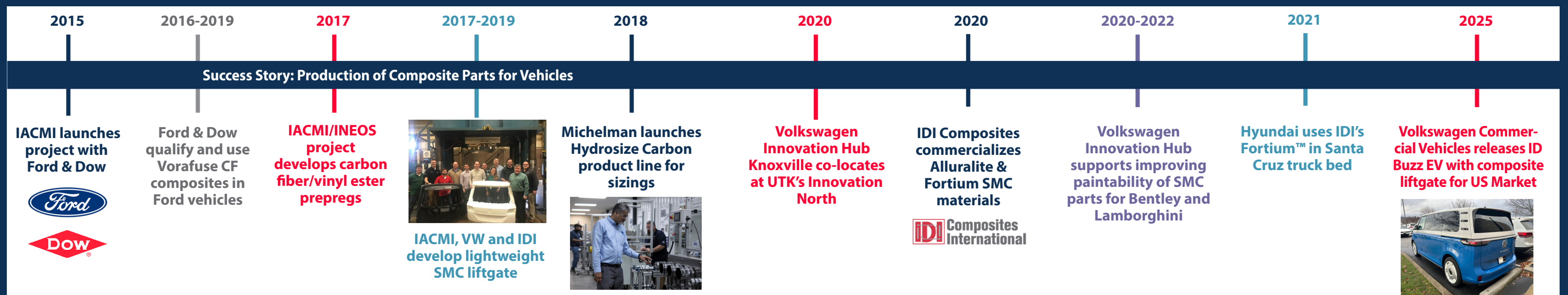


Saving Money and Improving Resiliency with Composite Manufacturing

An IACMI-led project created a compression molded composite liftgate for the Volkswagen Atlas, reducing weight by 35% and cost by 9%. Across 1.0 projects, IACMI achieved ways to reduce production costs of composites by 25% and 50% lower costs are projected in 2.0 projects.



IACMI automotive projects led to commercialized products and technologies used in Ford, Volkswagen, and Hundai vehicles.





Workforce Development

IACMI's WD programs build a robust talent pipeline from "K to gray" for U.S. advanced manufacturing. Through STEM events, workshops, online courses, and hands-on training, IACMI inspires and educates students about advanced careers in composites (ACCP), CNC machining (ACE), and casting & forging (METAL). We're preparing and connecting next generation machinists and engineers to further education, internships, apprenticeships, and rewarding careers.

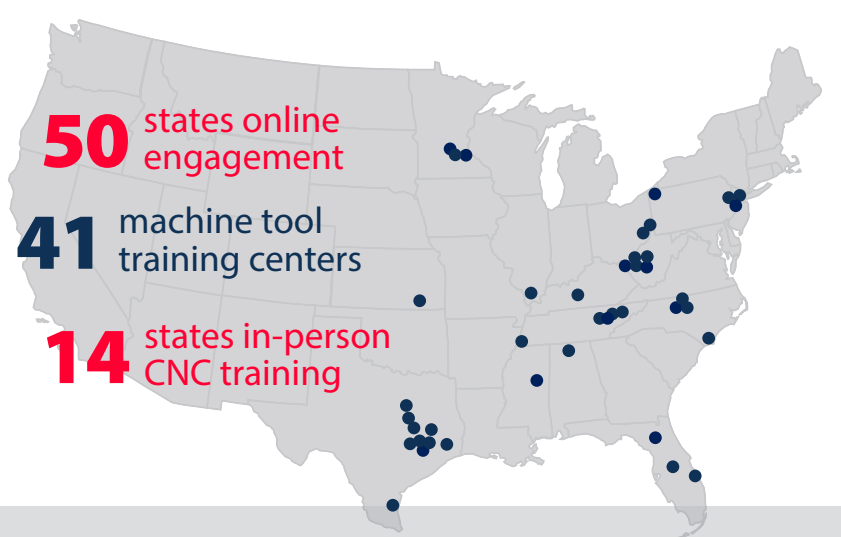
AmericasCuttingEdge.org

MetalforAmerica.org

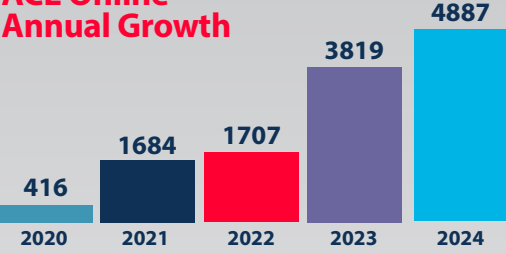
"I sought to get everything I could out of my internships, and I feel I'm a strong example of those efforts paying off."

—Will Henken, Volkswagen
VOLKSWAGEN
GROUP OF AMERICA

IACMI- America's Cutting Edge Training Facilities

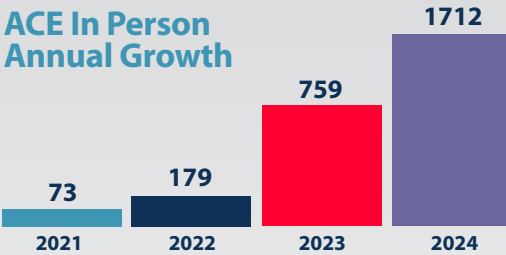


ACE Online Annual Growth



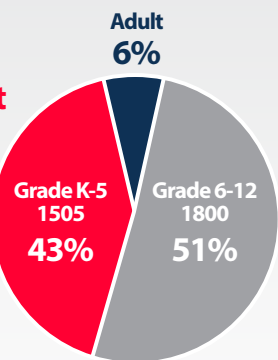
12,000+ trained in 50 states in CNC, metrology, composites or cybersecurity.

ACE In Person Annual Growth



Yearly ACE in-person participation has increased 856% between 2022 and 2024.

METAL Engagement



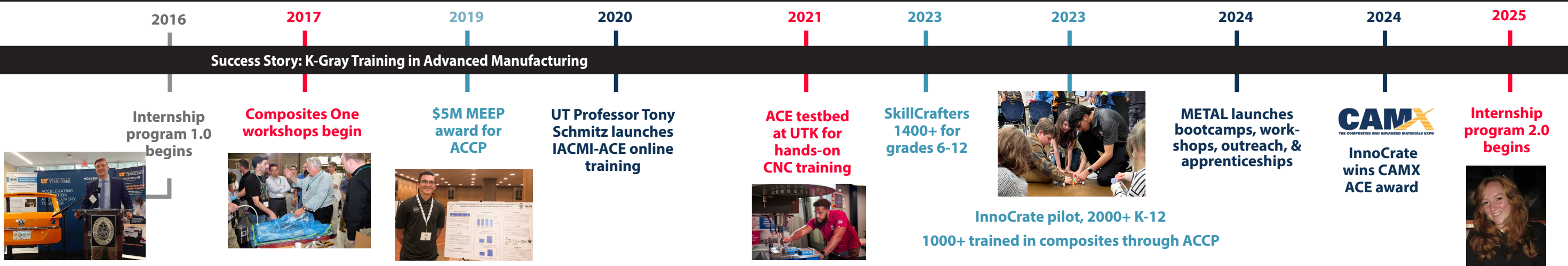
5100+ Hands-on advanced manufacturing training

18,300+ Students engaged in STEM Outreach

12,400 Online training in all 50 states

100 Internships with industry collaboration

Through internships, workshops, outreach engagements, and hands-on training, IACMI has created a pipeline of talent from K to Gray for advanced manufacturing.



WORKFORCE DEVELOPMENT



Leveraging Resources

ACMI has helped members leverage resources in two ways. The first is empowering them with access to equipment, facilities, and expertise they would not otherwise have. The second is through enabling companies and universities to secure additional funding, building on innovations and resources facilitated by IACMI. Early investments from the Department of Energy paved the way for the Department of Defense to establish critical, scalable training programs in CNC machining, casting, forging, and of course, composites.

“IACMI is a vital asset for any company looking to grow their business needs in composites.”

— Dale Leftwich, JR Automation



Catalyzing Additional Funding

IACMI Member Recipients	Source of Funding	Amount (\$M)
Workforce Development (ACCP + ACE + METAL)	DoD	69
R&D \$ for universities (Purdue + UTK + UDRI)	NSF, CERN, DOE, DoD	53
R&D \$ for federal labs (ORNL + NREL)	DOE	36
Investment in new manufacturing facilities	TPI	25
Investments in startups and SMEs	Innovation Crossroads, Diamond Edge Ventures	17
R&D \$ for industry (Ford + GM + SuRF)	DOE	15
Total		\$215M

IACMI projects have accelerated the Technology Readiness Levels (TRLs) in wind blade manufacturing.





A Network of Innovation

lacmi.org

AIRBUS



NORTHROP GRUMMAN



ARKEMA

SOLVAY



LM WIND POWER

SCHULER



WABASH



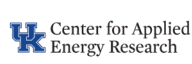
trimer



ExxonMobil



HLA ENGINEERS, INC.



One of 18 Manufacturing USA institutes, the Institute for Advanced Composites Manufacturing Innovation (IACMI) is headquartered in Knoxville, TN and is managed by the Collaborative Composite Solutions Corporation (CCS). CCS is a not-for-profit organization established by the University of Tennessee Research Foundation.