



House Finance Committee
And
House Business Affairs & Labor Committee

Senate Finance Committee
And
Senate Business, Labor and Technology Committee

Advanced Industries Accelerator Grant Program
Update as of
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Advanced industries (AIs) are key drivers of the U.S. and Colorado economies. Comprised of engineering and R&D-intensive companies, they deliver products and services in a wide range of markets, from aerospace to robotics to medical devices. Colorado's AIs include aerospace, advanced manufacturing, bioscience, electronics, energy and natural resources (including cleantech), infrastructure engineering, and technology and information. Together, they account for nearly 30 percent of the state's total wage earnings, around 30 percent of total sales revenue, and almost 35 percent of the state's total exports.

To ensure the progression of this vital aspect of Colorado's economy, the AI Accelerator Program was created in 2013. This initiative promotes growth and sustainability in these industries by driving innovation, commercialization, and public-private partnerships, while also increasing access to early-stage capital and creating a strong infrastructure that enhances the state's capacity to be globally competitive.

OEDIT offers four grants and two global business programs to support AI companies in their various phases of growth. The grants include Proof of Concept, Early-Stage Capital and Retention, Infrastructure Funding, and AI Export. The programs include a network of Global Consultants and export training to build export readiness and help connect Colorado AI companies to global opportunities.

Proof of Concept

Proof of Concept (POC) grants fund research with commercial applications at Colorado research universities, federal labs located in Colorado, and other Colorado labs with valid technology transfer offices. Funding helps pull technologies from the research institutions where they were discovered and connect them to the private sector where they can be developed into commercialized products. This acceleration of applied research leads to the rapid commercialization of products and services and provides significant economic impact and competitive advantage for Colorado and the Advanced Industries.

Grants support the commercialization of technologies at research institutions at two distinct stages along the commercialization pathway: Pre-Commercial Research (Phase I) and Commercialization Preparation (Phase II). Pre-Commercial Research includes proof of principle studies and other studies on intellectual property and resulting prototypes that demonstrate the utility of a technology for a specific application. Commercialization Preparation includes the process of creating a commercial opportunity assessment for a technology and the development of a commercialization plan.

In Fiscal Year 2021, 41 POC grants were awarded to researchers at Colorado research institutions, bringing cutting-edge technologies closer to market. Since the program's inception, 267 POC grants have been funded. Highlighted below is a project that was funded in Fiscal Year 2021.

University of Colorado Boulder, Dynamic Window Based on Reversible Metal Electrodeposition

This project, led by University of Colorado Boulder Professor Michael McGehee, received a \$93,750 Proof of Concept award. The aim of this project is to develop the next generation of dynamic windows for the residential market. Using the reversible metal electrodeposition technique, the windows will have perfectly neutral color, high clarity in transparent state, and true blackout privacy in the dark state.

To commercialize this technology the team founded the company Tynt Technologies. During Fiscal Year 2021 period, Tynt created 8 jobs and raised approximately \$7 million in seed funding.

Early Stage Capital and Retention

Early Stage Capital and Retention (ESCR) grants fund companies using technologies developed in proof of concept or other early stage start-ups that have created viable products that meet a market need. Grants support technology commercialization by funding product development in preparation for a product launch or the advancement of a product or technology to achieve a commercial milestone that significantly increases the company's value and stability and better positions the company for follow-on investment, including through the federal Small Business Innovation Research program, angel funding, or venture capital. The resulting product or service must be manufactured or performed in Colorado.

Grant funding does not compete with existing marketplace funding opportunities, but rather supplements and fills an existing void for capital market's tendency to under-invest in early stage technologies. ESCR grants allow early stage businesses to complete commercial activity such as production, sales and distribution, and business growth. Funds can also be used for business start-up activities, market validation, and pre-production prototypes.

In Fiscal Year 2021, 59 Early Stage Capital and Retention Grants helped Colorado companies further advance their commercialization efforts. Since the program's inception, 292 Colorado companies have been funded. Highlighted below is a company that was funded in Fiscal Year 2021.

PickNik Inc., Advanced Robot Teleoperation

PickNik, located in Boulder, CO, received a \$248,400 Early Stage Capital and Retention award. The aim of the company is to commercialize an advanced robotic teleoperation technology for advanced industrial and commercial applications. The proprietary software includes advanced autonomous motion planning and collision avoidance algorithms to control commercial robotic arms from a distance, and can be leveraged anywhere a human might do tasks with their arms.

During Fiscal Year 2021 period, PickNik created 14 jobs and secured approximately \$755,000 in follow-on grant funding.

Collaborative Infrastructure Grants

In order to align private industry and Colorado Research Institutes, Collaborative Infrastructure Grants help fund Advanced Industry projects that substantially build or utilize existing infrastructure to support or enhance the commercialization of Advanced Industry products, assist Advanced Industry start-ups with mentoring or access to outside capital, or contribute to the development of an Advanced Industry workforce.

Collaborative Infrastructure grants are used to assist in the implementation and execution of action items identified in Advanced Industries Strategic Plans, as developed through the Colorado Blueprint Key Industry Network initiatives in 2013. Collaborative Infrastructure Grants may also be used to assist the implementation of newly identified action items that are needed to accelerate such Advanced Industries, and to leverage federal funding opportunities that address a specific need of an Advanced Industry.

In Fiscal Year 2021, 5 Collaborative Infrastructure grants were awarded. Since the program's inception, 35 Collaborative Infrastructure grants have been funded. Highlighted below is a project that was funded

in Fiscal Year 2021.

GeoVisual Analytics, The Precision Agriculture Collaboration Initiative (PACI)

GeoVisual Analytics, located in Denver, CO, received a \$651,686 Collaborative Infrastructure award for the PACI initiative. This initiative assists the commercial growth of large and small Colorado businesses operating in underserved agriculture sectors, like high-value and perishable crops, by establishing a regional center of excellence for precision agriculture, food supply chains, and natural resource management. PACI drives ongoing collaboration between Colorado companies and universities, and uses substantial customer and supply chain insight to accelerator technology adoption in business growth in these market segments.

During Fiscal Year 2021 period, PACI retained 5 jobs and secured approximately \$2.5 million in follow-on grant funding.

Grants Awarded

The AI Accelerator Program’s statute requires an allocation of at least 15% of funds to Proof of Concept grants, 15% of the funds to Early Stage Capital and Retention Grants, and up to 15% of the funds to Collaborative Infrastructure. The table below summarizes all grants awarded in Fiscal Year 2021.

Status	Program	# of Awards	\$ Awarded	\$ Spent to date	Jobs Created	Jobs Retained	New Co Created	Follow- On Capital	IP	Projected Annual Revenue
	Proof of Concept	41	\$4,401,390	\$3,559,290	22	36	8	\$13,172,000	12	\$100,000
Active Grants	Early Stage Capital and Retention	59	\$14,408,811	\$3,271,539	81	193	1	\$12,779,973	36	\$17,031,048
	Collaborative Infrastructure	5	\$2,068,287	\$131,835	3	8	N/A	\$2,905,058	2	\$375,000
Totals		105	\$20,878,488	\$6,962,664	106	237	9	\$28,857,031	50	\$17,506,048

Since the program’s inception in 2013, approximately \$106,461,790 in Advanced Industries grants have been funded. To date, the program successes include the creation of 3,614 new jobs and approximately 2,895 jobs retained. Additionally, these funds have helped the technologies acquire an additional \$1,974,144,133 in grants and investments to commercialize further.

Advanced Industry Export Accelerator

The Advanced Industry (AI) Export Grant provides financial assistance for aspiring (new to export) and current (market expansion) Colorado exporters. The grant program supports small and medium-sized AI businesses through funds to offset international business development and marketing costs. Qualified expenditures include:

- Translation services for contracts;
- Legal fees related to intellectual property protection abroad and compliance/regulatory issues;
- Conducting due diligence or credit reviews on potential buyers or distributors;
- Travel-related costs for international sales trips and trade shows;
- Costs for exhibiting at an international trade show; and

International business development grants provide expense reimbursements to businesses that are new to exporting or are expanding into new export markets, helping them to grow and accelerate their businesses. OEDIT reimburses up to \$15,000, and Colorado businesses provide a 1:1 match for specific international export development needs.

Due to the COVID budget shortfall, the budget for the AI Export Grant was cut for Fiscal Year 2021 and there is no activity to report.