

# Ohio Third Frontier Program

## Overview

Created in 2002, the Ohio Third Frontier is an unprecedented commitment to create new technology-based products, companies, industries and jobs. In May, the Ohio Third Frontier was extended through 2015

The \$2.3 billion initiative supports applied research and commercialization, entrepreneurial assistance, early-stage capital formation, and expansion of a skilled talent pool that can support technology-based economic growth. The Ohio Third Frontier's strategic intent is to create an "innovation ecosystem" that supports the efficient and seamless transition of great ideas from the laboratory to the marketplace.

## The investment of Ohio Third Frontier resources is guided by the following strategic goals:

In targeted areas of technology, the Ohio Third Frontier is catalyzing the growth of existing and emerging industry clusters by:

- Increasing the quantity of high-quality research that has commercial relevance to Ohio companies
- Expanding access and availability of investment capital to create, grow, and attract technology-based enterprises
- Growing and nurturing an increasingly experienced pool of entrepreneurial management talent
- Addressing the technical needs of existing companies pursuing new products and production processes
- Contributing to the expansion of a technologically proficient workforce

## The Ohio Third Frontier supports a comprehensive portfolio of program activities that include:

### *Value Chain Development*

**Advanced Energy Program** to support R&D that addresses the technical and cost barriers to commercialization in Ohio of advanced energy components and systems, with preference to wind, biomass, and energy storage.

**Advanced Materials Program** to support R&D that addresses the technical and cost barriers to commercialization in Ohio of advanced materials products with preference to polymer and carbon nano-materials, liquid crystals, and bio-based materials.

**Biomedical Program** to support R&D that addresses the technical and cost barriers to commercialization in Ohio of biomedical products, with preference to cardiovascular, regenerative medicine, and orthopedics.

**Fuel Cell Program** to support R&D that addresses the technical and cost barriers to commercialization in Ohio of fuel cell and other advanced energy components and systems.

**Innovation Ohio Loan Fund** to assist Ohio companies in developing next generation products and services in targeted industry sectors by financing the acquisition, construction, and related costs of technology, facilities, and equipment.

**Medical Imaging Program** to support research and development that addresses the technical and cost barriers to commercialization in Ohio of medical imaging components and systems.

**Ohio Research Commercialization Grant Program** to support accelerated Ohio commercialization by small companies awarded selected federal R&D funding.

**Photovoltaic Program** to support R&D that addresses the technical and cost barriers to commercialization in Ohio of photovoltaic components and systems.

**Sensors Program** to support research and development that addresses the technical and cost barriers to commercialization in Ohio of sensors components and systems supporting key Ohio industries.

**Targeted Industry Attraction Grants** to focus resources and incentives on the attraction of companies that can help build critical mass in selected growth industries in Ohio.

**(NEW) JobsOhio Network Program** to support and leverage the retention, expansion and recruitment of businesses and industries with high potential for job and wealth creation in Ohio. Increase the technical capabilities and business competencies of Ohio value chains within key existing and emerging driver industries and pursue targeted attraction to fill gaps

**(NEW) Commercial Acceleration Loan Program** to increase the technical capabilities and business competencies of Ohio value chains within key existing and emerging driver industries and pursue targeted attraction to fill gaps.

- \$25 Million dollars
- Up to 50% of project cash costs;
- Deferred principal and/or interest options;
- Working capital eligible;
- For-profit companies in targeted industries;
- Different loans/terms for different opportunities;
- Validated market demand through IOLF, OTF Investment Forum, Battelle forums, staff survey;
- Invest in projects moving products/services into meaningful market entry:
  - Commercial scale demonstrations in market use conditions;
  - Manufacturing scale-up beyond pilot plant;
  - Final customer validation, product certification, and/or regulatory certification;
  - Acquisition of exclusive IP rights;
  - Launch of next generation of an existing product, service, or process;
  - Design engineering/packaging.
- **3 Commercial Acceleration Loan Funds:**

**New Venture Loans - \$500k - \$1 M per loan**

- Professional venture/smart money backed co.;
- Balloon loan w/ less than market rate interest;
- Warrant provision;
- 25% forgivable for successful completion and another 25% forgivable / sales of \$1 M and significant market entry.

**Venture/Non-venture Loans - \$500k - \$2 M per loan**

- Targeted to small, post revenue co. w/ existing product/service on market;
- Near to market project w/ high sales potential;
- Revenue participation note, deferred payments w/ min./max. payback;
- 25% forgivable w/ sales of \$1 M and another 25% forgivable w/ sales \$2 M+, and significant market entry at each milestone.

**Non-venture Loans - \$500k - \$3 M per loan**

- Targeted to small to established company w/existing product/service on market;
- Near to market project w/ strong financial backing;
- Loan will support up to 25% of the project;
- 5% annual interest, due monthly, principal deferred during project period.

***Entrepreneurial Services***

**Entrepreneurial Signature Program** to establish robust networks of entrepreneurial services and capital within six geographies to accelerate the growth of early-stage Ohio technology companies.

**Capitalization Program (4 Stages):**

**(NEW) Micro Fund**

- \$1 M dollars
- Up to \$100k per fund (non-profit);
- Investments from \$5k to \$25k;
- Non-profit organizations that have not received other state TBED assistance;
- Plan for sustainability including objectives and milestones;
- Incentive to encourage creative entrepreneurial efforts that are spontaneously arising at the community level.

**Pre-Seed Fund Capitalization Program** to increase the availability of professionally managed capital and associated services to accelerate the growth of early-stage Ohio technology companies.

- \$25 M dollars
- \$500K to \$2M per fund;
- Cash match 1:1.

**Seed Fund Capitalization Program**

- Investments from \$1M to \$4M

**(NEW) Growth Fund**

- \$10 M dollars
- \$5 M per fund;
- Private Cash Match 1:3;
- SBA Cash Match 1:8 (2x total fund);
- SBIC Impact Fund opportunity:
  - Invitation by SBA to participate;
  - \$200M per year available as fund leverage;
  - 2x leverage for total fund;
  - \$60M Fund:
    - \$5M State Investment;
    - \$15M Private Capital;
    - \$40M SBIC Leverage.

\*SBIC Impact Fund targets energy, education and low to moderate income areas.

Funds must deploy 50% of capital to these targets.

## **Talent**

**Internship Program** to provide Ohio businesses with technically trained students in targeted areas and allow students to explore career opportunities within Ohio.

- \$3 M
- Up to \$3,000 per internship;
- For-profit companies;
- Deployed through seven regional non-profit partners.

*\*Reorganized program began deploying FY 2011 funding of \$2.25 beginning in summer quarter 2011*

*\*FY 2012 funding will be awarded for deployment well before the summer internship season 2012*

**(NEW) The ONE Fund** aims to aggressively recruit young entrepreneurs to Ohio to work under the guidance of seasoned entrepreneurs, industry experts, and investors to launch a new business venture.

- Attract and retain entrepreneurial talent in Ohio by directing resources to accelerate the formation and development of companies;
- Assist young companies in attracting follow-on investment;
- Foster a culture of entrepreneurship, and raise visibility and excitement about entrepreneurship in Ohio.

## **Pilot Accelerator**

Collaboration with OSU Center for Entrepreneurship 10-Xelerator (10x) for pilot accelerator:

*- First 10x class graduated on September 1, 2011 with "Showcase Day".*

*- Second 10x class starting in winter 2012.*

### **ONE Fund Accelerators:**

\$1.6 M

Funding for up to 4 Accelerators;

12 Statements of Interest received to date.

### **ONE Fund Start-Up Events:**

\$0.1 M

- 5-10 Start-Up Events;
- Sponsor high-profile prize-based start-up weekends and other events;
- Bring together broad range of new and established entrepreneurs, industry professionals, students and investors.

## ***Open Innovation***

**Industrial Research and Development Center Program** to make Ohio organizations more competitive for the attraction of major corporate, non-profit or federal research and Development centers.

**Innovation Platform Fund** to support near term commercialization projects requiring major capital acquisitions and improvements at Ohio higher education institutions and nonprofit research organizations with a secondary benefit to support technical workforce training. This Program is formerly known as the Wright Projects Program.

**Ohio Technology Validation and Start-up Fund** to create greater economic growth in Ohio based on start-up companies that commercialize technologies developed by Ohio institutions of higher education.

**Ohio Research Scholars Program**, in partnership with the Ohio Board of Regents, to attract leading research talent that can contribute to the growth of research centers of excellence within Ohio's academic institutions that support economic development priorities of the state.

**Research and Commercialization Program** to advance scientifically unique applied research projects that can sustain the development of new, innovative products within three years.

**Wright Centers of Innovation** to establish large-scale, world-class research and technology development centers designed to accelerate the pace of Ohio commercialization.

## **Leading Industry Sectors:**

Based on a Battelle Study, these are the leading and emerging areas that the 3<sup>rd</sup> Frontier Board and Commission will focus their time, effort and resources promoting:

- **Advanced Materials**
- **Software Applications for Business and Healthcare**
- **Fuel Cells and Energy Storage**
- **Medical Technology**
- **Aero-Propulsion Power Management**
- **Sensing & Automation Technologies**
- **Situational Awareness and Surveillance Systems**
- **Solar Photovoltaics**

## **The Future Direction of the Ohio 3<sup>rd</sup> Frontier Program:**

- A portfolio of activities that emphasizes economic outcomes in the 3-5 year timeframe;
- Updated assessment of major Ohio market opportunities and sharper focus on six key industries in which significant growth can be catalyzed with OTF investments, integrated with state's overall economic development strategy;
- Identification of some potential large game-changing investments that can be pursued in the next five years;
- Explore funding alternatives [to grants] that shift more risk to award recipients and generate some direct return back to OTF for future investments;
- Metrics that improve ability to make ROI-based decisions and track success in those terms.

**Pursued Outcomes of the 3<sup>rd</sup> Frontier Program:**

- Produce a high level of economic return for the state in quality jobs, company growth, and wealth creation;
- Attract companies, talent and capital to Ohio;
- Create sustainable engines of economic development activity in key areas of technology and industry strengths;
- Reduce the risk of pursuing entrepreneurial, innovation and development activities in Ohio;
- Sustain best practices and relationships that lead to efficient commercialization;
- Increase the visibility and reputation of Ohio as an innovation and entrepreneurial destination.

**3<sup>rd</sup> Frontier Financial Resources over the next several years:**

*- All OTF program funding from a single source, Third Frontier Research and Development Fund (voter-approved bonds):*

Appropriation Amounts			
FY 12	FY 13	FY 14	FY 15
\$225 M*	\$175 M	\$175 M	\$175 M

*\*\$200 M available for new program awards in 2012*

*- 2012's Budget is \$200 million and will be disbursed in the following manner (with \$14.4 million unallocated):*

Entrepreneurial Support	Value Chain Development	Open Innovation	Talent	Total
\$77.7 M	\$39.9 M	\$65 M*	\$3 M	\$185.6M
42%	21%	35%	2%	100%

*\*Includes \$8 M Research Incentive budget item*