



Development Services Agency

John R. Kasich, Governor

David Goodman, Director



Third Frontier
Innovation Creating Opportunity

www.OhioThirdFrontier.com

Ohio Third Frontier December 11, 2013

Advisory Board and Commission Meetings

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45670982346
68092385603
68230848564
80692380458
56234685604
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02394530495
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Advisory Board and Commission Joint Meeting

CY 2013 Program Update

Biohealth/Agribusiness Industry Update



Aaron Pitts

**Managing Director
Biohealth & Agribusiness**

December 11, 2013

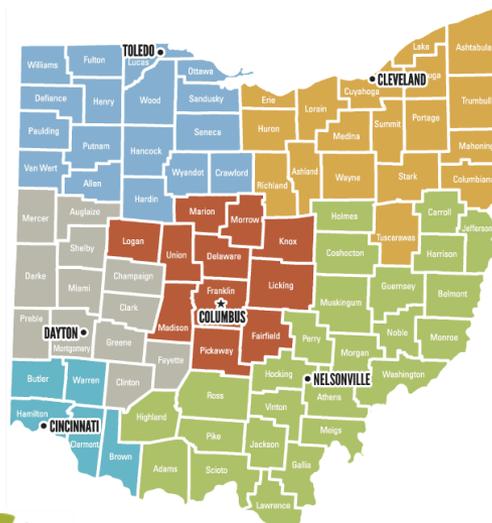
Who We Are

JobsOhio and its Network partners are focused on driving job creation, new capital investment, and economic growth for Ohio by helping businesses achieve their strategic goals.

- 25-year lease of liquor franchise
- Approximately \$125 million annually for economic development

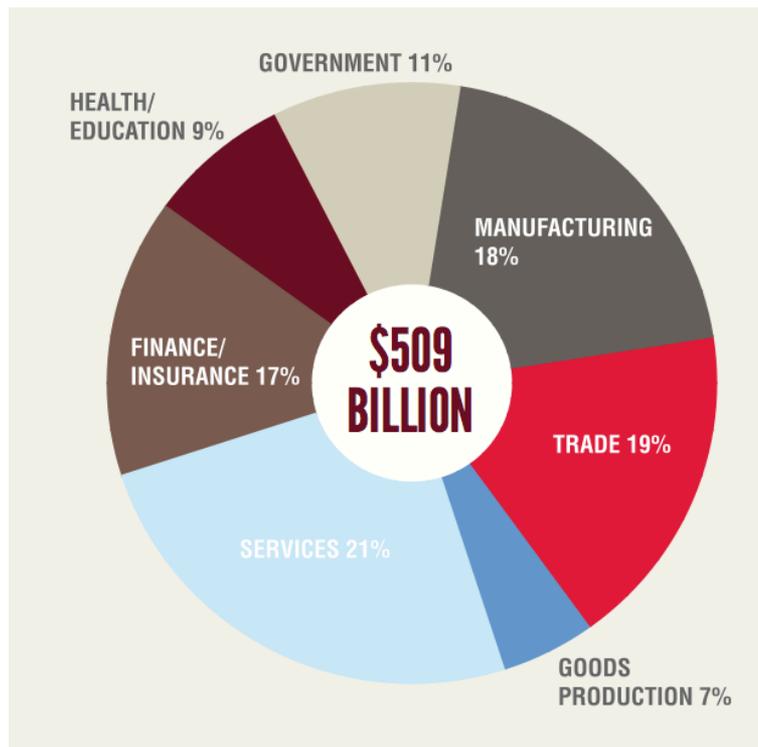
What this dedicated funding stream supports:

- Corporate Relationship Development & Management
- JobsOhio Growth Fund Loan
- JobsOhio Economic Development Grant
- JobsOhio Workforce Grant
- JobsOhio Revitalization Program



Ohio's Favorable Position

Ohio's Economy (% by GDP)



Ohio Strengths	
Land	✓
Resources	✓
People	✓
Business Climate	
Tax Reform	✓
Proximity	✓
Regulatory Environment	✓

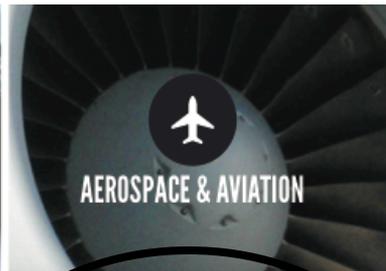
736 CHIEF EXECUTIVES MADE AN EXECUTIVE DECISION.

The most improved business climate in the U.S.

Learn why at: jobs-ohio.com/mostimproved



Nine Targeted Industries & Four Business Functions

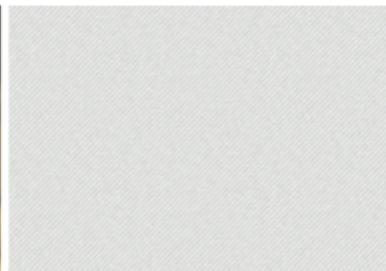
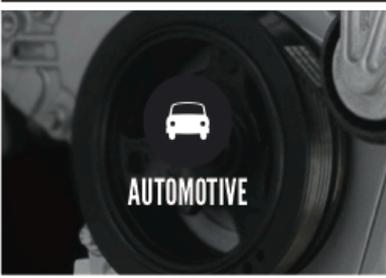
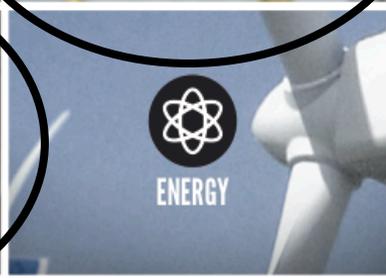
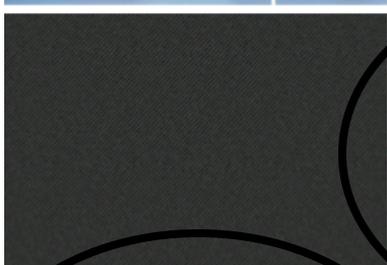


JOBSOHIO FOCUSES ITS ECONOMIC DEVELOPMENT EFFORTS ON A DIVERSE PORTFOLIO OF NINE TARGETED INDUSTRIES AND FOUR BUSINESS FUNCTIONS THAT DRIVE THE STATE'S ECONOMY AND HAVE THE GREATEST IMPACT ON JOB CREATION.

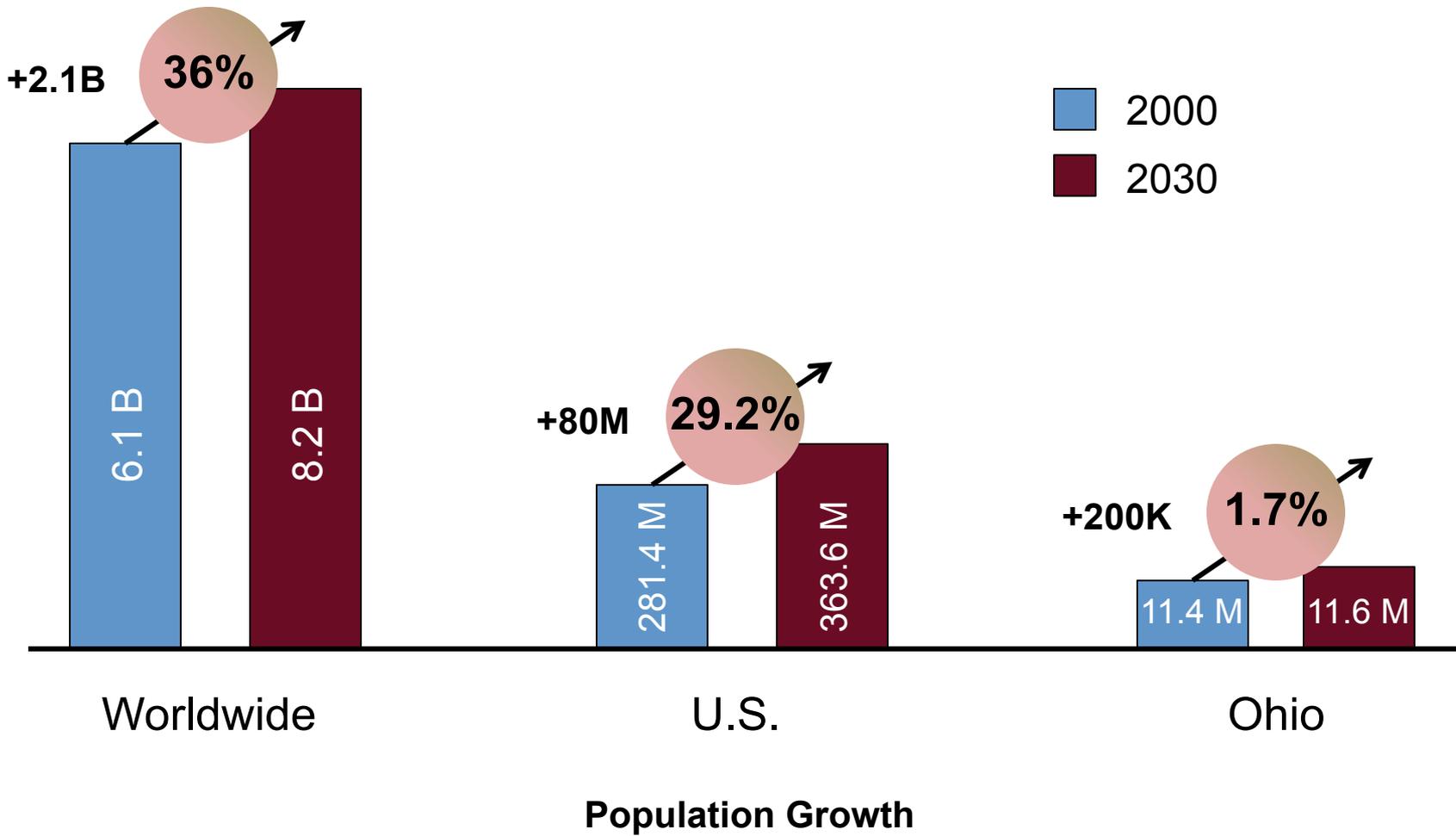


OHIO'S STRONG BUSINESS FUNCTIONS:

- Back Office
- Headquarters & Consulting
- Logistics
- Research & Development

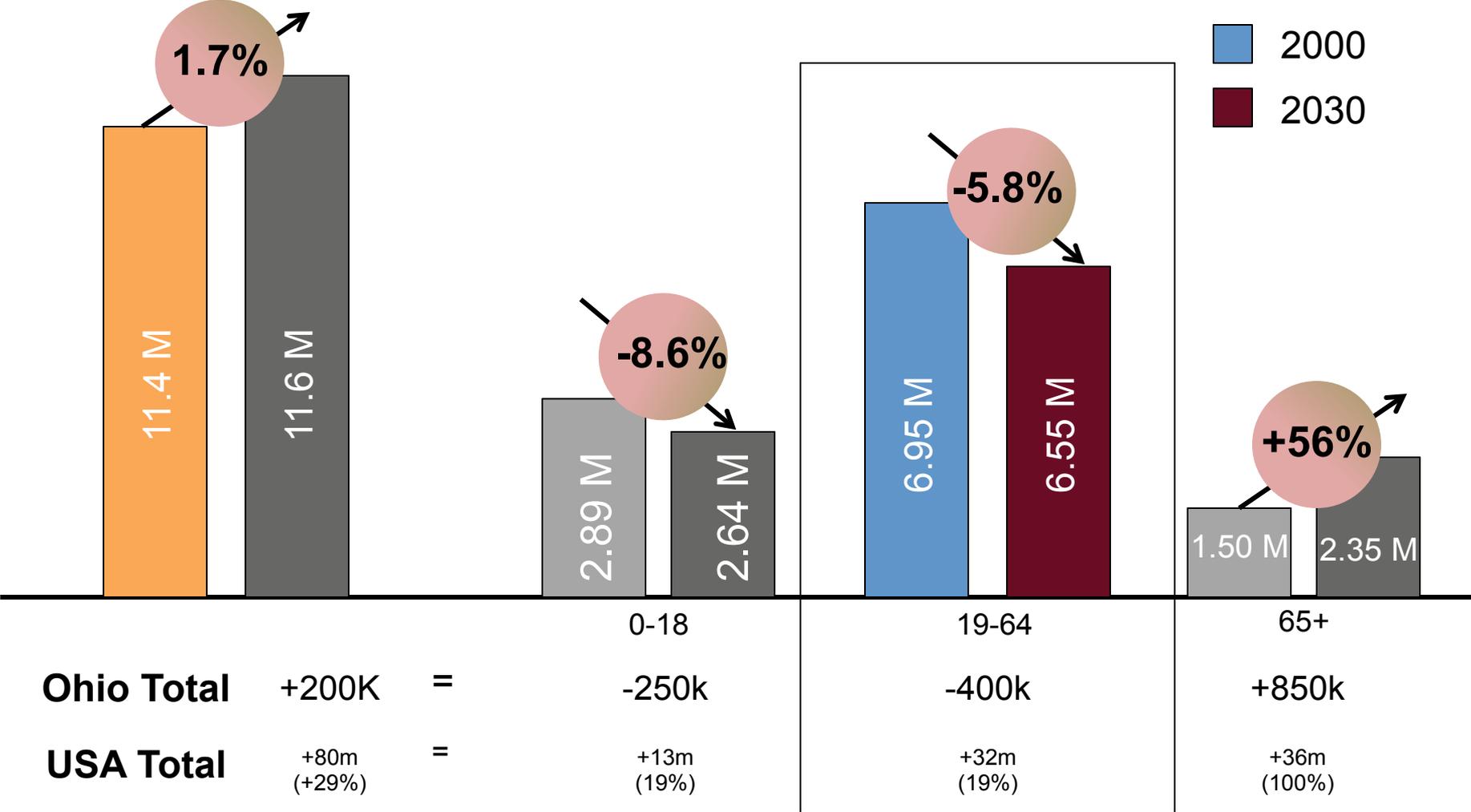


Global : National : Ohio Backdrop



Source: US Census Bureau

Ohio Population Implications



@ ~150,000 children per year, how do we want to evolve?

Future Leadership Opportunities

1. Feeding a Hungry World



2. Fueling a Hungry World



3. Enabling Happy, Healthy Lives



Why Ohio?

Innovation Basis

1. Feeding a Hungry World



- Large installed industry base: crop, animal, food processing know-how
- Leading research university with strategic focus

2. Fueling a Hungry World



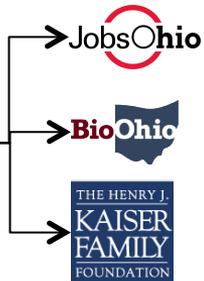
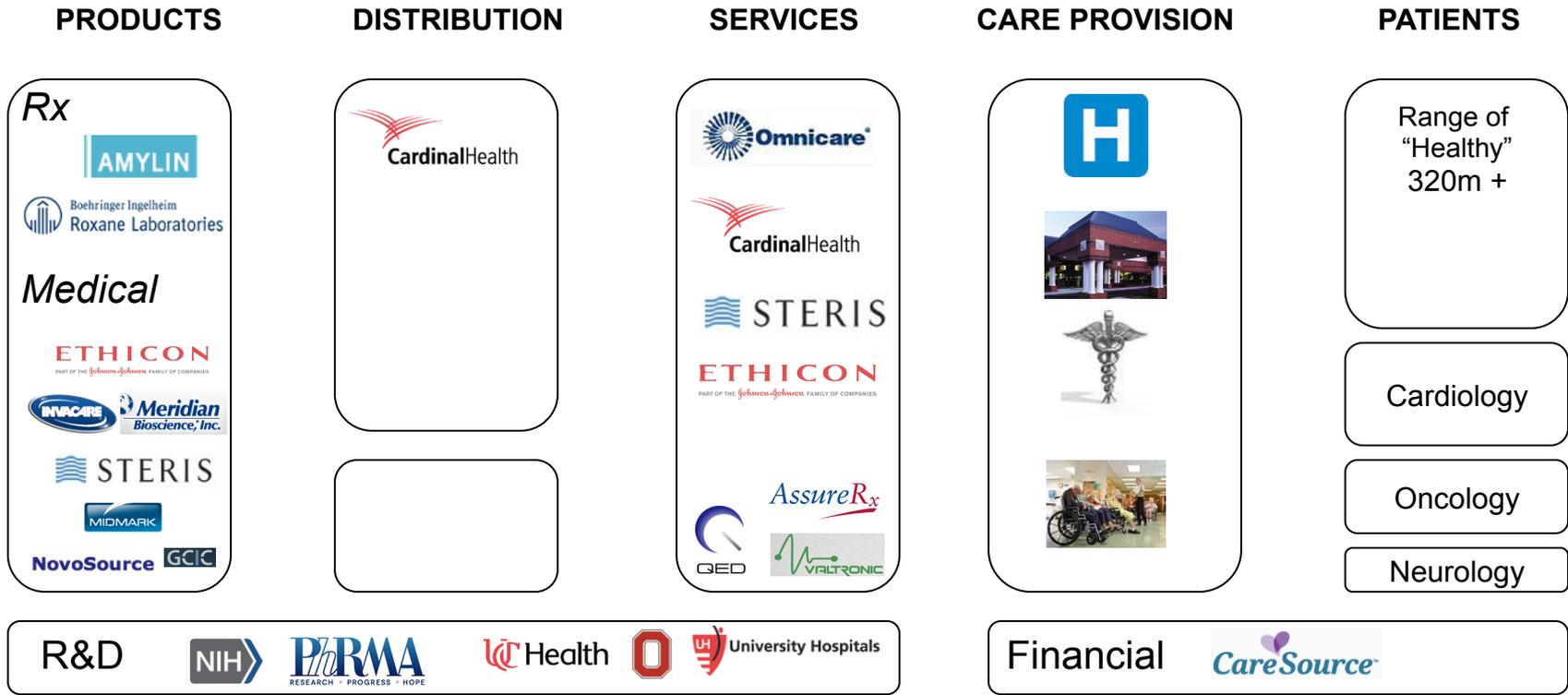
- Shale development
- Energy independence
- Cost advantage

3. Enabling Happy, Healthy Lives



- Device innovation
- Clinical leadership
- Caring, innovative, hard working people

US Healthcare Value Chain: \$3b (17% of GDP)



436 firms (4 NAICS codes)

16,000 jobs (.3% of Ohio employment)

1,280 'bioscience'-related firms

60,000 jobs (1.1%)

550,000 jobs (10.5%)

Need to create harmonized 'Biohealth' definition in order to market OH as relevant.

Agriculture Value Chain– Ohio's #1 industry sector

Production

Crop

Corn
Soybeans
Wheat
Other

Animal

Beef
Swine
Chicken
Turkey
Other

Mid-Stream



Down-stream



US Retail



Export



Consumers

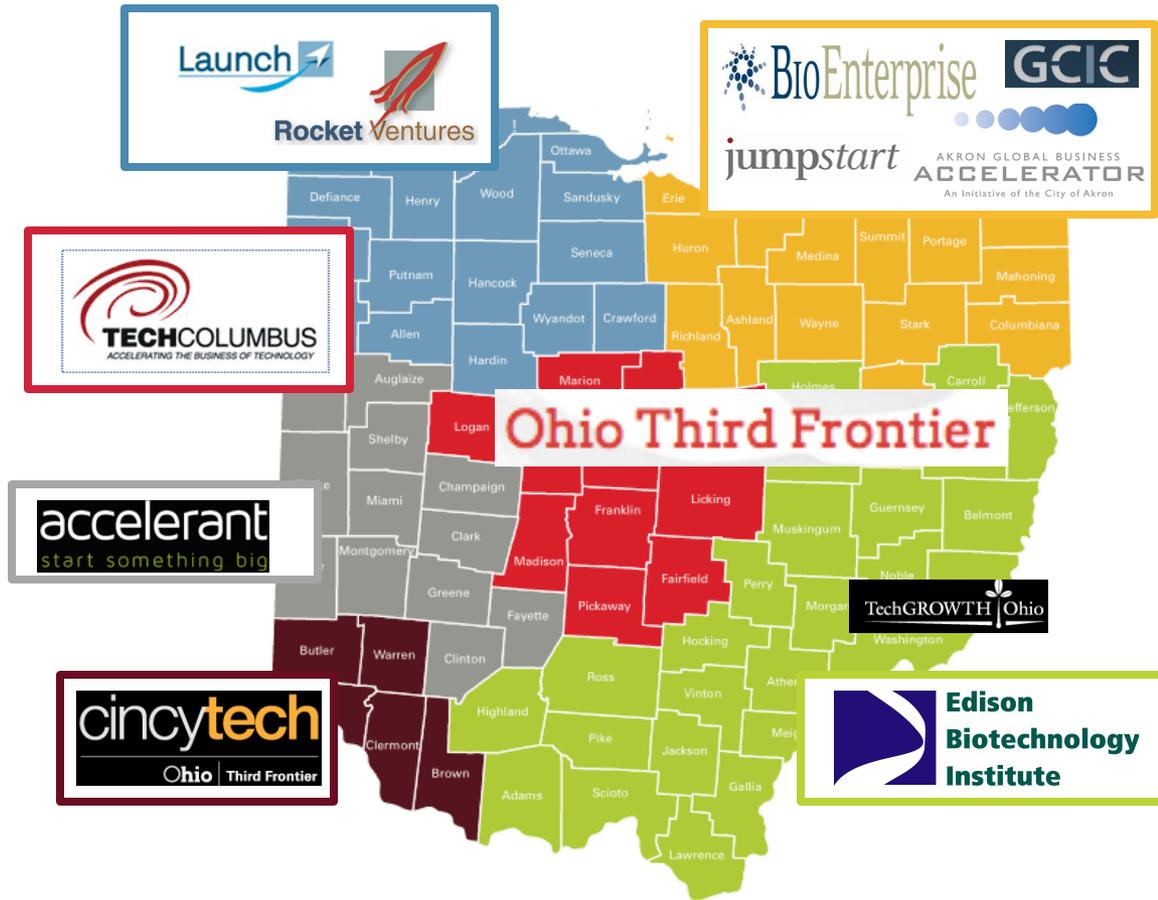
Canada 35m	2050
USA 320m	+80m
Ohio 11.5	
Latin America 600m	+200m
Rest Of World 6b	+2 b

R&D



What role can Ohio play in Feeding a Growing World?

Key to Success: Ohio's Advantaged Economic Development Ecosystem



Partners

-  **Appalachian Partnership**
for Economic Growth
-  **Cincinnati USA Partnership**
for Economic Development
-  **COLUMBUS 2020**
-  **dayton development coalition**
GROWING THE DAYTON REGION
-  **Regional Growth Partnership**
BUILDING A HIGH-TECH, HIGH-PERFORMANCE ECONOMY
-  **team neo** | **Cleveland+ Business**

Key to Success: Coordinated and Adequate Growth Funding

Typical
Company
Type

Early Stage

Developing

Growth/Mature

Ohio Third Frontier

Loans /Grants

Ohio

Development
Services Agency

Loans /Grants

Plus JCTCs (scales w jobs)

JobsOhio

Loans /Grants

Third Frontier

- Tech-based Product Dev't
- Commercialization of University Technology
- Support of technology entrepreneurs
- Access to capital for early-stage tech- companies
- Adoption of new innovative practices
- STEMM workforce

State / DSA

- 166 Loans
- OEBF Loans
- Job Creation Tax Credits
- Grants (?)
- 629 Roadwork Improvements

JobsOhio

- Workforce Training Grants
- Economic Development Grants
- ED Loans
- Revitalization

Key to Success: Risk Takers / Capitalists



ED + \$ + Risk Takers =



Safe & Plentiful Nutrition



Sustainable Energy
Supply



Meaningful,
Productive Lives



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CY 2013 Retreat Follow-up

Metrics

Overall Metrics Development

- What was planned?
 - Full accounting of all the companies identified that have received an investment of time and/or services, directly or indirectly, since 2009
 - Creation of centralized platform to manage data
 - More frequent reporting – total economic impact, leading companies, etc.
 - Development of intermediary metrics by program

Metrics Map

- Using the metrics reporting map as the template for reporting
 - Better clarity on current company status, including dates
 - Better isolation of funds vs. services-only and created vs. retained jobs

<u>Company Info</u>	<u>Status</u>	<u>OTF Investment</u>	<u>Jobs</u>	<u>Payroll</u>
- FEIN	- Direct / Intermed.	- If not direct, whom?	- Total current staff	
- Description	- Active / Grad /	- Funds / Services	- Created (P/NP)	Average
- Location	Exit / Other	- Date of each	- Retained (base)	Salary
- Industry Sector	- If not active, date	- Amount of each	- Other categories	

<u>Revenue</u>	<u>Professional Investment</u>	<u>Public Funding</u>	<u>Patent Activity</u>
- Product Sales	- Source	- Fed grants	- Pending
- License Income	- Amount	- State (non-OTF)	- Issued
- Industry Contracts	- Date		- Licenses

Progress and Planning

- What have we done?
 - Database architecture largely built; started to load internal data
 - Gathered much of the data from ESPs and a number of the Pre-Seeds
 - Identification of additional companies assisted through other intermediary programs (Wright Centers, RCPs, WPPs)
- What do we still need to do?
 - Program roll-out to remaining intermediaries (e.g. Pre-Seed Funds)
 - Complete external data collection and standardization
 - Refine process for metrics attribution
 - Begin work on intermediary metrics by program (e.g. ESPs, Incubators)

Going Forward

- Metrics development will enable further improvements to economic impact analysis shared in September
 - Isolation of services + investment vs. services-only companies
 - Job creation vs. job retention
 - Intervals (time in the pipeline, “graduated companies”)
 - ODSA will consider outside resources/assistance offered
- Additional analyses
 - Industry cluster effects, geographic analysis, legacy programs

Gazelles

- Commission and Board expressed desire to identify and understand the “crown jewels” of the portfolio
 - What/how many “successful companies” have we created that might need additional support?
 - Does not include exits (OrthoHelix Surgical), later stage (TOA Technologies) or established companies (The Anderson’s)
- Identified 90 companies based on input from ESPs, Pre-Seed Funds, Wright Centers and ODSA staff
 - Compared recommended companies with entire list of companies supported directly by the state and for each intermediary
 - Largely included only companies that have received a significant \$ investment; many also received 100+ hours of assistance

Results

- Companies have generated a tremendous return on investment in terms of capital, sales and jobs

Industry Area	Companies	Average Timeframe (Y)	Capital (\$M)	Cumulative Sales (\$M)	New Jobs	ESP/PS (\$M)*	Direct OTF Invest. (\$M)
Medical Technology	28	5.8	\$613	\$276	805	\$13	\$25
Information Technology	28	3.8	\$95	\$145	729	\$13	\$0
Advanced Materials	19	5.0	\$114	\$179	468	\$4	\$41
Others	15	4.4	\$95	\$73	238	\$6	\$15
TOTALS	90		\$917	\$672	2,240	\$36	\$80
AVERAGE		4.8	\$10.2	\$7.6	25	\$546K	\$3.3M
MEDIAN		5.0	\$3.9	\$2.0	15	\$468K	\$1.0M

* Does not include investments from every Pre-Seed Fund; actual figures are higher

Medical Technology

- Over \$200 million in cumulative sales

Company	Brief Description	Assistance		Timeframe (years)	Capital (\$M)	New Jobs
 Akebia THERAPEUTICS	Therapies for anemia and peripheral artery disease	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Other OTF	7	95	17
 Athersys INC.	Stem cell therapies	<input type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> Other OTF	9	87	48
 VIEWRAY	MRI-guided radiotherapy	<input type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Direct OTF <input checked="" type="checkbox"/> Other OTF	5	80	45
 ClevelandHeartLab	Cardiovascular risk diagnostics	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Direct OTF	9	45	115
 cardioInsight	3D non-invasive EC mapping	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> Direct OTF	9	38	*
 assurex health	Diagnostic tests for behavioral health	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Direct OTF	5	37	180
 Juventas THERAPEUTICS	Regenerative therapies	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> Other OTF	7	31	11
 minimally invasive devices inc.	Prevents fogging and debris in surgery	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Direct OTF	7	23	30
 ARTERIOCYTE CELLULAR THERAPIES MEDICAL SYSTEMS	Platelet & stem cell separation	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Direct OTF <input checked="" type="checkbox"/> Other OTF	8	19	75
 X-spine	Instruments for spinal surgery	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Other OTF	3	0	46

Information Technology

- Over \$100 million in cumulative sales

Company	Brief Description	Assistance		Timeframe (years)	Capital (\$M)	New Jobs
	Informatics for healthcare industry	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	4	14	115
	Authorization request tools	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	5	*	74
	Cloud-based data management	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	8	0	64
	BI for healthcare providers/hospitals	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	5	10	60
	Agent-based simulation models	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	7	12	45
	Software for logistics / inventory management	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	2	2	30
	Accounts payable process software	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> Other OTF	1	0	22
	Managing performing arts auditions	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> Other OTF	2	2	7

Top Non-Med Tech / IT

- Over \$50 million in cumulative sales

Company	Industry	Brief Description	Assistance		Timeframe (years)	Capital (\$M)	New Jobs
	Advanced Materials	Nanocomposite microstructured materials	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> OTF Direct	5	14	28
	Advanced Materials	Reactive glass and nanosands	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	5	16	24
	Advanced Materials	High performance, sustainable polymers	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	4	14	42
	Advanced Materials	High temp composites for aviation	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> OTF Direct	2	15	45
	Advanced Materials	Self-contained refrigerated pharma transport containers	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	3	1	10
	Aero-Propulsion	Waste heat recovery	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> OTF Direct	6	43	33
	Photovoltaics	Amorphous silicon PV panels	<input type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input checked="" type="checkbox"/> OTF Direct	6	21	68
	Photovoltaics	Solar site analysis and installation	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	9	0	28
	Advanced Manufacturing	Workholding device for machining parts	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	3	2	10
	Sensing and Automation	Terahertz camera for non-destructive testing	<input checked="" type="checkbox"/> ESP <input checked="" type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	5	8	4
	Situational Awareness	Satellite imagery analysis	<input checked="" type="checkbox"/> ESP <input type="checkbox"/> Incubation	<input checked="" type="checkbox"/> Pre-Seed <input type="checkbox"/> OTF Direct	3	1	10

Going Forward

- Still a manual process, starting to automate as data enters the system
- Deeper analysis of current list of companies, or expand analysis to include the next level?
- Company confidentiality is a big concern – need to formalize the process for addressing this

Marketing / Legacy Programs

- Generation of successful companies list should provide opportunities to market/package companies and programs
 - Content for print / digital updates
 - Working with Communications Office to support their process
- Legacy Programs
 - Identify companies, infrastructure that still provide value
 - Lessons learned that inform current programs (WPP/IPP, W-Mega/TCC)
 - Roll off old metrics to better reflect current activity

Technology Focus Areas

Targeting Growth Opportunities

- Final report includes updated industry data and incorporates suggested improvements
 - Recently released 2012 government data now included
 - Reconsideration of the aero-propulsion market (military vs. commercial)
 - Subsector details; industry base size; analysis of productivity trends
- Report also includes feedback from TFC/TFAB members and several additional outside experts on select areas
 - Advanced materials best viewed through various niches
 - Still concerns about characterization of aero-propulsion

Key Thoughts

- Industries identified as strongest for innovation and company creation are generally consistent with OTF results
 - Biomedical, IT, Advanced Materials
- Data suggests other areas provide additional opportunities for commercialization and attraction programs (IRDCP, TAG, IPP)
 - Sensing & Automation, Aero-Propulsion, Situational Awareness
- Unconventional Oil & Gas a weak fit for OTF
 - Strong potential for job creation; very little in terms of innovation

Questions?

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Marketing Ohio Third Frontier

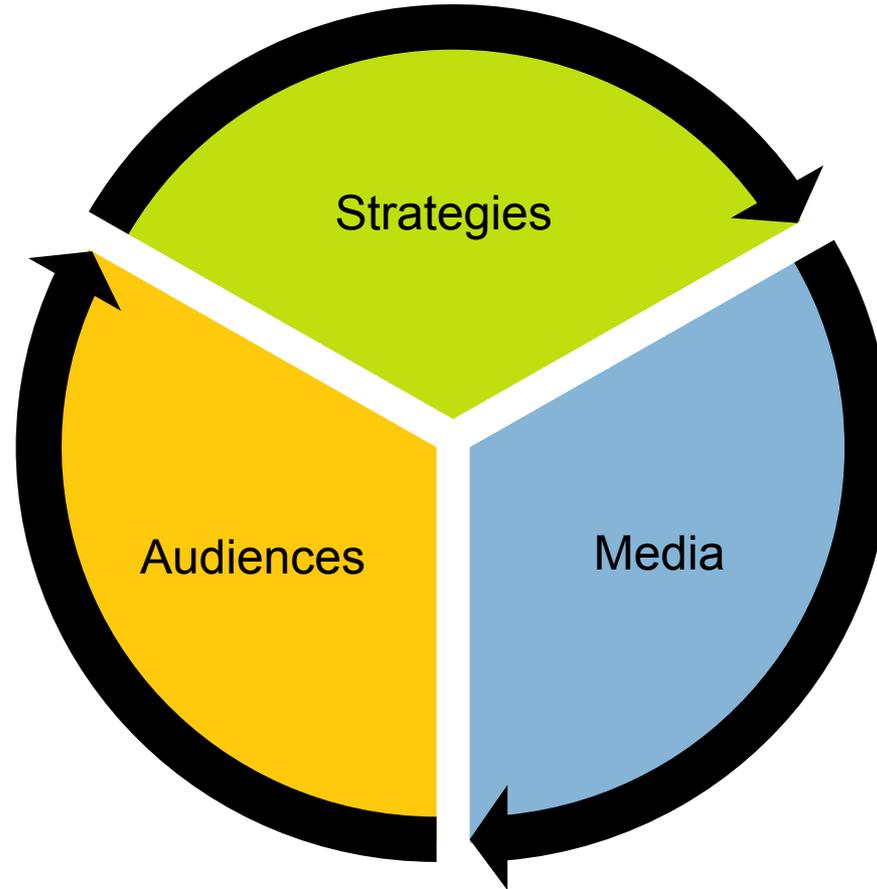


Development
Services Agency

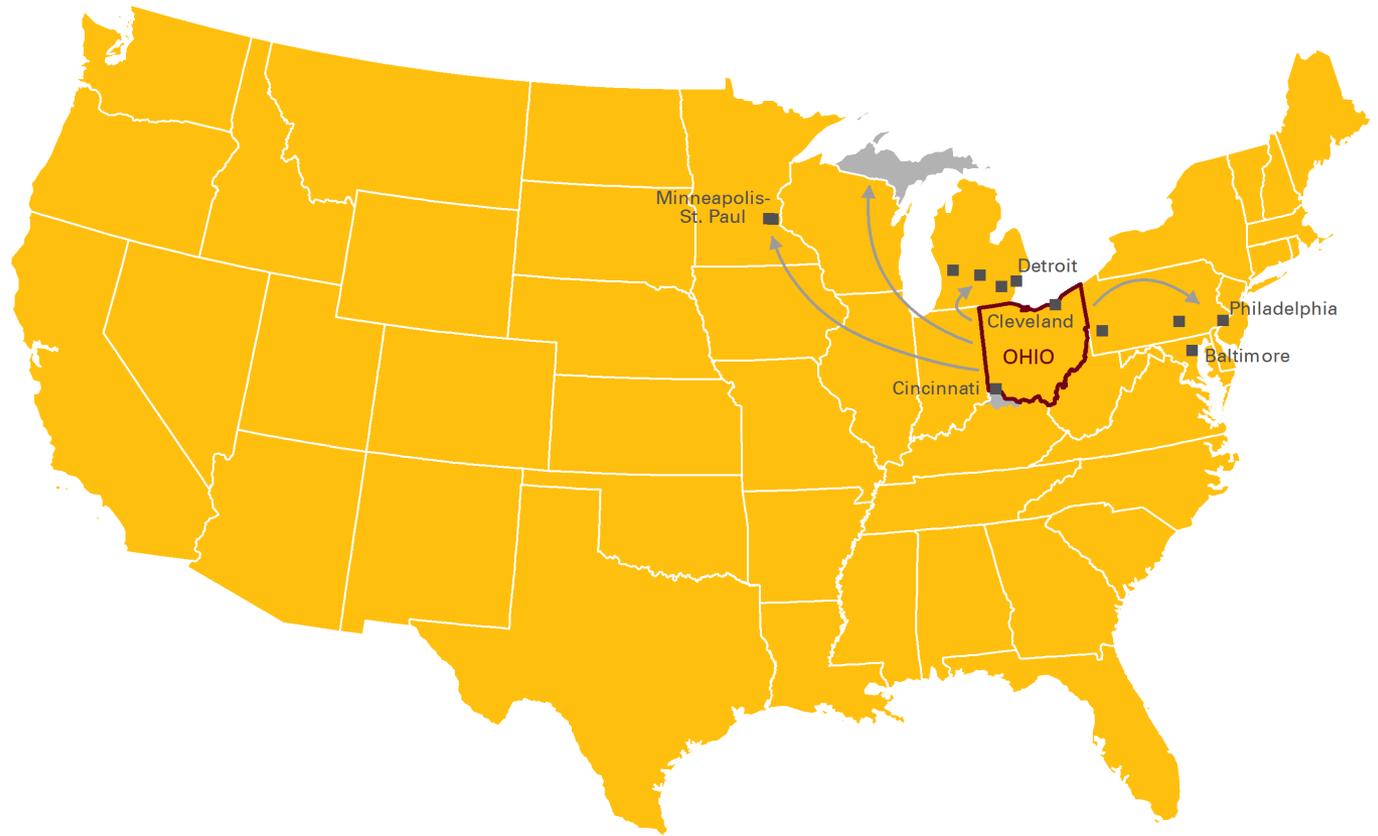
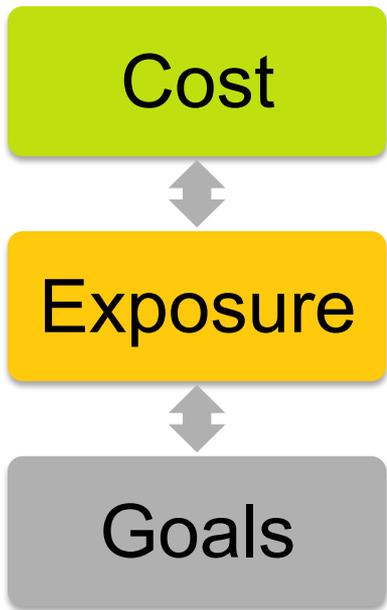


Third Frontier
Innovation Creating Opportunity

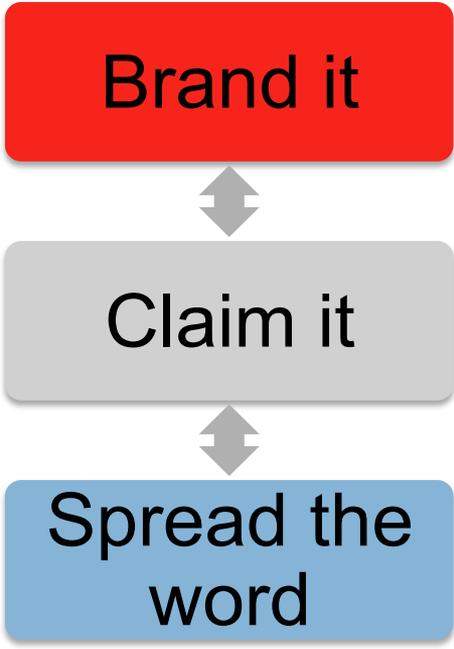
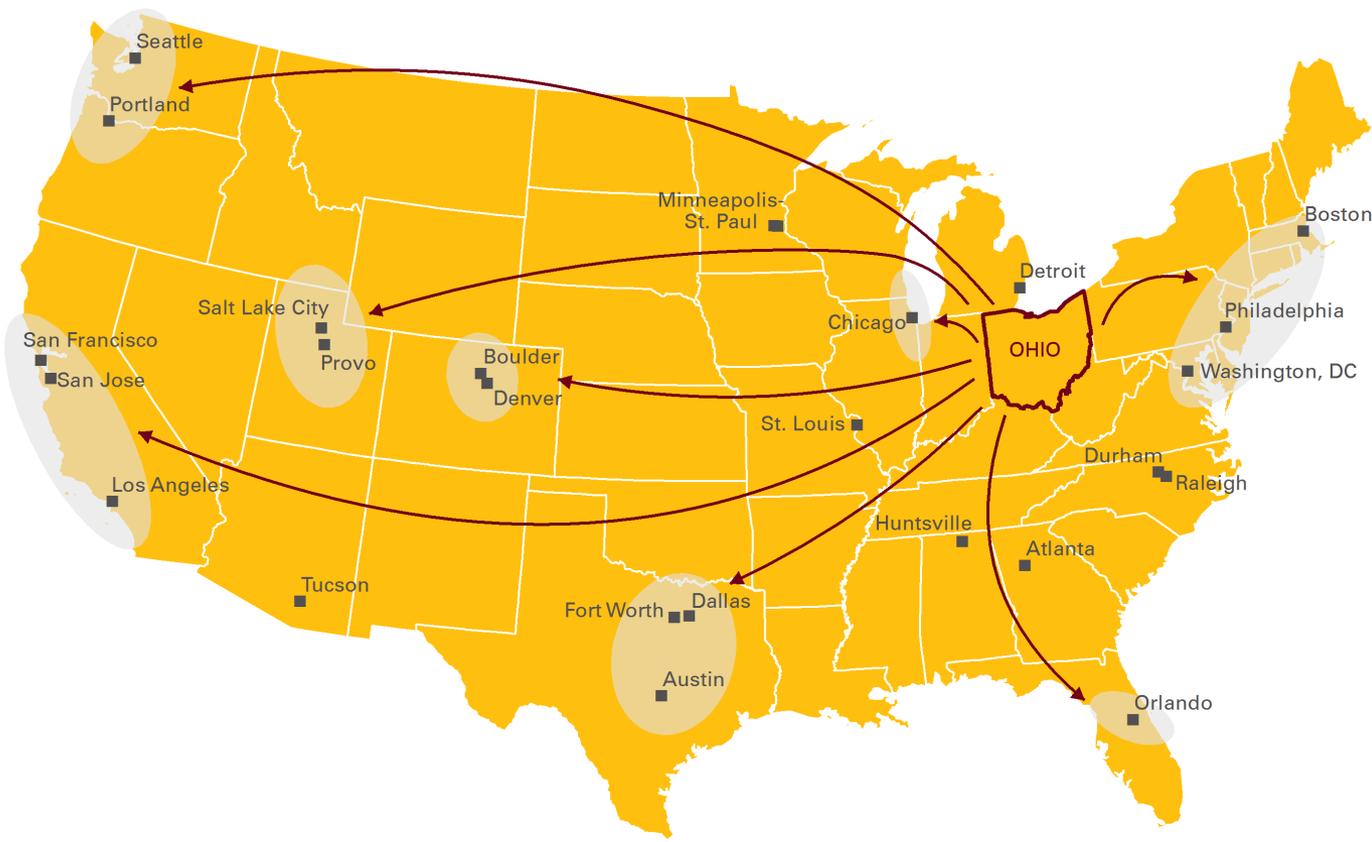
Marketing Action Plan



hi velocity



New hiVelocity





Taking Credit for Success

“Over the last five years, ViewRay has raised more than \$80 million from investors, hired about 50 employees ...this could be a game changer...”

... A whole story later the Ohio Third Frontier is mentioned.



Utilizing Multimedia

- Compelling
- People
- Video

Goals

Foster Innovation

Grow Capital and Talent

University Research Commercialization

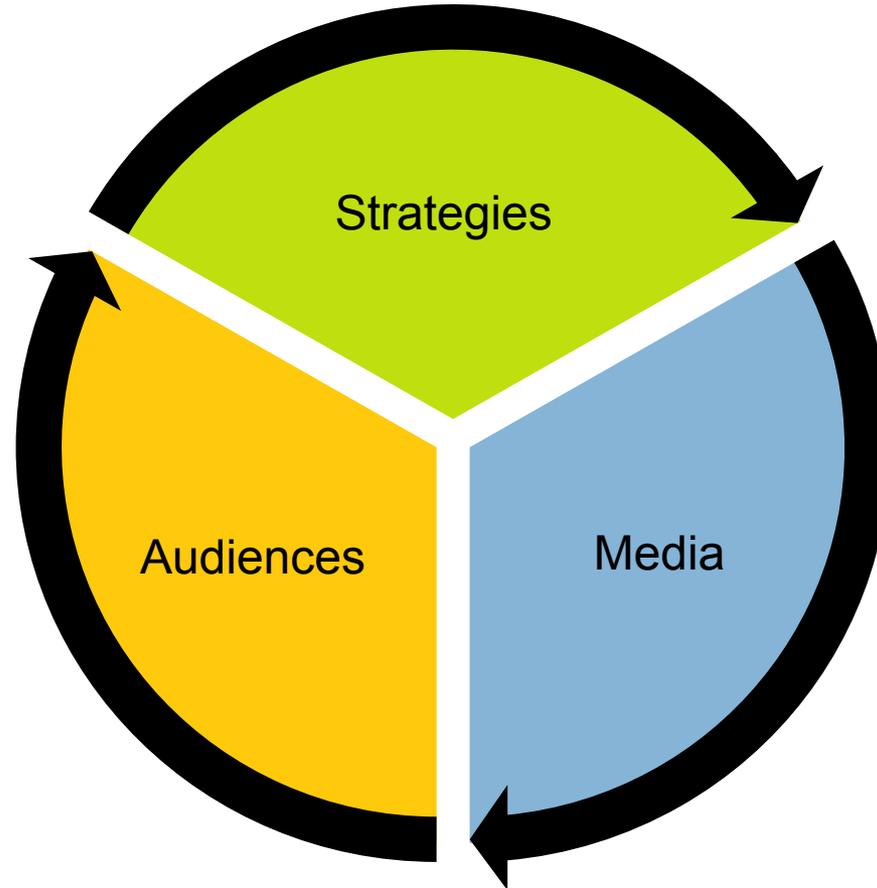
Target Audience

General Public

Entrepreneurs and Technology Community

Investors

Marketing Action Plan



Questions?

Lisa Colbert

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CY 2014 Program Plan

Calendar Year 2014 Program Plan

**Current Balance of Bond Funds
(Unencumbered & Uncommitted)**

\$556 million

Calendar Year 2014 Program Plan Plan Summary

➤ Carryover from Calendar Year 2013		\$105.0 million
➤ Additional new allocation	+	\$ 92.0 million
➤ Research Incentive (earmark)	+	<u>\$ 8.0 million</u>
➤ Plan total for Calendar Year 2014		\$205.0 million

Calendar Year 2014 Program Plan

Innovation Programs \$1.2 million

Program	CY 2013 (millions)	Carryover	CY 2014 (millions)
Entrepreneurial Signature Program	-	-	-
ONE Fund	0.8	-	1.2
Incubation Program*	4.9	-	-
JO Network	9.1	-	-
Totals		0.0	1.2

* Awards expected December 11, 2013

Calendar Year 2014 Program Plan

Capital Programs \$60.0 million

Program	CY 2013 (millions)	Carryover	CY 2014 (millions)
Pre-seed Fund Capitalization Program*	-	20.0	-
Commercial Acceleration Loan Fund**	-	20.0	20.0
Totals		40.0	20.0

* RFP release December 2013

** \$6.4 million in awards expected December 11, 2013; pipeline > \$70 million

Calendar Year 2014 Program Plan

Commercialization Programs \$130.0 million

Program	CY 2013 (millions)	Carryover	CY 2014 (millions)
Technology Validation & Start-up Fund*	1.4	-	2.0
Innovation Platform Program	16.9	-	21.0
Industrial Research and Development Centers**	4.9	-	20.0
Technology Asset Grant Program	-	15.0	-
Technology Commercialization Center***	-	50.0	25.0
Totals		65.0	68.0

* 2013 Cycle 3 RFP opened November 7, 2013

** Contingent commitments totaling \$6.8 million

*** LOIs/ Proposals received totaling \$81 million

Calendar Year 2014 Program Plan

Talent \$3.0 million

Program	CY 2013 (millions)	Carryover	CY 2014 (millions)
Third Frontier Internship Program	2.8	-	3.0

Calendar Year 2014 Program Plan

\$205.0 million total

Functional Area	Program	CY 2013	Carryover	CY2014
Innovation	Entrepreneurial Signature Program	-	-	-
	ONE Fund	0.8	-	1.0
	Incubation Program	4.9	-	-
	JO Network	9.1	-	-
Capital	Pre-seed Fund Capitalization Program	-	20.0	-
	Commercial Acceleration Loan Fund	-	20.0	20.0
Commercialization	Technology Validation & Start-up Fund	1.4	-	2.0
	Innovation Platform Program	16.9	-	21.0
	Industrial Research and Development Center Program	4.9	-	20.0
	Technology Asset Grant Program	-	15.0	-
	Technology Commercialization Center	-	50.0	25.0
Talent	Third Frontier Internship Program	2.8	-	3.0
Research	Research Incentive	8.0	-	8.0
Totals			105.0	100.0

Calendar Year 2014 Program Plan

Remaining Balance of Bond Funds (Expected After CY 2014)

\$351.0 million

Third Frontier Commission Meeting

CY 2014 Program Plan

Calendar Year 2014 Program Plan

\$205.0 million total

Functional Area	Program	CY 2013	Carryover	CY2014
Innovation	Entrepreneurial Signature Program	-	-	-
	ONE Fund	0.8	-	1.0
	Incubation Program	4.9	-	-
	JO Network	9.1	-	-
Capital	Pre-seed Fund Capitalization Program	-	20.0	-
	Commercial Acceleration Loan Fund	-	20.0	20.0
Commercialization	Technology Validation & Start-up Fund	1.4	-	2.0
	Innovation Platform Program	16.9	-	21.0
	Industrial Research and Development Center Program	4.9	-	20.0
	Technology Asset Grant Program	-	15.0	-
	Technology Commercialization Center	-	50.0	25.0
Talent	Third Frontier Internship Program	2.8	-	3.0
Research	Research Incentive	8.0	-	8.0
Totals			105.0	100.0

ESP

Rocket Ventures

Year Two Funding

Industrial Research and Development Center Program Award



Development
Services Agency



Third Frontier
Innovation Creating Opportunity

Goals and Objectives

- Attract large, nationally designated corporate, nonprofit and federal R&D centers to Ohio by providing matching incentive funds.
- Increase the high-tech reputation/visibility of Ohio industry in targeted technology areas.
- Support centers that:
 - conduct value-added applied research at the direction of or in collaboration with Ohio industry,
 - perform industry-directed or industry-oriented problem solving and
 - develop commercially viable technologies with an Ohio for-profit company.
- Attract senior research/entrepreneurial talent.
- Create jobs.

Program Basics

- **Lead Applicant:**
 - State-supported/assisted college or university or an Ohio nonprofit research organization that is competing for a federally funded R&D center to be in Ohio, or
 - A for-profit company planning to establish a corporate R&D center in Ohio.
- **Funding:**
 - Awards of up to 15 percent of primary sponsor funding received to establish the Ohio center, and
 - An IRDCP award cap of typically no more than \$5 million.
- **External Evaluator:**
 - Taratec Corporation

Cleveland Clinic

- **Applicant:** Cleveland Clinic – NIH Center for Accelerated Innovations
- **Federal Sponsor:** National Institute of Health’s National Heart, Lung & Blood Institute
- **NIH Award:** \$10,199,164 **IRDCP Recommended:** \$1,529,875
- **Collaborators:**
 - Cincinnati Children’s Hospital Medical Center
 - University of Cincinnati College of Medicine
 - The Ohio State University Wexner Medical Center
 - Case Western Reserve University School of Medicine
- **Job Commitment:** 34 jobs

NIH Center for Accelerated Innovations

Purpose of the Center

Solicit, select, fund, develop, and commercialize promising technologies in heart, lung, blood, and sleep disorder clinical application areas from the NCAI consortium.

Provide entrepreneurial education and entrepreneurial skills development programs to researchers and investigators throughout the NCAI consortium.

Provide promising technologies with access to NCAI product development experts.

NIH Center for Accelerated Innovations

Commitment Recommendation

IRDCP award to the Cleveland Clinic of \$1,529,875 to:

- Match its \$10.2 million NIH grant
- Help establish the National Center for Accelerated Innovations at the Cleveland Clinic
- Recruit and hire two biomedical product development experts
- Generate impacts of:
 - 34 new, full-time jobs across the consortium, and
 - 20 to 25 new technologies leading three to five capitalized and fully functioning new companies

Commercial Acceleration Loan Fund Awards

Commercial Acceleration Loan Awards

Company Name	Loan Award	Market	Technology	Intellectual Property	Legal	Business Model	Management	Financial	Evaluator Recommendation
Nanofiber Solutions, Inc	\$1,500,000	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	SBCi Ltd.
Synapse Biomedical, Inc.	\$2,387,016	Green	Green	Yellow	Green	Green	Green	Green	SBCi Ltd.
Cleveland Medical Devices, Inc.	\$1,000,000	Green	Green	Yellow	Green	Green	Green	Yellow	SBCi Ltd.
Intellirod Spine, Inc.	\$1,600,000	Green	Green	Green	Green	Green	Green	Green	SBCi Ltd.
Total	\$6,487,016								

Incubation Program Awards

Goals and Objectives

- Assist Ohio's technology-based companies to move efficiently and effectively through the Commercialization Framework through novel approaches to providing intensive entrepreneurial assistance, access to capital, high-quality incubation facilities and other resources; and
- Facilitate efficient graduation of incubator tenants into becoming successful, self-sustaining, job-creating members of Ohio business communities.

Program Basics

- **Lead Applicants:** Existing Ohio technology incubator with high-quality incubation facilities, a dedicated full-time staff and a track record in providing entrepreneurial assistance. Prior support under the Thomas Edison Program is not necessary. Must serve a defined community and one or more industries and must demonstrate current and continuing demand for services from that community.
- **Funding:** up to \$8 million (CY14)
- **External Evaluator:** Urban Venture Group (UVG)



Incubation Program

Reviewer Report and Recommendations

Ohio Third Frontier Commission

December 11, 2013



The New OTF Incubation Program

- The OTF Incubation Program is new in FY2014
 - Replaces the Edison Technology Incubator Program
- New Features of the OTF Incubation Program:
 - Emphasis on the OTF Commercialization Framework
 - Focus on high-potential technology companies
 - Adoption of performance goals and metrics tracking
 - Explicit goal of graduating tenants
 - Documenting of tenant management processes
 - New Funding Option: Technology Tenant Awards



Evaluation Process

- Intake and Reviewer Assignment
 - Check for reviewer conflicts of interest
 - Result: Two independent reviewers assigned to application
- Stage 1: Initial Screen
 - Confirm application is generally compliant with RFP requirements, develop preliminary scoring
 - Result: Recommendation regarding Stage 2 review
- Stage 2: In-depth review
 - Review against RFP merit criteria, using pre-defined rubric
 - Interviews with current tenant and graduate companies
 - Interview with Lead Applicant:
 - Result: Funding Recommendation



Applications Received

Ctrl #	Applicant
14-201	TechColumbus
14-202	Akron Global Business Accelerator (AGBA)
14-203	BioEnterprise
14-204	Great Lakes Innovation and Development Enterprise (GLIDE)
14-206	Braintree
14-207	Hamilton County Business Center (HCBC)
14-208	North Central Campus for Emerging Technology (NCC-ET)
14-209	Youngstown Business Incubator (YBI)
14-210	The Entrepreneurs Center (Dayton)
14-211	MAGNET
14-213	University of Toledo Launch Pad
14-214	Ohio University Innovation Center (OUIC)
14-215	LaunchHouse
14-216	Muskingum County Business Incubator (MCBI)
14-217	Cintrifuse



Evaluation Results

Ctrl #	Applicant	Stage 1 Review	Evaluation Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-201	TechColumbus	Pass	↗	↗	↗	→	↗	→	↑	Fund
14-202	AGBA (Akron)	Pass	↗	↗	↗	→	↗	↗	↗	Fund
14-203	BioEnterprise	Pass	↗	↗	↗	↗	↗	→	↑	Fund
14-204	GLIDE	Pass	→	→	→	→	→	→	→	Fund
14-206	Braintree	Pass	→	→	→	↘	↘	→	↗	Fund
14-207	HCBC (Hamilton)	Pass	↗	↑	↑	↑	↗	↑	↗	Fund
14-208	NCC-ET	Stop								Do Not Fund
14-209	YBI (Youngstown)	Pass	↑	↗	↗	↑	↑	↗	↗	Fund
14-210	TEC-Dayton	Pass	→	→	↗	↘	→	→	↗	Fund
14-211	MAGNET	Pass	→	→	↗	→	→	→	→	Fund
14-213	UT (Toledo)	Pass	→	→	→	↘	→	→	→	Fund
14-214	OUIIC (Ohio University)	Pass	↗	↗	↗	↗	↗	↗	↑	Fund
14-215	LaunchHouse	Pass	↘	↘	→	↗	↓	↓	↓	Do Not Fund
14-216	MCBI (Muskingum)	Pass	↘	↘	↘	↘	↓	→	↓	Do Not Fund
14-217	Cintrifuse	Pass	↓	↘	↘	↗	↓	↓	→	Do Not Fund

Evaluation Criteria:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Overall Strategy of the Incubator 2. Entrepreneurial Assistance & Client Management 3. Environment, Resources, and Facilities 4. Technology Tenant Pipeline | <ol style="list-style-type: none"> 5. 5-Year Portfolio, Graduate Track Record, and Tenant Case Studies 6. Experience and Qualification of Incubator Team 7. Budget and Cost Share |
|---|--|

Legend:

- – excellent
- – good
- – acceptable
- – poor
- – unacceptable



TechColumbus



Ctrl #	Applicant	Stage 1	Merit Criteria							Funding
		Review	1	2	3	4	5	6	7	Recommendation
14-201	TechColumbus	Pass	↗	↗	↗	→	↗	→	↑	\$400,000 Operating Funds \$200,000 Tenant Awards

Strengths

- Proven track record
- Seasoned team
- Strong pipeline
- High level of service and capital access

Weaknesses

- None Noted



AGBA (Akron)



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-202	AGBA (Akron)	Pass	↗	↗	↗	→	↗	↗	↗	\$500,000 Operating Funds

Strengths

- State-of-the-art facility
- Experienced management team
- Good impact metrics:
 - Jobs created
 - Tenant revenue
 - Capital raised by tenants

Weaknesses

- Uncertain deal flow
- Long tenant incubation times



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-203	BioEnterprise	Pass	↗	↗	↗	↗	↗	→	↑	\$350,000 Operating Funds

Strengths

- Clear healthcare focus
- Targeted service offerings:
 - Regulatory
 - Clinical / technical
 - Market
- Very good capital access
- Track record of producing successful companies

Weaknesses

- Inconsistent pipeline
- *Ad hoc* service offerings
- Little emphasis on milestones and metrics



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-204	GLIDE	Pass	→	→	→	→	→	→	→	\$350,000 Operating Funds

Strengths

- Host (LCCC) provides good facility/resources
- Innovation Fund provides regional capital access
- Emerging technology focus (sensors)
- Well integrated into NE Ohio incubator network

Weaknesses

- Undefined tenant selection criteria
- Lack of graduation process or criteria
- Modest track record



Braintree



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-206	Braintree	Pass	→	→	→	↘	↘	→	↗	\$250,000 Operating Funds \$200,000 Tenant Awards

Strengths

- Committed Leadership
- Fills important need in community
- History of providing micro-capital

Weaknesses

- Modest track record
- Lack of technology focus
- Weak tenant pipeline



HCBC (Hamilton County)



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-207	HCBC	Pass	↗	↑	↑	↑	↗	↑	↗	\$500,000 Operating Funds

Strengths

- Impressive track record
- Strong job creation
- Consistent economic impacts
- Thoughtful tenant service process and systems
- Strong advisory board

Weaknesses

- Long tenant incubation times due to industry focus



YBI (Youngstown)



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-209	YBI	Pass	↑	↗	↗	↑	↑	↗	↗	\$250,000 Operating Funds \$200,000 Tenant Awards

Strengths

- World-class incubator
- Impressive track record
- Strong support network
- Realistic performance goals
- Positive impact on neighboring incubators

Weaknesses

- Over reliance on single member of incubator team



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-210	TEC-Dayton	Pass	→	→	↗	↘	→	→	↗	\$250,000 Operating Funds \$200,000 Tenant Awards

Strengths

- Structured program and incubation services
- Good track record with early stage businesses
- Compelling framework assessment tool

Weaknesses

- Long tenant incubation times
- Low intensity incubation services
- Lack of expertise for highly technical businesses



MAGNET



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-211	MAGNET	Pass	→	→	↗	→	→	→	→	\$250,000 Operating Funds \$200,000 Tenant Awards

Strengths

- Well-differentiated vision
- Strong physical facilities
- Collaborative with neighboring incubators
- Robust tenant experience
- Good collaboration with NE Ohio incubators

Weaknesses

- Reliance on single individual
- *Ad hoc* service offerings
- Little emphasis on milestones and metrics



Launch Pad (U. Toledo)



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-213	Launch Pad (U. Toledo)	Pass	→	→	→	↘	→	→	→	\$250,000 Operating Funds \$200,000 Tenant Awards

Strengths

- Reasonable vision to rejuvenate the incubator
- Considerable resources to support incubator
- Good access to capital

Weaknesses

- Past performance is weak
- New market focus not established
- *Ad hoc* service offerings



Ohio University (OUIC)



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-214	OUIC	Pass	↗	↗	↗	↗	↗	↗	↑	\$350,000 Operating Funds

Strengths

- Increasing suite of services
- Emphasis on lean startup principles
- Good incubation facilities
- Intensive coaching and tracking

Weaknesses

- None Noted



NCC-ET



NCC-ET submitted an incomplete application, with multiple required sections missing. The proposal did not advance to Stage 2.



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-215	LaunchHouse	Pass	↘	↘	→	↗	↓	↓	↓	Do Not Fund

Strengths

- “Lean incubator” vision
- Robust tenant pipeline

Weaknesses

- Vague plan for operations and personnel
- Tenant award plan lacking detail
- Inadequate budget narrative detail
- Lacks clear separation of finances among programs



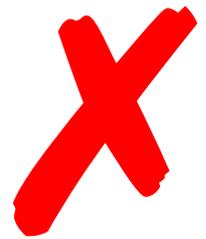
Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation	
			1	2	3	4	5	6	7		
14-216	MCBI	Pass	⬇	⬇	⬇	⬇	⬇	⬇	➔	⬇	Do Not Fund

Strengths

- Emerging, potentially compelling vision for manufacturing automation and robotics

Weaknesses

- Significant shortcomings in:
 - Intensity and definition of incubation services
 - Tenant Pipeline
 - Metrics tracking
 - Capital access
- Too reliant on external entities for core operations



Ctrl #	Applicant	Stage 1 Review	Merit Criteria							Funding Recommendation
			1	2	3	4	5	6	7	
14-217	Cintrifuse	Pass	↓	↘	↘	↗	↓	↓	→	Do Not Fund

Strengths

- Lead Applicant with strong position within SW Ohio entrepreneurial ecosystem

Weaknesses

- Lack of strategy or process for incubator services
- Unrealistic goal to scale to 60 tenants in first year
- Other shortcomings noted:
 - Lack of graduation focus
 - Inadequate staffing plan
 - Lack of defined tenant award process



Discussion



Evaluation Criteria

- The following slides may be used to respond to specific questions from Commissioners



1 – Overall Strategy of the Incubation Program

The reviewers consider how the overarching philosophy and strategy of the incubator is established to effectively support technology startup companies through the Commercialization Framework. Specific points addressed include, but are not limited to:

- How the program applies both internal and external resources to meaningfully advance companies through the Framework;
- The vision of the incubator as a launch point, not a long-term home;
- How the incubator aligns with local resources, OTF focus technologies, and clusters.





2 – Entrepreneurial Assistance and Client Management

Central to the vision of the OTF Incubation Program is the expectation that an effective incubator will deploy specialized technical and entrepreneurial services that significantly improve the pace and likelihood of tenant company success. Such services go well beyond inexpensive office rent. Specific points addressed include, but are not limited to:

- Capabilities in providing high quality, intensive services, including access to named capital sources;
- The intensity and character of individualized tenant client engagement;
- Tools and strategy for managing tenant client engagement;
- Overall program design, including: Progress tracking; Goal and milestone setting; Gap identification and resolution; Plan for achieving graduation.





3 – Environment, Resources, and Facilities

While the review recognizes that the nature and quality of an incubator is determined by the service delivered by the incubator team, specialized facilities and resources can have a significant beneficial impact on tenant success. Therefore, the reviewers take note of facilities and specialized equipment available to tenants:

- Quality and criticality of resources available to entrepreneurs;
- Physical facilities (where necessary and appropriate);
- Occupancy substantially by technology tenants;
- Environment conducive to technology tenants and supports sense of community.





4 – Technology Tenant Pipeline

The OTF Incubation Program's intent is to support incubators that fill a demonstrated need in the market or region. A healthy tenant pipeline is an indication of such demand. Specific points addressed include, but are not limited to:

- Selectivity of application acceptance;
- Tenant selection process; Target definition / Fit assessment;
- Existing pipeline – health and “freshness”;
- Marketing plan, how the pipeline is maintained and grown.





5 – 5-Year Portfolio, Graduate Track Record, and Tenant Case Studies

The reviewers assess the recent performance of the applicant incubator. Specific points addressed include, but are not limited to:

- Track record of graduates:
 - Raising 3rd party investment capital;
 - Bringing products to market;
 - Independent, thriving Ohio firms.
- Advancement in framework (beginning vs. current state);
- Average time to graduation;
- Clear relationship between services/support and advancement;
- Companies that do not advance leave the incubator;
- Consistency of the five-year portfolio with the incubator strategy.





6 – Experience and Qualification of Incubator Team

The character of the incubator's team will have a direct impact on the quality of the services provided to tenants. Specific points addressed include, but are not limited to:

- Experience and qualifications of lead applicant team in technology startup support;
- Individual track record of success in entrepreneurial support, beyond success in own businesses





7 – Budget and Cost Share

Reviewers confirm that the budget conforms to DSA and OTF requirements, is reasonable, cost share is adequate and compliant, and the lead applicant is judged to be a trustworthy steward of State funds. Specific points addressed include, but are not limited to:

- No State funds to be used for bonus, incentive or other rewards;
- No property acquisition or physical facility improvement paid for using State funds;
- The budget is reasonable and consistent with services described in the proposal;
- Tenant award funds applied to meaningfully and specifically advance the company's products within the Commercialization Framework; and
- Each budget line item is evaluated in detail, with respect to cost share and appropriate use of State funds.

