



Ohio Third Frontier
Commission Meeting

November 21, 2019

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Call to Order and Approval of the
08/27/2019 Meeting Minutes

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The slide features a light blue background with a subtle network pattern of dots and lines. The title 'Introductions' is centered in a large, bold, blue font. Below it, the names and titles of Jack Christopher and Scott Ryan are listed in a bold black font. The footer contains four logos: the Ohio Development Services Agency logo, the United States Census 2020 logo, the BE COUNTED Ohio logo, and the Ohio Third Frontier logo.

Introductions

Jack Christopher
Chief Counsel

Scott Ryan
Executive Director

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The slide features a light blue background with a subtle network pattern of dots and lines. The title 'Ethics Training' is centered in a large, bold, blue font. Below it, the name and title of Jack Christopher are listed in a bold black font. The footer contains four logos: the Ohio Development Services Agency logo, the United States Census 2020 logo, the BE COUNTED Ohio logo, and the Ohio Third Frontier logo.

Ethics Training

Jack Christopher
Chief Counsel

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Technology Validation and Start-Up Fund (TVSF) RFP Update

Jennifer Spohr
Program Manager



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Technology Validation and Start-Up Fund (TVSF) Program Purpose

Help transition technology from Ohio research institutions into the marketplace through Ohio start-up companies

Two ways to engage the program

- **Phase 1:** Validation Projects (Institutions)
- **Phase 2:** Start-up Funds (New Companies)



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Technology Validation and Start-Up Fund (TVSF) Lead Applicants

Phase 1	Phase 2
Ohio institution of higher education, or not-for-profit research institution with sufficient internal deal flow to support a multitude of projects.	Ohio start-ups and young companies that are prospective licensees of technology from institutions.
Awards range from \$200,000-\$500,000 with 1:1 cash cost share.	Awards up to \$100,000 (or \$150,000 if in biomedical technology) as initial capitalization with no cost share.
Goal License to startups	Goal Raise Capital / Market Entry





   

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Technology Validation and Start-Up Fund (TVSF) Round 20 Evaluation Report


Evaluators

Jim Sonnett, PhD
Susan Stanton, PhD
Redwood Innovation Partners

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TVSF Round 20 Evaluation


Jim Sonnett PhD, Susan Stanton PhD
November 21, 2019

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Outline

- Redwood Introduction
- Round 20 overview
- Evaluation Process Description
- Funding Recommendations
- Applicant Snapshots
- Analysis and Recommendations

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Redwood has a well qualified proposal evaluation team

- Redwood, an LLC based in Columbus, was founded in 2013 by former Battelle executives
- A four person team is performing the evaluations – all have extensive business acumen AND advanced technical degrees (3 PhDs).
 - 100+ years of combined experience in senior Commercial / Innovation roles at major corporations, research institutions, venture capital firms and start-ups.
 - Cumulative new product sales in excess of \$1.5 B
 - Depth and breadth in 5 of 6 Third Frontier focus areas (external experts are used for sensors)
- The Redwood team has served as evaluators for the Ohio Advanced Manufacturing program and CALF, TIP and IOF loan programs for multiple years



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Round 20 Overview

- 21 Applications Totaling \$2,885,000
- 9 Awards Recommended Totaling \$1,350,000
- Phase 1 applications from Ohio Health and U Toledo total \$450,000
 - Funding of both Phase 1 applications is recommended
- 19 Phase 2 applications total \$2,435,000
 - Funding of seven Phase 2 applications totaling \$900,000 is recommended



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Round 20 Overview (Continued):

- Round 20 approval rate is 43%, which is comparable to the overall rate of 41%

Round	\$ Recommended	Approval Rate
1 (APR 2012)	\$950,000	35%
2 (AUG 2012)	\$900,000	52%
3 (DEC 2012)	\$610,000	44%
4 (JUN 2013)	\$864,000	30%
5 (FEB 2014)	\$1,462,000	46%
6 (JUN 2014)	\$998,000	39%
7 (OCT 2014)	\$1,100,000	57%
8 (FEB 2015)	\$710,000	37%
9 (JUN 2015)	\$550,000	31%
10 (DEC 2015)	\$925,000	38%
11 (APR 2016)	\$1,239,000	46%
12 (OCT 2016)	\$3,537,269	46%
13 (MAR 2017)	\$1,567,500	38%
14 (SEP 2017)	\$498,832	27%
15 (DEC 2017)	\$2,250,000	38%
16 (MAR 2018)	\$2,098,600	52%
17 (SEP 2018)	\$2,100,000	42%
18 (DEC 2018)	\$1,150,000	35%
19 (APR 2019)	\$2,250,000	43%
20 (NOV 2019)	\$1,350,000	43%
Overall	\$27,110,201	
Average	\$1,355,510	41%



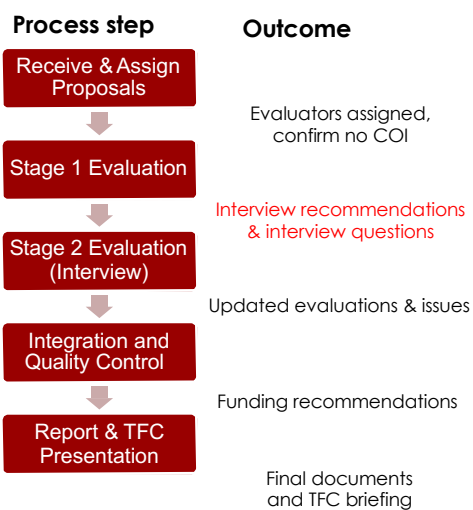
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Redwood has a comprehensive evaluation process, that assures high quality



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Phase 1 & 2 Evaluations Use Variable Criteria Weightings

Phase 1

Criterion	Weighting
Alignment & Compliance	Go / No go
Project Selection Committee	20
Deal Flow, Budget Strategy	15
External Participation	15
Track Record	15
Metrics	15
Project Management & Experience	15
Project Selection Process	5

Phase 2

Criterion	Weighting
Alignment & Compliance	Go / No Go
Management Team	20
Opportunity / market size	15
IP Protection / License	15
Compelling Proof of Concept	15
Potential Investor / Business Partner Engagement	10
Business Model	10
Project Plan / Budget Narrative	5
Start-up in Ohio	5
ESP Interaction	5



Note: 1) Column heights are proportional to weighting

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Funding Recommendations are Developed as a Team Using Common Standards

TVSF Round 20 Proposal Evaluations										
Phase 2 Proposals										
Proposal	Interviewed?	Recommend Funding?	Team	Opportunity / Market Size	IP Protection / License	Compelling Proof of Concept	Potential Investor / Business Partner Engagement	Business model	Project plan / budget narrative	Start-up in Ohio
A	Yes	Yes								
B	Yes	No								
C	Yes	Yes								
D	Yes	Yes								
E	Yes	Yes								
F	Yes	Yes								
G	Yes	Yes								
H	Yes	Yes								
I	Yes	No								
J	No	No								
K	No	No								
L	Yes	No								
M	No	No								
N	No	No								
O	No	No								
P	No	No								
Q	No	No								
R	No	No								
S	No	No								
			Absent	Poor	Weak	Meets	Exceeds	Outstanding		

Note: 1) Column widths are proportional to weighting



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Phase 1 Recommended Funding



Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding
20-0021	OhioHealth Research and Innovation Institute	Healthcare Technology-2: TVSF Phase I	\$250,000

Comments:

- Strong selection committee and project management
- IP model encourages clinician entrepreneurs
- Efforts to increase opportunity flow



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Phase 1 Recommended Funding



Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding
20-0022	University of Toledo	UT Rocket Fuel Fund II	\$200,000

Comments:

- Strong history in biomedical / life sciences, research in several Third Frontier areas
- Promising new commercialization hires, new efforts to increase opportunity flow



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Phase 2 Recommended Funding

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0003	CAPTURE Collective	... Biomarkers for Radiation Biodosimetry	\$150,000	The Ohio State University

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0004	RooSense, LLC	Wearable Fabric Hydration Monitor	\$100,000	University of Akron



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Phase 2 Recommended Funding

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0010	Exotome, LLC	Development of therapeutics for image guided surgery and adjuvant treatment of prostate cancer	\$150,000	Case Western Reserve University

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0014	Akron PolyEnergy Inc	Polymer Binder for Silicon Anode based Lithium Batteries	\$100,000	University of Akron



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Phase 2 Recommended Funding

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0015	IR MedTek	Commercialization of a Fast Infrared Probe for Rapid Cancer Detection / Skin Cancer Detection	\$150,000	The Ohio State University



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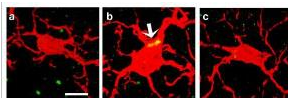
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Snapshot of Phase 2 Funding Recommendation – NeuroTherapia



Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0003	NeuroTherapia, Inc	Synthesis of ^{11}C NTRX-07, a Novel Tool to Assess Microglial Activation in Patients / Alzheimer's Therapeutic	\$150,000	Cleveland Clinic

- Cleveland Clinic spinoff company created in 2015.
- Focus: Treatment of neuroinflammatory disease.
 - Initially targeting treatment of Alzheimer's Disease.
- Lead product, NTRX-07, shown to reduce memory loss in rodent models.
- Investigational New Drug (IND) accepted by FDA, goal to initiate first in human clinical trials.
- \$3.2 M financing in convertible notes plus \$0.7 M grant from Alzheimer's Association.



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Snapshot of Phase 2 Funding Recommendation – Matsaki Technologies

Proposal	Lead Applicant	Project Title / Product Focus	Recommended Funding	Licensing Institution
20-0013	Matsaki Technologies Inc	Low-Cost High-Value Innovative Infrared Sensor System	\$100,000	The Ohio State University

- Ohio State University spinoff company created in May 2019.
- Focus: IR Sensor system platform technology.
 - Initially targeting stand-off natural gas leak detection.
- Initial low cost, high quality IR sensing product will be able to detect natural gas leaks from 100 feet.
- Significant industry input regarding technical specs and market pull.



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Round 20 Analysis & Recommendations



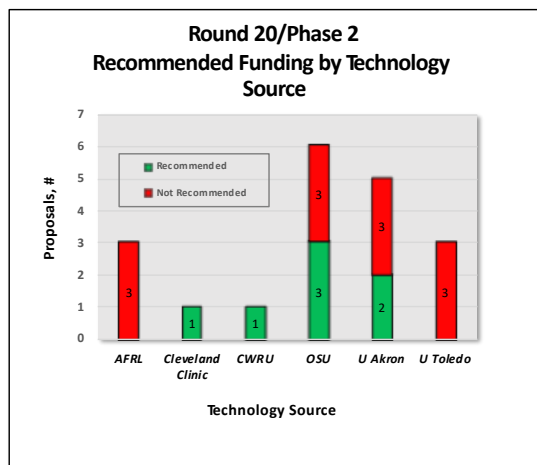
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Ohio State was the Most Active Phase 2 Applicant



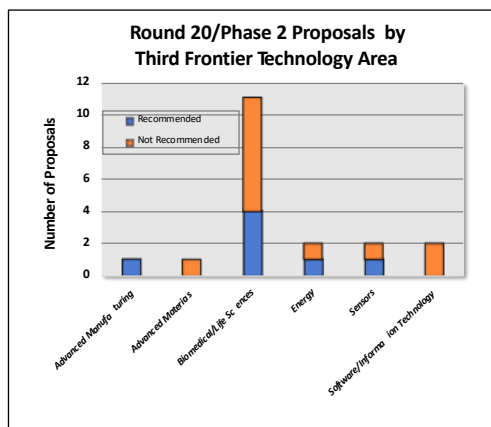
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Biomedical / Life Sciences Comprise Over Half the Phase 2 Applications



Recommendation => Develop strategies to encourage proposals in non-biomedical areas

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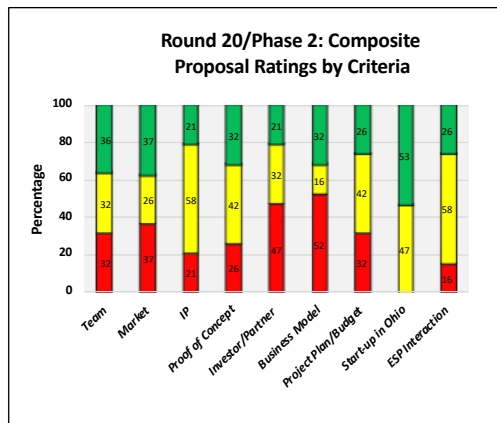
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Phase 2 Composite Rankings show:

- Management Team and Market were the Highest Rated Criteria
- Business Model and Investor / Partner Engagement were Lowest



Recommendation:

=> Revise RFP to encourage proposal clarity and uniformity, especially in market, business model and investor / partner engagement

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Technology Validation and Start-Up Fund (TVSF)

Round 20 Recommendations



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Entrepreneurial Services Provider (ESP) Program

Jason Miller
Program Manager



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ESP Program

Purpose

- Fill gaps in the entrepreneurial system for high-potential Ohio concept, seed, and early stage technology companies.
- Provide financial support to a regional network of service providers and their collaborators to assist Ohio's tech startup and early stage companies in achieving significant growth.
- The ESP Program aims to foster sustainable engines of entrepreneurial activity and technical assistance, and to continue to generate visibility and excitement about entrepreneurship in Ohio.



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ESP Program

The diagram features three green rectangular boxes arranged vertically, each preceded by a circular icon. The first icon is an hourglass, the second is a stack of money, and the third is a handshake. A blue line connects the icons from top to bottom.

- Project Period:** Jan. 1, 2020 – Dec. 31, 2022
- Funding:** Up to \$75.6 Million
- Cost Share Commitment:** 1:1 Ratio

Logos at the bottom: Ohio Development Services Agency, United States Census 2020, BE COUNTED Ohio, Ohio, and Third Frontier Innovation Creating Opportunity.

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Entrepreneurial Services Provider (ESP) Program

Evaluator Report

Robert Worden - Quantum Commerce, LLC

Logos at the bottom: Ohio Development Services Agency, United States Census 2020, BE COUNTED Ohio, Ohio, and Third Frontier Innovation Creating Opportunity.

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Overview

- Six proposals submitted
 - One new applicant
 - Five reapplied for the six regions
 - One proposal was for two regions
 - One proposal was for partial Central region
- Five Recommended for Funding
- Total grant dollars recommended is \$75,500,000

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General ESP Ecosystem Observations

- The ESPs have positively changed Ohio's entrepreneurial culture
- No major gaps that preclude support for extant providers
- The major gap is operational excellence mindset

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Lead Applicant	Title	State Funds Requested	Total Budget	Recommend
CincyTech, LLC	Southwest Ohio Entrepreneurial Services Provider Program	\$15,075,000	\$30,150,000	\$13,500,000
JumpStart Inc. (NEO)	The NEO/NWO Entrepreneurial Services Provider Program	\$28,014,517	\$56,029,032	\$26,500,000
JumpStart Inc. (NWO)	The NEO/NWO Entrepreneurial Services Provider Program	\$5,687,619	\$11,375,236	\$5,650,000
The Entrepreneurs Center, Inc.	TEC: Leading the West Central Ohio ESP	\$19,734,571	\$39,489,654	\$10,800,000
Ohio University	TechGROWTH Ohio Services VI	\$5,072,810	\$10,144,740	\$5,050,000
Rev1 Ventures, Inc.	Central Ohio Region ESP 2020 - 2022	\$15,060,000	\$30,120,000	\$14,000,000
Ikove Entrepreneurship Center, Inc	Central Ohio Entrepreneurial Services Provider Program	\$7,248,260	\$15,620,978	\$0
Totals		\$95,892,776		\$75,500,000

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Proposal Recommendations

CINCYTECH, LLC		Southwest Ohio Entrepreneurial Services Provider Program	
Amount Requested:	Recommended:		
\$15,075,000	\$13,500,000 ¹		

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$13,107,497	\$15,075,000
Capital Leverage (Private + Public Capital raised/ State funds)	27.7	49.4
Average State \$\$ per job created	\$21,526	\$9,804
Jobs Leverage (Jobs/ \$100K State funds)	4.7	11.1

*2019 = Projected through end of year. Data used for tables provided by applicants.


¹ Tranche \$1MM to 2021 and another \$1MM in 2022 of the total award amount, if the ESP meets at least 90% of stated metric goals in the prior year for job creation and capital raise. (e.g. \$11.5MM/ \$1MM/ \$1MM)

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Proposal Recommendations

JUMPSTART INC. (NEO)		The NEO/NWO Entrepreneurial Services Provider Program	
Amount Requested:	Recommended:		
\$28,014,517	\$26,500,000		

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$25,633,572	\$28,014,517
Capital Leverage (Private + Public Capital raised/ State funds)	96.8**	27.1
Average State \$\$/job created	\$17,213	\$22,025
Jobs Leverage (Jobs/ \$100K State funds)	5.8	4.6

2019 = Projected through end of year. Data used for tables provided by applicants.


**Note: Capital leverage is substantially higher than typical due to one large event in 2017.

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Proposal Recommendations

JUMPSTART INC. (NWO)		The NEO/NWO Entrepreneurial Services Provider Program	
Amount Requested:	Recommended:		
\$5,687,619	\$5,650,000		

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$3,688,998	\$5,687,618
Capital Leverage (Private + Public Capital raised/ State funds)**	N/A	5.8
Average State \$\$/job created	N/A	\$27,224
Jobs Leverage (Jobs/ \$100K State funds)	N/A	3.9

2019 = Projected through end of year. Data used for tables provided by applicants.


** Full data not available due to transition to JumpStart

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Proposal Recommendations

THE ENTREPRENEURS CENTER, INC.		<i>TEC: Leading the West Central Ohio ESP</i>  THE ENTREPRENEURS CENTER
Amount Requested:	Recommended:	
\$19,734,571	\$10,800,000	

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$5,237,000	\$19,734,571
Capital Leverage (Private + Public Capital raised/ State funds)	9.5	9.0
Average State \$\$/job created	\$7,671	\$24,255
Jobs Leverage (Jobs/ \$100K State funds)	13.1	4.2


2019 = Projected through end of year. Data used for tables provided by applicants.

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Proposal Recommendations

OHIO UNIVERSITY (TECHGROWTH)		<i>TechGROWTH Ohio Services VI</i> 
Amount Requested:	Recommended:	
\$5,072,000	\$5,050,000	

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$3,439,752	\$5,072,810
Capital Leverage (Private + Public Capital raised/ State funds)	11.5	13.8
Average State \$\$/job created	\$4,201	\$4,671
Jobs Leverage (Jobs/ \$100K State funds)	24.1	21.6


2019 = Projected through end of year. Data used for tables provided by applicants.

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Proposal Recommendations

REVI VENTURES, INC.		Central Ohio Region ESP 2020 - 2022
Amount Requested:	Recommended:	
\$15,060,000	\$14,000,000	

Leverage	2017-2019 Actual*	2020-2022 Proposed
State ESP Funds (used/proposed)	\$12,033,131	\$15,060,000
Capital Leverage (Private + Public Capital raised/ State funds)	72.6	68.2
Average State \$\$/job created	\$18,076	\$19,872
Jobs Leverage (Jobs/ \$100K State funds)	5.9	5.0


2019 = Projected through end of year. Data used for tables provided by applicants.



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Proposal Recommendations

IKOVE ENTREPRENEURSHIP CENTER, INC		Central Ohio Entrepreneurial Services Provider Program
Amount Requested:	Recommended:	
\$7,248,260	\$0	

Leverage	2017-2019 Actual	2020-2022 Proposed
State ESP Funds (used/proposed)	N/A	\$7,248,260
Capital Leverage (Private + Public Capital raised/ State funds)	N/A	16.3
Average State \$\$/job created	N/A	\$11,413
Jobs Leverage (Jobs per \$100K State funds)	N/A	9.0



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Entrepreneurial Services Provider (ESP) Program

Evaluator Recommendations

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Other Business

Proposed next meeting: February 26, 2020

Adjournment

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