



Ohio Third Frontier Technology Validation and Start-Up Fund

Calendar Year 2014 Request for Proposals (RFP)

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- Cycle 2:
 - Written Questions – through July 30, 2014
 - Technology Transfer Office Qualification Document – due by 2:00 PM, July 30, 2014
 - Proposals - due by 2:00 PM, August 6, 2014
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RFP Administered by:
Ohio Development Services Agency
Office of Technology Investments
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Ohio Third Frontier Technology Validation and Start-Up Fund

1 Ohio Third Frontier Statement of Solicitation

1.1 Background

The Ohio Third Frontier represents an unprecedented and bipartisan commitment to expand Ohio's technological strengths and promote commercialization that leads to economic prosperity throughout Ohio. Designed to build world-class research programs, nurture early-stage companies and foster technology development that makes existing industries more productive, Ohio Third Frontier creates opportunity through innovation. In targeted areas of technology, the multi-year State of Ohio initiative supported with over \$2 billion is catalyzing the growth of existing and emerging industry clusters throughout the state by:

- Improving the capacity of Ohio's entrepreneurial ecosystem to deliver services and attract capital necessary to create and grow scalable technology-based enterprises;
- Increasing the technical capabilities and business competencies of Ohio value chains within key existing and emerging driver industries and pursue targeted attraction to fill gaps; and
- Cultivating a highly collaborative and innovative environment that encourages Ohio's community of technology seekers and solvers to regularly exchange new knowledge in pursuit of targeted market driven commercial opportunities.

For more information about Ohio Third Frontier, please see http://development.ohio.gov/bs_thirdfrontier/default.htm.

Consistent with the strategic goals, Ohio Third Frontier investments represent a balanced portfolio of programming that proactively identifies opportunities throughout the Technology Commercialization Framework (Framework). As a result, all Ohio Third Frontier Programs share a common goal — to promote technology-based economic development within Ohio by funding activities that move technology from idea to market. This goal requires the state to design programs, evaluate proposals and projects, leverage resources, and provide management oversight within the context of the Framework. It is expected that every proposal seeking Ohio Third Frontier funding will clearly demonstrate its understanding of the Framework, and will be able to articulate its scope of work within the Framework's model.

For more information about the guiding principles contained within the Framework, please see <http://development.ohio.gov/files/otf/TechCommFramework-Complete.pdf>.

1.2 Request for Proposals Issuance

This Request for Proposals (RFP) is being issued for Funds to be awarded under Ohio Third Frontier. This RFP will be released by publication on the Ohio Third Frontier website at http://development.ohio.gov/bs_thirdfrontier/tvsf.htm.

The Ohio Third Frontier Commission reserves the right to fund any Proposal in full or in part, to request additional information to assist in the review process, to reject any or all proposals responding to this RFP and to re-issue the RFP and accept new proposals if the Ohio Third Frontier Commission determines that doing so is in the best interests of the State of Ohio. Issuing this RFP does not bind the state to make an award of Ohio Third Frontier Funds. Any award of Ohio Third Frontier Funds in respect to this RFP will be subject to availability of funds as provided in Ohio Revised Code Section 126.07. This RFP is not a contract or commitment of any kind on behalf of the Ohio Development Services Agency (Development).

Development administers this RFP and reserves the right to adjust the dates for this RFP for whatever reason it deems appropriate. Development's Office of Technology Investments will administer all Funds awarded under this RFP.

1.3 The RFP Process and Awards Process

The RFP Process will consist of the following steps:

- Release of RFP
- Questions and Answers (Q&A) and Communications
- Technology Transfer Office Qualification Document Submission
- Submittal of Proposals

Each of these steps is discussed in Appendix A – RFP Process, Awards Process and Mandatory Compliance.

The Awards Process will consist of the following steps:

- Proposal Review and Evaluation Procedures
- Award Decision
- Award and Agreement Preparation and Execution

Each of these steps is discussed in Appendix A – RFP Process, Awards Process and Mandatory Compliance.

All questions regarding this RFP must be submitted in writing via email to TVSF@development.ohio.gov with the subject line “Technology Validation and Start-Up Fund Q&A”. Lead Applicants, Collaborators and/or others acting on their behalf are to be aware of all prohibited contact in Section IV of Appendix A – RFP Process, Awards Process and Mandatory Compliance. If a Lead Applicant, Collaborator and/or others acting on their behalf makes prohibited contact, Development in its discretion may subject the Proposal to elimination from the RFP process.

2 Program Description

2.1 Purpose and Goals

The goal of the Ohio Third Frontier Technology Validation and Start-Up Fund is to create greater economic growth in Ohio based on start-up companies that commercialize technologies developed by Ohio institutions of higher education, other Ohio not-for-profit research institutions and federal labs located in Ohio.

The Technology Validation and Start-up Fund has been designed to: 1) Support protected technologies developed at eligible Ohio research institutions and federal labs located in Ohio that need known validation/proof that will directly impact and enhance both their commercial viability and ability to support a start-up company and 2) Support Ohio start-up and Ohio young companies that license these validated/proven technologies from these Ohio institutions or federal labs located in Ohio.

Two separate mechanisms, with different application requirements, have been set up to achieve these goals: Technology Validation (Phase 1) and Start-Up Funds (Phase 2).

Phase 1 – Technology Validation: The specific objectives of this phase are as follows:

- Generate the proof needed to move technology to the point that it is either ready to be licensed by an Ohio start-up company or otherwise deemed unfeasible for commercialization. The Applicant is encouraged, prior to application to Phase 1, to work with potential Ohio licensees to identify the proof needed.
- Perform fund validation activities such as prototyping, demonstration and assessment of critical failure points in subsequent development, scale-up and commercialization in order to generate this proof with strong preference for these validation activities being performed by an independent source.

Phase 2 – Start-Up Funds: The specific objectives of this phase are as follows:

- Support Ohio start-up companies that have licensed technology developed at Ohio research institutions or federal labs located in Ohio during the critical early life of the company, and accelerate the time to market of this technology.
- Generate the proof needed to move technology to the point where additional funds needed for commercialization can be raised, or commercialize the technology. The applicant is encouraged to have a clearly identified path to subsequent funding opportunities, and if possible work directly with potential investors to identify the proof they require to invest in the company.
- Fund activities including but not limited to beta prototype development and deployment to potential customers for testing and evaluation, and market research/business development in order to generate the proof needed.

2.2 Lead Applicant Eligibility

A Lead Applicant is the entity that submits a Proposal and will be legally and financially responsible for the administration of any resulting award of Ohio Third Frontier Funds. The Lead Applicant will be responsible for the administration of the Proposal should it be awarded. The Lead Applicant must also serve as both the administrative and technical director of the Project.

Technology Transfer Office Qualification

In order for applications from Ohio institutions of higher education, other Ohio eligible not-for-profit research institutions or federal labs located in Ohio to be considered for Phase 1 funding or its eligible start-up considered for Phase 2 funding, its Technology Transfer Office must submit a four-page document utilizing the questions provided in Appendix B that outlines:

- 1) Near-term deal flow as defined by quantification of technologies currently eligible for and worthy of application to Phase 1 and are likely to generate proof that will lead to commercialization;
- 2) The Technology Transfer Office's process for internal selection among these candidates in order to arrive at the six best applications; and
- 3) University-coordinated or accessible services available to faculty and staff entrepreneurs, incubating technologies and university spin-offs.

An institution's plan for selecting its six best opportunities as well as the support of entrepreneurship and capability for mentoring and advising available to those opportunities is considered an important element of the program. The services that are available can incorporate outside entities such as the regional Entrepreneurial Signature Program when appropriate. Outside entities must submit a letter of no more than one page acknowledging they are engaged with the Technology Transfer Office and are providing services. No more than five organizations may submit such an acknowledgement letter. This number is capped at five to ensure that letters are received from only the five organizations providing the most substantive and impactful services.

Institutions that previously submitted an approved Technology Transfer Office Qualification Document need not resubmit if there are no substantive changes.

Phase 1 – Technology Validation

An eligible Lead Applicant for the Phase 1 Technology Validation Fund must be:

- 1) An Ohio Institution of higher education or
- 2) Other Ohio not-for-profit research institution
 - which has a history of technology commercialization and creation of start-ups and
 - institutional infrastructure and support for commercialization.

Eligible Lead Applicants must have a dedicated Technology Transfer Office.

The Lead Applicant's Technology Transfer Office must screen, select and submit proposals that represent only the very best commercialization start-up opportunities

at that institution. Each institution will be limited to submitting six Phase 1 applications to Development.

Phase 1 funding may not be requested for a technology after Phase 2 funding for that same technology has been awarded.

Phase 2 – Start-Up Funds

Eligible Lead Applicants for the Phase 2 Start-up Funds are Ohio start-ups and young, emerging Ohio companies that will execute an exclusive license with the owner of the technology that has been developed at an Ohio institution of higher education, an eligible Ohio not-for-profit research institutions as defined in Phase 1 or at a federal lab located in Ohio for a technology within the next nine months from the date of Phase 2 application. The technology being licensed must have been developed at the eligible institution and not previously licensed. The technology does not need to have been the subject of a Phase 1 Award to be eligible for Phase 2 funding. **However, if a technology received Phase 1 funding, that project period must be complete with affirmative results before Phase 2 can be applied for.** See section 3.7 for additional instructions for pursuing a Phase 2 application based on a previous Phase 1 Award.

The Lead Applicant must be an Ohio for-profit company with a Principle Place of Business in Ohio and a strategy and business plan that has it remaining in Ohio. A Principal Place of Business is a facility located in the State of Ohio where the Lead Applicant, who is registered with the Secretary of State to conduct business in Ohio, maintains physical operations, and those physical operations are managed by a senior representative of the Lead Applicant who is authorized to make decisions and to obligate the Lead Applicant and its resources. Benefits from commercialization of the technology must occur in Ohio.

Lead Applicants that become Grantees must maintain eligibility while the Grant is open. A Grantee that loses eligibility forfeits its award and may be required to repay the State of Ohio the full amount of the monies it has received, plus interest.

2.3 Eligible Technology Subject Matter

The Technology Validation and Start-Up Fund will support technology developed at eligible Ohio institutions that falls within technology areas that have been approved by the Ohio Third Frontier Commission as follows:

- Advanced Materials related to advanced polymers, ceramics, composites, carbon fibers and nanotubes and specialty metals and alloys
- Aeropropulsion Power Management
- Agribusiness and Food Processing
- Fuel Cells and Energy Storage
- Medical Technology related to imaging, surgical instruments/equipment, implant devices, and regenerative medicine
- Software Applications for business and healthcare
- Sensing and Automation Technologies
- Situational Awareness and Surveillance Systems
- Solar Photovoltaics
- Shale

The technology must already have, at the time of application to this program, intellectual property protection defined as patent-pending, patent-issued, or copyright as appropriate. It is expected the majority of technology will be patent-pending which may include provisional patents.

2.4 Funding and Cost Share

Development anticipates awarding up to \$1 million for each Cycle of the program for a total of \$3 million for CY2014.

Phase 1 – Technology Validation

The Technology Validation Fund Awards (Phase 1) may be up to \$50,000 for each proposed technology. Each Phase 1 Award requires a cash Cost Share commitment of at least one dollar for every dollar of Ohio Third Frontier Funds requested (i.e., a ratio of 1:1) and must represent a specific new unrestricted cash commitment to the Project. Each expense incurred through the validation/proof process must be paid on a pari passu basis in that the expense must be shared equally across Ohio Third Frontier Funds and Cost Share. Allowable expenses must be 1) incurred to perform activities in direct support of the Project during the Project Period; 2) charged to resources of Grantee; and 3) documented in Grant accounts or in the Grant-related financial books and records. It will be the responsibility of the Lead Applicant to insure that the 1:1 Cost Share requirement is met or exceeded and all reporting requirements are met. Cost Share must be available with no contingencies or conditions at the time of Proposal submission to Development.

Phase 2 – Start-Up Funds

The Start-up Fund Awards (Phase 2) may be up to \$100,000 for each project. Cost Share is not required of Phase 2 Start-up Fund Awards, but allowed use of funds are restricted as described in Section 3.6. **An exclusive license must be executed with the owner of the technology before an Agreement is executed with Development and Ohio Third Frontier Funds are disbursed. A copy of the signed, executed license must be provided to Development. This must occur within nine months of the date of application for Phase 2 funding.**

For both Phase 1 and Phase 2, no portion of Ohio Third Frontier Funds may be used to provide bonuses, incentive compensation or rewards. Travel expenses will not be reimbursable under the program. The budget line items in the application forms are the only types of reimbursable expenses.

2.5 Term of Project Period

A Project is the plan of activity or activities that make up the total scope of work for which an award of Ohio Third Frontier Funds is requested and for which a Proposal is approved. The Project Period is the period during which the work funded by the Grant will take place and will be one year for either Phase 1 or Phase 2. For an additional two years of the Grant, the Lead Applicant will continue to follow and report commercialization successes to Development.

3 General Proposal Requirements

3.1 General Instructions

The Technology Transfer Office Qualification Document must be submitted electronically as a PDF email attachment to TVSF@development.ohio.gov and received by Development by the deadline provided on the cover of this RFP.

Proposals for Phase 1 and Phase 2 must be submitted via Development's online proposal submission portal. A link for the portal will be available on the program's page: http://development.ohio.gov/bs_thirdfrontier/tvsf.htm.

If the portal is unavailable, proposals are to be submitted via email to TVSF@development.ohio.gov.

Proposals must use the questions provided in Appendix C – Phase 1 Application Forms and Questions or Appendix D – Phase 2 Application Forms and Questions for the appropriate Phase 1 or Phase 2 Application. No other materials other than what is requested in Appendix C or Appendix D may be submitted.

3.2 Institutional Support of Entrepreneurship

Each Technology Transfer Office must submit a four-page qualification document that outlines:

- 1) Near term deal flow as defined by quantification of candidate technologies currently eligible for application to Phase 1;
- 2) The Technology Transfer Office's process for internal selection among these candidates in order to arrive at the six best applications; and
- 3) University-coordinated or accessible services available to faculty and staff entrepreneurs, incubating technologies and university spin-offs.

An institution's plan for selecting its six best opportunities as well as the support of entrepreneurship and capability for mentoring and advising available to those opportunities is considered an important element of the program. The services that are available can incorporate outside entities such as the regional Entrepreneurial Signature Program when appropriate. Outside entities must submit a letter of no more than one page acknowledging they are engaged with the Technology Transfer Office and are providing services. No more than five organizations may submit such an acknowledgement letter. This number is capped at five to ensure that letters are received from only the five organizations providing the most substantive and impactful services.

3.3 Trade Secret Information

All Lead Applicants are strongly discouraged from including in a Proposal any information that the Lead Applicant considers to be a "trade secret," as that term is defined in Section 1333.61(D) of the Ohio Revised Code. All information submitted in response to this RFP is public information unless a statutory exception exists that exempts it from public release under the Ohio Public Records Act in Section 149.43

of the Ohio Revised Code. If any information in the Proposal is to be treated as a trade secret, the Proposal must:

- Identify each and every occurrence of the information within the Proposal with an asterisk before and after each line containing trade secret information and underline the trade secret information itself;
- Check the “This Application does include information considered a ‘trade secret’” box on the Applicant Information Page; and
- Include a summary page immediately after the Application Information Page that lists each page in the Proposal that includes trade secret information and the number of occurrences of trade secret information on that page.

To determine what qualifies as trade secret information, refer to the definition of “trade secret” in the Ohio Revised Code at 1333.61(D), which is reproduced below for reference:

- (D) “Trade Secret” means information, including the whole or any portion or phase of any scientific or technical information, design, process, procedure, formula, pattern, compilation, program, device, method, technique, or improvement, or any business information or plans, financial information, or listing of names, addresses, or telephone numbers, that satisfies both of the following:
- (1) It derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.
 - (2) It is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Development requires non-disclosure agreements from all non-Development persons who may have access to proposals containing trade secret information, including evaluators.

3.4 Applicant Information Page

The first page of the Proposal must be the completed Applicant Information page, which must contain the title and signature of the Lead Applicant’s Authorizing Agent. For a Phase 1 application, the Authorizing Agent will be the Technology Transfer Office. For a Phase 2 application, the Authorizing Agent will be the company.

3.5 Proposal Narrative

The application, using the questions provided, is limited to six pages. Suggestions on space allocations per section are included on the forms. However, Applicants can allocate the six pages as they feel best presents the opportunity. Applicants should carefully examine Section 4 to understand evaluation criteria to best use their available space. With the short page limit, the Proposal narrative is not expected to be an in-depth technical assessment of the problem and the work plan.

3.6 Budget

Indirect Costs, legal fees, or patent prosecution expenses are not allowed as part of the Budget Request for either Phase 1 or Phase 2. Indirect Costs are costs incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project but nevertheless are necessary to the operation of the organization. These costs are also known as “Facilities & Administrative (F&A) costs”. Travel expenses are also not allowed as part of the Budget Request for either Phase 1 or Phase 2.

Phase 2 Start-Up Funds have further restrictions in that no Ohio Third Frontier Funds may be used for personnel costs, licensing fees, royalties or sponsored research.

3.7 Summary of Previous Phase 1 Award

If a technology received Phase 1 funding, that project period must be complete with affirmative results before Phase 2 can be applied for. The Phase 2 application must include a summary of the Phase 1 project, including project-specific metrics that indicate successful completion of the project and a description of the validation/proof process employed. This summary is not to exceed one page and is not considered part of the Proposal Narrative.

3.8 Letters of Support

Letters of Support are not permitted as part of a Phase 1 or Phase 2 Proposal, except one letter from the Technology Transfer Office. Each application under Phase 1 must contain a letter from the Technology Transfer Office attesting that the technology has been reviewed and selected by the Technology Transfer Office as among the best start-up opportunities from the institution. Each application under Phase 2 must contain a letter from the Technology Transfer Office attesting that it is working with the Applicant company on a prospective license. The Technology Transfer Office letter, in both cases, cannot exceed one page.

3.9 Page Limitations

Any pages beyond the page limit listed below will be eliminated from the Proposal before it is sent for review and evaluation and may also cause the Proposal to be eliminated from consideration. Except as otherwise noted, appendices or other methods to augment the information presented in the Proposal are not allowed. Reference to web-based information to supplement the Proposal is not permitted, and such references will not be considered in the evaluation.

- Technology Transfer Office Qualification document – four pages, plus letters
 - Outside entities acknowledgement letter – one page per letter, with a limit of five letters total
- Project Information using questions (Phase 1 and Phase 2) – six pages

- Technology Transfer Office Letter (Phase 1 only) – one page
- Letter of Support from Technology Transfer Office (Phase 2 only) – one page
- Summary of Previous Phase 1 Award – one page, if applicable

4 Evaluation Criteria

Only the most meritorious proposals are sought for funding. Proposals will be evaluated based on responsiveness to all the requirements of this RFP. Implicit in those requirements and evaluation criteria is the quality of the statement of work and budget.

The Technology Transfer Office at the eligible institution is expected to only bring forward the best opportunities from their institutions as Lead Applicant on Phase 1 proposals and as a supporter of Phase 2 proposals from start-up companies.

The following criteria have been designated with the highest relevance to and weighting for the Technology Validation and Start-Up Fund:

- Alignment of the Proposal with the Technology Validation and Start-Up Fund purpose, goals, objectives, eligibility, and funding requirements as described in Section 2 of this RFP.
- Quality of the responses to the requirements of this RFP as outlined in the Proposal Narrative. The following specific elements of the Technology Validation and Start-Up Fund plan will be examined:

Phase 1 – Technology Validation

- Proposed proof needed to move the technology to a point where it is ready to be licensed to a start-up or young company is deemed meaningful and likely impactful to that end.
- Proposed proof can be generated during the one-year project period and with the proposed resources.
- Strong preference will be given to applications whose validation/proof process will be conducted or overseen by an independent party.
- Application of technology has commercially reasonable path to market entry of first product.
- Degree to which the intellectual property is protected and will protect the expected business model of a start-up company.
- Degree to which the proposed Project will likely lead to a start-up company if the Technology Validation is successful and needed proof is generated.
- Commercial opportunity including size of potential market.

- Completeness of Budget Narrative and appropriate use of funds.

Phase 2 – Start-Up Funds

- Proposed proof needed to raise additional funds for commercialization is deemed meaningful and likely impactful to that end.
- Proposed proof can be generated during the one-year project period and with the proposed resources.
- Likelihood of being able to raise additional funds needed for commercialization at the end of the Project.
- Experience and commitment of the team members in commercializing new technology.
- Realism and achievability of the proposed business model.
- Stability and backing of company. Must have demonstrated backing and support independent of the university.
- Degree to which the intellectual property is protected relative to both the technology and the proposed business model.
- Potential opportunity of the start-up including size of potential market.
- Completeness of Budget narrative and appropriate use of funds.

Upon request from Development or the external evaluators, in addition to the written proposal, Phase 2 applicants are expected to be able to provide their business plan, equity structure and a list of officers and their affiliations. The evaluation criteria are designed to support the mission and goals of Ohio Third Frontier and its various programs.

5 APPENDICES

- A. Request for Proposals Process, Awards Process and Mandatory Compliance**
- B. Technology Transfer Office Qualification Document**
- C. Phase 1 Application Forms and Questions**
- D. Phase 2 Application Forms and Questions**
- E. Form of Grant Agreement**