Ohio

Workforce Safety
Innovation Center

Grant Application

March 14, 2022

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3/07/2022

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Ohio Workforce Safety Innovation Grant

The Workforce Safety Innovation Center (WSIC), hereafter the "Center," is housed within the Ohio Bureau of Workers' Compensation (BWC). WSIC finds and promotes research and development grant opportunities for Ohio based not-for-profit higher education institutions and research organizations. These grant opportunities are open to all science and engineering disciplines. WSIC grants allow recipients to perform Personal Protective Equipment (PPE) research, develop cutting-edge technologies, and form impactful relationships that move results from laboratories to the workforce marketplace faster to improve the economic welfare of the people of the state. With this information, WSIC can work to improve the unique safety needs for the Ohio workforce.

WSIC funding opportunities are modeled after the National Institute for Occupational Safety and Health (NIOSH) National Occupational Research Agenda and the National Science Foundation (NSF) Partnerships for Innovation (PFI) Program. The Center provides grants up to $1.5 million in base funding with a non-budgeted deliverable component per approved research and development project. The duration of each project is limited to a maximum of 12 months. The deadline for proposal submission is 5:00 p.m. ET May 13, 2022. BWC will make determinations on the successful proposals approved for awards in late spring 2022.The successful proposals will be awarded according to the available funds. The total amount of funds available for the program for fiscal year (FY) 2023 is $15 million.

An application for a WSIC grant consists of a number of required components including an electronic portion submitted in Oracle Intelligent Advisor (OIA) via the on-line Ohio BWC Grant Management Portal and various forms and attachments. All the required components of a specific application must be completed and submitted by the application due date of May 13, 2022. **If any of the required components are not submitted by the due date indicated, the entire application will not be considered for review.**

A **Notice of Intent to Apply for Funding (NOIAF – Attachment #1) must be submitted by April 14, 2022** to establish access to the application in OIA via the on-line Ohio BWC Grant Management Portal https://grantmanagement.bwc.ohio.gov/.

For non-profit organizations, the NOIAF must be accompanied by proof of non- profit status. Both non-profit and local public agencies must submit proof of liability coverage. Potential applicants and current required to maintain their current supplier information in the State of Ohio Supplier Portal. This information includes, but is not limited to, Electronic Funds Transfer (EFT), W-9 and current address.

This information is maintained on the following website: http://supplier.ohio.gov/.

Note: Grant recipients' future payments will be held if the agency receives a paper check due to the EFT information not being properly maintained in the supplier portal.

Submission of the application in OIA constitutes acknowledgment and acceptance of WSIC Grant Administration Policies and Procedures (GAPP) Manual (Attachment #6), state rules and any other grant-specific requirements as outlined in this application. This application pertains to budget period: July 1, 2022 -June 30, 2023. Reference the application for more information.

The Project Budget Justification must include the following language and be signed/certified by the Agency leader:

- Applicant's budgeted costs are reasonable, allowable, and allocable under WSIC GAPP and state rules and regulations.
- The WSIC GAPP Manual has been read and is understood.
- Applicant understands and agrees that costs may be disallowed if deemed unallowable or in violation of WSIC GAPP and state rules and regulations.
- Applicant agrees and understands that costs incurred in the fulfillment of the Deliverables must be allowable under WSIC GAPP and state rules and regulations to qualify for reimbursement.

Eligibility Guidelines and Restrictions

This program is limited to not-for-profit higher education institutions and research organizations located in Ohio. Causes for rejection of a proposal without detailed review (in no particular order) include, but are not limited to:

1. College /university /research institution or organization is not in Ohio;
2. Proposal is not received by the 5:00 p.m. ET May 13, 2022 submission deadline;
3. Proposed research and development project is too broad or disjointed;
4. Proposal does not meet the format requirements described below;
5. Proposal duplicates other research and development projects previously completed or currently under way by a research team or organization;
6. Proposed research and development project or associated budget are not feasible or reasonable;
7. Proposals with focus areas that are excluded from funding during any given funding cycle (see *Research Focus Areas Excluded from Consideration for Funding* section for further details); or
8. Applicant owes funds in excess of $1,000 to the BWC.

Available Tracks for Submission of Proposals

This application offers two broad tracks for proposals in pursuit of reducing risks of injuries and enhancing workforce safety and the economic welfare of the people of the state in the priority research and development focus areas listed above:

- **Track 1 - Proof-of Concept:** offers the opportunity to apply PPE research; focuses on design factors that effectively reduce occupational morbidity, mortality, and injury; investigates emerging technologies; explores the technical and commercial viability and defines clear input and output flows to form the general view of the PPE innovation and the path forward.

- **Track 2 - Prototype:** offers the opportunity to develop, test, obtain Ohio user feedback, and validate the technical and commercial viability of the PPE innovation.

The proposed applied research and development project should identify knowledge and technology gaps that must be addressed to advance the innovation toward commercialization. The knowledge gained in each track is necessary to move discoveries out of the lab and into the market, and the identified project needs to advance knowledge along this continuum.

Research-to-Practice (r2p) and Partnerships for Innovation (PFI) Focus

Successful project proposals to be funded by the Center must demonstrate: 1) a high probability for short- or long-term impact for the proposed applied research and development project; 2) a commitment to achieving optimal dissemination of applied research products, including knowledge, interventions, recommendations, and technologies; and 3) a commitment to engaging internal and external partners throughout the process. BWC encourages applicants to consider the combined r2p and PFI elements, established by NIOSH and the NSF listed below as they develop their project proposals:

1. List external partners involved in the research project and their expected contributions, including roles and responsibilities. Applicants will need to engage external partners in the innovation

process, research, and PPE evaluation, as appropriate. Refer to "Letters of Collaboration & Commitment/Partnership Partner" for the Industry Partner application requirement.
   a. A "partner" is an individual, group, or organization actively involved in the project. Involvement may include, but is not limited to, identifying workforce safety issues, project planning, providing access to worker populations, data collection, implementing and assessing recommended work practices, disseminating project findings, and evaluating the impact of the innovation on reducing the frequency and severity of on-the-job injuries and enhancing safety in the workforce.
2. Identify the primary target audience(s) for the project and determine how the target audiences(s) may interact with/use the results generated by the project (i.e., knowledge, intervention, recommendations, technology, PPE innovation).
   a. An "audience" is an individual, group, or organization who will use the findings generated by the project to reduce the frequency and severity of on-the-job injuries and enhance safety in the workforce. Audience(s) may include, but are not limited to, workers, employers, industry leaders, academicians, researchers, policymakers, standard-setting organizations, professional associations, safety and health professionals, labor unions, other government agencies, and not-for-profit organizations.
3. Identify relevant outputs/products that will be used to effectively communicate project results to the target audience(s).
   a. "Outputs" are products of the project activities. Outputs may include but are not limited to peer-reviewed journal publications, trade journal publications, technologies, patents, recommendations, reports, website content and other electronic media, workshops and conferences, presentations, databases, educational and informational materials.
4. Describe the methods/channels of communication that will be used to disseminate the project results and associated outputs to the target audience(s). Channels of communication may include but are not limited to peer-reviewed journals, trade journals, workplace solutions, information circulars, web and other social media platforms, partner organizations, workshops and conferences, presentations, educational and informational materials, proceedings, and media outlets.
5. Identify intermediate outcomes that could potentially occur due to the project results and/or related outputs. A successful project will generate measurable outcomes such as a proof-of-concept or an early PPE prototype to meet an identified market need and inform the next phase towards commercialization. **Please note** intermediate outcomes may occur throughout the duration of the project, a few months after the project concludes, or several years afterward. Including 'projected intermediate outcomes' in the proposal provides the applicant and BWC a mechanism for tracking potential impacts and guides the follow-up and assessment of impact at a later time, as appropriate. Intermediate outcomes may include, but are not limited to, the development of or a change in policy, citations in scientific literature, adoption of recommendations into training materials, implementation and adoption of a new technology or workplace practice, and the development of a standard or regulation.
6. Outline methods that may be used to capture the potential impact that the project findings have on improving worker safety and health. Methods of capturing intermediate outcomes may include but are not limited to conducting an Internet search to assess who is using a particular output; conducting citation searches; contacting partners and key stakeholders to determine use of research results, project outputs, etc.; assessing production and sales of new technologies; and reviewing reference lists in new regulations. For example, include what methods could be used to determine whether a stakeholder adopted the recommendations or how they will utilize the innovation from this project.

Priority Research and Development Focus Areas

This application covers, in broad terms, the entire Ohio workforce and all industries within Ohio. Specifically, funds are intended to support PPE research/evaluation and proof-of-concept or prototype development, to ensure that Ohio employers are ready and capable of keeping their workers safe and mitigating the impacts of any employee illness or injury, thereby enhancing the economic welfare of the state. The following focus areas have been prioritized for the purposes of this grant:

- Prevention of industry-specific illnesses, injuries, and/or fatalities:
  - In the service industry sector (i.e., restaurants and healthcare).
  - In the commercial industry sector (i.e., automobile service, repair center, and wholesale).
  - In the manufacturing industry sector (i.e., plastics manifesting molded products and machine shops).
  - In the transportation sector (i.e., trucking).
- Prevention of musculoskeletal disorders, especially those associated with the neck, back, shoulder, knee, and ankle.
- Prevention of injuries caused by falls, on the same level and/or different levels.
- Reduction of injury rates, illness rates, and duration of disability using redesigned or enhanced PPE with technological interventions or accessories to improve PPE design and effectiveness.
- Prevention of long-term disability among injured workers after their injury.
- Integration of PPE innovations into Ohio's workforce.

While the above list represents the Center's FY 2023 priorities, other proposals that will generate measurable outcomes (such as a proof-of-concept or an early prototype) that 1) meet an identified workforce need; 2) reduce accidents and injuries, or; 3) prevent disabilities among injured workers; and, will inform the next phase towards commercialization will be accepted for review and evaluation.

Potential topics may be found in the National Institute for Occupational Safety and Health (NIOSH) DRAFT Healthcare Personal Protective Technology Research Targets for 2020 – 2030.

Several critical areas of national interest involve PPE for healthcare practitioners and research and development needs to address:

- better fitting respiratory protective devices
- innovative technologies to inform the user when a fit is compromised
- integration of sensor-based technologies in respiratory protective devices
- new materials for efficacy, sustainability, and manufacturability
- solutions to address the psychosocial, usability, and comfort aspects of prolonged PPE use
- human centered design issues associated with PPE use

Research and Development Focus Areas Excluded from Consideration for Funding

Proposals that were submitted to BWC and were not funded in the previous Ohio Occupational Safety and Health Research Program funding cycles that were issued in October 2014, September 2015, February 2017, November 2017, November 2018, and November 2021, are excluded from consideration.

Funds Available and Number of Grants

Any Notice of Award (NOA) made through this grant is contingent upon the availability of BWC funds for this purpose and the quality of proposals received.
- No more than 30 Ohio Workforce Safety Innovation Center Grants may be awarded for a total amount of $15,000,000 in FY 2023.
- **$1,500,000 Total Costs** (direct and indirect costs) per budget period
  - **Award Ceiling:** $1,500,000 total costs per budget period
  - **Award Floor:** $500,000 total costs per budget period
- The maximum amount for each application/award will be $1,500,000 of total costs (direct and indirect) for the 12-month budget period (1 July 2022 – 30 June 2023).
- No grant award will be issued for less than $500,000. The award floor represents only BWC funds granted. Applications submitted for less than the minimum amount will not be considered for review.

The recipient agency must be prepared to support the costs of operating the project in the event of a delay in grant payments.

Limit on Number of Proposals per Organization

There is no limit to the number of proposals from eligible organizations to the deadline of this application.

Project Proposal Elements and Guidelines

General

Font: Use an Arial or Times New Roman typeface, a black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)

Type Density: Type density, including characters and spaces, must be no more than 15 characters per inch. Type may be no more than six lines per inch.

Paper Size and Page Margins: Use standard paper size (8 ½" x 11"). Use at least one-half inch margins (top, bottom, left and right) for all pages.

Figures, Graphs, Diagrams, Charts, Tables, Figure Legends, and Footnotes: You may use a smaller type size, but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures; however, all text must be in a black font color, clear, and legible.

Grantsmanship: Use clear language and avoid jargon. If terms and acronyms are not universally known, define and spell out the term/acronym the first time it is used and note the appropriate abbreviation in parentheses. The abbreviation may be used thereafter.

Appendix(ices): The set of appendices may include publications (no more than five submitted or accepted manuscripts and published materials not publicly available), questionnaires, and other detailed information that supplements information provided in the main proposal. Reviewers are not required to evaluate materials in an appendix. Do not put essential Project Plan information in an appendix.

Cover Sheet: Information on the applicant agency and its administrative staff must be accurately completed. This information will serve as the basis for necessary communication between the agency and the BWC. Provide the following information in the cover/title page (first page) for the proposal:
- Project Title;
- Name of sponsoring institution;
- Name and affiliation of the principal investigator (PI);
- Email address of the PI;
- Telephone number of the PI;
- Address of the PI at the sponsoring institution;
- Project Track;
- Amount of Funding Requested.

Table of Contents: The table of contents must list at least the major sections designated by Roman numerals "I" through "VII" plus the appendices. Also, the table of contents must list the various elements of the Project Plan designated by uppercase letters "A" through "D."

IMPORTANT: The Project Proposal must be uploaded in OIA as a MSWord file format or a pdf text searchable file format for all elements except the Project Budget. The Project Budget consists of two parts and must be completed in the MS Excel Project Budget Template Attachment #2 file format and uploaded in OIA along with the Attachment #3 Project Budget Justification, which must be completed, certified by the Agency leader listed in OIA, and uploaded in OIA.

Structure of Proposal

Proposals must clearly identify the track (Track 1- Proof of Concept or Track 2 - Proto-type) and include the **required** seven major sections described below. Each section is limited to the number of pages allowed for that section. Remember to include all tables, graphs, figures, diagrams, and charts within the Project Plan page limit. All proposals must be self-contained within the specified page limits. The completeness check will include checks for page limits. Internet website addresses (URLs) may not be used to provide information necessary to the review because reviewers are not obligated to view the Internet sites. URLs are acceptable in citation listings, the biographical sketch (biosketch), and the references. PIs are prohibited from using the appendix to circumvent page limitations in any section of the proposal for which a page limit applies. Each proposal must include the following seven section headings designated with Roman numerals:

I. Project Summary/Abstract (Page limit: 2)

The Project Summary/Abstract section requires a succinct and accurate description of the proposed work when separated from the proposal.

1. State the proposal's broad, long-term objectives and specific aims, making reference to the:
   a. need for the proposed PPE innovation;
   b. areas of application;
   c. key hurdles that need to be overcome, and;
   d. potential outcomes of the proposed activity and the relatedness of the project (i.e., relevance to the mission of BWC).
2. Describe concisely the Project Plan and methods for achieving the stated goals.
   This section should be informative to other persons working in the same or related fields and, insofar as possible, understandable to a scientifically or technically literate reader. Avoid describing past accomplishments and the use of the first person. Finally, please make every effort to be succinct. Do not include any proprietary/confidential information.

Relationship to the Review: BWC and the reviewers will use the project summary/abstract to gain an overview of the proposal before evaluating the budget and the Project Plan.

II. Performance Site(s), Resources, and Equipment (Page limit: 3)

The Performance Site(s), Resources, and Equipment section of the proposal is used to assess the adequacy of the resources available to perform the effort proposed.

Applicants must include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded. Such information must be provided in this section, in lieu of other parts of the proposal (e.g., Budget, Project Plan). The description should be narrative in nature and must not include any quantifiable financial information.

- **Performance Site(s) (organization name, city, state)**: Describe the availability of facilities, equipment, and other resources required for the proposed project. Indicate the primary site where the work will be performed. If a portion of the project will be performed at secondary sites, identify the secondary site location(s). Include a short description of performance site(s). For each performance site, describe the resources and facilities provided at that site.

- **Resources:** Describe how the scientific and engineering environment in which the project will be done contributes to the probability of success (e.g., institutional support, physical resources, and intellectual rapport). In describing the scientific and engineering environment in which the work will be done, discuss ways in which the proposed project will benefit from unique features of the scientific and engineering environment or subject populations or will employ useful collaborative arrangements with industry partners. Describe only those resources that are directly applicable to the proposed work. Provide any information describing the other resources available to the project (e.g., machine shop, electronic shop) and the extent to which they would be available to

the project. Describe any special facilities used for working with biohazards or other potentially dangerous substances.

- **Equipment:** List major items of equipment (minimum $5,000 unit cost value) already available for this project and, if appropriate, identify location and pertinent capabilities.

Relationship to the Review: This information is used to assess the capability of the organizational resources available for successful completion of the proposed project and will answer questions such as:

- Will the environment in which the work will be done contribute to the probability of success?
- Are the institutional support, equipment, and other physical resources available to the investigators adequate for the proposed project?
- Will the project benefit from unique features of the scientific, engineering, and public health environments, or subject populations?

III. Key Personnel **(Page limit: 3)**

In the Key Personnel section, the applicant must provide a staffing plan that identifies all key personnel required to do the Project and their responsibilities on the Project. Key personnel are defined as all individuals who contribute in a substantive, meaningful way to the scientific and engineering development or execution of the project, whether salaries are requested in the Project Budget.

- Describe the team members and the qualifications they bring to the project.
- Identify partners and/or collaborators outside of the proposing institution and describe their role and the value they add to the project.
- Describe the qualifications and motivation of the PI.
- Describe the role of the technology commercialization expert or the co-PI who is a member or employee of the industry partner.
- Elaborate on how the co-PI / industry partner will help the team achieve the goals of the project.

All participants listed as either PI, co-PIs, or "Key Personnel" must submit a biosketch of no more than four single spaced pages. Include short bios (two pages maximum) of graduate students and postdoctoral researchers, the industry partner, technology commercialization expert, and other key personnel. Highlight the participants' technical expertise and track record in research, technology development, and/or commercialization. BWC requires a biosketch, including research/project support information, for these individuals as this highlights their accomplishments as scientists and/or engineers.

Other significant contributors (OSCs) should also be listed as key personnel. OSCs are individuals who have committed to contribute to the scientific development, engineering, or execution of the project but are not committing any specified measurable effort (in person-months) to the project. These individuals are typically presented at "effort of zero person-months" or "as needed." Individuals with measurable effort cannot be listed as OSCs. Applicants should also include individuals with critical expertise even if the effort is minimal in person-months. For example, Consultants should be included in the Key Personnel Template below if they meet either of these definitions.

It should be expressly understood that the applicant's selection to receive an award is based in part on the credentials of the key personnel. Any substitution for key personnel during the course of the agreement shall be deemed a material breach unless substituted employees' credentials are submitted to BWC and approved by BWC prior to substitution. Substituted key personnel or employees cannot begin working on the project to any capacity until the substitution is approved by BWC.

After the PI, list co-PIs followed by all other key personnel in alphabetical order according to the table format below. Add a row for each key person.

- **Key Personnel (Template)**

NAME/TITLE	ORGANIZATION	MAJOR ROLE(S) ON PROJECT

- **Letters of Collaboration & Commitment/Partnership: "**Collaborators" are individuals or entities that work with the PI and the PI's team to provide additional value to the project and may be paid or unpaid and may or may not be included in the budget. Collaboration with at least one industry partner is mandatory for the project. Any substantial collaboration with individuals/entities not included in the budget should be described in the Facilities, Equipment, and Other Resources section of the proposal. Whether or not the collaborator is included in the budget, a letter of collaboration from the industry partner must be provided as part of the application in OIA. The industry partner letter must appear on the entity's letterhead and be signed by the appropriate representative of the entity/organization. The industry partner provides the academic community with use-inspired research problems, accelerates the translation of basic research to the market, and supports the development of workforce resources. The partnership affords the industry partner access to the talent base of the agency academia and practitioners; the partnership also enables the industry to leverage intellectual property that results from funded activities to help accelerate discovery to practice; and pools together public and private resources and ensures that the sum is greater than the individual parts - including sharing the risks of early-stage research and development. The letter(s) must describe the nature of the collaboration and how the collaboration brings additional value to the project. It is the responsibility of the submitting organization to discuss the appropriate intellectual property policies, including patent disclosures and filings, with project partners. BWC is not responsible for the type of agreement reached between grantees and project partners. If applicable, include a statement that an executed cooperative research agreement will be provided as a condition for recommendation of the proposal for award. Proposals that lack an industry partner will be returned without review. Collaboration with NIOSH intramural scientists and programs and the National Personal Protective Technology Laboratory.

Partnerships may also be critical to translate research into effective work practices. Interdisciplinary and transdisciplinary collaboration among investigators, institutions, and industries to utilize and share existing expertise is essential to advancing PPE innovations.

Applicants need to also address participation and user-led design. Employers and workers that need to utilize PPE must be at the center of the innovation design, acknowledging innovation capacity within the Ohio workforce and placing them at the heart of the innovation process. Ohio workers, their employers, and other relevant stakeholders should be informed, engaged, and able to actively participate in the development process to ensure that their needs and expectations inform design decisions. Describe the partnerships that will be assembled to pursue the project. Discuss the capabilities of each of the partners and their roles in the project. Address how the proposed partnership will achieve the goals of the project to catalyze and accelerate technology development toward commercialization

Relationship to the Review: In conjunction with Section IV. Biographical Sketch(es), reviewers will use this information in the assessment of key personnel qualifications for a specific role in the proposed project, as well as to evaluate the overall qualifications of the project team.

IV. Biographical Sketch(es) **(Page limit: 4 pages per biosketch)**

In the Biographical Sketch(es) section include the biosketch of Key Personnel. Start the biosketch for each Key Personnel on a new page. **Each biosketch may not exceed four pages. See the** *Biographical Sketch (Template)* **at the end of this section.**

Complete the educational block at the top of the format page beginning with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training (if applicable). For each entry, provide the name and location of the institution, the degree received (if applicable), the month and year the degree was received, and the field of study.

Following the educational block, complete sections A, B, C, and D as described below.

A. **Personal Statement.** Briefly summarize why you are well-suited for your role(s) in this project. Identify the strengths you bring to the project. Highlight relevant factors for this project which may include: aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific and/or engineering environment; and/or your past performance in similar projects.

B. **Positions and Honors.** List in chronological order previous professional/technical positions, concluding with the present position. List any honors. Include present membership on any federal and/or state government public advisory committee, if applicable.

C. **Selected Peer-Reviewed Publications or Manuscripts in Press (in chronological order).** List no more than 15 selected peer-reviewed publications or manuscripts. Do not include unpublished manuscripts submitted or in preparation. You may choose to include selected publications based on recency, importance to the field, and/or relevance to the proposed project. Note that copies of publicly available publications are not acceptable as appendix material.

D. **Research/Project Support.** List both ongoing and completed (during the last three years) projects. Begin with the projects that are most relevant to the PPE innovation suggested in this proposal. Briefly indicate the overall goals of the projects and responsibilities of the key person identified on the biographical sketch.

In Part C. Research and Development/Project Support of the **Biographical Sketch (Template)**, highlight the accomplishments of Key Personnel as scientists.

Relationship to the Review: In conjunction with Section III. Key Personnel, the reviewers will use this information in the assessment of everyone's qualifications for a specific role in the proposed project, as well as to evaluate the overall qualifications of the project team. Also, the reviewers will use the information to assess how well-suited the project leader and the project team are to conduct this work. Reviewers will consider questions such as:

- For project leaders who are in the early stages of their work in this area, do they have appropriate experience and training and/or will they receive appropriate mentoring and supervision?
- Have established project leaders demonstrated an ongoing record of accomplishments that have advanced their field(s) of work?
- If the project is collaborative, do the key personnel have complementary and integrated expertise, and is the project's leadership approach, governance, and organizational structure conducive for project success?

Biographical Sketch (Template)

BIOGRAPHICAL SKETCH			
NAME	**POSITION TITLE**		

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY

RESEARCH/PROJECT AND PROFESSIONAL EXPERIENCE:

A. Personal Statement

B. Positions and Honors

C. Selected Peer-Reviewed Publications or Manuscripts in Press

D. Research and Development/Project Support

V. Project Plan (Page limit: 20 pages excluding bibliography and references)

The Project Plan must clearly identify the track 1- Proof of Concept or 2-Proto-type) and include the structure and elements below, adhering to the page limits for each of these elements. Include all tables, graphs, figures, diagrams, and charts within the Project Plan page limit.

The Project Plan must include the elements/sub-sections designated with uppercase letters as described in section V. below.

A. Specific Aims

State concisely the goals of the proposed project and summarize the expected outcome(s), including any intermediate and end outcomes and the impact the results of the proposed project will have on the industry and/or the workers targeted by the project.

List succinctly the specific objectives of the project proposed, (i.e., evaluate and redesign existing PPE, create a novel PPE design, develop new technology, solve a specific problem with PPE, reduce the frequency and severity of on-the-job injuries, enhance safety in the workforce).

Specific Aims are limited to one page.

B. Project Strategy

The Project Strategy is limited to 17 pages, excluding the bibliography and references cited.

- Organize the Project Strategy in the specified order and using the instructions provided below.
- Start each section with the appropriate section heading – Significance, Impact, Innovation, and Approach.
- Cite published experimental details in the project strategy section and provide the full reference in the bibliography and references cited section.

At the end of the project, the final report should identify new knowledge to solve a significant technical challenge and move the technology closer toward commercialization and societal benefit.

1) *Significance*
   - Explain the relevance of the proposed project and identify critical barriers to the advancement and/or improvement of Ohio workforce safety that the proposed project addresses.
   - Describe the existing competitive technologies, and their shortcomings.
   - If present in the literature, describe and analyze prior research that serves as the key support for the proposed project, including the limitations of the described research.
   - Explain how the proposed project will improve scientific knowledge, technical capability, and/or safety and health of workers.
   - Describe how the concepts, methods, technologies, services, and/or preventative interventions that impact Ohio's workforce will be changed if the proposed aims are achieved.
   - If applicable, explain how the proposed project may have commercial potential to lead to a marketable product, process, or service.

2) *Impact*
   - Discuss the impact that the proposed project will have on workers and how the expected activities or findings will plausibly lead to a safer, healthier, workforce in either the near- or long-term.
   - Describe the target market segment addressed by the proposed project and who will benefit from the project activities. Elaborate on how the target market is informed by any preliminary market research or workforce discovery, and how the innovation will address the unmet market need.
   - Describe the overall future commercialization strategy and plans envisioned beyond the duration of the proposed project.
   - Describe partners and/or stakeholders involved in the project activities to help ensure successful transfer of the findings to the end users/intended audience.

3) *Innovation*
   - Identify the key differentiators of the proposed technology vs. the current state of the art and other competing technologies.
   - Explain the refinements, improvements, or new applications of emerging technologies, approaches or methodologies, instrumentation, or interventions.
   - Describe the knowledge gaps and technical barriers that must be overcome to translate the technology into a product, process, or service. Also discuss which of these gaps and barriers are most significant.
   - In relation to the proposed project, discuss the unique challenges faced by employers and workers and which of these challenges are most significant.
   - Explain how the project challenges and seeks to shift current PPE research or workplace practice paradigms.
   - In relation to the proposed project, discuss if there are concepts, approaches, PPE, and/or other safety interventions novel to one industry or novel in a broad sense to the workforce.
   - Describe the envisioned next steps for successful development of the technology toward commercialization and societal use.

4) *Approach*
   - Describe the overall strategy, methodology, and analyses to be used to accomplish the Specific Aims of the project. Address how applicants will collect, analyze, and interpret project data.
   - Describe the plan to address the knowledge gaps and technical barriers. Elaborate on the specific objectives and tasks/activities that will need to be undertaken to close the knowledge and technical barriers gaps so that the proof-of-concept, prototype, or technology can be demonstrated?
   - Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
   - Define the success metrics needed to assess the progress of the proposed project. Include a discussion of the choice and appropriateness of the stated success metrics.
   - Describe the complementary and integrated expertise of the key personnel and the project's leadership approach, governance, and organizational structure.
   - Identify the target audience groups intended to use the project's innovation

- Describe the proposed outputs/products that will be developed to effectively communicate the innovation to the target audience(s), describe the methods that will be used to disseminate the projects findings and proposed outputs, and specify external partners that will be engaged in the project including their primary role(s).
- Describe deliverables specific to BWC in Section VII. Timeline.

C. Human Subjects

If activities involving human subjects are planned at any time during the proposed project at any performance site, provide information on the protection of human subjects, even if the proposed project is exempt from Regulations for the Protection of Human Subjects.

Provide a one-page summary describing the elements and aspects of your institution's Institutional Review Board (IRB) process. If reasonable incentives and/or enablers such as gas cards for participation will be offered, make sure they are included in the budget under other direct costs.

D. Bibliography and References Cited

Provide a bibliography of all references cited in the Project Plan. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Include only bibliographic citations. Applicants should be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. Citations that are publicly available in a free, online format may include URLs or PMCID numbers along with the full reference (note that copies of publicly available publications are not accepted as appendix material). The references should be limited to relevant and current literature. While there is not a page limitation, it is important to be concise and to select only those literature references pertinent to the Project Plan.

Relationship to the Review: The reviewers will use the information in Section V. Project Plan to assess the project's significance, impact, innovation, and approach on workers.

VI. Budget

Budget Narrative: Applicant's must provide a detailed budget justification in a narrative form that describes how categorical costs are derived. Discuss the necessity, reasonableness, and allocation of the proposed costs. Describe the specific functions of the personnel, consultants, collaborators, and industry partner(s). Explain and justify equipment, travel, (including plans for out-of-state travel), supplies and training costs. Complete and upload/submit the MS Excel Project Budget Template Attachment #2 and FY23 Project Budget Justification Attachment #3 in OIA.

- **Personnel, Travel, Equipment, Contracts and Other Direct Costs, Sections:** Submit a budget to support costs for the budget period: July 1, 2022 to June 30, 2023. Funds may be used to support personnel, staff training, travel (see the Ohio Office of Budget Management [OBM] website http://obm.ohio.gov/TravelRule/default.aspx), and supplies directly related to planning, organizing, and conducting the project activities. Itemize, on the Equipment Tab in the Attachment #2 Budget Template, all equipment (minimum $5,000 unit cost value) to be purchased with grant funds.
  Note: Please refer to the WSIC GAPP Manual regarding equipment rules. The applicant must also obtain BWC prior approval for any contracts and shall also retain all original fully executed contracts on file and make them available for review by BWC upon request.

- **Base Funding:** The grant is 100% base funding with a non-budgeted deliverable component. The base-funded model requires budgeting all projected costs by line item (i.e., personnel [by staff paid on the subgrant], travel, other costs [supplies, etc.], equipment [PCs, printers, etc. with a unit cost of $5,000 or more], and contracts. This ties 100% of the funding to actual costs.

- **Non-budgeted deliverables:** Non-budgeted deliverables have been developed by WSIC and a percentage of the award has been assigned to each deliverable. The total percentage/value of all deliverables in the Budget Justification (Attachment #3) will equal the amount of base funding budgeted in the Project Budget (Attachment #2). The percentage assigned to each deliverable is the "up to" amount the applicant will be eligible to receive. If any deliverable is not successfully met, the value of the deliverable will be subtracted from the budgeted categories and the amount the grant recipient will receive will be based on the actual amount expended as reflected in the grant recipient's expenditure reports and invoices. Once the deliverable has been resubmitted and approved, the grant recipient may add the expense to the final expenditure report. The expenses should be added back to the category (line item) in which the original reduction took place.

- **Budget Line-Item Associations:** The Attachment #2 Project Budget Template requires all budget line items to be associated to a deliverable(s) or project administration. The following definitions and instructions describe how to report budget line items, including the proportion of every line item that goes to support deliverable completion and administrative costs in the Project Budget. The process for reporting each budgeted item is described below and is based on which of the following categories under which it falls.
    - Personnel whose roles and responsibilities are administrative in nature;
    - Personnel whose roles and responsibilities are project implementation (not administrative) in nature; and
    - Other object class line items (e.g., travel, equipment, contracts, and other direct costs.)

  Administrative personnel are those who spend 100% of their time on activities not directly tied to a specific project function, including those who:
    - Plan, direct, and coordinate project operations at the highest level (e.g., Agency directors, grant managers, etc.);
    - Provide day-to-day staff assistance or clerical duties in support of the individuals described above.

  When entering administrative personnel line items in the project budget, after name and job title are filled in, applicants must enter 100% in the "Program Administration". After this is done, the applicant should not enter an association with any deliverable.

  Project personnel are those whose roles and responsibilities are directly tied to a specific function or activity necessary to meet the project requirements and include such personnel as those who do the following:
    - Plan, implement, and maintain project activities; and
    - Manage the project.

  When entering this type of line item in the project budget, after name and job title are filled in, applicants must enter the percentage of time the position devotes to implementing the project plan activities that contribute to deliverable completion. The total deliverable distribution across any line item must equal 100%.

  There could be administrative costs associated with other budget category line items. The total distribution across the project deliverables and administration must equal 100%.

  Note: Applicants should contact the WSIC Chief if additional technical assistance is required.

- **Unallowable Costs:** Funds may not be used for the following:
    1. To advance political or religious points of view or for fund raising or lobbying;
    2. Fund raising and investment management costs;
    3. To disseminate factually incorrect or deceitful information;
    4. Consulting fees for salaried WSIC personnel to perform activities related to grant objectives;
    5. Advertisement other than for human subject recruitment
    6. Bad debts of any kind;

7. Contributions to a contingency fund;
8. Entertainment;
9. Alcoholic Beverages;
10. Fines and penalties;
11. Legal fees incurred in defense of any civil or criminal fraud proceeding;
12. Membership fees -- unless related to the grant and approved by BWC;
13. Loans or mortgage payments;
14. Contributions made by WSIC personnel;
15. Costs to rent equipment or space owned by the funded agency;
16. The purchase or improvement of land; the purchase, construction, or permanent improvement of any building;
17. Lodging, travel, and meals over the current state rates (See Ohio Shared Services Website for hotel rates and Meals Per Diem at: http://www.ohiosharedservices.ohio.gov/TravelExpense.aspx);
18. All costs related to out-of-state travel, unless prior approval from BWC is obtained;
19. Training longer than one week in duration, unless prior approval from BWC is obtained;
20. Contracts, for compensation, with BWC board members or other BWC staff/fiduciaries;
21. Goods or services for personal use regardless if reported as taxable income to employee;
22. Payments to any person for influencing or attempting to influence members of the Ohio General Assembly in connection with awarding of grants;
23. Grant-related equipment costs greater than $5,000, unless justified and approved by BWC;
24. Promotional items (include items with slogans, logos, agency name/address, messaging).
25. Office furniture

Grant recipients will not receive payment from BWC grant funds used for prohibited purposes. BWC has the right to recover funds paid to recipients for purposes later discovered to be prohibited.

- **Indirect (Facilities and Administration):** The applicant may charge a *de minimis* rate of 10% of modified total direct costs (MTDC). Base the budget solely upon direct costs.

VII. Timeline

Applicants must include a detailed timeline of the project, including projected start and end dates for each task (including deliverables such as the quarterly progress reports, interim progress report, and final progress report), critical milestones to be reached along a technology/product development timeline, and responsible party (e.g., a Gantt chart or schedule table). The contractual period of performance should include additional time for review and required revisions to draft deliverables. **Note:** the specific dates may need to be altered depending on the timing of the selection process and funding agreement negotiations.

Review Criteria and Scoring System

Researchers from NIOSH as well as safety/ergonomics/industrial hygiene experts from BWC will review and score the proposals. Reviewers are required to evaluate each proposal using the following review criteria and scoring system:

Review Criteria Influencing the Score
All proposal reviews will be based upon the quality, clarity, and completeness of the application submitted in OIA. Only the review criteria described below will be considered in the review process. Reviewers are instructed to score the proposal based on the following criteria, weighing the criteria as they deem appropriate for each proposal.
- Performance Site(s), Resources, and Facilities,
- Project Officers and Key Personnel,

- Significance,
- Impact on the Workforce,
- Innovation,
- Approach.

The reviewers will consider the following questions when assessing the strengths of the proposal in each of the areas:

1. **Performance Site(s), Resources and Facilities**: Will the environment in which the work will be done contribute to the probability of success? Are the institutional and industry support, equipment, and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, public health environment, subject populations, and/or collaborative arrangement?

2. **Project Officers and Key Personnel:** Is/are the project leader(s) well-suited to conduct this work? For project leaders who are in the early stages of their work in this area, do they have appropriate experience and training and/or will they receive appropriate mentoring and supervision? Have established project leaders demonstrated an ongoing record of accomplishments that have advanced their field(s) of work? Because the project must be collaborative, is an industry partner identified? Do the key personnel have complementary and integrated expertise, and is the project's leadership approach, governance, and organizational structure appropriate?

3. **Significance**: Does the project address the relevance of the innovation and identify critical barriers to the advancement and/or improvement of Ohio workforce safety? Are the existing competitive technologies and shortcomings described? Is there prior research supporting the project? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or the safety and health of workers improve? How will successful completion of the aims change the concepts, methods, technologies, services, or preventative interventions impact Ohio's workforce? Is commercial potential identified?

4. **Impact on the Workforce:** Does the applicant describe how the expected activities and PPE innovation, (e.g., knowledge, interventions, or technologies) will plausibly lead to a safer, healthier workforce in either the near- or long-term? Does the applicant describe the target market that will benefit from the project activities? Does the proposal address how the innovation addresses the unmet market need? Were appropriate collaborations and partners included in the project activities to help ensure successful transfer of the findings to the end users/intended audience? Is the overall future commercialization strategy and plans envisioned going beyond the duration of the proposed project explained?

5. **Innovation**: Are the key differentiators of the proposed technology vs. the current state of the art and other competing technologies identified? Is the refinement, improvement, or new application of concepts or approaches explained and are challenges identified? Does the proposal challenge and seek to shift current research or workplace practice paradigms by using novel concepts, approaches, PPE, and/or safety interventions? Are knowledge gaps and technical barriers that must be overcome to translate technology into a product, process or service discussed along with envisioned next steps for successful development of the technology toward commercialization and societal use?

6. **Approach**: Are the overall strategy, methodology(ies), and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are unique challenges, potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility, and will particularly risky aspects be managed? Does the proposal have an appropriate evaluation plan, including design for determining project success? Does the PI include appropriate partners throughout the project and are their roles well-defined? If an additional track will be necessary, are there clear,

appropriate, measurable goals (milestones) that should be achieved prior to initiating the next track?

Additional Review Consideration Not Influencing the Score: The reviewers will assess the reasonableness of the proposed budget to the proposed work. The scientific/technical merit score should not be affected by the evaluation of the budget.

The reviewers will use the scoring definitions in the table below (adapted from the National Institutes of Health [NIH]).

Scoring Definitions

Overall Merit	Score	Descriptor	Additional Guidance on Strengths/Weaknesses
High	9	Exceptional	Exceptionally strong with essentially no weaknesses
	8	Outstanding	Extremely strong with negligible weaknesses
	7	Excellent	Very strong with only some minor weaknesses
Medium	6	Very good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	4	Satisfactory	Some strengths but also moderate weaknesses
Low	3	Fair	Some strengths but with at least one major weakness
	2	Marginal	A few strengths and a few major weaknesses
	1	Poor	Very few strengths and numerous major weaknesses
Minor weakness: An easily addressable weakness that does not substantially lessen the overall merit of the work. **Moderate weakness:** A weakness that lessens the overall merit of the work **Major weakness:** A weakness that severely limits the overall merit of the work			

Deliverables

Applicants should thoroughly review this application for specific deliverable requirements. All deliverables are to be submitted through OIA, unless noted below. Requests for deliverable extensions must be submitted in writing with a justification and action plan a minimum of 30 calendar days prior to the deliverable deadline. All requests for deliverable extension must be reviewed and approved by the WSIC Chief.

Deliverable – Objective 1: Attendance of FY23 Ohio Workforce Safety Innovation Grant Kick-Off Meeting

Description: The purpose of the FY23 Ohio Workforce Safety Innovation Grant Kick Off-Meeting is to review the goals, objectives, and expectations for the budget period. Attendees will have the opportunity to provide feedback and seek clarification for all outstanding inquiries.

Successful Completion of the Deliverable(s) Includes:
1. The recipient is required to attend the FY23 Ohio Workforce Safety Innovation Grant Kick Off-Meeting.
2. The PI, or designee, must register through BWC's preferred method of verification.

Objective 1.1: By July 15, 2022, the recipient must attend the FY23 Ohio Workforce Safety Innovation Grant Kick Off-Meeting as evidenced by the PIs, or designee's, registration through BWC's preferred method of verification. **(1%)**

Deliverable – Objective 2: Monthly Project Team Meetings

Description: Active participation in monthly project team meetings is crucial to information exchange and collaboration between the PI, Co PIs, key project personnel, and industry partners. It is important to disseminate information to align planning efforts for project progress, building relationships, and promoting team communication. It is equally important for BWC to maintain a comprehensive operating picture of the team landscape for the project. The PI is also expected to act as a liaison between BWC and project team members for meetings. The PI will gather feedback from the project team members and provide feedback to BWC (e.g., recommendations for quarterly Ohio Workforce Safety Innovation Grant agenda items, speakers, or topics).

Successful Completion of the Deliverable(s) Includes:
1. The PI, or designee, must facilitate each monthly project team meeting.

Objective 2.1: By July 22, 2022, the recipient must submit a calendar of the monthly project team meetings scheduled within the grant year via OIA. **(0.5%)**

Objective 2.2: By August 10, 2022, the recipient must submit a copy of the July Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.3: By September 9, 2022, the recipient must submit a copy of the August Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.4: By October 10, 2022, the recipient must submit a copy of the September Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.5: By November 10, 2022, the recipient must submit a copy of the October Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.6: By December 9, 2022, the recipient must submit a copy of the November Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.7: By January 10, 2023, the recipient must submit a copy of the December Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.8: By February 10, 2023, the recipient must submit a copy of the January Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.9: By March 10, 2023, the recipient must submit a copy of the February Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.10: By April 10, 2023, the recipient must submit a copy of the March Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.11: By May 10, 2023, the recipient must submit a copy of the April Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.12: By June 9, 2023, the recipient must submit a copy of the May Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Objective 2.13: By June 23, 2023, the recipient must submit a copy of the June Project Team Meeting sign-in sheet, agenda, copies of any presentations, and meeting minutes via OIA. **(0.5%)**

Deliverable – Objective 3: Quarterly Ohio Workforce Safety Innovation Grant Meetings

Description: The quarterly Ohio Workforce Safety Innovation Grant Meetings are a forum for BWC to disseminate information to the PIs. These meetings build relationships between BWC and PIs across the state and allow PIs to collaborate and learn from one another. Topics may include grant updates, upcoming deadlines, PI project updates, and more.

Successful Completion of the Deliverable(s) Includes:
1. Representation must be provided by the PI, or designee, at each quarterly grant meeting.
2. The PI, or designee, must register through BWC's preferred method of verification.

Objective 3.1: Q1: By September 30, 2022, the recipient will demonstrate representation at the quarterly grant meeting evidenced by the PI's, or designee's, registration through BWC's preferred method of verification. **(0.5%)**

Objective 3.2: Q2: By December 31, 2022, the recipient will demonstrate representation at the quarterly grant meeting evidenced by the PI's, or designee's, registration through BWC's preferred method of verification. **(0.5%)**

Objective 3.3: Q3: By March 31, 2023, the recipient will demonstrate representation at the quarterly grant meeting evidenced by the PI's, or designee's, registration through BWC's preferred method of verification. **(0.5%)**

Objective 3.4: Q4: By May 31, 2023, the recipient will demonstrate representation at the quarterly grant meeting evidenced by the PI's, or designee's, registration through BWC's preferred method of verification. **(0.5%)**

Deliverable – Objective 4: Project Management Plan

Description: The Project Management Plan provides PIs the opportunity to explain the objectives, goals, and planned activities of the project in more detail than the staffing plan that was submitted in the application. The Project Management Plan identifies all individuals and organizations participating in the project, their specific roles and responsibilities, and their time commitment to the project. The Project Management Plan must describe how the PI will maintain accountability for the individuals and organizations involved in the project. A concise organizational chart must be included showing the relationships and the lines of communication among the PI, the project team, BWC and all other project participants.

Successful Completion of the Deliverable(s) Includes:
Objective 4.1: By July 29, 2022, the recipient must submit a Project Management Plan via OIA. **(5%)**

Deliverable – Objective 5: Project Risk Assessment and Mitigation Plan

Description: Risk comprises two factors: the probability of its occurrence, and the consequences if it does occur. Identification and analysis of the project risks will assist the PI and the project team in making decisions to address the analyzed risks. A mitigation plan that identifies strategies based on the evaluated risks and the implementation of an effective risk management framework should reduce project risk exposure, effectively minimize the impact, and allow for clear decisions to be made during the project.

Successful Completion of the Deliverable(s) Includes:
Objective 5.1: By August 12, 2022, the recipient must submit a Project Risk Assessment via OIA. **(5%)**

Objective 5.2: By August 26, 2022, the recipient must submit a Mitigation Plan via OIA. **(5%)**

Deliverable – Objective 6: Project Communication Plan

Description: The project communication plan enables the PI the opportunity to communicate effectively, and in a timely manner, on the project, project results, and key outcomes with BWC, the project team, and other stakeholders who can apply the results for the benefit of Ohio's workforce. It sets clear guidelines for how information will be shared, as well as roles and responsibilities for who needs to be included in each project communication. In the recommendations for the dissemination of the project results, findings, and/or outputs, BWC encourages recipients to capitalize on some of the existing programs and services administered by BWC and the Division of Safety & Hygiene, including: the Ohio Safety Congress & Expo, the Ohio Safety Council Program, BWC safety consulting services, BWC safety education and training services, the BWC Library and Resource Center, Public Employment Risk Reduction Program, and OSHA On-Site Program.

Successful Completion of the Deliverable(s) Includes:
The Project Communication Plan must address the following questions:
1. Who are the target audiences for the final deliverable(s)?
2. Who are the end users of the project results, and what other BWC stakeholders might benefit from knowing the results?
3. What deliverables and communication activities are necessary to reach the target audiences effectively? What format, content, focus, and level of detail are appropriate?
4. When during the project should communication occur? Should there be interim communication activities before project completion?
5. Are there opportunities for joint or combined communication activities with those of other ongoing, related projects?

Objective 6.1: By September 9, 2022, the recipient must submit a Project Communication Plan via OIA. **(5%)**

Objective 6.2: By June 30, 2023, the recipient must submit evidence of dissemination of project results through conference presentations, journal publication and results posted to university and BWC websites/social media via OIA. **(2%)**

Deliverable – Objective 7: Quarterly Progress Reports

Description: The purpose of the quarterly progress report is to collect information about the project achievements and challenges during the quarter so BWC can measure these against the approved Project Plan and budget to identify how the project is performing. If the research project is not on track to be completed, the recipient will be required to submit additional progress reports, and additional conference calls or site visits as may be necessary on a case-by-case basis.

Successful Completion of the Deliverable(s) Includes:
1. Quarterly written progress reports describing the work completed during the quarter, timelines of the project in terms of completed tasks up to date, and the percent of progress towards completion of the project.
2. The report must also address the challenges and obstacles to the project, strategies for addressing the challenges, obstacles, and next steps.
3. If the role of any key staff, as outlined in the approved Project Plan, has changed, explain how and why it has changed.

Objective 7.1: Q1: By October 10, 2022, the recipient must submit the First Quarter Progress Report via OIA. **(10%)**

Objective 7.2: Q2: By January 10, 2023, the recipient must submit the Second Quarter Progress Report via OIA. **(10%)**

Objective 7.3: Q3: By April 10, 2023, the recipient must submit a Third Quarter Progress Report via OIA. **(10%)**

Objective 7.4: Q4: By June 16, 2023, the recipient must submit a Fourth Quarter Progress Report via OIA. **(10%)**

Deliverable – Objective 8: Interim Progress Report

Description: The purpose of the interim progress report is to provide a comprehensive update on the project, achievements, and challenges during project implementation, how the project is progressing and next steps.

Successful Completion of the Deliverable(s) Includes:
1. The interim report must describe the work completed during the first half of the project, timelines of the project in terms of completed tasks up to date, and the percent of progress towards completion of the project.
2. The interim report must also address the challenges and obstacles to the project, strategies for addressing the challenges and obstacles, any corrective actions, and next steps.
3. If a project goal due for completion within the first two quarters was not met, justification must be provided, along with what steps have been taken to get the project back on schedule, and any barriers to completion of the project by the end of the award/budget period. Favorable developments that will enable project goals to be realized sooner must be also be described.
4. Any changes that have been made, or are anticipated, to the project work plan or methodology must be described.

Objective 8.1: By January 10, 2023, the recipient must submit an Interim Progress Report via OIA. **(13%)**

Deliverable – Objective 9: Final Report and Project Presentation

Description: The purpose of the final report is to provide a comprehensive report about the project, project achievements and outcomes so BWC can measure these against the approved Project Plan to identify how the project performed and determine the value of continuing this type of work in the future.

Successful Completion of the Deliverable(s) Includes:
1. The final report must contain an executive summary and describe the Specific Aims outlined in the project proposal and the status of each.
2. The final report must describe the work completed during the project, collaborative efforts and industry partner involvement, the challenges and obstacles encountered during the project, strategies used to address the challenges and obstacles and areas for improvement.
3. Dependent on the track proposed for the project, the following track requirements must be addressed in the final report:
   a. **Track 1 - Proof-of Concept.** Include a summary of the emerging technologies investigated, PPE evaluated and findings, evaluation methods, evaluation results, user feedback, discussion of evaluation results, innovation feasibility, any other key findings, recommendations, next steps, and conclusion.
   b. **Track 2 - Proto-type.** Include a summary of the PPE innovation, design period, laboratory testing of physical prototypes by the recipient (efficiency testing, effectiveness

testing, comfort testing, etc.,), test results, user feedback, discussion of evaluation results, any other key findings, recommendations, next steps, and conclusions.
4. In a separate section, the final report must also address the six elements related to the r2p and PFI Focus section of this application.

Objective 9.1: By June 30, 2023, the recipient must submit a Final Report via OIA. **(15%)**

Objective 9.2: By June 30, 2023, the recipient must conduct an on-site project presentation to BWC. **(0.5%)**

Post Submission Requirements

Note: Failure to assure quality of reporting such as submitting incomplete and/or late deliverables or expenditure reports will jeopardize the receipt of future recipient payments.

a. **WSIC Grant Agreement:** The Agency leader will be required to sign a WSIC Grant Agreement once the application submitted in OIA has been approved, see Attachment #5 WSIC Grant Agreement Template.
b. **Internal Control Questionnaire (ICQ):** Recipients will be required to complete and submit an ICQ by 29 July 2022. WSIC will review the recipient's ICQ, schedule a mini-desk review, and the recipient will be required to submit support documentation for one quarter of the project period. The recipient will receive an email notification outlining the project being reviewed, the documentation needed and the date the documentation must be submitted by. The required support documentation may include but is not limited to receipts, contracts/agreements, invoices, and general and payroll ledgers.
c. **Deliverables:** Recipients will be required to complete and submit deliverables by the due dates listed.
d. **Recipient Expenditure Reports and Invoices:** Recipients will be required to submit quarterly expenditure reports and quarterly invoices in OIA by the following dates:

Report Period	Expenditure Report and Invoice Due Dates
July 1 – September 30, 2022	October 15, 2022
October 1 – December 31, 2022	January 15, 2023
January 1 – March 31, 2023	April 15, 2023
April 1 – June 30, 2023	July 15, 2023

Note: Obligations not reported on the final/4th quarter expenditure report will not be considered for payment with the final expenditure report.

The quarterly expenditure report must include the agency's name, Supplier/Vendor ID number, project number, project title, PI, project fiscal contact, and an itemized breakdown by budget category and budget line item including the approved amount in the project budget, obligated amount, actual expense, and amount remaining.

The quarterly Invoice must include the agency's name, billing address, Supplier ID/Vendor number, Purchase Order number, project number, project title, billing contact, and a breakdown by budget category of the amount expensed. In addition, the quarterly invoice must include a list of the deliverables completed within the quarter and the completion date of each.

e. **Final Expenditure Reports:** The Recipient Final Expenditure Report reflecting total expenditures for FY 2023 must be completed and submitted in OIA by 5:00 p.m. ET on or before September 15, 2023. The information contained in this report must reflect the recipient's accounting records and supportive documentation for any deliverables that had not been previously approved. Any cash balances must be returned with the Recipient Final Expenditure Report. The Recipient Final Expenditure Report serves as an invoice to return unused funds.
f. If the project is not on track to be completed, the recipient will be required to submit a corrective action plan, and additional conference calls or site visits may be scheduled as necessary on a case-by-case basis to review all records associated with this grant. Requests for deliverable extensions must be submitted in writing with a justification and action plan a minimum of 30 calendar days prior

to the deliverable deadline. All requests for deliverable extensions must be reviewed and approved by the WSIC Chief.

g. Recipients have a 30-day time period in which they must respond should a special condition be issued. Subsequent payments will be withheld until satisfactory responses to the special conditions or a plan describing how those special conditions will be satisfied is submitted.

h. Recipient will be required to review the WSIC website quarterly for updates about the WSIC grant, including meeting schedules and findings related to noncompliance issues or unallowable costs identified during desk or on-site reviews.

Submission of Proposals

Once an agency determines that it can comply with the requirements of this application, a **Notice of Intent to Apply for Funding (NOIAF) must be submitted via e-mail to WSIC by 5:00 p.m. ET. April 14, 2022** along with all form requirements at BWCWSIC@bwc.state.oh.us. Agencies will receive their initial authorization for Internet submission, after the posting of this application to the BWC website and the receipt of the NOIAF.

The following time frames have been established for completing the application process:

TASK	DATE
Application Posted	March 14, 2022
NOIAF Due	April 14, 2022
Applications Due	May 13, 2022
Notice of Award/WSIC Grant Agreement	July 1, 2022

Applicants must **complete and submit the application with all required uploads in OIA by 5:00 p.m. ET May 13, 2022**. OIA will provide a confirmation e-mail upon receipt of OIA application submission. If you do not receive a confirmation e-mail or if you have questions, please contact the WSIC at 614-644-1501 or via e-mail BWCWSIC@bwc.state.oh.us.

The application submission in OIA consists of the following:

Project Proposal Element Requirements	Page Limit/notes
Proposal Cover Sheet	1
Table of Contents	
I. Project Summary/Abstract	2
II. Performance Site(s), Resources, and Equipment	3
III. Key Personnel	3
IV. Biographical Sketch(es)	4 pages/person
V. Project Plan	20
VI. Project Budget	Must complete Attachment #2 Project Budget Template and upload in OIA. Must complete Attachment #3 Project Budget Justification, obtain Agency leader certification and upload in OIA.
VII. Project Timeline	

The Project Proposal must be uploaded in OIA as a MSWord file format or a pdf text searchable file format with all components except VI. Project Budget see VI. notes above.

Additional Application Requirements	Notes
Application Information • Agency Information • Project Information	Must be verified in OIA: Agency Information includes the agency address and contact information for the Agency leader, Agency Fiscal leader, and PI. Must be completed in OIA: Project information includes contact information for the PI and the Project Fiscal contact, the project title, project address, project start and end dates, project track, total amount requested for the project, and reimbursement type.
Industry Partner Letter	Must be uploaded in OIA. The letter must appear on the entity's letterhead and be signed by the appropriate representative of the entity/organization. The letter must describe the nature of the collaboration and how the collaboration brings additional value to the project.

Notice of Award

The overall point score for those proposals scored will determine the selected recipients, see Attachment #4 Application Review Form. No information will be released by BWC until the official announcement of the final selection decision.

- **Successful Applicants:** BWC will present successful applicants with a WSIC Grant agreement that will include the terms recited in Attachment #5 WSIC Grant Agreement template, and that must be signed by the Agency leader and submitted to BWC. The WSIC Grant agreement, upon signature of the BWC Administrator, shall be the official notification of award and shall allow for expenditure of grant funds.

- **Unsuccessful Applicants:** Within 30 days after a decision to disapprove or not fund a grant application that was submitted in OIA, written notification, issued over the signature of the Administrator, or her designee, shall be sent to the unsuccessful applicant.

ATTACHMENTS

Attachment #1 Notice of Intent to Apply for Funding Form

Attachment #2 Project Budget Template

Attachment #3 Project Budget Justification

Attachment #4 Application Review Form

Attachment #5 WSIC Grant Agreement Template

Attachment #6 WSIC Grant Administration Policies and Procedures Manual