Today’s CHIPS Program Office Speakers

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Chief of Staff and Head of Operations

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AGENDA & OBJECTIVES FOR TODAY

Agenda
• Reminder of CHIPS for America Vision – 5 mins
• Reminder of Application Process – 5 mins
• Deep Dives into Pre-Application Sections and Relevant Priorities – 45 mins
• Next Steps and Additional Resources – 5 mins

By the end, attendees should understand
• Why should applicants submit a pre-application
• What is required for a pre-application
• What we're looking for in a pre-application
• How to submit a pre-application
The CHIPS Act will strengthen supply chain security and increase economic resilience in critical sectors.

The CHIPS Act will ensure that the U.S. can manufacture advanced technologies, including secure chips for the U.S. military.

The CHIPS Act will spur innovation, increase competitiveness, and ensure long-term U.S. leadership in the sector.
Vision for Success

Leading-Edge Logic

✓ The U.S. will have at least two new large-scale clusters of leading-edge logic fabs

✓ U.S.-based engineers will develop the process technologies underlying the next gen of logic chips

Memory

✓ U.S.-based fabs will produce high-volume memory chips on economically competitive terms

✓ R&D for next-generation memory technologies critical to supercomputing and other advanced computing applications will be conducted in the U.S.

Advanced Packaging

✓ The U.S. will be home to multiple high-volume advanced packaging facilities

✓ The U.S. will be a global leader in commercial-scale advanced packaging technology

Current-Generation and Mature

✓ The U.S. will have strategically increased its production capacity for current-gen and mature chips

✓ Chipmakers will also be able to respond more nimbly to supply and demand shocks
Funding Opportunities

February 28, 2023

1st Notice of Funding Opportunity

For commercial leading-edge, current, mature node fabrication and back-end facilities

Focus of today’s webinar

Late Spring 2023

2nd Notice of Funding Opportunity

For material suppliers and equipment manufacturers

Fall 2023

3rd Notice of Funding Opportunity

To support the construction of semiconductor R&D facilities

Pre-Application submission is only available for applicants eligible for NOFO 1
## Eligible Commercial Fabrication Facilities

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Leading-Edge Logic &amp; Memory</strong></td>
<td>For logic, this currently includes facilities that produce semiconductors at high volumes using extreme ultraviolet (EUV) lithography tools. For memory, this currently includes facilities capable of producing 3D NAND flash chips with 200 layers and above, and/or dynamic random-access memory (DRAM) chips with a half-pitch of 13 nm and below.</td>
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<tr>
<td><strong>Current-Generation</strong></td>
<td>Produce semiconductors that are up to 28 nm process technologies, and include logic, analog, radio frequency, and mixed-signal devices</td>
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<tr>
<td><strong>Mature- Node</strong></td>
<td>Fabricate generations of - Logic and analog chips that are not based on FinFET, post-FinFET transistor architectures, or any other sub-28 nm transistor architectures - Discrete semiconductor devices such as diodes and transistors - Optoelectronics and optical semiconductors - Sensors</td>
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<tr>
<td><strong>Back-End Production</strong></td>
<td>Assembly, testing, or packaging of semiconductors that have completed the front-end fabrication process including advanced packaging</td>
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# Application Process

## Submissions accepted as of...

<table>
<thead>
<tr>
<th>Leading-edge</th>
<th>Current-gen, mature-node, and back-end</th>
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<tbody>
<tr>
<td>February 28, 2023</td>
<td>February 28, 2023</td>
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<tr>
<td>March 31, 2023</td>
<td>May 1, 2023</td>
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<tr>
<td>March 31, 2023</td>
<td>June 26, 2023</td>
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1. **Statement of interest (open to all)**

2. **Pre-application (optional)**

3. **Full application**

4. **Due diligence**

5. **Award preparation**

**Focus for today:**

- Leading-edge: March 31, 2023
- Current-gen, mature-node, and back-end: May 1, 2023
WHY SUBMIT A PRE-APPLICATION?

Objective
Create an opportunity for dialogue between CPO and the potential applicant and enable the applicant to receive feedback on its submission – to ensure applications meet program priorities

Outcome
At the conclusion of a pre-application review, CPO will provide a written assessment of

- Strengths and weaknesses of the pre-application
- Recommendations for next steps

Who should submit?

<table>
<thead>
<tr>
<th>Optional but Highly Recommended</th>
<th>Current-Generation Facility</th>
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<tbody>
<tr>
<td>Optional</td>
<td>Mature-Node Facility</td>
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<tr>
<td>Optional</td>
<td>Back-End Production Facility</td>
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<tr>
<td>Optional</td>
<td>Leading-Edge Facility</td>
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</table>
## PRE-APPLICATION REQUIREMENTS

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<tr>
<th>Requirement</th>
<th>Web Form</th>
<th>PDF Upload</th>
<th>Excel Upload</th>
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<tbody>
<tr>
<td><strong>A</strong> Cover Page</td>
<td>✔️</td>
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<tr>
<td><strong>B</strong> Project Plan</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td><strong>C</strong> Financial Information</td>
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<td><strong>D</strong> Environmental Questionnaire</td>
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<td><strong>E</strong> Workforce Development</td>
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<tr>
<td><strong>F</strong> Attestation &amp; Submission</td>
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</table>
How will the CHIPS Program Office protect confidential business information throughout the application process?

• We are instituting robust protocols, technology solutions, and organizational practices to keep all data safe, secure, confidential, and limited in distribution. Application data will be housed in a secure environment, upholding NIST’s FIPS 199 high impact requirements for cybersecurity and data protection.

• In general, applicant information will be accessible only to federal employees, consultants, and contractors who have a need to know, including application reviewers and key investment decision-makers, to carry out the government’s responsibilities in connection with the CHIPS Incentives Program, or as otherwise required by law.
Does CPO plan to review pre-applications and full applications in order of receipt?

Initial eligibility review will be performed in order of receipt, subsequent deeper reviews will be prioritized based on program priorities laid out in NOFO.
What constitutes a "covered incentive" from a state and local government?

- The CHIPS Act specifies that an applicant must have been offered a covered incentive from a state or local jurisdiction where the project is located for the purposes of attracting the construction, expansion, or modernization of the facility.
- Each applicant must provide a letter from a state or local government entity to demonstrate they have been offered a qualifying covered incentive.
- A “covered incentive” may take many forms, including a tax incentive, a workforce-related incentive, any concession with respect to real property, funding for research and development with respect to semiconductors, or any other incentive determined appropriate by the CHIPS Program Office.
**Cover Page**

- **Name of Application**: Descriptive name for application / project(s)

- **Applicant Organization Information**: Contact information for the applicant organization or consortium, SAM.gov account registration, UEI # (optional)

- **Applicant point of contact**: Contact information of applicant’s point of contact

- **Partnership information**: Information on potential partnerships with other entities

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*Pre-populated fields based on the SOI submission must be updated and verified for accuracy*

*UEI is required for award*

*This should be an Authorized Representative who can make commitments on behalf of the applicant*
PROJECT PLAN

Project(s) Plan Narrative
Summary description of the project(s) that is responsive to the program description and the Evaluation Criteria

Project(s) Information
Description of Project(s), Product End Market Application, Site location, Facility Type(s), Expected Total Capital Expenditures and estimated peak monthly unit production capacity for all proposed projects

Facilities Information
Number of facilities that will be within the scope of the application including name, brief description, technology type and expected construction and production start dates

Pre-populated fields based on the SOI submission must be updated and verified for accuracy
Program Priorities

- Economic and national security objectives
- Commercial viability
- Financial strength
- Technical feasibility and readiness
- Workforce development
- Broader impacts
Economic Security

SEEKING PROJECTS THAT
- Increase U.S. semiconductor production and align with U.S. strategic needs
- Create a more resilient semiconductor supply chain
- Build foundry or other capacity to serve many different customers
- Attract supplier, workforce, and other investments
- Contribute to a self-sustaining ecosystem and catalyze future upgrades

Leading-edge
- Use the most advanced tech and produce products that are most critical to enhancing U.S. competitiveness
- Commit to ongoing investment in U.S.

Current-generation and mature-node
- Support production of chips vital to automobiles, aerospace and defense, and other critical infrastructure
- Use processes that convert to make other types of chips in times of disruption

Back-end production
- Advanced packaging
National Security

SEEKING PROJECTS THAT

- Produce semiconductors that are relied upon by the Department of Defense, other government systems, or by critical infrastructure
- Support U.S. government national security needs, such as by providing U.S. government access to facility output, or adapting commercial production for low-volume and high-mix national security components
- Mitigate operational and cybersecurity risks
- Strengthen supply chain resilience by analyzing and managing risks to their own supply chains
- Ensure that foreign entities of concern will not pose undue risks
- Produce mature-node semiconductors that are then supplied to critical manufacturing industries
Commercial Viability

- Demand for the product
- Size / diversity of customer base
- Existing and planned supply
- Expected volume and pricing dynamics
- Ability to counter potential technological obsolescence of the facility
- Stability and predictability of key supplies
Financial Strength

- Financial strength of the applicant / parent
- Financial strength of the project
- Commitment of private/third-party investment
- Reasonableness / suitability of CHIPS funding request
Summary narrative of financial information for the applicant and the project(s)

Formal legal entity and organizational structure for the project

Information on project costs and capital sources via a descriptive narrative and via the spreadsheet template

For discussion in this Thursday’s webinar

Audited consolidated financial statements at fiscal year-end and any key performance metrics
FINANCIAL INFORMATION (2/2)

Summary Financials

Summary of the expected revenues, costs, and cash flows for the project, including key income statement, cash flow statement, and balance sheet information via a narrative and spreadsheet format for discussion in this Thursday’s webinar.

CHIPS Program Incentives Request

Web form

Summary of the type and amount of funding request and available credit ratings from borrowing entity and its corporate parent / sponsor.

- Narrative description for how the financial information submitted for the project(s) support program priorities
- Description of how the incentives requested were sized based on applicable analyses

Deep Dive on the next page

Summary Financials includes both a summary narrative in Word and an Excel.
The Financial Information sections above will be covered in detail in Thursday’s webinar.
Provide the requested information on the Environmental Questionnaire using the template available on the CHIPS Incentives Program application portal.

If an applicant chooses to submit a pre-application, the Environmental Questionnaire is a required portion of the submission; however, it can be preliminary and partially complete at this stage.
Frequently Asked Questions

How should applicants prepare for environmental review under National Environmental Policy Act (NEPA)?

The first step for potential applicants is to submit an environmental questionnaire as part of a pre- or full application. The environmental questionnaire will assist the CHIPS Program Office’s Environmental Division in assessing the likely level of NEPA review that will be required for the proposed project and allows the team to work with the applicant to ensure that all required environmental information is available as early as possible, which can help expedite the NEPA review process for potentially successful applications.

Will the CHIPS Program Office support applicants in the environmental review process?

Yes. The CHIPS Program Office’s Environmental Division will work with applicants and their third-party contractors in an iterative process to help ensure smooth and expeditious completion of the NEPA review process.
Summary with information on the three topics below regarding workforce development

- Approach to recruit, train, and retain a diverse and skilled set of workers
- The status and goals of discussions with relevant policy stakeholders
- Details on any conversations or planning done in concert with partners

Explanation and estimate of the number of jobs that will be created during the construction and production phases of the project(s)

Includes jobs that are both directly and indirectly involved in the construction activities for the construction, expansion, or modernization of a facility
Workforce Development Vision

Delivering on our national and economic security objectives demands major investments in the semiconductor workforce that will support good-paying jobs across the industry.

America’s diversity is a comparative advantage; we must make significant investments to create opportunities for Americans from historically underserved communities.

Effective workforce solutions enable key stakeholders to work together.
Strong Partnerships Critical to Project Success

Effective workforce investments rely on successful strategic partnerships, and partnerships will be critical to achieve CHIPS program goals.

Partners can help applicants:

- Attract new sources of talent
- Increase awareness of opportunities
- Provide wraparound supports
- Retain and grow the workforce

Applicants **must secure commitments** from strategic partners and are expected to engage with these partners on an **ongoing basis**.
HOW TO SUBMIT

Earliest submission for leading edge applicants
March 31, 2023

Earliest submission for current-generation, mature-node or back-end production facilities
May 1, 2023

May be submitted a minimum of 21 days following the submission of a Statement of Interest (SOI)

Submit the pre-application through applications.chips.gov

After Pre-Application Submission
The CHIPS Program Office will
✔ Send a confirmation email once the pre-application is submitted
✔ Review submission and may reach out for additional information or clarification
✔ Provide a written assessment with suggested next steps
Next Steps

- Submit a Pre-Application - *resources listed in the next page*
- Visit [CHIPS.gov](https://chips.gov) for additional resources
- Join our mailing list
- Contact us: [apply@chips.gov](mailto:apply@chips.gov) – application-related inquiries
- Upcoming webinars:
  - Overview of the Financial Information Required for Pre-App and Full App – Thur., April 13, 2023
  - Environmental Review – TBD Date
  - Partnerships – TBD Date

### Additional Resources Available

**General**
- [Pre-Application Instructions](#)

**Sources & Uses of Funds**
- [Pre-Application Sources and Uses Template](#)

**Summary Financials**
- [Pre-Application Example Financial Model White Paper](#)
- [Pre-Application Example Financial Model](#)

**Environmental Questionnaire**
- [Pre-Application Environmental Questionnaire](#)
Thank you