TODAY’S CHIPS PROGRAM OFFICE SPEAKERS

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Public Engagement

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Investments Office Chief of Staff and Head of Operations

Ben Schwartz
Director of National Security

Hassan Khan
Economic Security

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Investment Director

Hoshing Chang
Supervisory NEPA Coordinator

Reginald Hicks
Head of Facilities Workforce
AGENDA & OBJECTIVES FOR TODAY

Agenda
• Reminder of CHIPS for America Vision – 5 mins
• Reminder of Application Process – 5 mins
• Overview of Full Application Requirements – 5 mins
• Deep Dives into Full Application Sections and Relevant Priorities – 60 mins
• Next Steps and Additional Resources – 5 mins
• Q&A – 10 min

By the end, attendees should understand
• What is required for a full application
• What we’re looking for in a successful full application
• How to submit a full application
COMMERCIAL FABRICATION FACILITIES NOFO

The CHIPS Incentives Program - Commercial Fabrication Facilities NOFO is the official funding announcement document. Nothing in this presentation or the accompanying materials is intended to contradict or supersede information in the NOFO. The NOFO controls in the event of any conflicts.
CHIPS FOR AMERICA VISION

Economic Security
The CHIPS Act will strengthen supply chain security and increase economic resilience in critical sectors.

National Security
The CHIPS Act will support U.S. manufacture of high-quality and secure chips for defense and other critical infrastructure applications.

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

2nd Notice of Funding Opportunity

For material suppliers and equipment manufacturers

3rd Notice of Funding Opportunity

To support the construction of semiconductor R&D facilities

Full Application submission will be available for NOFO 1 eligible applicants
<table>
<thead>
<tr>
<th>ELIGIBLE COMMERCIAL FABRICATION FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leading-Edge Logic &amp; Memory</strong></td>
</tr>
<tr>
<td>- <strong>Logic</strong>: high-volume facilities capable of producing semiconductors using extreme ultraviolet (EUV) lithography tools</td>
</tr>
<tr>
<td>- <strong>Memory</strong>: 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>
</tr>
<tr>
<td><strong>Current-Generation</strong></td>
</tr>
<tr>
<td>Facilities capable of producing semiconductors that are up to 28 nm process technologies, and include logic, analog, radio frequency, and mixed-signal devices</td>
</tr>
<tr>
<td><strong>Mature- Node</strong></td>
</tr>
<tr>
<td>Facilities capable of fabricating generations of</td>
</tr>
<tr>
<td>- Logic and analog chips that are not based on FinFET, post-FinFET transistor architectures, or any other sub-28 nm transistor architectures</td>
</tr>
<tr>
<td>- Discrete semiconductor devices such as diodes and transistors</td>
</tr>
<tr>
<td>- Optoelectronics and optical semiconductors</td>
</tr>
<tr>
<td>- Sensors</td>
</tr>
<tr>
<td><strong>Back-End Production</strong></td>
</tr>
<tr>
<td>Facilities for assembly, testing, or packaging of semiconductors that have completed the front-end fabrication process including advanced packaging</td>
</tr>
</tbody>
</table>
APPLICATION PROCESS

1. Statement of interest (*open to all*)
2. Pre-application (optional)
3. Full application
   - Feedback
4. Due diligence
5. Award preparation

<table>
<thead>
<tr>
<th>Submissions accepted as of...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading-edge</td>
</tr>
<tr>
<td>February 28, 2023</td>
</tr>
<tr>
<td>March 31, 2023</td>
</tr>
<tr>
<td>March 31, 2023</td>
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</tbody>
</table>

Focus for today
Because the full application is resource-intensive, the applicant should strongly consider any pre-application feedback when deciding whether to prepare and submit a full application…. If a potential applicant has submitted a pre-application, it should not submit a full application until after it receives written feedback on the pre-application.

- CFF NOFO Section 1. B.
FULL APPLICATION OBJECTIVE

Objectives

- Create opportunity to be considered for CHIPS Incentives Awards
- Enable evaluation of proposed project(s)
- If selected, negotiate preliminary terms of potential award

The applicant will not be considered for award until a complete full application is submitted
EVALUATION CRITERIA

- Economic and national security objectives
- Commercial viability
- Financial strength
- Technical feasibility and readiness
- Workforce development
- Broader impacts
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Submission Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Cover Page</td>
<td>Basic applicant, application, and contact information</td>
<td></td>
</tr>
<tr>
<td>B Covered Incentive</td>
<td>Letter from state or local gov’t. demonstrating covered incentive agreement</td>
<td></td>
</tr>
<tr>
<td>C Description of Project(s)</td>
<td>Detailed project description</td>
<td></td>
</tr>
<tr>
<td>D Applicant Profile</td>
<td>Detailed applicant information, financial statements, equity capital structure, and outstanding debt</td>
<td></td>
</tr>
<tr>
<td>E Alignment with Economic and National Security Objectives</td>
<td>Description of how the project(s) meet economic and national security objectives</td>
<td></td>
</tr>
<tr>
<td>F Commercial Strategy</td>
<td>Overview of end-markets, market position, competitors, and supply chain</td>
<td></td>
</tr>
<tr>
<td>G Financial Information</td>
<td>Sources &amp; uses, financial models, scenarios, &amp; incentives/loan requests</td>
<td></td>
</tr>
<tr>
<td>H Project Technical Feasibility</td>
<td>Technology viability, construction plan, and environmental questionnaire</td>
<td></td>
</tr>
<tr>
<td>I Organization Information</td>
<td>Detailed org., management, and consortium information (if applicable)</td>
<td></td>
</tr>
<tr>
<td>J Workforce Development Plan</td>
<td>Facility &amp; construction workforce needs and strategy</td>
<td></td>
</tr>
<tr>
<td>K Broader Impacts</td>
<td>Impacts on industry, local, and national communities</td>
<td></td>
</tr>
<tr>
<td>L Standard Forms</td>
<td>Additional forms relating to lobbying, foreign interests, and other development information</td>
<td></td>
</tr>
<tr>
<td>Name of Application</td>
<td>Application organization information</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• As part of applicant org. info, Unique Entity Identifier (UEI) from SAM.gov is an optional field, however, it is required to receive an award</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• We recommend starting the SAM.gov registration process as early as possible, as it may take 6 months or more</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicant Organization Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Application organization information</td>
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<tr>
<td></td>
<td>• As part of applicant org. info, Unique Entity Identifier (UEI) from SAM.gov is an optional field, however, it is required to receive an award</td>
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</table>

<table>
<thead>
<tr>
<th>Applicant Point of Contact</th>
<th>Partnership information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• List all entities you anticipate partnering with in a meaningful way</td>
</tr>
<tr>
<td></td>
<td>• Partnerships are important in demonstrating potential to engender a productive, efficient, and self-sustaining ecosystem (e.g., with suppliers, customers, third-party financing, and workforce)</td>
</tr>
</tbody>
</table>
**Covered Incentive Letter**

- A covered incentive letter is required for a full application.
- A “covered incentive” may take many forms, including a tax incentive for the purposes of constructing, expanding, or modernizing a facility within that jurisdiction, a workforce-related incentive, or any concession with respect to real property, funding for semiconductor R&D, or any other incentive determined appropriate by the CPO.
- Workforce or community investment and covered incentives **prior to the release** of the funding opportunity **will be accepted**.
<table>
<thead>
<tr>
<th>Description of Projects</th>
<th>Cluster Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consortium Description (if applicable)</td>
<td>- Describe how the project will attract supplier, workforce, and other related investments, thus creating a more productive, efficient, and self-sustaining ecosystem and catalysing future upgrades and expansions.</td>
</tr>
<tr>
<td>Cluster Profile</td>
<td>- The CHIPS program office vision for success includes at least two new large-scale clusters of leading-edge logic fabs.</td>
</tr>
<tr>
<td>Project Timeline</td>
<td>Summary Narrative Addressing Evaluation Criteria</td>
</tr>
<tr>
<td>Summary Narrative Addressing Evaluation Criteria</td>
<td>- Summarize how the project supports the six evaluation criteria (ECs) laid out in the NOFO.</td>
</tr>
<tr>
<td>CHIPS Incentives Justification</td>
<td>CHIPS Incentives Justification</td>
</tr>
<tr>
<td></td>
<td>- Explain how the CHIPS Incentives requested will incentivize the applicant to make investments in facilities and equipment in the United States that would not occur in the absence of the incentives.</td>
</tr>
</tbody>
</table>
If the applicant is a subsidiary, the applicant should provide information for themselves, their ultimate corporate parent, and any key intermediate entities.

Submit audited consolidated financial statements at fiscal year-end for each of the last 5 years.

If available, submit interim financial statements for the current fiscal year.

Include key financial metrics laid out in NOFO section IV.1.4.
## ALIGNMENT WITH ECONOMIC AND NATIONAL SECURITY OBJECTIVES

<table>
<thead>
<tr>
<th>Narrotive Description of how project meets Economic and National Security objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting Uploads (optional)</td>
</tr>
</tbody>
</table>

**Narrative Description**

Description of how project(s) meet Economic and National Security objectives laid out in Section I.C.1 of the NOFO

**Supporting Uploads**

- Cybersecurity - evaluation vs. cybersecurity framework<sup>1</sup>, security risk assessment
- Supply chain resilience and risk management plan
- Foreign ownership, control or influence risk self-identification

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## National Security

Improve the safety and security by supporting U.S. manufacture of a dependable supply of trustworthy products, and protecting the data and technologies critical to the security of the U.S.

<table>
<thead>
<tr>
<th>Products</th>
<th>Facilities</th>
<th>Supply Chains</th>
</tr>
</thead>
</table>
| • Useable in Defense and Critical Infrastructure  
• Secure by design (e.g. anti-tamper / anti-counterfeit) | • Ability to detect and mitigate variety of security risks  
• Robust security plan and milestones that identifies applied regulations, certifications, standards, etc. | • Level of visibility and control of the supply chain  
• Supply Chain Risk Management Plan that addresses foreign entities of concern, chokepoints, and counterfeits. |
# 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
- Will not happen in the absence of incentives
- Attract supplier, workforce, and other investments
- Contribute to a self-sustaining ecosystem and catalyze future upgrades

<table>
<thead>
<tr>
<th>Leading-edge</th>
<th>Current-generation and mature-node</th>
<th>Back-end production</th>
</tr>
</thead>
</table>
| • Utilize the most advanced production technology and produce advances chips most critical to enhancing U.S. competitiveness  
• Commit to ongoing investment and regular updates in U.S. facilities | • Support production of chips vital to manufacturing, healthcare, defense industrial base, and other critical economic infrastructure  
• Resilient supply chain that withstands and adapts to disruptions | • Establish U.S. technology leadership in advanced packaging for both logic and memory  
• Support U.S. competitiveness by lowering the cost of conventional packaging in the U.S. |
COMMERCIAL STRATEGY

End-market Demand Information
- Demonstrate customer demand (examples might include evidence of pre-purchase commitments, list of top 10 customers)

Market Position and Competitor Landscape
- Assess key competitors, market dynamics, and market exposures

Stability of Supplies and Materials
- Describe strategies to ensure long-term existence of stable and predictable sources of materials

Improvement Plans
- Describe existing plans and resourcing for continued investment
### Commercial Viability Evaluation Criterion #2

<table>
<thead>
<tr>
<th>Demand for the product</th>
<th>Size / diversity of customer base</th>
<th>Existing and planned supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected volume and pricing dynamics</td>
<td>Ability to counter potential technological obsolescence of the facility</td>
<td>Domestic content preferences</td>
</tr>
</tbody>
</table>
FINANCIAL INFORMATION

- **Project Sources and Uses of Funds**
  - Include CHIPS incentives request and ITC as sources

- **Project Financial Statements and Metrics**
  - Applicants are not required to use the provided financial model template
  - The pre-application model template is not suitable for full application submissions

- **Scenario Analysis**

- **Incentives Request**

- **Loan or Loan Guarantee Request (optional)**
  - Applicants are not required to apply for CHIPS loans or loan guarantees, however, they are encouraged to maximize alternative financing sources
## Evaluation Criterion #3

### Financial Strength

<table>
<thead>
<tr>
<th>Financial strength of the applicant/parent</th>
<th>Financial strength of the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment of private / third party investment</td>
<td>Reasonableness / suitability of CHIPS funding request</td>
</tr>
</tbody>
</table>
Funding Instruments & Allocation

Funding Availability

- Direct funding
- Loans
- Loan guarantees

Total funding

For CHIPS Direct Funding, up to $38.2B available in total

Funding by project

Direct funding expected to be 5-15% of project capital expenditures

For CHIPS Loans and Loan Guarantees, up to $75B in total in direct loan or guaranteed principal

Expected total amount of a CHIPS Incentives Award expected not to exceed 35% of project capital expenditures

Alternate funding sources:
- Private Investments
- Investment Tax Credit (26 U.S.C. § 48D)
- State & Local Incentives
PROJECT TECHNICAL FEASIBILITY

Technology and Manufacturing Processes
• Detailed description of the core underlying technologie(s) and manufacturing processes, their respective level of maturity and the applicant’s relevant experience and expertise

Construction Plan
• As part of the construction plan, submit an inventory of all Federal, state, and local permits, licenses, and approvals, including environmental authorizations

Environmental Questionnaire
• If applicable, update previously submitted questionnaire and resubmit
• The environmental team will work closely with you after submission of the questionnaire
<table>
<thead>
<tr>
<th><strong>ORGANIZATION INFORMATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership, Legal Entity, and Organizational Structure</strong></td>
</tr>
<tr>
<td>• Submit a chart showing parent companies, subsidiaries, affiliates and other relevant entities, including associated ownership of those entities</td>
</tr>
<tr>
<td><strong>Managerial Capacity</strong></td>
</tr>
<tr>
<td>• Disclose any future mergers or changes to corporate structure</td>
</tr>
<tr>
<td><strong>Consortium Applications</strong></td>
</tr>
<tr>
<td><strong>Past Project History</strong></td>
</tr>
<tr>
<td><strong>Intellectual Property Security</strong></td>
</tr>
<tr>
<td><strong>Litigation and / or Conflicts</strong></td>
</tr>
<tr>
<td><strong>Advisors and Key Partners</strong></td>
</tr>
</tbody>
</table>

- IRRs reported as part of past project history should reflect both projected and realized IRRs.
Technical Feasibility and Readiness

Evaluation Criterion #4

Organizational Readiness
Technology and Manufacturing Processes

Construction Plan
Environmental Risk
ENVIRONMENTAL REVIEW: PERMITTING AND NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

1. Submit an environmental questionnaire (EQ) with app
   (see "Overview of the EQ", May 11 webinar)

2. CHIPS environmental review team will use the EQ to ensure required information is provided for our environmental review

3. CHIPS environmental team will engage in an iterative process with applicants
WORKFORCE DEVELOPMENT PLAN OVERVIEW

- **Facility Workforce Plan**
  - Describe strategic partnerships with workforce organizations
  - Describe strategies to retain a diverse and skilled workforce

- **Construction Workforce Plan**
  - Disclose any planned Project Labor Agreement (PLA’s)
  - Demonstrate history of compliance with Federal labor laws and safe workplaces

- **Child Care Requirements**
  - Required only for projects requesting >$150MM in direct funding
  - Identify Partners & Operating Models, and any wraparound services plans
Evaluation Criterion #5

Workforce Development

Recruit, hire, train, and retain a diverse and skilled construction and manufacturing workforce

Create & Identify good jobs by type, required skills, & numbers of workers

Include DEI Metrics that include women, people of color, veterans, and inclusive leadership models

Align the metrics and data to the hiring needs / gaps and link to strategic partnership

Provide milestones that create line of site to Good Job Principles
Strong Partnerships Critical to Project Success

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

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

Partners can help applicants:

- Provide Letters of Commitment
- Identify financial resources to fund workforce development
- Provide workforce development plans to meet the facility requirements
- Retain and grow the workforce through Registered Apprenticeship programs

 Applicants must secure commitments from strategic partners and are expected to engage with these partners on an ongoing basis.
Overview of Broader Impacts Narrative

- Commitments to future investment in the US semiconductor industry
- Buyback commitment
- Support for semiconductor research and development, including NSTC, NAPMP, and Manufacturing USA
- Supplier diversity plan
- Climate and environmental responsibility plan
- Community investments
- Plan to utilize domestically produced iron, steel, and construction materials
Broader Impacts

Evaluation Criterion #6

Commitments to future investment
Support for semiconductor R&D
Inclusive opportunities for businesses
Climate and environmental responsibility
Community investments
Domestic content preferences
### STANDARD FORMS

<table>
<thead>
<tr>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF-328</td>
<td>Certificate Pertaining to Foreign Interests</td>
</tr>
<tr>
<td>CD-511</td>
<td>Certification Regarding Lobbying</td>
</tr>
<tr>
<td>SF-LLL (if applicable)</td>
<td>Disclosure of Lobbying Activities</td>
</tr>
<tr>
<td>SF-424 (if applicable)</td>
<td>Application for Federal Assistance</td>
</tr>
<tr>
<td>S-424C and SF-424D (if applicable)</td>
<td>For the construction component of projects</td>
</tr>
<tr>
<td>SF-424A (if applicable)</td>
<td>For the construction component of projects</td>
</tr>
</tbody>
</table>

**Legend**
- PDF Upload
- Excel Upload
- Web Form

**Image:**
- CHIPS for America

**Source:**
- National Institute of Standards and Technology | U.S. Department of Commerce

**Page Number:** 34
HOW TO SUBMIT

Earliest submission for leading edge applicants
March 31, 2023

Earliest submission for current-generation, mature-node or back-end production facilities
June 26, 2023

Submit the full application through applications.chips.gov

After Full Application Submission
The CHIPS Program Office may engage to
✓ Provide automatic confirmation of receipt
✓ Seek further information or clarification
✓ Provide feedback on scope of the proposed project and the amount of CHIPS Incentives requested
✓ If applicable, negotiate the preliminary terms of a potential award
Next Steps and Additional Resources

**Next Steps**

- Submit a Full Application
- Visit [CHIPS.gov](http://CHIPS.gov) for additional resources
- Join our mailing list
- Contact us: apply@chips.gov – application-related inquiries
- Upcoming webinars: Overview of the Financial Information Required for Full App

**Additional Resources Available**

**Instruction Guide**
- Full Application Instructions
- Cover Page
  - Cover Page Instructions

**Incentives Request**
- Incentives Request Instructions
- Incentives Request Offline Template

**Financial Model**
- Guiding Principles for Full Application Financial Model

**Sources and Uses**
- Sources and Uses of Funds Instructions
- Sources and Uses Offline Template

**Environmental Review**
- Environmental Questionnaire

**Workforce Development**
- Workforce Development Planning Guide
I submitted a pre-application but haven’t heard back yet. Can I submit a full application?

- We strongly encourage applicants to consider any pre-application feedback when deciding whether to prepare and submit a full application.
- This does not mean that applicants must wait, however, waiting for feedback is highly encouraged given the amount of effort required to prepare the full application.
I have most of my application materials prepared, but don’t yet have my covered incentive letter. Can I still submit?

- A covered incentive letter is required for a full application.
- This letter must include the estimated size and nature of the incentive and any contingencies, if applicable.
- Prior to receiving a CHIPS Incentives Award, the applicant may be required to provide additional information demonstrating to the Department’s satisfaction that the covered incentive has been or will be received.
How soon should I expect to hear a final decision after I submit my full app?

The timing for full application review and due diligence will vary from project to project and will depend on the nature and quality of each application.
I didn’t submit an SOI or a pre-application, am I able to submit a full application?

- Potential applicants must submit a statement of interest with a brief description of the planned application. Statements of interest must be submitted a minimum of 21 days before submission of a pre-application or a full application.
- Potential applicants are highly encouraged, although not required, to submit a pre-application prior to submitting a full application. This optional pre-application phase creates an opportunity for dialogue between the Department and the potential applicant to ensure the proposed application would meet program requirements and address program priorities.
Thank You