CHIPS for America
Notice of Funding Opportunity Launch

Briefing with the National Governors Association – CHIPS Funding for Commercial leading-edge, current and mature-node fabrication facilities

March 15, 2023
WELCOME

• We look forward to your questions. We will answer as many questions as possible today.

• Visit CHIPS.gov
  • Get the Notice of Funding Opportunity
  • Access additional resources for applicants and stakeholders
  • Sign up for email updates
  • Register for webinars
Today's Speakers

Michael Schmidt
Director of the CHIPS Program Office

Morgan Dwyer
Chief Strategy Officer

Todd Fisher
Chief Investment Officer

Ayodele Okeowo
Director of Intergovernmental Affairs
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 ensure that the U.S. can manufacture advanced technologies, including secure chips for the U.S. military.

**Future Innovation**

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

### $39 billion for manufacturing

**Components:**

1. Attract large-scale investments in advanced technologies such as leading-edge logic and memory
2. Incentivize expansion of manufacturing capacity for mature and other types of semiconductors

### $11 billion for R&D

- National Semiconductor Technology Center
- National Advanced Packaging Manufacturing Program
- Manufacturing USA institute(s)
- National Institute of Standards and Technology measurement science

Together with CHIPS initiatives from other agencies, including DOD, State, NSF, and Treasury

---

**Workforce development**
CHIPS Incentives Program Objectives

• Strengthen security and resilience of the semiconductor supply chain
• Provide a supply of secure semiconductors for national security
• Improve resilience of semiconductor supply chains for critical industries
• Bolster the semiconductor and skilled technical workforces
• Strengthen U.S. leadership in semiconductor technology
• Promote inclusion of economically disadvantaged individuals and small businesses
• Grow the U.S. economy and support job creation
We have spent the last 6 months preparing for this milestone.
First Funding Announcement*

Released on February 28, 2023

*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.
Funding Opportunities

Today

1st Notice of Funding Opportunity

For commercial leading-edge, current, and mature node fabrication 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

Statements of Interest for all funding opportunities encouraged starting today
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
Accomplishing these objectives requires:

- Catalyzing private investment
- Protecting taxpayer dollars
- Building a skilled and diverse workforce
- Engaging with U.S. partners and allies
- Driving economic opportunity and inclusive economic growth
Funding Eligibility

For organizations that are...
- private
- non-profit
- consortia

that can substantially...
- construct
- expand
- modernize

a U.S. facility for...
- fabrication
- assembly
- testing
- packaging
- production

of...
- semiconductors

*More details available in the funding opportunity announcement*
Covered Incentives From State or Local Governments

- An eligible entity must have been offered a covered incentive from a state or local jurisdiction where the project is located, for the purposes of construction, expansion, or modernization of the facility.

- Examples of this can be:
  - Concessions related to real property
  - Workforce pipeline and technical training investments
  - Funding for research and development with respect to semiconductors
  - Investments in industrial infrastructure that specifically support the proposed project, but that also could support broader development of a supplier ecosystem such as shared utility, logistics, and production capacity
This funding announcement contains:

- Program objectives and priorities
- Funding instruments
- How to apply
- Application evaluation and selection processes
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
Guardrails

- Funds may not be provided to a foreign entity of concern.
- Recipients will be required to agree to restrict their ability to expand semiconductor manufacturing capacity in foreign countries of concern for ten years.
- Recipients must not knowingly engage in any joint research or technology licensing effort with a foreign entity of concern that involves sensitive technologies or products.
- Failure by CHIPS incentives recipients to comply with these restrictions may result in recovery of the full amount of funding.
Commercial Viability

- Demand for the product
- Size / diversity of customer base
- Expected volume and pricing dynamics
- Ability to counter potential technological obsolescence of the facility
- Existing and planned supply
- 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
Technical Feasibility and Readiness

Organizational readiness

Technology and manufacturing processes

Construction plan

Environmental risk
CPO Environmental Review, NEPA Compliance & Environmental Permitting

- CPO environmental questionnaire mandatory for all applications
  - Form environmental questionnaire forthcoming
  - CPO encourages potential applicants to submit the environmental questionnaire with pre-application
  - CHIPS environmental review team will use the environmental questionnaire to assess environmental risks and merits of application
  - Upcoming webinars will provide detailed information
- NEPA Compliance:
  - Applicants are encouraged to begin assessing potential environmental impacts for NEPA purposes as soon as possible
- Environmental Permitting (Federal, State and Local):
  - Applicants are encouraged to begin assessing potential environmental impacts for permitting purposes as soon as possible
  - Collaboration and dialogue with permitting authorities can help ensure projects stay on schedule while remaining safe, environmentally friendly, and otherwise compliant with relevant laws

The Department intends to prioritize applications that demonstrate a clear path to meeting these permitting requirements in a timely manner.
Workforce Development

Create good jobs

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

Include women and economically disadvantaged individuals

Engage with community partners

Child care
Broader Impacts

Commitments to future investment
Support for semiconductor R&D
Inclusive opportunities for businesses
Climate and environmental responsibility
Community investments
Domestic content preferences
Upside sharing
Funding Instruments

Funding Availability

Direct funding

Loan guarantees

Loans

Total funding

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

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

Funding by project

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

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

Total funding

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

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

No funds may be used to construct, modify, or improve a facility outside of the U.S.

Funds may not be used to physically relocate existing facility infrastructure to another jurisdiction in the U.S., unless the project is in the national interest.

Public funds cannot be used for stock buybacks or dividend payments.

Recipients of funds may not charge above the actual costs incurred in executing the award’s approved scope of work.

Funds to be returned if taxpayer funds are misused.
## Application Overview

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>Highly iterative and dynamic</td>
</tr>
<tr>
<td>✔️</td>
<td>Substantial back and forth between the CPO and applicant</td>
</tr>
<tr>
<td>✔️</td>
<td>Applications accepted on rolling basis</td>
</tr>
<tr>
<td>✔️</td>
<td>Holistic review process</td>
</tr>
<tr>
<td>✔️</td>
<td>Multiple projects can be on the same application; a single applicant can submit multiple applications</td>
</tr>
<tr>
<td>✔️</td>
<td>CPO takes extremely seriously the importance of protecting confidential business information</td>
</tr>
</tbody>
</table>
# Application Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Leading-edge</th>
<th>Current-gen, mature-node, and back-end</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Statement of interest <em>(open to all)</em></td>
<td>February 28, 2023</td>
<td>February 28, 2023</td>
</tr>
<tr>
<td>2</td>
<td>Pre-application (optional) <strong>Feedback</strong></td>
<td>March 31, 2023</td>
<td>May 1, 2023</td>
</tr>
<tr>
<td>3</td>
<td>Full application</td>
<td>March 31, 2023</td>
<td>June 26, 2023</td>
</tr>
<tr>
<td>4</td>
<td>Due diligence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Award preparation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Statement of Interest (SOI)

Purpose
Help CPO gauge interest in the program and the types of projects and applicants applying, and prepare to review applications

The SOI will not be evaluated for purposes of review and selection of awards

What is needed?
• Applicant information
• Basic project information including nature of the project and potential scope
• Estimated timeline for next submission
• 1 SOI per application

All applicants eligible for funding across any funding opportunity

Earliest submission on February 28, 2023
Required 21 days before next submission

Submit an SOI via CHIPS.gov
Pre-Application

Purpose
Create an opportunity for dialogue between CPO and the potential applicant before preparation of full application to ensure it is ready to meet program requirements and address program priorities.

What is needed?
• More detailed description of proposed project(s)
• Summary financial information (refer to NOFO section IV.H.3)

Strongly recommended for current-generation, mature-node, or back-end production facilities.

Earliest submission for leading edge applicants: March 31, 2023

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

Purpose
Submit a full application to be officially considered for a CHIPS Incentive Award

What is needed?
• Detailed information on the proposed project(s) to enable evaluation of its merits
• Detailed financial modelling (refer to NOFO section IV.1.7)
• CPO will make use of available benchmarks in the semiconductor industry

Required for all applicants

Earliest submission for leading-edge applicants: March 31, 2023

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

If CPO determines that a full application is reasonably likely to receive an award and there is, or likely will be, agreement on a **Preliminary Memorandum of Terms**, the application will enter the due diligence phase.

**What is needed?**
- Validation of national security, financial, and other information
- Possible engagement of outside advisors; applicants will be asked if they are willing to cover costs before moving to this stage

**Award Issuance**

The Department will prepare and issue one or more CHIPS Incentive Awards for applications selected for funding. Specific terms and conditions will vary by award.

**When will these funds be disbursed?**
- Disbursements will be tied to project milestones
- Project milestones will be determined during the application process
- Milestones will vary by project
Next Steps
Next Steps

• Potential applicants can submit a Statement of Interest¹
• Visit CHIPS.gov for resources, including:
  • Notice of Funding Opportunity
  • Vision for Success paper
  • Applicant guides and templates
  • FAQs and fact sheets
  • Webinar schedule (and recordings of prior webinars)
• Join our mailing list
• Contact us
  • askchips@chips.gov – general inquiries
  • apply@chips.gov – application-related inquiries

1. Statements of Interest are welcome beginning Feb. 28, 2023 for all three funding opportunities
Question and Answers