

Funding Opportunity – Commercial Fabrication Facilities GUIDE: Instruction Guide for Full Application Web Forms OMB Control #0693-0094, Expiration Date 09/30/2023

Introduction:

This document provides instructions and guidance for those filling out a full application as part of the CHIPS Incentive Program <u>Notice of Funding Opportunity for Commercial Fabrication Facilities</u>. If a preapplication has been submitted by a potential applicant, the full application should not be submitted until feedback has been received on the pre-application. Statements of Interest must be submitted at least 21 days prior to submitting a pre-application or full application. Submission of a pre-application is recommended for applications for current-generation, mature-node, back-end production, wafer manufacturing or materials and manufacturing equipment facilities for which capital expenditure are greater than or equal to \$300M to serve as an opportunity for the Department to provide meaningful feedback to applicants before they prepare a full application package.

Applicants should make efforts to complete the process of registering for the System for Award Management (SAM.gov), including obtaining a Unique Entity Identifier (UEI), prior to submitting a full application. Applicants are strongly encouraged to begin the process of registering for SAM.gov as early as possible. The Department is unable to issue a CHIPS Incentives Award to an entity that lacks an active <u>SAM.gov</u> registration.

This document pertains to the following Web Form Questions in the Full Application Portal:

- Acknowledgement
- Project Plan Web Form Questions
- Sources and Uses of Funds Web Form Questions
- CHIPS Incentives Request Web Form Questions
- Workforce Development Information Web Form Questions
- Attestation and Submission

Please refer to the <u>CHIPS Incentives Program—Commercial Fabrication Facilities Notice of Funding</u> <u>Opportunity</u> (CHIPS-CFF NOFO) section IV.I. and the <u>FAQs</u> and other guidance materials on the CHIPS website, or email <u>apply@chips.gov</u> with additional questions about submitting a full application package.

Throughout the review process, the Department may request additional information and/or revisions regarding your submission.



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0. Acknowledgement

Instructions: In the web portal, you must complete the acknowledgement section of the full application before you can access the rest of the full application. By completing this section, you acknowledge that:

"Any communication, data, or other information stored or transmitted on this system may be accessed and used by federal employees, consultants and contractors in accordance with Section IV.C. of the CHIPS Incentives Program – Commercial Fabrication Facilities Notice of Funding Opportunity (CHIPS-CFF NOFO). By voluntarily furnishing information through this system, the applicant consents to such access and use."

1. Cover Page Web Form

Instruction for completing the full application cover page are located at this link: <u>https://www.nist.gov/document/chips-nofo-commercial-fabrication-facilities-cover-page-instructions</u>

2. Project Plan Web Form Questions

Instructions: In the web portal, update the answers to the following questions that were submitted in the statement of interest or pre-application (whichever is more recent for the applicant) to reflect the most up-to-date details of the projects.

Note, a "project" is a set of capital expenditures for the construction, expansion, or modernization of a single facility. A project also includes any related workforce development or operating expense costs for the project facility that the applicant proposes to cover with CHIPS Incentives funds. An application may include more than one project, covering separate facilities, if the facilities are within a single location and under common ownership and control.

- **Description of Project(s):** Provide a description of the construction, expansion, or modernization activities for each proposed facility at a single location; resulting products that will be manufactured, along with information on the scale, size, and capacity of production, and any known timelines (maximum 3000 characters).
- **Product End Market Application:** Provide a description of the types of customers and end markets that will be served by the technology being produced from each proposed facility (maximum 500 characters).
- Site location: Provide the City, State, and Zip Code where the proposed facility or facilities will be located. If you do not know the full 9-digit zip code, enter "0000" for the last four digits.
- Expected Total Project Capital Expenditures (Min, Max)
 - Provide an estimated range of total project capital expenditures (provide minimum and maximum with the narrowest range possible) for all facilities in the application. Total project capital expenditures refer to expenses incurred in the



construction or improvement of physical assets, such as the costs of land, building and construction, equipment and installation, physical improvements, and working capital during the construction phase. Applicants should provide the estimated range on a best-effort basis that will be needed for all projects in the application. Figures provided are expected to be preliminary high-level estimates and should be refined with greater detail in future application steps.

- Applicants may optionally provide commentary on the expected total capital expenditures for all proposed projects range, which could include a description of the key cost drivers, an explanation if the range provided is large, or other supporting details (maximum 500 characters).
- Estimated peak monthly unit production capacity: Provide an estimated number of units per month produced when the facility reaches peak production. Specify what the units being produced are (e.g., wafers per month, components per month).
 - If the facility will not have any production capacity, leave the box blank and select "Not Applicable."

a. Facilities Information Questions

Instructions: In the web portal, complete all questions related to the facility or facilities that will be included in this application. A "facility" used in the context of this application refers to a leading-edge, current-generation, mature-node commercial fabrication facility, or back-end production facility that will be constructed, expanded, or modernized as a result of this project.

- According to the NOFO, an application may include one or more facilities that are / will be on the same site. For each facility for this application, click 'Add New Facility'
 - Additional questions are required to be answered individually for each facility:
 - **Provide a name for the Facility:** Provide a name for the facility that corresponds to the way the facility will be referenced in application materials.
 - **Project type:** that best describes the activities that will be completed at the facility (i.e., construction, expansion, or modernization)
 - **Facility Type:** Choose from the provided options to indicate the type of this facility. Only one type may be selected:
 - Leading-Edge Facilities that utilize the most advanced front-end fabrication processes for logic, 3D NAND Flash, and Dynamic Random-Access Memory (DRAM) semiconductors.
 - Current-Generation Facilities that produce semiconductors that are not leading edge, up to 28 nm process technologies, and include logic, analog, and mixed- signal devices.





- Mature-Node Facilities that fabricate generations of: (a) logic and analog chips that are not based on FinFET, post-FinFET transistor architectures, or any other sub-28 nm transistor architectures; (b) discrete semiconductor devices such as diodes and transistors; (c) optoelectronics and optical semiconductors; and (d) sensors.
- Wafer Manufacturing Facilities for the high-volume production of semiconductor wafers, including wafers made from silicon, silicon carbide, and gallium nitride. These facilities are the sites of ingot production and wafer slicing, lapping, polishing, cleaning and inspection.
- Semiconductor Materials and Manufacturing Equipment Facilities (if project capital expenditures are greater than or equal to \$300 million included in this NOFO, otherwise included in future NOFO) according to the descriptions below
 - Semiconductor Materials Facilities for the manufacture or production, including growth or extraction, of materials used to manufacture semiconductors, which are the chemicals, gases, raw and intermediate materials, and other consumables used in semiconductor manufacturing.
 - Semiconductor Manufacturing Equipment Facilities for the physical production of specialized equipment integral to the manufacturing of semiconductors and subsystems that enable or are incorporated into the manufacturing equipment.
- Back-end Production Facilities for the assembly, testing, or packaging of semiconductors that have completed the front-end fabrication process.
- Other: if "other" is selected for Facility Type, provide a description for the facility in the space provided
- **Technology Type:** Choose from the provided options to indicate the type of this facility. Only one type may be selected. Refer to the NOFO section I.B.1 for more descriptions of the eligible technology types for each facility.
- **Estimated peak monthly unit production capacity:** Provide an estimated number of units produced per month when the facility reaches peak production. Specify what the units being produced are (e.g., wafers per month, components per month).
- Note the expected construction start date for this facility: Enter the month and year for the beginning of this facility's construction activities as they pertain to new construction, expansion, or modernization. If construction has already begun, enter the date construction began.
- **Note the expected production start date for this facility:** Enter the month and year for when construction, expansion, or modernization activities will be completed





and the facility will begin or resume production, after completion of this project.

- If the facility will not have any production capacity, leave the box blank and select "Not Applicable."
- Provide a description for the facility, with defining characteristics of the units produced in the facility (e.g., 13nm DRAM wafers, 40nm Logic wafers, etc). You may also use this space to describe the back-end production activities, if applicable to this facility.

3. Sources and Uses of Funds Web Form Questions

Instructions: Applicants should first download and complete the CHIPS Full Application Sources and Uses Excel Template for this project:

For Applications for Front-End and Back-End Commercial Fabrication Facilities: use the template at the following link: <u>https://www.nist.gov/document/chips-nofo-commercial-fabrication-facilities-full-application-offline-template-sources-and</u> and access corresponding instructions to complete the template at the following link: <u>https://www.nist.gov/document/chips-nofo-commercial-fabrication-facilities-sources-and-uses-full-application-offline-template-fabrication-facilities-sources-and-uses-full-application-offline-template-fabrication-facilities-sources-and-uses-full-application-facilities-sources-and-uses-full-application-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-application-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-sources-and-uses-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-full-fabrication-facilities-fabrication-facilities-fabrication-facilities-fabrication-facilitie</u>

funds-instructions

For Applications for Semiconductor Materials, and Semiconductor Manufacturing Equipment, and Wafer Manufacturing Facilities: use the template at the following link: <u>https://www.nist.gov/document/full-application-sources-and-uses-funds-template-</u> <u>semiconductor-materials-semiconductor</u> and access corresponding instructions to complete the template at the following link: <u>https://www.nist.gov/document/full-applicant-sources-and-uses-funds-instructions- semiconductor-materials-semiconductor</u>

Using the completed template, applicants should enter the corresponding figures in the Sources and Uses of Funds section of the Full Application Portal. Please ensure the values entered for sources and uses match the numbers submitted in the uploaded document as well as the CHIPS Incentives request form. Applicants will also be required to submit the completed CHIPS Sources and Uses of Funds Excel template by uploading in the Full Application Document Uploads section in the Full Application Portal.

For each box in the form, enter in the exact same value from the correspondingly named cell in the S&U – Summation across projects sheet in the uploaded Excel template.

- Please enter the total Project Uses Schedule (from the completed excel template) into the fields on Sources and Uses of Funds Form Page 1
- Please enter the total Project Sources Schedule (from the completed excel template) into the fields on Sources and Uses of Funds Form Page 2 and Page 3
- For State and Local Government Incentives, sum together the expected grants, loans, tax credits, and other incentives from those sources and enter as a single value in the form.





4. CHIPS Incentives Request Web Form Questions

Instructions: In the full application web portal, provide a summary of the funding request and available credit ratings in the CHIPS Incentives Request Web Form. Please refer to the Notice of Funding Opportunity (NOFO) Section IV.H.3 – Financial Information: CHIPS Incentives Request for an overview of the requirements for this portion of the application.

**Please note that the Department of Commerce will make final determinations on the form and amount of any CHIPS Incentives award. This information is being provided to help the Department understand the Applicant's estimate of required financial assistance.

<u>A) CHIPS Incentives Request Summary</u> – In the web portal, indicate whether you are requesting for Direct Funding, CHIPS Loan, and/or a CHIPS Loan Guarantee. For any of those that you select "Yes" for, you will see an additional corresponding page to provide a summary of the amount of funding requested. Please ensure information provided in this form matches the corresponding CHIPS Direct Funding, CHIPS Loans, and Guaranteed portion of Third-party Loans Guaranteed by CHIPS Program sections in the "S&U – Summation across projects sheet" sheet in the Sources and Uses of Funds Excel template and web form.

Guidelines for CHIPS Loans and Loan Guarantees - Please see NOFO Section I.B.8 for further details:

- <u>Interest Rate</u>: The interest rate on a CHIPS Loan will generally be based on the cost of funds to the Department of the Treasury for obligations of comparable maturity plus a portion of the spread to the market rate for commercial loans or debt of similar risk, tenor, and terms.
- <u>Tenor</u>: Loans will generally be extended for a term that covers the construction period plus up to 15 years. The maximum tenor is 25 years.
- <u>Structure</u>: Loans will be available on both a corporate and project finance basis, depending on the legal structure and nature of the project.
- <u>Amortization</u>: Corporate finance loans will generally be bullet loans repayable at maturity. Project finance loans will generally be non-amortizing during the construction period of a project and then amortizing until maturity.
- <u>Prepayment</u>: CHIPS Loans may be prepaid at the election of the borrower, subject to prepayment periods, waiting periods, and other terms to be agreed upon.

The specific terms of a CHIPS Loan Guarantee will be subject to negotiation with the applicant and the third-party lender(s). While the extent of the loan guarantee will vary based on the financing requirements and risk characteristics of a transaction, loan guarantees are not expected to cover more than 80% of any third-party debt obligation. CHIPS Loan Guarantees will be subject to comparable underwriting and diligence standards as CHIPS Loans.

CHIPS Direct Funding: Indicate whether direct funding will be requested. If requested, enter the expected amount to be requested in dollars.





CHIPS Loan: Indicate whether a CHIPS loan will be requested. If the application includes a request for a loan:

- Provide the dollar amount requested
- Provide the requested tenor of the loan (not to exceed 25 years)
- Indicate whether the financing structure of the loan will be "Corporate Finance" or "Project Finance."
 - <u>Corporate Finance</u> implies debt is incurred at the parent of development company level, with debt secured at the development company-level.
 - <u>Project Finance</u> implies that debt is secured at the project companylevel to finance the project
- Optionally, provide other requested terms for the requested CHIPS loan (e.g., details on amortization schedule, deferred interest option, pre-payment, seniority, collateralization, fixed vs floating interest rate type).
- To the extent that requested terms differ from the baseline terms in Section I.B.8 of the NOFO, the CHIPS Incentives Request summary uploaded by the applicant should include a justification.

CHIPS Loan Guarantee: Indicate whether a CHIPS loan guarantee will be requested. If the application includes a request for a loan guarantee:

- Add a loan guarantee request by selecting the "Add Loan Guarantee" button. Enter the following information:
 - Provide the total size of the loan in dollars
 - If known, provide the third-party lender (include all lenders if the loan is syndicated)
 - Provide the amount of the loan requested to be guaranteed in dollars (not to exceed 80% of the total size of the loan)
 - Provide the requested tenor of the loan guarantee (not to exceed 25 years)
- Verify that the calculated loan guarantee summary fields correctly reflect the loan guarantee information entered
- Optionally, provide other known or requested terms for the loan requested to be guaranteed (e.g., details on amortization schedule, deferred interest option, pre- payment, seniority, collateralization, fixed vs floating interest rate type).
- To the extent that requested terms differ from the baseline terms in Section I.B.8 of the NOFO, the CHIPS Incentives Request summary uploaded by the applicant should include a justification.





<u>B) Credit Rating Summary</u> – Provide the most recent credit ratings applicable to the borrowing entity and its corporate parent / sponsor, if available. If credits ratings are not available, please enter N/A for the name of the agency, N/A for the rating, and select any date.

- Borrowing entity for Project: Enter details such as entity name, SAM.gov unique enterprise identifier (if available), mailing address, and organization website. Some fields may be auto populated from other sections and the applicant should verify the information is correct.
- **Corporate Parent / Sponsoring Entity:** If applicable, provide details for the corporate parent or sponsoring entity that houses the entity that will borrow from the CHIPS program.
- **Credit Rating of Borrowing Entity:** If the borrowing entity has received a long-term corporate credit rating from a credit rating agency, indicate the name of the agency, the rating, and the date the rating was released. Provide the most recent rating for any agency which has rated the entity's corporate creditworthiness.
- **Credit Rating of Corporate Parent / Sponsoring Entity:** If the corporate parent / sponsoring entity has received a long-term corporate credit rating from a credit rating agency, indicate the name of the agency, the rating, and the date the rating was released. Provide the most recent rating for any agency which has rated the entity's corporate creditworthiness.

5. Workforce Development Web Form Questions

Instructions: In the web portal complete all required questions related to workforce development.

- Provide an estimate of the number of jobs that will be created in the United States during the construction phase of the project(s). Do not include any jobs that will be performed outside of the United States.
 - **Direct jobs on the construction site(s)**: Enter an estimate for the number of jobs that will be directly involved in the construction activities for the construction, expansion, or modernization of a facility. Examples include laborers and foremen for construction activities.
 - Indirect jobs: Enter an estimate for the number of jobs that will be indirectly involved in the construction activities for the construction, expansion, or modernization of a facility. Examples include contracted equipment suppliers and technicians, architects and engineers consulted.
 - **Provide an explanation of your job creation estimates above.** Provide any assumptions, sources, or other explanations for the estimates included for direct or indirect jobs created.
- Provide an estimate of the number of jobs that will be created during the production phase of the project(s). Do not include any jobs that will be performed outside of the United States.
 - **Direct jobs in production:** Enter an estimate for the number of jobs that will be





directly involved in the operation of the facility or facilities. This includes all employees of the entity that will be onsite for activities relating to manufacturing, overhead, research & development, and administration.

- Indirect jobs: Enter an estimate for the number of jobs that will be created in the broader ecosystem as a result of operating the facility or facilities. Examples include incremental needs for materials suppliers (e.g., silicon, chemicals, consumables), utilities suppliers, contractors for equipment needs (e.g., cleaning and repair), product transport, etc.
- **Provide an explanation of your job creation estimates above.** Provide any assumptions, sources, or other explanations for the estimates included for direct or indirect jobs created.





6. Full Application Document Uploads

Instructions for completing the Full Application Document Upload section are included within each question in the portal. Please also refer to CHIPS-CFF NOFO Section IV.I. for helpful information to complete these requirements. The following uploads will be requested of applicants:

Section	Document Upload	Recommended File Type
Covered Incentive	Covered Incentive	PDF
Project Plan	Description of Project(s)	PDF
Applicant Profile	Descriptive Information about	PDF
	the Applicant	
	Company Financials	PDF or Excel
	Equity Capital Structure	PDF or Excel
	Outstanding Debt	PDF of Excel
Alignment with Economic	Alignment with Economic	PDF
Resilience and National Security	Resilience and National Security	
Objectives	Objectives	
Commercial Strategy	Commercial Strategy	PDF
Financial Information	Detailed Description of Financial	PDF
	Plan	
	Project Sources and Uses of	Completed Excel Template
	Funds	
	Project Cash Flow, Income	Excel or similar file type
	Statement, and Balance Sheet	
	Projections, and Relevant	
	Metrics for each Project	
	Scenario Analysis	PDF and/or Excel
	CHIPS Incentives Request	PDF
	Narrative	
	CHIPS Loan or Loan Guarantee	PDF
	Request	
Project Technical Feasibility	Project Technical Feasibility	PDF
	Description	
	Environmental Questionnaire	PDF
Organization Information	Ownership, Legal Entity, and	PDF
	Organizational Structure	
	Managerial Capability	PDF
	Consortium Applicants	PDF
	Past Project History	PDF
	Intellectual Property Security	PDF
	Litigation and/or Conflicts	PDF





Norkforce Development Plan	PDF
Proador Impacts	
bioauer impacts	PDF
F-328, Certificate Pertaining to	PDF
oreign Interests	
CD-511, Certificate Regarding	PDF
obbying	
F-LLL, Disclosure of Lobbying	PDF
Activities	
Other Forms [Optional]	PDF
5F 50 50 57 57	reign Interests 0-511, Certificate Regarding bbying -LLL, Disclosure of Lobbying tivities

7. Attestation and Submission Web Form Questions

In the web portal, you must complete the attestation and certifications before you can submit the full application. By completing this section and submitting the application you acknowledge the following statements.

The CHIPS Program Office (CPO) recognizes the importance of protecting confidential business information and will follow all applicable laws to protect such information, including, for example, the CHIPS Act, the Trade Secrets Act, and the Freedom of Information Act. Please refer to Section IV.C. of the **CHIPS Incentives Program – Commercial Fabrication Facilities** Notice of Funding Opportunity (CHIPS-CFF NOFO) for a further discussion of these laws.

Submission Certifications:

□ The individual submitting the Full Application certifies on behalf of the applicant entity that the applicant information and data submitted and the representations made in the Full Application are true, complete and accurate, to the best of the applicant's knowledge and belief after due inquiry.

□ The individual submitting the Full Application certifies on behalf of the applicant that the applicant understands that CPO and the Department of Commerce will rely on the accuracy and completeness of the application information and data submitted and the representations made in the Full Application and that any false, fictitious or fraudulent statement or representation made in the Full Application may be the basis for rejection of the Full Application or subject the applicant to criminal, civil, or administrative penalties. (18 U.S. Code, Section 1001.)

□ The individual submitting the Full Application certifies on behalf of the applicant that the applicant understands that any applicant information and data contained in the Full Application may be accessed and used by federal employees, consultants and contractors in accordance with CHIPS-CFF NOFO, Section IV.C. (Confidential Information).

□ The individual submitting the Full Application certifies that they possess the full legal power and authority to submit the Full Application and make the preceding certifications on behalf of the applicant.





Public Communications:

□ The individual submitting the Full Application agrees that neither the applicant entity nor any of its affiliates may disclose to third parties the status of the Full Application or the contents of any communications from CPO or the Department of Commerce without CPO's prior written consent.

□ The individual submitting the Full Application certifies that they possess the full legal power and authority to bind the applicant.

8. Burden Statement

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0693-0094. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 125 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are mandatory to be eligible for CHIPS Act Funding. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the National Institute of Standards and Technology at Cierra Bean, Business Operations Specialist, askchips@chips.gov.

