

The National Semiconductor Technology Center The vision for 2024

In February 2024, the Biden-Harris Administration announced it expects to invest **over \$5 billion in the National Semiconductor Technology Center (NSTC)** to advance President Biden's goals of driving innovation in the United States. As part of the implementation of the CHIPS and Science Act and the President's Investing in America agenda, these investments sustain and advance U.S. leadership in semiconductor R&D, cut down on the time and cost of commercializing new technologies, bolster U.S. national and economic security, and connect and support workers in securing good-paying semiconductor jobs.

A historic and long-lasting investment, the NSTC is one of CHIPS for America's Research and Development (R&D) programs. As a public-private consortium, the NSTC is where members will have access to an investment fund, facilities, partners, and additional funding opportunities to research, test, and scale-up semiconductor technologies and workforce activities. The NSTC shall be a thriving semiconductor research center that shall serve as an engine of innovation for decades to come.

The NSTC is operated by Natcast, a purpose-built, non-profit entity. Natcast works in tandem with the CHIPS NSTC Program, which sits within the Department of Commerce.

To bring this vision to life, CHIPS for America has moved intentionally.

2023	2024
 ✓ Presented NSTC Vision and Strategy ✓ Natcast, a non-profit organization, was independently established ✓ Engaged with stakeholder and participated in public events 	Early ✓ Announced an anticipated \$5 billion investment in the NSTC ✓ Signed the consortium agreement establishing the NSTC with federal agency partners ✓ Natcast selected as the operator of the NSTC ✓ Natcast launched a pre-membership program ✓ Broadcasted a fireside chat with CHIPS R&D and Natcast ✓ Announced a series of early R&D funding opportunities ✓ Natcast released an RFI on facilities to gauge industry demand ✓ Roadmap Summer ✓ Facilities Model and Selection Process ✓ Workforce Center of Excellence Initiatives Announced ✓ NSTC initial R&D funding call for proposals for AI-based RF design ✓ NSTC R&D Proposer's Day for RF Design ✓ R&D funding call for proposals for development for test vehicles Fall □ Update on Facilities Search □ NSTC R&D Proposer's Day for test vehicles □ Open Membership
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Building on our Progress in 2024



Announcing the NSTC Facilities Model and Selection Process – Summer 2024

The NSTC and its facilities will benefit the whole country by boosting research and innovation that is unique in scale, breadth, and focus. As with all of the NSTC priorities, the consideration of facilities is driven by stakeholder engagement.

In March 2024, Natcast released a Request for Information (RFI) to gather community input on use cases for facilities and capabilities, and to gauge market demand. RFI responses will help inform the requirements for potential NSTC facilities. An announcement will be made about the facility model and selection process in Summer 2024.



Launching Workforce Center of Excellence – Summer 2024

The Department of Commerce expects to invest hundreds of millions of dollars in the NSTC's workforce efforts, including the creation of a Workforce Center of Excellence to support efforts across the country.

The Center of Excellence will ensure students and workers at all stages of life have access to education and training for good-paying jobs in the semiconductor industry. Among others, activities will include:

- Building a community of stakeholders and enabling resource sharing among employers, educational institutions, and training providers, including community and technical colleges, workforce development boards, universities, labor organizations, research organizations and registered apprenticeship programs.
- Using research and data to identify and promote innovative solutions, guide future investments, and inform the development of capacity-building initiatives.
- Piloting new efforts and scaling effective and equitable education and workforce development programs, including initiatives to engage students, educators, and underserved communities.

We expect to launch the Workforce Center of Excellence in Summer 2024.



Releasing Initial R&D Funding Opportunities – June 2024

The NSTC has identified initial R&D programs which will kick start the process of delivering impactful results through early investments in projects with a near term time horizon. Approximately \$100 million will be available to fund the first set of external teams. The first two

topics selected are Al-based Radio Frequency (RF) Design and Test Vehicles.

In selecting initial R&D topics, CHIPS and Natcast prioritized short duration, high impact topics that will engage multiple parts of the semiconductor ecosystem including government, industry, entrepreneurs, and more. Funding competitions for these projects is expected to launch in early summer 2024 with a second competition expected to be released later in the summer.



Opening Membership – Fall 2024

To directly address the needs of the semiconductor ecosystem, the NSTC is purpose built and member driven. Interested parties can join the Community of Interest, a zero-cost, pre-

membership program, for interested stakeholders to provide input into the anticipated membership structure and program offerings of the NSTC.





240+ entities have signed up, including:

- Industry and industry associations
- Academia
- Workforce organizations and labor unions
- Government Agencies, Labs, Consortia
- Investors and Incubators
- Non-Technical organizations and service providers

Future members may include industry, industry associations, academia, workforce organizations, federal, state & local governments, labor unions, and think tanks and research consortiums.

A membership structure for the NSTC is expected to be announced in Summer 2024 and open for applications by Fall 2024.

For more information sign up for email updates: https://natcast.org/ and email info@natcast.org for general inquiries.

