STATE OF NORTH CAROLINA

Coalition Support & Resource Guide

OFFICE OF SCIENCE, TECHNOLOGY, AND INNOVATION

Department of Commerce November 2024



CONTENTS

ACKNOWLEDGEMENTS	3
ACRONYMS	3
A LETTER FROM THE OFFICE OF SCIENCE, TECHNOLOGY, AND INNOVATION	4
PURPOSE OF THE COALITION SUPPORT & RESOURCE GUIDE	5
An Overview of OSTI/BSTI	6
Current Landscape of Federal Grants and Coalitions in North Carolina	6
Significant Rural Population	7
Defense Innovation	7
Domestic Manufacturing of Innovative Technologies	8
Economic and Workforce Development	8
A ROADMAP THROUGH THE GUIDE	9
Defining Coalitions	9
Best Practices for Coalitions	10
Next Steps	10
The Appendix	10
DEFINING COALITIONS.	11
The Importance of Coalitions in North Carolina	
Advantages of Coalitions	
COALITION INTAKE FORM & EVALUATION MATRIX	13
The Process Flow	13
Purpose of the Coalition Intake Form	13
The Intake Form	13
Explanation of Scores	16
Resources Available Based on Scoring	17
Evaluation Matrix	18
BEST PRACTICES FOR COALITIONS	22
Building a Coalition's Identity	22
Collaborations and Partnerships	27
Tracking Progress	29
Strategic Planning	31
NEXT STEPS	
Coalition Application	32
Next Steps for the State	32
REFERENCES	35
APPENDIX	



ACKNOWLEDGEMENTS

The North Carolina Office of Science, Technology, and Innovation (OSTI) and the North Carolina Board of Science, Technology, and Innovation (BSTI) would like to express its sincere gratitude to the North Carolina Biotechnology Center, the North Carolina Commercial Leap Ahead for Wide Bandgap Semiconductors (NC CLAWS), and the Carolinas Innovation Center for Optics and Metrology (CICOM). These groups generously shared their experiences, providing invaluable feedback on how OSTI and BSTI can aid technology Coalitions as they grow. This Guide would not exist without their contributions.

OSTI and BSTI would also like to extend its appreciation to every BSTI board member for their guidance as OSTI and BSTI work together to empower technology Coalitions within the state. Their unique insights have emphasized the importance of OSTI and BSTI's role in fostering connections and supporting technology Coalition goals.

Finally, OSTI and BSTI would like to acknowledge the ongoing work of all technology Coalitions within North Carolina. Their commitment to advancing innovation and driving economic development within the state is second-to-none, and their contributions will shape North Carolina's future for years-to-come.



commerce.nc.gov/sti

ACRONYMS

BIL - Bipartisan Infrastructure Law

BSTI - Board of Science, Technology, and Innovation

CHIPS - Creating Helpful Incentives to Produce Semiconductors Act

CICOM - Carolinas Innovation Center for Optics and Metrology

CLAWS - North Carolina Commercial Leap Ahead for Wide Bandgap Semiconductors

CPO - CHIPS Program Office

DoD - Department of Defense

EDA - Economic Development Administration

IRA - Inflation Reduction Act

KPI - Key Performance Indicator

NC CLAWS - North Carolina Commercial Leap Ahead for Wide Bandgap Semiconductors

NIH - National Institutes of Health

NIST - National Institute of Standards and Technology

NOFO - Notice of Funding Opportunity

NSF - National Science Foundation

OSTI - Office of Science, Technology, and Innovation

R&D - Research and Development

SME - Subject Matter Expert

A LETTER FROM THE OFFICE OF SCIENCE, TECHNOLOGY, AND INNOVATION

OSTI and BSTI are dedicated to developing technology-driven Coalitions that propel advancements in research and economic growth across the state. Recognizing the significant advantages of well-coordinated public-private partnerships, North Carolina is prioritizing the formation of technology-based Coalitions that can compete for federal funding opportunities related to infrastructure and advanced manufacturing projects statewide. This focus is reflected in the newly developed *Coalition Support and Resource Guide*. Drafted by an expert third-party team from Deloitte, the team's research grounds the Guide's recommendations in effective, proven practices in Coalition-building, organizational structuring, and grants management.

The Guide provides a structured path for Coalitions of all maturity levels to create partnerships centered around technology initiatives. Coalitions that can align resources and demonstrate strategic capacity are more likely to secure funding through competitive programs such as the Creating Helpful Incentives to produce Semiconductors Act (CHIPS), the Bipartisan Infrastructure Law (BIL), and the Inflation Reduction Act (IRA). Advanced manufacturing projects, such as semiconductor fabrication and microelectronics facilities, are prime candidates for funding through the CHIPS Act, given their emphasis on technology, production capacity, and supply chain resilience. Similarly, infrastructure projects would align well with the goals of IRA and BIL. With the Evaluation Matrix included in the Guide, organizations can self-assess their internal structure and their readiness for managing substantial federal funding opportunities, ultimately improving their Coalition's ability to secure these funds.

The Guide also takes a tiered approach to support, providing targeted encouragement, depending on a Coalition's stage of development. This structured approach helps all Coalitions contribute to North Carolina's high-tech growth trajectory, regardless of starting point and

maturity level. Additionally, Deloitte has compiled existing resources for BIL, CHIPS, and IRA programs, allowing Coalition members access to the tools necessary to navigate these opportunities effectively. With access to a curated list of federal funding resources, Coalition members have a clear path to navigate funding landscapes and prepare competitive applications.

A primary feature of the Coalition Support and Resource Guide is a section devoted to strengthening Coalition structures. This section provides actionable insights on how Coalitions can optimize their leadership, their staff, and their governance practices to improve and enhance collaboration potential. By establishing a Coalition ecosystem statewide, BSTI and OSTI aim to strengthen individual Coalitions and enhance the state's ability to compete for substantial federal funding. This strategic approach to Coalition-building is set to drive transformative economic growth and foster innovation, fortifying North Carolina as a strong contender for advanced manufacturing and infrastructure project funding. Through this roadmap for Coalition-building, North Carolina's technology sector is well-positioned to create significant economic impacts statewide.

Recommendations have been provided to strategically improve state resources that enable and empower technology Coalitions in North Carolina. These recommendations focus on leveraging North Carolina's existing strengths in research, education, and industry while also identifying areas for enhanced support, so the state remains competitive in the technology landscape. By fostering collaboration and supporting workforce and research initiatives, North Carolina can position itself as a national leader in technology-driven economic development.

Thank you for your consideration and support.



PURPOSE OF THE COALITION SUPPORT & RESOURCE GUIDE

The Coalition Support and Resource Guide has been written with the objective of equipping organizations with the essential knowledge and skills required to grow their technology-based Coalitions. Using the Guide, Coalitions may optimize internal organizational structures and learn to manage grant funding across varying levels of complexity.

The State of North Carolina stands at a pivotal moment where supporting the work of the OSTI/BSTI can yield significant benefits, including:

- Foster Innovation: Coalitions bring together diverse stakeholders, fostering an environment of collaboration and innovation. This can lead to groundbreaking advancements in technology and other sectors.
- Enhance Economic Development: Increased funding and innovation translate to job creation, business growth, and overall economic development. Supporting OSTI/BSTI helps ensure that North Carolina remains competitive and prosperous.
- Promote Sustainable Growth: By building strong Coalitions and implementing efficient practices, North Carolina can create sustainable growth models that benefit communities across the state, fostering accountability and supporting long-term prosperity.
- Attract More Funding: Coalitions are powerful vehicles for securing federal and private funding. By supporting OSTI/BSTI, North Carolina can increase its share of grants and investments, driving economic growth and innovation.

Supporting OSTI/BSTI's work is not just an investment in Coalitions; it's an investment in North Carolina's future. By fostering collaboration, securing funding, and driving innovation, the state can position itself as a leader in technology and economic development.

Essential Takeaway: Supporting the development of Coalitions is crucial for the state of North Carolina as it can significantly increase the state's ability to attract federal and private funding, drive innovation, and promote economic growth. By investing in this Guide and OSTI/BSTI's efforts, North Carolina can sustain momentum towards a prosperous future.





An Overview of OSTI/BSTI

OSTI operates as full-time staff within the Department of Commerce, while BSTI serves as a volunteer board providing advisory support and advocacy. The mission of OSTI/BSTI is to improve the economic well-being and quality of life for all North Carolinians by advancing science, technology, and innovation. Established by the North Carolina General Assembly in 1963 and revised to its current form under the Department of Commerce in 2001, OSTI has a long history of fostering technological advancement. The office, which has always had staff and an executive director, was formally named OSTI in 2001 when it transitioned from the Department of Administration to the Department of Commerce to better align its work with the state's economic development efforts. OSTI/ BSTI identifies funding opportunities, provides letters of support, and offers in-kind support, but cannot provide direct financial assistance. Instead, it acts as an honest broker and facilitator, showcased, for example, by its support of the One North Carolina Small Business Program. OSTI and BSTI work hand in hand, with OSTI executing the mission and strategies developed by BSTI, which is why the institutions are collectively referred to as "OSTI/BSTI" throughout this narrative.

Essential Takeaway: The work of OSTI/BSTI is crucial for North Carolina's future. By advancing science, technology, and innovation, OSTI/BSTI helps to create high-quality jobs, attract new businesses, and foster a culture of innovation that can drive long-term economic growth. The office's efforts help North Carolina remain competitive in a rapidly evolving global economy, particularly in high-tech and emerging industries. Moreover, OSTI/BSTI's Coalition work is vital in bringing together diverse stakeholders to address complex challenges collaboratively. By aiding in the formation and in the maturation of Coalitions, OSTI/BSTI leverages collective resources, expertise, and influence to achieve objectives that individual entities might struggle to accomplish alone. This collaborative approach not only supports economic development within the state, but also enhances the quality of life for North Carolina residents through technological advancements and innovation.

Current Landscape of Federal Grants and Coalitions in North Carolina

North Carolina has a rich history of leveraging federal funding programs to drive innovation and economic growth. The strategic utilization of federal funds has been instrumental in transforming various sectors within the state, from education and research to technology and infrastructure.

Recently, there has been a significant increase in federal funding opportunities that align to OSTI/BSTI's mission of advancing science, technology, and innovation. Some examples of these opportunities include:

 Creating Helpful Incentives to Produce Semiconductors (CHIPS):

Goal: To boost U.S. semiconductor manufacturing, Research and Development (R&D), and workforce development.

• Inflation Reduction Act (IRA):

Goal: To promote clean energy, enhance climate resilience, expand healthcare coverage, and support economic growth through sustainable practices.

Bipartisan Infrastructure Law (BIL):

Goal: To rebuild and enhance infrastructure across the country. Focus areas include transportation, broadband expansion, and clean water projects.

These three laws represent a massive investment in American competitiveness, providing more than \$2 trillion in authorized federal funding and incentives. They seek to rebuild infrastructure and strengthen the domestic semiconductor industry – all while promoting job growth and workforce development.¹ While the opportunities are significant, there are also unique complexities related to these federal programs, including navigating subsequent regulatory requirements, ensuring proper allocation and management of funds, and coordinating amongst various stakeholders to maximize the impact of these investments.

It is important to note that the insights presented in this Guide are adaptable in nature, consisting of transferable skills that can be applied across any federal funding programs, such as those from the National Science Foundation (NSF), the Economic Development Administration (EDA), the National Institute of Standards and Technology (NIST). As new programs are released that mirror North Carolina and OSTI/BSTI's priorities—infrastructure, defense innovation, and advancing rural communities—Coalitions can apply what they've learned in relation to CHIPS, IRA, and BIL to opportunities they'd like to pursue in the future.

That being said, as the primary goals of CHIPS, IRA, and BIL significantly align with North Carolina's needs, these programs should be leveraged so long as they are active to advance the state's strategic initiatives, foster economic growth, and address critical challenges (outlined below).

Significant Rural Population

Current Landscape: North Carolina's rural population is significant and has historically benefited far less from science, technology, and innovation programs in comparison to urban and suburban communities. North Carolina has the second-largest rural population in the country, with 3,474,661 people living in rural North Carolina as of April 1, 2020, with 33% of North Carolinians residing in rural areas.²

Many rural areas in North Carolina face significant economic disparities and struggle with inadequate access to essential services. These challenges include limited access to broadband connectivity and lower levels of investment and job opportunities compared to urban centers, which hamper economic development and quality of life for residents.³ Addressing such challenges requires targeted investments and policies to improve access to essential services and economic opportunities.

Opportunity: Federal funding programs focusing on technology and innovation can help address these challenges by providing a broad scope of financial support. The BIL allocates significant funding to expand broadband infrastructure, particularly in underserved and rural areas. Improved broadband connectivity can enhance educational opportunities, enable telehealth services, and stimulate economic development in rural communities.⁴ Additionally, the CHIPS Act can foster growth in the semiconductor manufacturing industry in North Carolina, driving economic diversification, creating high-paying jobs, and enhancing the state's economic resilience.⁵

Defense Innovation

Current Landscape: Increasing defense innovation in North Carolina is another priority for the state. North Carolina has the fourth largest military footprint in the country, along with an active network of companies, universities, governments, and economic development organizations – such an environment positions the state on the frontline of defense innovation. That said, despite the state's strong military presence, total dollars in defense contracts spent on North Carolina's businesses and research organizations rank the state as only 22nd in the country, and only 2% of the defense contracting dollars in the state are in R&D.

"Taking decisive action to grow defense innovation will enable us to expand the innovation ecosystem of our state, which is fundamental to growing the economy, attracting new industry, expanding jobs, raising the tax base, promoting national security, and improving the quality of life of all North Carolinians."

 North Carolina Department of Commerce Secretary Machelle Baker Sanders

Opportunity: The CHIPS Act can significantly contribute to North Carolina's defense innovation priorities by providing incentives for semiconductor manufacturing, a critical component for defense technologies. By directing funding towards R&D in semiconductor technologies, the CHIPS Act can foster innovation in defense-related applications. Additionally, the establishment of semiconductor manufacturing facilities can create high-tech jobs, contributing to the state's economy and providing skilled labor for defense innovation projects. 10

¹ Eggers, William D., John O'Leary, and Kevin Pollari. "Executing on the \$2 Trillion Investment to Boost American Competitiveness." Deloitte Insights, March 16, 2023.

² Cline, Michael. "15 Things We Learned from the New 2020 Census Data." 15 Things We Learned from the New 2020 Census Data | NC OSBM, May 15, 2023.

 $^{^{\}mathbf{3}}$ "2024 North Carolina Rural Health Snapshot." NC Rural Health Association, April 2024.

⁴ "Fact Sheet: The Bipartisan Infrastructure Deal." The White House, November 6, 2021.

⁵ Roy, Diana. "The Chips Act: How U.S. Microchip Factories Could Reshape the Economy." Council on Foreign Relations, October 8, 2024.

⁶ Rhoades, David. "New Report Finds Unrealized Opportunity to Grow North Carolina's Defense Innovation Economy." Press Release | NC Commerce, April 26, 2022.

⁷ "Advancing Defense Innovation." NC Defense Innovation Task Force | NC Board of Science, Technology, and Innovation, March 14, 2022.

^{8 &}quot;New Report Finds Unrealized Opportunity to Grow North Carolina's Defense Innovation Economy." Press Release | NC Commerce, April 26, 2022.

⁹ Blatt, Josh. "Defense Department Should Invest in Leap-Ahead Semiconductor Technologies, Work to Reshore Production Capabilities, and Strengthen Industry and Interagency Engagement, Says New Report." National Academies of Sciences, Engineering, and Medicine, August 28, 2024.

 $^{^{10}}$ "Biden-Harris Administration Announces Preliminary Terms with Akash Systems to Support Development and Production of Emerging Semiconductor Technology." U.S.

Also, BIL can enhance defense innovation in North Carolina by improving infrastructure, which builds the state's capacity to support defense innovation activities. Investments in broadband and digital infrastructure can facilitate better communication and collaboration among defense innovation stakeholders in North Carolina. The BIL also includes provisions for workforce development, which can support training and upskilling workers in North Carolina to meet the demands of defense innovation projects.11 Furthermore, BIL provides funding for R&D in critical areas such as cybersecurity, autonomous systems, and advanced manufacturing, which is essential for defense innovation.¹² These combined efforts position North Carolina as a leader in defense technology, driving innovation, creating high-tech jobs, and improving the quality of life for its residents.

Domestic Manufacturing of Innovative Technologies

Current Landscape: Increasing the domestic manufacturing of innovative technologies in North Carolina is a priority of the state. It is important to reduce dependence on the global supply chain, as these channels are susceptible to disruptions and can limit local economic growth. To attract more innovation and local manufacturing, North Carolina faces the challenge of enhancing its R&D capabilities, which requires significant investment and collaboration between industry and academia. To add, navigating complex state-specific regulations and policies adds another layer of complexity and barrier to entry for new Coalitions. These combined challenges necessitate a coordinated effort to create a conducive environment for innovative manufacturing.

Opportunity: CHIPS, BIL, and the Build America Act can help address the challenges North Carolina faces in increasing domestic manufacturing of innovative technologies. The CHIPS Act provides substantial funding for semiconductor research, development, and manufacturing, which can enhance North Carolina's R&D capabilities and foster industry-academia collaboration. North Carolina is primed to take advantage of this opportunity through collaboration amongst the NC Research Triangle Park and various technology Coalitions/ Hubs and academic institutions. Additionally, the BIL allocates resources to enhance infrastructure, including transportation networks and broadband access, facilitating efficient logistics and communication essential for modern manufacturing. The Build America Act further supports these efforts by providing additional funding

and regulatory support for infrastructure projects that are critical to manufacturing and economic development. Together, these legislative measures can help North Carolina reduce dependence on global supply chains, navigate complex regulations, and create an environment conditioned for innovative manufacturing.

Economic and Workforce Development

Current Landscape: North Carolina, like many states, faces the challenge of economic diversification and the creation of high-quality jobs. While the state has a strong agricultural base and a growing technology sector, there is a need to further diversify its economy to support long-term resilience and prosperity. Expanded strategies and new approaches are required to develop an available and skilled workforce, which is a priority outlined in North Carolina's strategic economic development plan. ¹⁵ Challenges such as lack of quality jobs, decreasing middle-income jobs, barriers to education access, and the rapid acceleration of technology are all concerns for residents of North Carolina.

Opportunity: The CHIPS Act can significantly address North Carolina's economic diversification challenges by fostering the growth of the semiconductor industry within the state. 16 Funding from this federal program can incentivize domestic semiconductor manufacturing in North Carolina, which can create high-quality jobs, promote economic growth and resilience, and stimulate training programs at North Carolina universities and community colleges that are tailored to the semiconductor sector.¹⁷ These education institutions in particular are well-suited to collaborate with industry leaders to provide a steady pipeline of skilled workers and promote growth in high-demand advanced manufacturing fields. This strategic alignment with the CHIPS Act can both bolster North Carolina's economic landscape and grow a sustainable and skilled workforce for the future.

Essential Takeaway: Understanding the current landscape of federal funding opportunities in North Carolina highlights the state's potential to address challenges impacting their community. While there are unique complexities related to these funding opportunities, the significant benefit these grants provide make them an area of prioritization for North Carolina. By supporting OSTI/BSTI's efforts, the state can continue to build on these opportunities and move towards a prosperous future.

Department of Commerce, November 13, 2024.

 $^{^{11}}$ "Advancing Equitable Workforce Development for Infrastructure Jobs." The White House, November 2022.

 $^{^{12}}$ "Fact Sheet: The Bipartisan Infrastructure Deal." The White House, November 6, 2021.

¹³ Haskins, Glencora, and Joseph Parilla. "Accelerating Equitable Growth in North Carolina's Life Sciences Cluster." Brookings, May 21, 2024.

¹⁴ Hitchings, Benjamin, and David Rouse. "Managing Disruption in a Rapidly Changing World." The University of North Carolina at Chapel Hill, September 30, 2024.

^{15 &}quot;First in Talent: Strategic Economic Development Plan for the State of North Carolina." NC Commerce, April 26, 2022.

¹⁶ CHIPS and Science Act of 2022, Pub. L. No. 117-167, H.R.4346 (2022)

¹⁷ Reid, Michael, and Falan Yinug. "Chipping in: The Positive Impact of the Semiconductor Industry on the American Workforce and How Federal Industry Incentives Will Increase Domestic Jobs." Semiconductor Industry Association, May 19, 2021.

A ROADMAP THROUGH THE GUIDE

Defining Coalitions

A central feature of this Guide is the section dedicated to defining Coalitions—exploring what they are, why they are effective, and how they can be successfully designed and managed. By outlining Coalition theory and providing evidence-based best practices, this Guide provides Coalitions with the foundational knowledge to create collaborative networks that amplify innovation, solve complex challenges, and achieve shared goals.

Essential Takeaway: Understanding and effectively managing Coalitions is essential for fostering innovation and collaboration. By supporting OSTI/BSTI's work in this area, North Carolina can build strong networks that attract more funding and drive economic development.

Coalition Intake Form and Evaluation Matrix

The Coalition Intake Form

To help Coalitions better understand their readiness to engage in collaborative efforts, the Guide includes a Coalition Intake Form and Evaluation Matrix. Both items allow for Coalitions and OSTI/BSTI to measure their maturity level and preparedness across key dimensions, including financial management infrastructure and alignment with OSTI/BSTI's mission. Additionally, they serve as both a diagnostic tool and a roadmap for improvement, enabling Coalitions to pinpoint areas of strength, and to identify opportunities for growth. OSTI/ BSTI aims to use the Coalition Intake Form and Evaluation Matrix to assess a Coalition's alignment with OSTI/BSTI's goal of growing technology opportunities within the state, as well as alignment with North Carolina's goals of workforce development, growing technology opportunities in rural areas, and making strides in advanced manufacturing. The initial scores of both will help OSTI/ BSTI best-allocate time and resources so that each Coalition is provided with what they need to grow.

The Guide is meant not only as an evaluation tool for OSTI/BSTI, but also to enable Coalitions to use the Coalition Intake Form to identify areas they may want to expand and grow, so they can be strategic in how they seek support from OSTI/BSTI. The Guide is not meant to guarantee support for Coalitions but is intended as a starting point for OSTI/BSTI and the Coalition to evaluate where the Coalition is in its development process and to identify areas it could benefit from support, OSTI/BSTI will then provide the needed support as resources are available. As OSTI/BSTI receives additional support from the state, the support and resources that OSTI/BSTI can provide Coalitions will grow in tandem.



Key Areas of the Evaluation Matrix:

- Financial and Grants Management Capacity: This
 dimension evaluates the Coalition's ability to manage
 and report on financial resources and grants effectively.
- 2. Internal Organizational Structure and Leadership:
 Robustness of the Coalition's internal structure,
 leadership, and governance are assessed in this
 dimension.
- Coalition Engagement and Outreach: This section measures the Coalition's ability to engage with stakeholders, build partnerships, and conduct outreach activities.
- **4. Organization Sustainability and Strategic Planning:** The Coalition's strategic planning processes and its capacity for sustainable growth are examined here.
- 5. Strategic Fit and Collaboration Potential: This dimension evaluates how well the Coalition's goals align with OSTI/BSTI's mission and its potential for successful collaboration with other entities.

Essential Takeaway: The Evaluation Matrix is a critical tool for preparing Coalitions to engage effectively and to secure funding. By investing in this tool and OSTI/BSTI's capacity to support Coalitions, North Carolina can better allocate resources, foster innovation, and drive economic growth. This structured approach not only enhances the effectiveness of Coalitions, but also strategically positions Coalitions to maximize their impact and contribute to the economic and technological advancement of the state.

Best Practices for Coalitions

To help Coalitions understand key processes and strategies for Coalition building and pursing federal funding opportunities, the guide includes a section dedicated around best practices for Coalitions. This section is designed to be a valuable resource for Coalitions at any stage of development, whether they are in the early stages or are well-established entities. By leveraging the insights and recommendations provided, all Coalitions can enhance their operational efficiency and strategic approach to securing federal funding.

The Best Practices section covers the following topics:

- Building a Coalition Identity
- Coalition Governance
- Collaborations and Partnerships
- Tracking Progress
- Strategic Planning

Essential Takeaway: Understanding the areas in which Coalitions should strengthen their capabilities is crucial for enhancing their impact on North Carolina. By focusing on these priorities, Coalitions can better position themselves to receive support from OSTI/BSTI and advance science, technology, and innovation within the state.

Next Steps

This section includes both next steps for Coalitions to reach out to OSTI/BSTI for support, as well as next steps for the North Carolina to better position the state as a leader in technology-driven economic development. It details how, through increased funding and operational capacity, OSTI/BSTI can broaden its impact and enable more Coalitions to achieve their objectives. Additionally, it examines the current capabilities of OSTI/BSTI and explores the potential expansion of these capabilities with additional funding and resources.

Essential Takeaway: As OSTI/BSTI works to help Coalitions grow, the Next Steps focus on ways the state can foster OSTI'S/BSTI'S own growth, specifically by investing in the office's future. By allocating additional funding to the office, they can design and implement programming that generates more public-private partnerships, they can aid Coalitions in positioning themselves for federal funding, and they can promote technology-focused opportunities in rural North Carolina.

The Appendix

Additionally, the Guide provides a comprehensive appendix which contains a curated selection of resources aimed at supporting Coalition members in effectively navigating technology-based grant procurement processes and optimizing organizational processes.

The appendix offers detailed information on federal technology grant programs, including:

- CHIPS (Creating Helpful Incentives to Produce Semiconductors)
- IRA (Inflation Reduction Act)
- BIL (Bipartisan Infrastructure Law)

Alongside these resources, users are provided a collection of existing technology reports so that they are familiar with programming and concepts critical to building larger Coalitions, as well as contact information and references.

Essential Takeaway: Access to detailed information on federal funding programs is essential for Coalitions seeking grants. By supporting OSTI/BSTI's efforts to provide this information, North Carolina Coalitions will be well-equipped to secure grants, drive innovation, and contribute to economic growth.



DEFINING COALITIONS

What is a Coalition?

A Coalition is a group of individuals, organizations, or entities that come together to achieve a common goal or address a specific issue. Coalitions are typically formed to leverage the collective resources, expertise, and influence of their members to accomplish objectives that might be difficult to achieve independently. They can be temporary or permanent and are often used in political, social, or business contexts to advocate for policy changes, promote shared interests, or coordinate actions and strategies.

This Guide uses the term "Coalition" as an all-encompassing term to represent a variety of organizational forms, including Innovation/Technology Hubs, Partnerships, Industry Alliances, Advocacy Groups, and other collaborative groups aiming to influence outcomes or goals in North Carolina. The defining feature of these organizations is the shared goal amongst its members. Coalition members unite around a common objective or mission, which serves as the driving force behind the Coalition's activities and initiatives.

There are numerous advantages to forming a Coalition in North Carolina, especially in the fields of science, technology, and innovation. These benefits, outlined in the following sections, can significantly aid in achieving goals and enhancing impact.

The Importance of Coalitions in North Carolina

As described in the section, <u>Current Landscape of Federal Grants and Coalitions in North Carolina</u>, building technology Coalitions in North Carolina and securing federal funding through grants from CHIPS, IRA, and BIL can significantly drive job creation and economic development across both urban and rural areas of the state. These federal programs explicitly highlight the importance of collaborative efforts and Coalition-building, recognizing that Coalitions help enhance the overall impact and sustainability of funded projects.

Notice of Funding Opportunities (NOFO) issued under BIL specifically emphasize the importance of regional partnerships that prioritize workforce development and supply chain resilience, particularly in infrastructure and manufacturing sectors. By connecting rural manufacturing facilities and local community colleges with urban technology hubs through Coalitions, North Carolina can more effectively meet the criteria in NOFOs, attract significant funding, and create jobs that benefit a broader population across the state. 19

Federal funding through IRA similarly emphasizes the need for coordinated Coalitions to address the technological demands of the energy sector. Coalitions are more effective in deploying technologies across diverse regions due to their broader expertise, logistics, and workforce resources. This approach aligns with the "First in Talent" strategy from the North Carolina Department of Commerce, supporting the state's long-term workforce and economic goals by promoting sustainable job growth across its communities.²⁰

Funding opportunities under the CHIPS Act prioritize semiconductor manufacturing and advanced technology hubs, which also benefits from a Coalition structure. A 2023 U.S. Department of Commerce report indicates that regions with established Coalitions focused on semiconductor manufacturing have a competitive edge in securing CHIPS funding, as these networks offer robust support systems, including academic research, workforce training, and logistical capabilities.²¹ North Carolina's Research Triangle Park, along with research universities like NC State and Duke, provides a strong foundation for such Coalitionbased semiconductor initiatives.²² Additional case studies by the National Coalition for Advanced Manufacturing show that regions adopting Coalition frameworks secure more federal grants by better leveraging local assets, addressing skills gaps, and enhancing supply chain resilience.²³ In North Carolina, this approach can expand the economic impact of Coalition projects, creating a sustainable economic pipeline that connects training, manufacturing, and technological innovation.

Advantages of Coalitions

While the Evaluation Matrix will be presented in the next section, thinking about the current state of a Coalition is also important. To facilitate this, the Guide aligns the advantages of having Coalitions in North Carolina that support science, technology, and innovation with the five elements of the Evaluation Matrix, which will be detailed in the following section. This preliminary alignment will help to assess a Coalition's strengths and areas for growth, setting the stage for a more comprehensive assessment using the Evaluation Matrix.

¹⁸ Infrastructure Investment and Jobs Act (BIL) Notice of Funding Opportunity. U.S. Department of Transportation, 2023.

¹⁹ North Carolina Department of Commerce. First in Talent: North Carolina's Economic Development Strategy. North Carolina Department of Commerce, 2022.

 $^{{\}color{red}^{\bf 20}} \ North\ Carolina\ Department\ of\ Commerce.\ First\ in\ Talent:\ North\ Carolina's\ Economic\ Development\ Strategy.\ North\ Carolina\ Department\ of\ Commerce,\ 2022.$

 $^{^{21}}$ CHIPS Act Funding Opportunity Announcement. U.S. Department of Commerce, 2023.

 $^{^{22}}$ Research Triangle Park. "The Triangle." Research Triangle, 2023.

²³ Subcommittee on Advanced Manufacturing, National Science and Technology Council. "National Strategy for Advanced Manufacturing," 2022.

Matrix Element	Advantage	Explanation
Matrix Element 1: Financial and Grants Management Capacity	Coalitions can have improved access to funding opportunities	By combining their strengths, expertise, and resources, Coalitions can submit more compelling funding proposals, manage and execute large-scale projects more effectively, and tap into a wider range of funding sources. This directly enhances their financial and grants management capacity. ²⁴
Matrix Element 2: Internal Organizational Structure and Leadership	Coalitions can foster greater knowledge sharing and resources	Coalitions bring together the resources and knowledge of multiple organizations, reducing duplication of efforts and increasing information sharing. This creates a more robust and comprehensive approach to addressing issues, which strengthens the internal organizational structure and leadership. ²⁵
Matrix Element 3: Coalition Engagement and Outreach	Coalitions can have increased influence and outreach	By partnering together, Coalitions can expand their circle of influence, increase their stakeholder reach, and represent larger and more diverse groups. This directly improves Coalition engagement and outreach. ²⁶
Matrix Element 4: Organization Sustainability and Strategic Planning	Coalitions can enhance credibility and legitimacy	Leveraging the established reputations of member organizations and presenting a united front can enhance a Coalition's credibility with funding agencies, policymakers, and stakeholders. This contributes to the organization's sustainability and strategic planning. ²⁷
Matrix Element 5: Strategic Fit with OSTI/BSTI and Collaboration Potential	Sharing resources, industry contacts, and data can create better outcomes and promote Coalition growth	By building strong collaborations and partnerships with organizations that have similar values and goals, OSTI/BSTI can enhance a Coalition's influence and impact. These alliances can expand resources, increase networking opportunities, and incorporate diverse stakeholder inputs, aligning with the strategic fit and collaboration potential. ²⁸

²⁴ Zakocs, R. C., & Edwards, E. M. (2006). What Explains Community Coalition Effectiveness? A Review of the Literature. American Journal of Preventive Medicine, 30(4), 351-361.

²⁵ Kreuter, M. W., Lezin, N. A., & Young, L. A. (2000). Evaluating Community-Based Collaborative Mechanisms: Implications for Practitioners. Health Promotion Practice, 1(1), 49-63.

²⁶ Butterfoss, F. D., & Kegler, M. C. (2009). The Community Coalition Action Theory. In R. J. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), Emerging Theories in Health Promotion Practice and Research (2nd ed., pp. 237-276). Jossey-Bass.

²⁷ Roussos, S. T., & Fawcett, S. B. (2000). A Review of Collaborative Partnerships as a Strategy for Improving Community Health. Annual Review of Public Health, 21, 369-402.

²⁸ Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building Collaborative Capacity in Community Coalitions: A Review and Integrative Framework. American Journal of Community Psychology, 29(2), 241-261.

COALITION INTAKE FORM & EVALUATION MATRIX

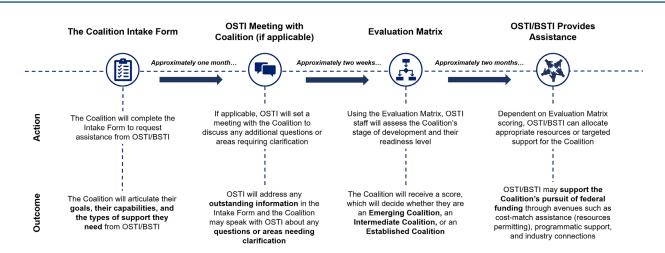


Figure 1: The Process Flow

Purpose of the Coalition Intake Form

Serving as both a data collection tool and a means of analysis, OSTI/BSTI's Coalition Intake Form encourages reflection on a Coalition's current objectives. The form gathers basic Coalition details, including contact information, current grant funding, and services that OSTI/BSTI may be able to assist with. By completing this form, applicants can also identify areas for further development, such as creating a long-term strategic plan. By strengthening these areas, Coalitions may find themselves better-positioned for federal funding, and for Coalition-building opportunities.

Coalitions at all stages of development-- from recent startups to established technology hubs-- are encouraged to submit the Intake Form and begin communicating with OSTI/BSTI. By increasing technology-driven Coalitions, OSTI/BSTI can contribute to the state's economic growth and innovation opportunities.

The Intake Form

Steps for Completing the Coalition Intake Form

Disclaimer: Please reference the Evaluation Matrix while completing the Intake Form and provide information such as a strategic plan or public annual reports. These documents provide OSTI/BSTI a more robust perspective, which assists OSTI/BSTI in allocating a maturity level reflective of the Coalition's capabilities and supports timely responses from OSTI/BSTI.

Step 1: Review the Form

Reviewing the form helps applicants better understand how it functions as a Coalition. This is an opportunity to reflect on the Coalition's current objectives, available resources, and foundational strategies.

Step 2: Complete the Form Sections

The form is divided into several sections, each designed to

gather targeted information. The Application Information section gives applicants an opportunity to describe the reasons the Coalition is reaching out to OSTI/BSTI, along with any specific services requested. If applying for cost-match support, the Grant and Financial Information section asks for details concerning current grants, existing Coalition partners, grants management staff capacity, and any long-term strategic planning efforts.

From start to finish, the form should take about 30 minutes to complete.

Step 3: Conduct a Self-Assessment

Once the form is completed, the tool can be used to evaluate the Coalition's readiness for partnership. Reviewing responses may reveal areas for additional preparation, such as strategic planning or resource development.

Step 4: Submit the Completed Form

Once completed, the form should be emailed to OSTI at OSTI_Programs@commerce.nc.gov using the email heading Coalition Intake Form. For assistance during any part of this process, please contact this inbox.

Step 5: Await Follow-Up from the Office

OSTI/BSTI will review the submitted form and use the answers to initially complete the Evaluation Matrix (shown in the next section). You will notice that the answers from the form align with the five criteria of the Matrix. OSTI/BSTI will reach out, likely within a month, to have a conversation to better understand the request from the Coalition, if additional insight is needed. The Matrix scores will be refined, and ongoing discussions will take place to determine the appropriate resources OSTI/BSTI can provide to the Coalition. The Intake Form and the Matrix are designed to provide a systematic process for Coalitions to request support, and OSTI/BSTI looks forward to engaging in discussions with Coalitions.

The Intake Form

Downloadable link to the form:

The Coalition Intake Form

Organizational Information	
1. Coalition Name:	
2. Primary Contact Person:	
a. Name:	
b. Title:	
c. Phone: —	
e. Address:	
3. Website/Social Media:	
4. Date of Submission	
5. Total Annual Budget (USD)	
6. Number of Staff?	

Section 1: Financial and Grant Management Capacity

Goal: To evaluate financial resource management, grant handling capabilities, and experience with grant funding

- 7. How much federal grant funding has your group secured in the past year?
 - a. Criteria: Grant totals (in USD)
- 8. Please specify the types of grants your Coalition has managed (federal, state, private) and the size of the awards (large federal grants, mixed private and state/federal, small one-time grants).
 - a. Criteria: Types of grants/funding pursued
- 9. How many grants has your Coalition pursued in the past five years as the primary recipient?
 - a. Criteria: Number of grants pursued
- 10. What is the typical length of grant awards your Coalition has received as the primary recipient?
 - a. Criteria: Length of grant Awards
- 11. Explain your team's capacity or processes for grants management.
 - a. Criteria: Capability to manage grants
- 12. Please specify your financial infrastructure and your bandwidth to manage funds if awarded a grant (financial systems, structures, etc.).
 - a. Criteria: Financial infrastructure

Section 2: Internal Organizational Structure and Leadership

Goal: To assess internal leadership, staffing, and governance.

- 1. Provide an overview of your organizational structure and your leadership roles.
 - a. Criteria: Organizational hierarchy
- 2. Detail the staff responsible for grant management in your Coalition (in-house or outsourced).
 - a. Criteria: Dedicated grant management staff
- 3. Describe your board's role in governance and oversight of grant activities.
 - a. Criteria: Steering Committee/Board of Directors
- 4. Specific your team's abilities to manage and complete grant applications.
 - a. Criteria: Team structure

Section 3: Coalition Engagement and Outreach

Goal: To evaluate stakeholder engagement through events, publications, and feedback

- 1. Describe your Coalition engagement efforts through outreach or meetings.
 - a. Criteria: Coalition meetings
- 2. Detail how stakeholder feedback is collected and integrated into your work.
 - a. Criteria: Stakeholder feedback

Section 4: Coalition Sustainability and Strategic Planning

Goal: To evaluate long-term planning and scalability practices

- 1. Provide an overview of your strategic plan (short-term/long-term).
 - a. Criteria: Strategic plan
- 2. Describe the infrastructure in place to promote Coalition growth and scalability.
 - a. Criteria: Scalability

Section 5: Strategic Fit and Collaboration Potential

Goal: To assess alignment with OSTI/BSTI's and North Carolina's mission and potential for collaboration

- Explain how your organization's mission aligns with OSTI/BSTI's goals (Advancing science, technology, and innovation)
 - a. Criteria: Alignment with office mission
- 2. Explain how your organization's mission aligns with North Carolina's priorities (Broad Community Impact: Advancing Defense R&D, Impact on Rural Communities, Supporting Advanced Manufacturing Industries, Improving Infrastructure, Expanding Education Opportunities, Prioritizing Supply Chain Sustainability, and Advancing Economic/Workforce Development)
 - a. Criteria: Alignment with state's mission
- 3. What bodies have awarded your Coalition grants in the past?
 - a. Criteria: Typical Grant Awarding Bodies
- 4. Potential for Long-Term Collaboration
 - a. Criteria: Outline the potential for a sustained, longterm collaboration.

Section 6: Supporting Documents

Please attach the following documents when emailing the form to <u>OSTI_Programs@commerce.nc.gov</u> if applicable (as email attachment).

- 1. Annual Report
 - a. Attached? Yes/No
- 2. Financial Reports /Audit Reports
 - a. Attached? Yes/No
- 3. Strategic Plan
 - a. Attached? Yes/No
- 4. Other Supporting Documents
 - a. Attached? Yes/No
 - b. Please describe:

Purpose of the Evaluation Matrix

Upon submission of the Intake Form, OSTI/BSTI will use the Evaluation Matrix to figure a cumulative score based on the information provided. The Intake Form is designed to align directly with each Evaluation Matrix element, and each section consists of specific criteria that assesses various aspects of demonstrable capabilities and bandwidth. Coalitions will be given designations based on their cumulative score: Established Coalition (49 - 54 points), Intermediate Coalition (36 - 48 points), or Emerging Coalition (18 - 35 points).

The resources provided to each Coalition will be based on their designation. Additionally, the specific needs of Coalitions, shaped by their history and experience, may require different types of support to effectively address their unique challenges and opportunities. By providing tailored resources and support, OSTI/BSTI's goal is to provide all Coalitions the opportunity to succeed and further develop their capabilities.



Explanation of Scores

The scoring system is designed to assess not just current performance but potential for growth. Each score reflects the Coalition's current capabilities, readiness for development, and alignment with the goals of OSTI/BSTI.

Established Coalition (54 Points)

This rating indicates that the Coalition demonstrates a strong performance and capability in their specific technology area. The Coalition excels in this criterion and may serve as a model for others. It is fully prepared to sustain its operations and grow without immediate external assistance. However, additional resources may still be provided to further efforts, expand opportunities, or engage in strategic planning.

• Intermediate Coalition (at least 36 Points)

This rating indicates that the Coalition is performing adequately but has room for improvement. The Coalition has a solid foundation in the criterion but may need targeted assistance to reach full potential. Intermediate Coalitions are often prepared for more complex activities but may require additional resources, training, or support to enhance their capabilities and increase their sustainability.

Emerging Coalition (at least 18 Points)

This rating indicates that the Coalition is in the early stages of developing this capability. It shows potential but will need targeted support, mentoring, and structured guidance to improve. This score does not imply failure but rather reflects an opportunity for growth. OSTI/BSTI, along with the Coalition Support and Resource Guide, can provide resources to build the necessary skills, infrastructure, and practices to elevate the Coalition to the next level.

Resources Available Based on Scoring

Using the Coalition's overall performance across the Evaluation Matrix, OSTI/BSTI can provide resources to help the Coalition grow, develop, and better-align with OSTI/BSTI's strategic objectives. These resources will vary depending on whether the Coalition is designated an Established Coalition, an Intermediate Coalition, or an Emerging Coalition.

Category	Emerging Coalitions	Intermediate Coalitions	Established Coalitions	All Coalitions
OSTI/BSTI Direct Support	Mentoring: Advice related to opportunities the Coalition can pursue, how to develop a strategic plan, etc.	Cost-Share: Monetary opportunities, as available, with targeted guidance on managing more complex funding structures	Letters of Support: Formal letters indicating OSTI/BSTI's support for a Coalition's grant proposal (as applicable) Cost-Share: Access to advanced strategic initiatives and cost-share opportunities, resources permitting	Data: Economic data, labor market data, business data and tools, economic development reports, etc., as needed by Coalitions to bolster proposals
Third Party Support	Strategic Guidance: Assistance with building foundational systems for financial management, governance, and Coalition-building Mentoring: Advice focusing on leadership development, sustainability practices, grant acquisition strategies, and strategic planning Peer-Learning: Access to related Coalitions that provide strategic guidance	Mentoring: Access to mentoring aimed at filling specific gaps in organizational capacity Training: Opportunities focused on leadership development, grants management, and financial systems	Partnerships: Participation in pilot programs for new projects	 "Red Team" Review: Third-party, neutral perspective of fully developed proposals, to garner feedback and refine content prior to submission Connections: Connections with other Coalitions across North Carolina to leverage shared industry insight and resources applicable to Federal funding opportunities Workshops: Invitations to leadership and innovation workshops to further hone skills and strategic planning capabilities

Figure 2: Levels of Support

Established Coalitions

Focus: These Coalitions are established leaders in their field and provide a clear economic impact to the North Carolina and its citizens. The goal will be to sustain and further expand their already strong capabilities. Support will emphasize scaling efforts and further broadening their impact.

Intermediate Coalitions

Focus: These Coalitions are developed and have a growth trajectory that will enable them to be leaders in their field. The focus here will be on improving systems and practices to build greater sustainability and efficiency. Intermediate Coalitions will receive additional tools and mentorship to help them enhance their operations, preparing them to eventually reach high performance to meet long-term economic impact to North Carolina.

Emerging Coalitions:

Focus: These Coalitions are starting up and require guidance to build core capabilities, understand their mission, and formulate long-term strategy. The aim here will be to support Emerging Coalitions through their evolution from an Emerging stage to Established. OSTI/BSTI can provide mentorship as available, connections with industry partners, or access to development workshops.

1. Financial and Grants Management Capacity

Goal: To evaluate financial resource management, grant handling capabilities, and experience with grant funding

Criteria	Max (3 Points)	Mid (2 Points)	Min (1 Point)	Score
How Much Federal Grant Funding Has Your Group Secured This Past Year (in USD)	High Grant Acquisition; > \$1 million annually in secured grants	Moderate Grant Acquisition; \$250,000 - \$1 million annually	Emerging Grant Acquisition; < \$250,000 annually	
Types of Grants/ Funding Pursued	Large Federal Grants: Advanced Complexity Examples: CHIPS, IRA, BIL	Mixed Federal, State, and Private Sector Grants/Funds: Moderate Complexity Examples: Some complexity, multi- source funding	Primarily Small, One-Time Grants; well-positioned to advance towards more complex grant opportunities Examples: Small, one-time grants	
Number of Federal Grants Pursued in Past 5 Years	More than 5	Between 2-4	Less than 2	
Typical Length of Grant Awards	Multi-year (3+ years)	Mid-range (1-2 years)	Short-term (under 1 year)	
History of Grants Management	Strong experience managing large federal grants	Some experience with federal grants	Is at the beginning stages of federal grants management	
Capability to Manage Grants	Fully developed systems with dedicated grants management staff and expertise	Baseline to intermediate management; 1-2 part-time staff members supporting sometimes	Developing internal capacity; no dedicated staff yet	
Financial Infrastructure	Well-established financial systems, comprehensive internal controls, and regular external audits	Adequate financial systems with some formal controls	Has a foundational financial structure with initial internal controls	
Financial and Gran	ts Management Capac	ity Total Score:		

2. Internal Organizational Structure and Leadership

Goal: To assess internal leadership, staffing, and governance

Criteria	Established (3 Points)	Intermediate (2 Points)	Emerging (1 Point)	Score
Organizational Hierarchy	Clear structure with senior leadership and defined roles	Some defined hierarchy but lacking specialized leadership	Flat or unclear hierarchy; developing structure and leadership roles	
Dedicated Grants Management Staff	Dedicated, experienced grants management and accounting staff	Partially dedicated or outsourced grants management staff	Building capacity to integrate dedicated staff for grants management	
Board of Directors	Active board with governance experience and involvement in strategic oversight	Board exists but limited involvement in grants management	No formal board or limited governance structure	
Team	Fully Equipped Team; have the necessary members to pursue large grants	Partially Equipped Team; have some of the needed team to pursue large grants, but they would need to work nights and weekends	Developing team capacity; identifying skill-building opportunities	
1. 10 :	.: 10	I II T. IC		

Internal Organizational Structure and Leadership Total Score:

3. Coalition Engagement and Outreach

Goal: To evaluate stakeholder engagement through events, publications, and feedback

Criteria	Established (3 Points)	Intermediate (2 Points)	Emerging (1 Point)	Score
Coalition Meetings	Regularly hosts stakeholder meetings to share insights and engage stakeholders	Occasional public Coalition activities	Has potential to expand on Coalition outreach activities	
Stakeholder Feedback	Actively solicits and incorporates Coalition/stakeholder feedback	Some efforts to engage / Coalitions/stakeholders	Ready to implement a more structured feedback mechanism	
Coalition Engagement and Outreach Total Score:				

4. Organization Sustainability and Strategic Planning

Goal: To evaluate long-term planning and scalability practices

Goal: 10 evaluate long-term planning and scalability practices				
Criteria	Established (3 Points)	Intermediate (2 Points)	Emerging (1 Point)	Score
Strategic Plan	Multi-year strategic plan aligned with growth and sustainability	Short-term plan or initiatives with moderate growth outlook	In the early stages of the strategic planning process	
Scalability	Robust infrastructure in place for continued growth and scaling	Moderate capacity for growth with some gaps	Developing a robust infrastructure for future growth	
Organization Sustainability and Strategic Planning Total Score:				

5. Strategic Fit and Collaboration Potential

Overall Score (Total from 5 Categories):

Goal: To assess alignment with OSTI/BSTI's mission and potential for collaboration

Criteria	Established (3 Points)	Intermediate (2 Points)	Emerging (1 Point)	Score
Alignment with Office Mission	Strong alignment with OSTI/BSTI's goals	Some alignment	Is exploring further alignment opportunities	
Typical Grant Awarding Bodies	Primarily federal agencies (e.g., NSF, NIH, DoD) with some private and state funds	Primarily state agencies, non-profits, or private foundations	Primarily Local agencies or small non- profits	
Potential for Long- Term Collaboration	High potential for sustained, long-term collaboration	Moderate potential	Positioned to explore long-term collaboration opportunities	
Strategic Fit and Collaboration Potential Total Score:				

BEST PRACTICES FOR COALITIONS

To enhance Coalition efforts, this section outlines detailed best practices for Coalition building. These practices serve as a model for Emerging Coalitions navigating federal funding in North Carolina, while also providing encouragement for Intermediate and Established Coalitions to identify growth and expansion opportunities. Recognizing the critical role of funding in advancing Coalition initiatives, the Appendix following shortly after this section includes a detailed breakdown of prominent federal funding programs available for technology-focused projects.

The Best Practices section covers the following topics:

- Building a Coalition Identity
- Coalition Governance
- Collaborations and Partnerships
- Tracking Progress
- Strategic Planning

Building a Coalition's Identity

Importance of Coalition Identity

Matrix Element 4: Coalition Sustainability and Strategic Planning

Establishing a Coalition's identity is a critical preliminary step in building and sustaining a successful Coalition. Defining an explicit purpose, clear mission, and strategic goals significantly contribute to the success of a Coalition as it prepares for action. Building and articulating this identity provides a guiding framework externally and internally for decision-making and strategic planning. Clearly conveying this identity to potential funding organizations serves as the crux for creating a strong grant proposal narrative, increasing the chances of securing any funding opportunities pursued by the Coalition.²⁹

As Coalitions in North Carolina look to secure federal funding and enhance their capabilities, OSTI/BSTI strives to support those that align with their priorities in science, technology, and innovation. Specific areas of focus include increasing research and development in defense initiatives, advancing rural communities, and enhancing economic and workforce development in the state.

Define the Coalition's Purpose and Mission:

Matrix Element 4: Coalition Sustainability and Strategic Planning

The initial step in building a Coalition's identity is to clearly define the purpose and mission. The purpose should be a clear and concise statement of intent, outlining the Coalition's primary focus. It is important to reflect on the core issues a Coalition seeks to address, and the overall impact it aims to achieve. The mission statement should translate this purpose into an actionable objective, providing direction and focus. This will serve as a guiderail, aligning the efforts of Coalition members and stakeholders to collaborate towards a shared objective.³⁰

When identifying federal funding opportunities, a Coalition should confirm that its purpose and mission are both clearly articulated and closely aligned with those of the prospective funding entity. It is important to not only understand a Coalition's own identity, but also the objectives of relevant funding programs. For example, CHIPS programs provided by the National Institutes of Standards and Technology (NIST), requires alignment not only with the specific program's objectives, but also with the overarching mission, goals, and priorities of the overarching CHIPS Research and Development Office. This includes considerations related to domestic economic and national security, research security, domestic production, and control of intellectual property.31 This alignment is part of the CHIPS R&D merit review process and is one of the five criteria used to assess concept papers, a standard also commonly evaluated in other non-CHIPS funding opportunities.

Therefore, articulating this clearly in funding proposals is important for applicants to demonstrate their project's potential to contribute to the broader strategic goals of the funding initiative. By ensuring a strong alignment between the Coalition's purpose and mission with those of the funding entities, a Coalition can significantly enhance its chances of securing federal funding and achieving its strategic objectives. This also acts as a building block for identifying a Coalition's goals.

²⁹ "Strength in Numbers: A Guide to Building Community Coalitions." Community Catalyst, August 2003.

³⁰ Rabinowitz, Phil. "Section 5. Coalition Building I: Starting a Coalition." Chapter 5. Choosing Strategies to Promote Community Health and Development | Section 5. Coalition Building I: Starting a Coalition | Tools | Community Toolbox. n.d.

^{31 &}quot;National Advanced Packaging Manufacturing Program (NAPMP) Advanced Packaging Research and Development (R&D)." U.S. Department of Commerce, NIST, October 22, 2024.

Set SMART Goals:

Matrix Element 4: Coalition Sustainability and Strategic Planning

After a Coalition's purpose and mission is identified, a Coalition should intentionally set SMART goals grounded in the same themes. SMART stands for: Specific, Measurable, Achievable, Relevant, and Time-Bound. Setting Coalition goals in this manner provides goals that are clear, realistic, and actionable. This approach eliminates generalities and guesswork, establishes a clear timeline, and facilitates progress tracking and benchmark identification.³²

When creating a grant proposal, in addition to setting SMART goals that align with North Carolina's priorities, a Coalition should develop a narrative centered around a clear problem statement and well-defined project outcomes. The problem statement can be derived from the Coalition's purpose and mission and should provide context and significance to the issue the Coalition aims to address. After the problem statement, the narrative can transition to outlining project outcomes, detailing the anticipated benefits and impact from the SMART goals. The National Science Foundation (NSF) advises that "Proposers should address what they want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful." ³³ This level of clarity provides a window into the Coalition's planned actions and enables the funding entity to holistically evaluate the Coalition's long-term strategy.

Building on this, when articulating a Coalition's goals and project outcomes in the proposal narrative, it is important to note that many funding entities prioritize goals with a comprehensive, impactful reach. NSF proposals and many other grant applications require a dedicated section within the narrative titled "Broader Impacts," which is a mandatory component of the proposal.³⁴ Articulating goals that drive significant, positive change across multiple sectors enhance a proposal's appeal. Coalitions that emphasize their impact on diverse areas such as education, workforce development, environmental responsibility, rural and underserved communities, manufacturing, and innovation are highly valued.

Highlighting such aspects in the narrative plays a significant role in the evaluation and success of a proposal. While these areas should be carefully considered when identifying grant opportunities for pursuit, they are just as important when establishing a governance structure, collaborating with external partners, and tracking Coalition progress.

³² "SMART Goals: A How to Guide." University of California, 2016.

³³ "Proposal and Award Policies and Procedures Guide." U.S. National Science Foundation, May 20, 2024.

³⁴ Ibid.

Coalition Governance

Establishing a Governance Structure

Matrix Element 2: Internal Organizational Structure and Leadership

When starting a Coalition, members should have a conversation about the roles and responsibilities of each participating organization in order to establish a governance structure that leverages the strengths of all its members. Governance consists of an organization's framework with clearly defined roles and responsibilities, decision-making processes, and reporting lines. While sample governance structures have been provided in this section and the Appendix, the governance of a Coalition is fluid and will evolve over time. The responsibilities to be prioritized at any given moment will vary depending on present needs, which should be identified by a Steering Committee:

Steering Committee: Members of a Coalition who are responsible for providing strategic direction, oversight, and guidance for the Coalition. The Committee is responsible for making important decisions, setting priorities, and ensuring that the Coalition's activities align with the broader mission and identity of the Coalition.³⁵ Members of the Steering Committee should be activity engaged within the Coalition, with clear roles outlined for each member for the benefit of sustaining the Coalition's long-term efforts.

- a. Primary Functions:
 - Strategic Planning: Set long-term and short-term goals by identifying key issues and opportunities for the Coalition to pursue.
 - Oversight: Monitor the progress of Coalition activities, while ensuring compliance with policies, regulations, and ethical standards.
 - Resource Allocation: Oversee allocation of financial resources, as well as the delegation of responsibilities amongst Coalition members. Approve budget proposals.
 - Stakeholder Engagement: Facilitate internal collaboration amongst Coalition members and external engagement with stakeholders, policymakers, and community members.
 Represent the Coalition in public events.
 - Decision-Making: Approve projects and initiatives, while resolving conflicts that may arise along the way.

The strategic direction provided by the Steering Committee will influence all actions taken by the Coalition, which typically fall under four thematic areas: Grants Management, External Affairs, Monitoring and Evaluation, and Finance and Audit. All four areas will be prioritized or deprioritized as deemed necessary by the Steering Committee. For example, when identifying and pursuing a funding opportunity, the Steering Committee may choose to dedicate all Coalition members, as available, to assist in research and proposal writing. While, Finance and Audit may be leveraged heavily after a grant has been successfully pursued.

- Grants Management: Coalition members within
 a Grants Management workstream would be
 responsible for leading the proposal pursuit strategy,
 as determined by the Steering Committee. The Grants
 Management workstream would research funding
 opportunities, communicate opportunities that align
 with the Coalition's objectives, and develop proposals
 accordingly.
 - a. Roles to Consider: Grants Management Director, Grants Manager, Proposal Writer(s)

The Steering Committee should also remain mindful of the Coalition's statewide impact. North Carolina's unique context, characterized by its diverse landscape and significant rural areas, necessitates that the Steering Committee be adaptable and responsive to the state's pressing priorities. The state's commitment to reinvention and advancement post-disaster exemplifies this need. This dedication to recovery and innovation underscores the importance of the Steering Committee in addressing immediate needs while also contributing to North Carolina's priorities in a rapidly evolving environment.



 $^{^{35}}$ "Coalition Building: A How-To Guide." National College Attainment Network, February 2024.

Case Study: Grants Management at an Emerging Coalition

Emerging Coalitions may be focused on pursuing a single funding opportunity before considering the remaining three thematic areas. As a Coalition is starting up, it will be concentrating all resources and staff towards winning its first grant. Therefore, within an Emerging Coalition, efforts can be scattered at first with members taking on many roles at once to surpass the first milestone associated with Coalition building.

The Steering Committee at an Emerging Coalition may be informal, with the limited membership at this stage resulting in all those involved having a voice in the strategic direction of the Coalition. After identifying funding opportunities to be pursued, all members will likely take on a role in the proposal writing process as they are available to assist. The roles of those within the Grants Management Team, highlighted in Figure 3 below, can vary based on the competencies of the organizations involved in the Coalition. Some members may elect to assist with developing a budget proposal as explicitly required in most CHIPS, IRA, and BIL funding opportunities, whereas others may develop the proposed performance measures and mechanisms that will be utilized to track, measure, and report on project progress.



Figure 3: An Emerging Coalition's Governance Structure

Emerging Coalitions may find it difficult to immediately establish a robust governance structure due to a limited network and limited resources. To navigate the obstacles associated with starting up a Coalition, finding a balance between prioritizing critical roles and incorporating their respective responsibilities thoughtfully throughout a pared down structure will help the Coalition find a strong base while making room for growth over time. Emerging, as well as Intermediate Coalitions, should utilize the four thematic areas listed above and associated responsibilities to establish an organization structure that works best for them, given present resources and needs.

As the Coalition matures, and subsequently their responsibilities and membership, the Coalition's governance structure will become more advanced. An Intermediate Coalition will begin incorporating additional thematic areas such as External Affairs, which will support the Coalition's efforts to grow and expand into additional industries. See <u>Figure 6</u> in the Appendix for an Intermediate Coalition's sample governance structure.

- External Affairs: Coalition members within an
 External Affairs workstream would foster existing
 and new relationships to further expand the
 Coalition's ecosystem and achieve its objectives.
 Members may conduct outreach to local officials,
 industry partners, the media, as well as community
 partners to solicit feedback.
 - Roles to Consider: External Affairs Director,
 External Affairs Manager, Industry Liaison, Cost-Match Liaison, Communications Coordinator(s)

A Coalition should establish an explicit, yet agile, governance structure to properly equip them to respond to funding opportunities efficiently and appropriately given each opportunity's unique context. Therefore, the Steering Committee may consider identifying a member that can take on the role of an Industry Liaison or Cost-Match Liaison, depending on the funding opportunity at hand. For example, while funding opportunities through CHIPS do not have a mandatory cost-match, IRA and BIL often do. This means that while a Coalition would consider adjusting their governance structure to incorporate a "Cost-Match Liaison" for some opportunities (See Table 1: Expanded Governance Structure), they may eliminate that role for others.

The Industry Liaison is particularly important for Emerging and Intermediate Coalitions that are looking to expand their membership base. Established Coalitions that want to grow into new industries should consider creating this position so that a designated member is conducting regular outreach, attending relevant industry events, and leveraging the network of Coalition members to widen the Coalition's scope.

Monitoring and Evaluation will also become important as a Coalition reaches Intermediate level maturity due to the importance of data in showcasing a Coalition's value and ability to return on a partner's investment in the Coalition. Data collection will help a Coalition highlight milestones, strengths, and overall capability to pursue and win funding opportunities that will, ultimately, benefit North Carolina and its population.

- 3. Monitoring and Evaluation: Coalition members within a Monitoring and Evaluation workstream would oversee metrics and tools designed to measure the impact of the Coalition. Responsibilities would also include analyzing data related to Coalition activities and developing quarterly reports documenting the data, corresponding milestones, and overall progress.
 - a. Roles to Consider: Monitoring and Evaluation Director, Monitoring and Evaluation Manager, Data Analyst(s)

As a Coalition grows into becoming an Established Coalition, they should consider the fourth thematic area: Finance and Audit. Established Coalitions (See <u>Figure 7</u> in the Appendix) will have procured several grants, which require comprehensive financial monitoring procedures. Identifying these procedures in advance helps prepare for audits, informs reporting required of grant programs, and builds a reputable Coalition that prospective partners can support, financially or otherwise, with confidence.

4. **Finance and Audit:** Coalition members within a Finance and Audit workstream would manage financial monitoring, compliance, and planning for the Coalition. This includes collaborating with the Grants Management workstream to develop budget proposals and disburse grants if the Coalition successfully pursues an opportunity. Members maintain adherence to legal, regulatory, and funding requirements. As needed, this workstream could support audits and compliance reviews.

 a. Roles to Consider: Finance and Audit Director, Finance and Audit Manager, Compliance Officer(s)

If a Coalition has the capacity to further expand their governance structure, there are additional roles that may enhance its capabilities (See Table 1: Expanded Governance Structure). While the roles listed below are not necessary for Coalition success, their corresponding responsibilities may be incorporated under existing roles within the Coalition to bolster a Coalition's capabilities. Additionally, to address these responsibilities, a Coalition may consider leveraging the existing capabilities of Coalition members. Resource and information sharing amongst Coalition members is integral to a Coalition and its success. For instance, a Coalition member may be an expert in workforce development. Engaging that member in times of need would eliminate the need to allocate resources towards a full-time Coalition member dedicated to such a thematic area.

Table 1: Expanded Governance Structure

Title	Responsibilities	Reporting Line
Advisory Board Member(s)	 Composed of experts and stakeholders from fields relevant to the Coalition's mission and identity Provides strategic advice and guidance to the Steering Committee Reviews and evaluates major initiatives and projects 	The Steering Committee reports to the Board as needed
Cost Match Liaison	Researches, identifies, and pursues avenues to meet cost match requirements as needed for federal funding opportunities	If applicable, a Coalition's Industry Liaison can take on this responsibility. If an Industry Liaison does not already exist within the Coalition's governance structure, this role would be held within the External Affairs workstream, reporting to the External
Workforce Development Coordinator	Researches, conducts outreach, and documents entities focusing on workforce development for ease of highlighting within proposals	The role would be held within the Grants Management workstream, reporting to the Grants Management Director
Subject Matter Expert (SME)	Assists with developing substantive responses to relevant thematic areas of a proposal	The role would be held on an ad hoc basis within the Grants Management workstream, reporting to the Grants Management Director
Government Liaison	Advocates for the mission of the Coalition at the state and federal level. This role would act as the primary point of contact between the Coalition and state and federal government	The role would be held within the External Affairs workstream, reporting to the External Affairs Director. OSTI can assume this role as needed, as a connector between state and federal government and the Coalition, if a Coalition does not have the resources to account for this position themselves

Regardless of how a Coalition chooses to structure themselves, the Coalition must outline decision-making processes, along with accountability and escalation procedures. Figure 8 within the Appendix outlines a sample governance model that can be adapted based on the Coalition's chosen governance structure. Establishing a governance model helps facilitate smooth day-to-day operations within the Coalition and allows members to know where to escalate risks, along with the decision-making responsibilities of each member in a leadership position.

Collaborations and Partnerships

Importance of Partnerships:

Matrix Element 3: Coalition Engagement and Outreach

Building and maintaining partnerships is key to a Coalition's success. External collaborations can enable a Coalition to expand their scope, leverage additional resources, and foster a greater impact within their industry. Implementing a process to identify and engage with partnering organizations will yield significant benefits to almost all Coalitions, regardless of their type, as they work towards achieving long-term objectives. ³⁶ Coalitions may consider leveraging an External Affairs workstream and associated roles to enable such outreach and partnership opportunities (see the *Coalition Governance* section for more details).

The potential support OSTI/BSTI can provide through collaborating with Coalitions is addressed in the <u>Resources Available Based on Scoring</u> section. As OSTI/BSTI conducts its assessment of Coalitions to support, a criterion in the Evaluation Matrix includes "Alignment with Office Mission." When reaching out to OSTI/BSTI through the Coalition Intake Form, it is important to reflect and explicitly identify the Coalition's alignment with advancing science, technology, and innovation. Broad impacts across the state, particularly in rural areas, are highly prioritized by OSTI/BSTI when identifying Coalitions to support.

Identifying and Evaluating Potential Partners

Matrix Element 3: Coalition Engagement and Outreach

Identifying and evaluating potential partners is important when looking to grow a Coalition. To best position themselves when searching for partners, a Coalition should first assess their strategic plan to understand the type of partner they are looking for and for what purpose.

Sample questions to consider:

Expansion Areas: Where does the Coalition want to expand?

Areas for Improvement: Which areas does the Coalition need to strengthen?

Gaps or Needs: What gaps or needs limit the Coalition's success?

When identifying gaps, needs, or areas for improvement, areas should be ranked based on priority level. Distinguishing between high-priority and lower-priority improvement areas enables a Coalition to effectively assess the actions it should take, and the partners it should engage. After this, a Coalition can use this analysis to assess which prospective partners will best address these priorities.

Questions a Coalition should ask internally:

Value Addition: What value does this partnership bring the Coalition?

Resource Sufficiency: Does this entity have sufficient resources to fill identified strategic gaps?

Growth Facilitation: How will this partnership help the Coalition break into prospective growth areas?

To answer these questions, a Coalition should rank the capabilities and value a prospective partner can bring, against the findings of their gaps, needs, and improvement areas. This approach provides clear insights into which partners should be prioritized and which partnerships will yield the most benefits. For example, if the gap analysis revealed a lack of funding, the Coalition should seek partners that can enhance competitiveness in the funding landscape. This could involve partners committed to supporting underdeveloped areas, offering additional resources and capabilities, or having influence in specific policy areas. Therefore, it is important to not only identify a Coalition's gap or need, but also to understand how to address and improve it.

When evaluating prospective partners, a Coalition should look to identify prospective entities that share similar missions and goals. Having alignment in these areas maintains that actions and collaborations benefit all parties, and that all partners are working together for a common objective.³⁷ As described in the <u>Building a Coalition's Identity</u> section, consistency in mission and goals also drives other processes such as strategic planning, governance structure, and performance tracking.

Additionally, assessing partners' reputations and track record is another assessment that should be leveraged. This can be related to their pursuit of previous grant opportunities, their reputation with previous Coalitions, or other past experiences. Conducting such a historical analysis can help a Coalition anticipate what working with the entity will be like and whether the partnership will lead to positive outcomes.

Engaging Prospective Partners:

Matrix Element 5: Strategic Fit and Collaboration Potential

Once a Coalition has identified suitable partnerships, the next step is engaging and leveraging these alliances.

When reaching out to prospective partners, initiate contact through formal communication channels such

 $^{{\}bf ^{36}}\ ``Creating\ Partnerships\ and\ Coalitions."\ National\ Association\ of\ Secondary\ School\ Principals,\ February\ 15,\ 2017.$

 $^{^{\}bf 37}$ 1. Creating and Maintaining Coalitions and Partnerships." Community Toolbox. n.d.

as emails, phone calls, or meetings. It is important when first engaging to clearly articulate the partnership's value proposition, which outlines the specific benefits and outcomes expected from the partnership. Describe the alignment between both parties' mission and goals and highlight how partnering will help better achieve these shared objectives. This will provide prospective partners a basis for assessing and considering collaboration. The Coalition Intake Form outlines similar areas of consideration for OSTI/BSTI to assess, but others will be interested in this information as well.

After the initial engagement, if the contact is interested in collaborating, a Coalition should center discussion around developing partnership agreements. This will establish the terms of the partnership, providing clarity and alignment for all parties involved. A few areas to address in a partnership agreement are listed below, while keeping in mind the previous sections (<u>Building a Coalition's Identity</u> and <u>Coalition Governance</u>).³⁸

- Establish roles and responsibilities
- Define expectations
- Outline processes for collaboration
- Institute communication channels
- · Set goals
- Identify resource commitments
- Include clear dispute resolution mechanisms

With partnership agreements established, a Coalition can now leverage these strategic alliances to achieve their goals.

With the advancement of science, technology, and innovation at the forefront of North Carolina's economic development, OSTI/BSTI looks to align with Coalitions that can increase these opportunities by leveraging federal funding within the state. Programs like CHIPS, IRA, and BIL are essential to this mission. Below are a few best practices and benefits of leveraging partnerships to secure federal funding.

Leveraging Partnerships

Matrix Element 1: Financial and Grants Management Capacity

Joint Grant Applications - Enhanced Credibility and Scope:

When multiple organizations collaborate on a grant application, their collective reach and credibility can enhance the appeal of the proposal. Federal agencies often favor collaborative efforts that demonstrate a broad base of support. They evaluate the potential for a project to contribute to multiple avenues of U.S. priorities, such as research, innovation, education, workforce development, environmental responsibilities, etc.³⁹ A Coalition should have a clear understanding of the evaluation priorities of the specific grant program they are pursuing. For example, sixty to seventy percent of major infrastructure

grant applications now include workforce and labor plans, placing Coalitions that do not include such plans at a disadvantage. 40 Coalition partnerships can help address these priorities by strategically gathering diverse expertise and resources to meet all aspects of the grant requirements. By aligning with diverse partners and articulating a unified commitment to these priorities, a Coalition can enhance the competitiveness and impact of their funding proposal.

For example, a Coalition submitting a funding proposal under BIL to improve North Carolina's transportation infrastructure should utilize various partnerships to convey distinct messages. Industry leaders can be leveraged to articulate the economic benefit and business impact of the proposal, while community organizations can be engaged to describe the tangible improvements and day-to-day impact on residents in both urban and rural areas. Such a strategic use of partnerships allows the proposal to address both the macroeconomic and community-level benefits, aligning with BIL funding priorities and establishing credibility.

Shared Resources and Expertise - Cost Efficiency and Resource Optimization:

To secure federal funding, through the CHIPS program, for example, the CHIPS Program Office (CPO) encourages collaboration between various stakeholders, including but not limited to industry partners, investors, customers, designers, and suppliers. They describe how leveraging a diverse array of partners can help "attract investors, foster innovation, reduce risk, increase transparency, and ensure that investments are consistent with future market demand." This collaborative approach is equally important for pursuing federal funding opportunities beyond CHIPS, to be able to write robust proposals that showcase the unique capabilities of every partner involved in the process.

That said, specifically for CHIPS, NIST recommends potential collaborations to include purchase commitments and partnerships between producers and suppliers. For purchase commitments, the U.S. Department of Commerce "encourages projects where a manufacturer secures commitments from one or more customers to purchase a share of the project's output." Such commitments to purchase can help de-risk the project, attract more capital, and induce larger-scale, domestic investments.⁴² Additionally, CHIPS encourages partnerships between producers and suppliers. The Department advocates for collaboration among semiconductor fabricators and their upstream suppliers (such as specialty chemical providers), equipment providers, and downstream partners (such as those involved in assembly, testing, and packaging). Collaboration between partners with diverse capabilities can enhance the resiliency of the entire supply chain, creating a stronger case for funding.

^{39 &}quot;CHIPS for America: Advanced Packaging Research & Development Proposer's Day." U.S. Department of Commerce, National Institute of Standards and Technology, October 22, 2024.

 $^{^{40}}$ "Six Ways to Make Your BIL Grant Application More Competitive." Local Infrastructure Hub, February 3 , 2023 .

 $^{^{41}}$ "CHIPS for America: A Strategy for the CHIPS for America Fund." NIST, U.S. Department of Commerce, September 6 , 2022 .

⁴² "CHIPS for America: A Strategy for the CHIPS for America Fund." NIST, U.S. Department of Commerce, September ⁶, ²⁰²².

Advocacy and Lobbying - Influence and Policy Support:

A Coalition can also leverage partners to enhance their advocacy and lobbying efforts. Leveraging partner networks to plan grassroots actions, advertise projects, and develop policy advocacy materials (letters of support, case studies, sign-on letters) can all enhance a Coalition's chance of securing federal funding.⁴³

For example, a Coalition aiming to secure IRA funding for a large-scale infrastructure project may leverage different partners for specific advocacy and lobbying support.

They could leverage Community Development Organizations to initiate community events to build public support, industry leaders to produce promotional materials that promote the project's benefit, and local governments to draft and sign letters of support to federal agencies. By leveraging the strengths and network of each partner, the Coalition can present a comprehensive and compelling case for IRA funding.

Tracking Progress

Data Collection Essentials

Matrix Element 4: Coalition Sustainability and Strategic Planning

As Coalitions operate and grow, tracking progress becomes a critical part of long-term success. This process enables a Coalition's ability to monitor their performance, adapt to challenges, and seize opportunities. Effective use of performance metrics provides a structured and objective mechanism to measure the Coalition's activities, outcomes, and impact. These metrics must be carefully designed, implemented, and continuously monitored to provide actionable insights.

Performance metrics are quantifiable measures used to gauge a Coalition's progress toward specific goals. These metrics serve as the foundation for evaluating efficiency, effectiveness, and growth. Without well-defined metrics, Coalitions risk operating without a true guide, lacking the insights necessary to make quality decisions. Additionally, articulating Key Performance Indicators (KPIs) to external stakeholders, such as prospective partners and federal funding entities, can enhance a Coalition's appeal and likelihood of securing federal funding. The process of designing these metrics should align with the strategic objectives of the Coalition, and each metric reflects an area of performance.

Most metrics fall into a few core categories:

1. Financial Metrics

Financial metrics measure how funds are allocated and spent to achieve program objectives.

• **Budget Analysis:** A Coalition might demonstrate that federal funding has been spent within budgetary constraints, with regular reports detailing expenditures.

Example: A North Carolina technology Coalition could show that 95% of a \$2 million grant from the Department of Commerce's Economic Development Administration was spent on approved activities, like infrastructure upgrades or workforce training.

• **Return on Investment:** Demonstrates effective use of federal funding.

Example: Showing how many manufacturing jobs were created per \$10,000 invested.

2. Operational Metrics

These metrics demonstrate how a Coalition operates effectively and meets program timelines and objectives.

 Grant Compliance: Reporting standards, procurement regulations, and audit requirements show that funds are managed responsibly.

Example: Official program documents showing audit history and compliance with federal funding requirements.

• **Service Measurements:** Tracking specific criteria can show program milestones and successes.

Example: A Coalition may report the number of workforce training sessions they held and the retention number of participants.

3. Employee Metrics

Employee metrics assess the impact of funding on Coalition staff, partners, and the broader workforce.

• **Job Creation:** Attracting and hiring capable workers is essential to the success of a Coalition.

Example: A Coalition in North Carolina could document that funding from the CHIPS Act enabled the hiring of 50 skilled workers to develop energy infrastructure.

 Training and Retention Rates: Tracking employee retention rates and the number of workers trained in new technologies ensures sustainability.

Example: A Coalition could report that 300 workers completed federally funded training programs, with an 85% retention rate six months post-training.

4. Impact Metrics

Impact metrics demonstrate the broader social and economic outcomes of federally funded programs.

• Economic Growth: Industry and community growth reflects Coalition success.

Example: A Coalition could showcase how federal funding for advanced manufacturing hubs in North Carolina created 1,000 new jobs in high-tech industries.

⁴³ "Coalitions as a Tool for Advocacy: Evidence and Lessons Learned." TCC Group, October ²⁰²¹.

 Educational Impact: Coalition success can be measured in increased interest and participation in technology fields.

Example: Documenting increased enrollment in STEM programs at North Carolina universities, with 500 additional students entering semiconductor engineering fields.

Poorly designed metrics can lead to unintended consequences, such as incentivizing the wrong behaviors, or creating a narrow focus that overlooks critical areas. A well-designed metric should be SMART (see the <u>Building a Coalition's Identity</u> section for more details).

Data Collection Drives Internal Improvement

Matrix Element 4: Coalition Sustainability and Strategic Planning

The impact of metrics can influence both internal activities as well as enhance external stakeholder engagement. Internally, utilizing metrics to track Coalition performance is critical for Coalitions to adapt, evolve, and stay competitive in their industries. Using performance reviews, Coalitions can establish structured processes for receiving input and making informed changes. These mechanisms are designed to consistently monitor performance, identify areas for development, and allow the Coalition to operate efficiently.

An effective performance review consists of several core components that work together to provide action items:

- **1. Source of Feedback:** This could be from internal or external stakeholders.
- **2. Feedback Mechanism:** Mechanisms such as digital surveys, performance dashboards, or structured interviews are utilized to capture feedback.
- **3. Analysis and Interpretation:** Collected data needs to be thoroughly analyzed to identify patterns, areas of improvement, and potential opportunities.
- **4. Response and Action:** The most important phase of the feedback loop is acting on the feedback. For example, if customer surveys indicate dissatisfaction with delivery times, the organization must revise its logistical strategies.

By regularly acting on feedback and conducting thorough performance evaluations, Coalitions can create a culture of continuous improvement, where both individuals and the Coalitions are constantly improving.

Additionally, when evaluating metrics to assess a Coalition's impact and its alignment with North Carolina's innovation progress compared to other states, a valuable resource is the North Carolina DOC OSTI Tracking Innovation Report. This report is part of a long-running series first published in 2000, and rigorously evaluates North Carolina's standing against other states in the country on 42 measures of innovation capacity, and outlines ways to advance the state's economy by encouraging and harnessing innovation. Coalitions can leverage this comprehensive report to identify key areas of improvement, benchmark their progress, and develop targeted strategies to enhance their contributions to the state's innovation ecosystem.

Data Collection Drives External Engagement

Matrix Element 1: Financial and Grants Management Capacity

Externally, outside stakeholders are continuously evaluating a Coalition's performance and value through KPIs. This includes prospective partners, federal funding entities, and the community at large.

Prospective partners seek to understand the value the Coalition can provide upon collaboration, assessing how the partnership can enhance their own strategic objectives. They are particularly interested in metrics that demonstrate the Coalition's ability to drive innovation, successfully collaborate, and achieve measurable outcomes.

Example: A Coalition looking to collaborate with a
new partner could present detailed case studies and
performance metrics that highlight successful past
collaborations or project initiatives. They can also
include testimonials or endorsements from previous
partners to provide credibility and a proven track
record of success. This approach will help prospective
partners understand the potential benefits and
strategic fit of the collaboration.

Federal funding entities tend to focus on the broader community impact and efficient utilization of their funds. They require evidence that a Coalition can deliver tangible benefits to the community, such as improved public health and economic development. Additionally, grant proposals (such as CHIPS, IRA, and BIL) are often required to include comprehensive plans that clearly outline the allocation of funds, the anticipated return on investment, and project impact. These entities rigorously examine KPIs to maintain that their investments are used effectively and that the Coalition is capable of managing, reporting, and driving impact with the allocated funds.

 Example: A Coalition pursuing BIL funding to build highways in North Carolina should present a detailed impact study that includes specific metrics for success, such as projected reductions in traffic congestion, improvements in road safety, and economic benefits to local communities. The proposal should also highlight the Coalition's capacity to manage funds effectively, showcasing their operational strengths, financial management systems, and past performance on similar projects with supporting qualitative and quantitative data. Clearly demonstrating a Coalition's potential impact, capacity, and past success will increase the chances of securing federal funding.

Data collection is essential for both internal and external purposes. Recognizing the importance and benefits of robust data collection and KPIs is invaluable for a Coalition aiming to grow, establish meaningful connections, and achieve their objectives.

Strategic Planning

Importance of a Strategic Plan

Matrix Element 4: Coalition Sustainability and Strategic Planning

A strategic plan is an essential tool for any Coalition seeking long-term success, as it provides direction, increases operational efficiency, expands capabilities, and promotes continuous improvement. By clearly defining goals and outlining actionable steps, a strategic plan enables a Coalition to navigate challenges effectively and seize opportunities for growth.⁴⁴

Many of the elements and benefits of a successful strategic plan directly connect to each of the previously discussed items discussed in the <u>Best Practices for Coalitions</u> section, including <u>Building a Coalition's Identity, Coalition Governance, Collaborations and Partnerships</u>, and <u>Tracking Progress</u>.

Leveraging these elements in a Coalition's strategic plan is critical for a Coalition's long-term success.

Alignment to Best Practices

Matrix Element 4: Coalition Sustainability and Strategic Planning

Provides Direction - Coalition Identity

As described in the <u>Building a Coalition's Identity</u> section, clearly defining a Coalition's explicit purpose, mission, and goals is the first step to building a successful Coalition. These elements need to be thoroughly detailed in the Coalition's strategic plan, serving as the guiderail to provide direction for actions and initiatives. Additionally, this clarity supports members as they align and working towards common objectives, fostering unity and a shared sense of purpose within the Coalition.⁴⁵

Increases Operational Efficiency - Coalition Governance

A strategic plan will include a detailed governance structure, clearly defining the roles and responsibilities of Coalition members. Establishing this will increase operational efficiency by limiting duplicative efforts and fostering an understanding of each member's impact on the Coalition's objectives. ⁴⁶ Roles described in the <u>Coalition Governance</u> section such as the "Steering Committee" and "External Affairs Workstreams" all play a role in driving a Coalition's strategic plan and operational efficiency.

Expands Capabilities - External Partnerships and Collaborations

Plans for expanding capabilities and fostering long-term growth should be outlined in a Coalition's strategic plan. Engaging and leveraging external partnerships and collaborations is how Coalitions can achieve this scalability.

The processes and best practices described in the <u>Collaboration and Partnerships</u> section should be outlined in a Coalition's strategic plan in alignment with their mission and goals. This enables the strategic plan to better foster growth and expand the capabilities of a Coalition.

Promotes Continuous Improvement - Tracking Progress

Finally, a strategic plan can promote continuous improvement within a Coalition through analysis of performance metrics. Implementing the processes outlined in the <u>Tracking Progress</u> section into the strategic plan will enable a Coalition to foster this growth through self-reflection. Additionally, establishing data collection processes in a strategic plan enables a Coalition to pull KPIs, data outlining progress towards goals, gaps, and improvement areas. These metrics will help a Coalition understand how they can work towards continuous improvement.

A comprehensive strategic plan will encompass all the elements outlined above, serving as the definitive resource for guiding Coalition success. By leveraging a well-structured strategic plan, a Coalition can enable cohesive and informed decision-making, to achieve their long-term objectives.



^{44 &}quot;Strategic Planning Basics." Balanced Scorecard Institute, July 24, 2024.

⁴⁵ "Section ¹. An Overview of Strategic Planning or 'VMOSA' (Vision, Mission, Objectives, Strategies, and Action Plans)." Chapter ⁸. Developing a Strategic Plan | Main Section | Community Toolbox, n.d.

 $^{^{46}}$ Cohen, Larry, Nacy Baer, and Pam Satterwhite. "Developing Effective Coalitions: An Eight Step Guide." Prevention Institute, 2002 .

NEXT STEPS

As the state of North Carolina looks toward a future of increased connectivity, Coalition leaders and stakeholders are invited to actively engage with the opportunities presented within this Guide. Completing the <u>Coalition Intake Form</u> is an essential step towards understanding the foundational strengths and growth areas within a successful Coalition, guiding each Coalition toward effective and sustainable collaboration.

By embracing continuous learning, and by fostering new alliances, Coalitions can contribute to a resilient and dynamic ecosystem that drives forward scientific and technological progress. OSTI/BSTI is available to support Coalitions at every stage of their journey. Coalition members are encouraged to reach out to the office for assistance, whether for potential cost-sharing opportunities, for insights on applying for technology-based funding opportunities, or for advice on partnership development. Engaging in this ongoing dialogue allows for the exploration of innovative Coalitions and the development of cohesive strategies that reinforce economic growth.

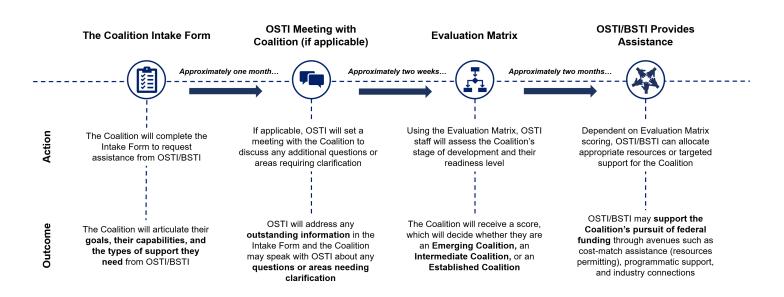


Figure 4: The Process Flow

Coalition Application

If your Coalition is interested in receiving support from OSTI/BSTI, please download the Intake Form linked in the <u>Coalition Intake Form</u> section or refer to OSTI/BSTI's website (<u>Science, Technology & Innovation | NC Commerce</u>). The instructions provided outline how to complete the form, items for consideration, and how to submit the completed form to OSTI/BSTI for consideration.

Upon receiving the completed form, OSTI/BSTI will utilize the <u>Evaluation Matrix</u> to assess the Coalition's readiness for receiving support from OSTI/BSTI. If conditions are met and resources are available, OSTI/BSTI will reach out to the Coalition to solicit further discussion. The levels of support that OSTI/BSTI can provide to Coalitions will be dependent on funding available to the office, state approvals, and staff bandwidth. Please reference the *Resources Available Based*

<u>on Scoring</u> and Next Steps for the State sections for additional information regarding the levels of support that OSTI/BSTI can provide Coalitions, as well as OSTI/BSTI's request for additional funding.

Next Steps for the State

To position North Carolina as a leader in technology-driven economic development, the state must prioritize enhancing the funding and operational capacity of OSTI/BSTI. By increasing financial support, OSTI/BSTI could expand its reach and empower more Coalitions to meet their goals (See Figure 5). This would include equipping Coalitions with the tools and expertise necessary to navigate challenges, secure federal grants, and innovate within their respective fields. Enhancing these efforts not only has the potential to bolster Coalition success but also to position the state as a hub for technological advancement and economic development.

How could OSTI/BSTI support Coalitions?

Current Capabilities



Access to State Data

Economic data, labor market data, business data and tools, economic development reports, etc., as needed by Coalitions to bolster proposals



Letters of Support

Formal letters indicating OSTI/BSTI's support for a Coalition's grant proposal (as applicable)



Connections

Connections with other Coalitions across North Carolina to leverage shared industry insight and resources applicable to Federal funding opportunities



Strategic Guidance

Support navigating complex proposals, understanding grants regulations, and building Coalition capacities

Expanded Capabilities



Enhanced Research Opportunities

Conduct new research and generate new data sets to be leveraged by Coalition's when completing proposals



Monetary Support

Cost-match opportunities (resources permitting)



Private Sector Partnerships

"Red team" review of developed proposals with Subject Matter Experts (SMEs) to garner feedback and refine content prior to submission, point of contact list for Coalitions to leverage when third-party support is needed



Mentorship & Development Workshops

Hands on mentorship opportunities on an ad hoc basis or through invitations to leadership and innovation workshops to further hone skills and strategic planning capabilities

Figure 5: Expanded Levels of Support

One critical avenue for improvement lies in providing Coalitions with robust resources and guidance. Expanded funding could support the development of customized toolkits, including market analyses, strategic planning frameworks, and performance tracking systems, designed to address the specific needs of Coalitions. These resources could help them identify opportunities, mitigate risks, and foster resilience. State investment could enable OSTI/BSTI to develop advanced training programs, including workforce development initiatives, leadership workshops, and specialized instruction on emerging technologies. Such training programs aid in addressing skill gaps that Coalitions often encounter, leading to a more capable and adaptable workforce.

An empowered OSTI/BSTI would also be better positioned to guide Coalitions through the complexities of securing federal grants. By offering detailed grant application guides and providing personalized advisory services, the office could improve the competitiveness of Coalitions vying for grants from federal agencies. Beyond financial benefits, federal grants often serve as endorsements, helping Coalitions attract additional investment and elevate their visibility.

Public-private partnerships present another compelling opportunity to enhance OSTI's/BSTI's reach. By partnering with private industry, the state could leverage expertise and resources to co-fund Coalition programs and provide mentorship. Partnerships with philanthropic organizations could offer additional funding streams, particularly for highrisk, high-reward projects that may fall outside traditional funding mechanisms. Moreover, the state could facilitate the creation of regional innovation hubs that integrate public agencies, private enterprises, and academic institutions. These hubs would serve as collaborative spaces for resource sharing, joint research, and the development of scalable solutions.

To implement these initiatives effectively, North Carolina must adopt a strategic approach for supporting Coalitions. Establishing dedicated budget allocations for OSTI/BSTI would provide sustained monetary support to Coalitions, while legislative actions could provide further incentives for partnering with private industry. With dedicated monetary support, OSTI/BSTI could establish a cost-match fund it could provide to Coalitions pursuing federal grant opportunities which contain cost-match requirements that would otherwise inhibit Coalitions from pursuing the funding due to lack of cost-matching funds. Cost-match funds from OSTI/BSTI could also be leveraged to support public-private partnerships Coalitions seek to establish for projects that invest in the development of innovation hubs and expanded economic growth and workforce development opportunities. Such support from the state would result in:

- Enhanced Capacity: With increased funding, OSTI/ BSTI can expand its capacity to support more Coalitions, providing them with the necessary tools and resources to succeed. Critically, cost-match funding provided by OSTI/ BSTI could unlock several federal funding opportunities Coalitions were previously unable to pursue due to lack of monetary support.
- Improved Resources: Additional funding will allow OSTI/BSTI to develop and distribute more comprehensive resources, such as advanced training programs, detailed grant application guides, and personalized advisory services.
- **Greater Impact:** By strengthening OSTI/BSTI's capabilities, the state can better equip the Coalitions to secure federal grants, drive technological innovation, and contribute to North Carolina's economic development. Cost-match funding would also serve as a catalyst for launching and strengthening public-private partnerships in state science, technology, and innovation initiatives.

By strengthening OSTI/BSTI through targeted financial support, expanded resources, and strategic partnerships, North Carolina can create a foundation for long-term economic growth and innovation. Enhanced funding would enable Coalitions to access critical resources, secure federal grants, and innovate in ways that drive the state's economy forward. Additionally, fostering robust public-private partnerships and integrating academic research into Coalition initiatives would further solidify the state's position as a leader in technology. Through these efforts, North Carolina can set a national example of how strategic investment in science and technology infrastructure can drive economic and technological advancement.

Contact Information

OSTI Email Inbox: OSTI_Programs@commerce.nc.gov

Reminder: Coalitions completing the Intake Form should email the completed form to the OSTI Email inbox above. Following this, OSTI/BSTI will review the submitted form and use the answers to complete the evaluation matrix. OSTI/BSTI will reach out, likely within a month, to have a conversation to better understand the request from the Coalition

REFERENCES

"Advancing Defense Innovation." NC Defense Innovation Task Force | NC Board of Science, Technology, and Innovation, March 14, 2022. https://www.commerce.nc.gov/defense-innovation-task-force-report-2022-1/download?attachment

"Advancing Equitable Workforce Development for Infrastructure Jobs." The White House, November 2022. https://www.whitehouse.gov/wp-content/uploads/2022/11/Advancing-Equitable-Workforce-Development-for-Infrastructure-Jobs_110122.pdf

"Advocacy Resource: Coalition Checklist." Alliance for Justice and Bolder Advocacy, 2018. https://afj.org/wp-content/uploads/2018/06/BA-Coalition-Checklist-1-2.pdf

"Biden-Harris Administration Announces Preliminary Terms with Akash Systems to Support Development and Production of Emerging Semiconductor Technology." U.S. Department of Commerce, November 13, 2024. https://www.commerce.gov/news/press-releases/2024/11/biden-harris-administration-announces-preliminary-terms-akash-systems.

Blatt, Josh. "Defense Department Should Invest in Leap-Ahead Semiconductor Technologies, Work to Reshore Production Capabilities, and Strengthen Industry and Interagency Engagement, Says New Report." National Academies of Sciences, Engineering, and Medicine, August 28, 2024. <a href="https://www.nationalacademies.org/news/2024/08/defense-department-should-invest-in-leap-ahead-semiconductor-technologies-work-to-reshore-production-capabilities-and-strengthen-industry-and-interagency-engagement-says-new-report."

Butterfoss, F. D., & Kegler, M. C. (2009). The Community Coalition Action Theory. In R. J. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), Emerging Theories in Health Promotion Practice and Research (2nd ed., pp. 237-276). Jossey-Bass. https://psycnet.apa.org/record/2009-19878-009

CHIPS Act Funding Opportunity Announcement. U.S. Department of Commerce, 2023. https://www.nist.gov/system/files/documents/2023/02/28/CHIPS_NOFO-1_Building_Skilled_Diverse_Workforce_Fact_Sheet_0.pdf

CHIPS and Science Act of 2022, Pub. L. No. 117-167, H.R.4346 (2022). https://www.congress.gov/bill/117th-congress/house-bill/4346

"CHIPS for America: A Strategy for the CHIPS for America Fund." NIST, U.S. Department of Commerce, September 6, 2022. https://www.nist.gov/system/files/documents/2022/09/13/CHIPS-for-America-Strategy%20%28Sept%206%2C%202022%29.pdf

Cline, Michael. "15 Things We Learned from the New 2020 Census Data." Recent Blogs | NC OSBM, May 15, 2023. https://www.osbm.nc.gov/blog/2023/05/25/15-things-we-learned-new-2020-census-data#:~:text=1.,Age%20and%20Racial/Ethnic%20Characteristics.

"CHIPS NOFO, Building a Skilled and Diverse Workforce." U.S. Department of Commerce. 2023. https://www.nist.gov/system/files/documents/2023/02/28/CHIPS_NOFO-1_Building_Skilled_Diverse_Workforce_Fact_Sheet_0.pdf

"Coalitions as a Tool for Advocacy: Evidence and Lessons Learned." TCC Group, October 2021. https://www.tccgrp.com/wp-content/uploads/Coalitions-Tool-for-Advocacy-Gates-FINAL-10.29.21.pdf

"Coalition Building: A How-To Guide." National College Attainment Network, February 2024. https://cdn.ymaws.com/www.ncan.org/resource/resmgr/policyadvocacy/resource_center/coalitions_v3.pdf

Cohen, Larry, Nacy Baer, and Pam Satterwhite. "Developing Effective Coalitions: An Eight Step Guide." Prevention Institute, 2002. https://www.ncfrp.org/wp-content/uploads/Tools-DevelopEffectiveCoalitions.pdf.

"Creating Partnerships and Coalitions." National Association of Secondary School Principals, February 15, 2017. https://www.nassp.org/tools-to-improve-your-school/for-state-and-district-officials/creating-partnerships-and-coalitions/.

Eggers, William D., John O'Leary, and Kevin Pollari. "Executing on the \$2 Trillion Investment to Boost American Competitiveness." Deloitte Insights, March 16, 2023. https://www2.deloitte.com/us/en/insights/industry/public-sector/infrastructure-bill-projects-agency-execution.html.

"Fact Sheet: The Bipartisan Infrastructure Deal." The White House, November 6, 2021. https://www.whitehouse.gov/briefingroom/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/.

"First in Talent: Strategic Economic Development Plan for the State of North Carolina." NC Department of Commerce, April 26, 2022. https://www.commerce.nc.gov/guidelines-north-carolina-strategic-plan-economic-development/download?attachment

Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building Collaborative Capacity in Community Coalitions: A Review and Integrative Framework. American Journal of Community Psychology, 29(2), 241-261. https://pubmed.ncbi.nlm.nih.gov/11446279/

Haskins, Glencora, and Joseph Parilla. "Accelerating Equitable Growth in North Carolina's Life Sciences Cluster." Brookings, May 21, 2024. https://www.brookings.edu/articles/accelerating-equitable-growth-in-north-carolinas-life-sciences-cluster/.

Hitchings, Benjamin, and David Rouse. "Managing Disruption in a Rapidly Changing World." The University of North Carolina at Chapel Hill, September 30, 2024. https://www.sog.unc.edu/sites/default/files/reports/Managing_Disruption_web_2024-10-08.pdf

Infrastructure Investment and Jobs Act (BIL) Notice of Funding Opportunity. U.S. Department of Transportation, 2023. https://www.fhwa.dot.gov/bridge/bip/index.cfm

Kreuter, M. W., Lezin, N. A., & Young, L. A. (2000). Evaluating Community-Based Collaborative Mechanisms: Implications for Practitioners. Health Promotion Practice, 1(1), 49-63. https://journals.sagepub.com/doi/abs/10.1177/152483990000100109

"National Advanced Packaging Manufacturing Program (NAPMP) Advanced Packaging Research and Development (R&D)." U.S. Department of Commerce, NIST, October 22, 2024. https://www.nist.gov/system/files/documents/2024/10/18/CHIPS%20NAPMP%20NOFO%202.pdf

National Coalition for Advanced Manufacturing. Federal Funding and Regional Collaboration: Best Practices. National Coalition for Advanced Manufacturing, 2022. https://www.whitehouse.gov/wp-content/uploads/2022/10/National-Strategy-for-Advanced-Manufacturing-10072022.pdf

"New Report Finds Unrealized Opportunity to Grow North Carolina's Defense Innovation Economy." Press Release | NC Department of Commerce, April 26, 2022. https://www.commerce.nc.gov/news/press-releases/new-report-finds-unrealized-opportunity-grow-north-carolina%E2%80%99s-defense-innovation.

North Carolina Department of Commerce. First in Talent: North Carolina's Economic Development Strategy. NC Department of Commerce, 2022. https://www.commerce.nc.gov/data-tools-reports/economic-development-reports/strategic-economic-development-plan-north-carolina

"Proposal and Award Policies and Procedures Guide." U.S. National Science Foundation, May 20, 2024. https://nsf-gov-resources.nsf.gov/files/nsf24_1.pdf

Rabinowitz, Phil. "Section 5. Coalition Building I: Starting a Coalition." Chapter 5. Choosing Strategies to Promote Community Health and Development | Tools | Community Toolbox, n.d. https://ctb.ku.edu/en/table-of-contents/assessment/promotion-strategies/start-a-coalition/tools.

Reid, Michael, and Falan Yinug. "Chipping in: The Positive Impact of the Semiconductor Industry on the American Workforce and How Federal Industry Incentives Will Increase Domestic Jobs." Semiconductor Industry Association, May 19, 2021. https://www.semiconductors.org/chipping-in-sia-jobs-report/.

Research Triangle Park. "Our Research Hub." Research Triangle Park, 2023. https://www.researchtriangle.org/the-triangle/

Rhoades, David. "New Report Finds Unrealized Opportunity to Grow North Carolina's Defense Innovation Economy." New Report Finds Unrealized Opportunity to Grow North Carolina's Defense Innovation Economy | NC Department of Commerce, April 26, 2022. https://www.commerce.nc.gov/news/press-releases/new-report-finds-unrealized-opportunity-grow-north-carolina%E2%80%99s-defense-innovation.

Roussos, S. T., & Fawcett, S. B. (2000). A Review of Collaborative Partnerships as a Strategy for Improving Community Health. Annual Review of Public Health, 21, 369-402. https://pubmed.ncbi.nlm.nih.gov/10884958/

Roy, Diana. "The Chips Act: How U.S. Microchip Factories Could Reshape the Economy." Council on Foreign Relations, October 8, 2024. https://www.cfr.org/in-brief/chips-act-how-us-microchip-factories-could-reshape-economy.

"Section 1. an Overview of Strategic Planning or 'VMOSA' (Vision, Mission, Objectives, Strategies, and Action Plans)." Chapter 8. Developing a Strategic Plan | Main Section | Community Toolbox, n.d. https://ctb.ku.edu/en/table-of-contents/structure/strategic-planning/vmosa/main.

"Six Ways to Make Your BIL Grant Application More Competitive." Local Infrastructure Hub, February 3, 2023. https://localinfrastructure.org/news/six-ways-to-make-your-bil-grant-application-more-competitive/.

"SMART Goals: A How to Guide." University of California, 2016. https://www.ucop.edu/local-human-resources/_files/performance-appraisal/How%20to%20write%20SMART%20Goals%20v2.pdf

"Strategic Planning Basics." Balanced Scorecard Institute, July 24, 2024. https://balancedscorecard.org/strategic-planning-basics/.

"Strength in Numbers: A Guide to Building Community Coalitions." Community Catalyst, August 2003. https://www.communitycatalyst.org/wp-content/uploads/2022/11/strength_in_numbers_a_guide_to_building_community_coalitions_aug03.pdf

Subcommittee on Advanced Manufacturing, National Science and Technology Council." National Strategy for Advanced Manufacturing, "2022. National strategy for ADVANCED MANUFACTURING

"1. Creating and Maintaining Coalitions and Partnerships." Community Toolbox, n.d. https://ctb.ku.edu/en/creating-and-maintaining-coalitions-and-partnerships.

"2024 North Carolina Rural Health Snapshot." North Carolina Rural Health Association, April 2024. https://www.ruralhealthnc.org/wp-content/uploads/2024/05/2024-NC-Rural-Health-Snapshot.pdf

APPENDIX

List of figures

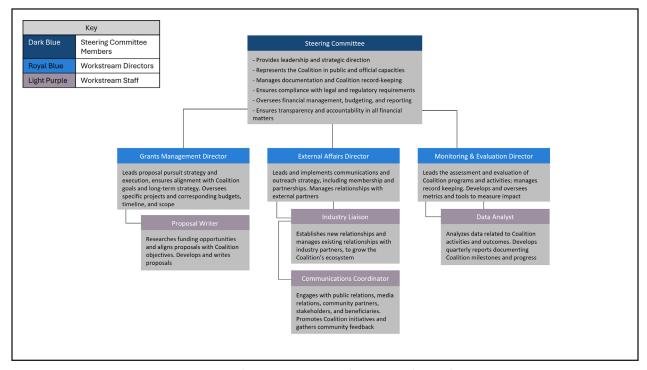


Figure 6: Sample Governance Structure for an Intermediate Coalition

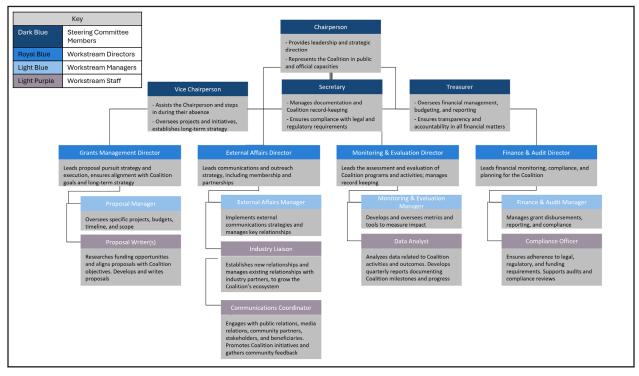


Figure 7: Sample Governance Structure for an Established Coalition

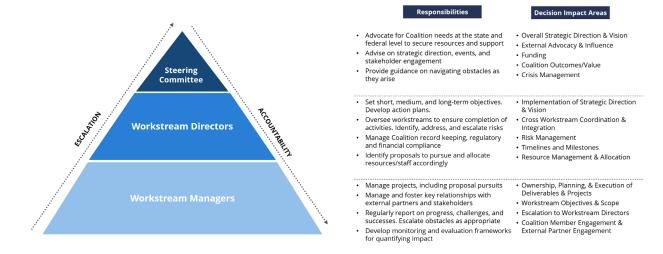


Figure 8: Sample Governance Model

GLOSSARY

Chips

Designed to boost U.S. semiconductor manufacturing, R&D, and workforce development. Organizations applying for CHIPS Act grants must adhere to the following:

• Eligibility Requirements: Priority is given to organizations involved in semiconductor manufacturing and research. These organizations should demonstrate advanced technological capabilities and alignment with U.S. supply chain resilience goals.

Goals:

- Strengthening domestic semiconductor manufacturing and R&D
- Establish collaborative partnerships with universities, private technology companies, and federal research centers.
- Demonstrate clear strategies for job creation, workforce development, and long-term sustainability.
- Exhibit financial transparency and robust project management frameworks to comply with federal reporting requirements.

IRA

Focuses on clean energy, climate resilience, and emissions reduction. When considering organizations for IRA grants, the following guidelines and practices apply:

• Eligibility Requirements: Applicants should focus on clean energy technologies such as solar, wind, hydrogen, and energy storage. Proposals with strong environmental justice components receive priority consideration.

Goals:

- Collaborate with local communities and focus on projects that reduce carbon footprints, increase energy efficiency, or deploy renewable energy solutions.
- Align with federal objectives on emissions reduction, especially in underserved areas or areas highly impacted by climate change.
- Build a comprehensive risk management plan to support long-term project sustainability and environmental safety.

BII

Aims to rebuild and enhance infrastructure across the U.S. Focus areas include transportation, broadband expansion, and clean water projects.

• Eligibility Requirements: Applicants must focus on large-scale infrastructure projects. This includes transportation projects, electric grid improvements, and broadband infrastructure development.

Goals:

- Build partnerships with state and local governments, especially for transportation and broadband expansion projects.
- Focus on public-private partnerships to expand project reach and secure additional funding.
- Provide detailed project timelines and clear financial plans to meet milestones and budget targets over the long-term.

ADDITIONAL RESOURCES

Resource Type:	Associated Resource Links:
OSTI/BSTI Reports	"Forces for Change – An Economy in Transition." The North Carolina Board of Science and Technology, November 13, 2018. https://www.commerce.nc.gov/forces-change-economy-transition-2000/open
	"InnovateNC: Community Innovation Asset Map." InnovateNC, 2017. https://www.commerce.nc.gov/innovatenc-community-innovation-asset-map-2017/open
	"Tracking Innovation." NC Department of Commerce Office of Science, Technology & Innovation, 2024. https://www.commerce.nc.gov/tracking-innovation-2024/open
Federal Information	"Case Studies." U.S. Economic Development Administration, n.d. https://www.eda.gov/funding/programs/american-rescue-plan/build-back-better/case-studies.
	"Phase 2 Tech Hubs Supplemental Guide: Investment and Policy Commitment Menu." U.S. Economic Development Administration, n.d.
	https://www.eda.gov/sites/default/files/2023-12/Tech_Hubs_Commitment_Menu.pdf
Insights/Guidance	"Management Guide for Consortia." NC State University, November 14, 2024. https://research.ncsu.edu/centers/guidelines-and-management/management-guideconsortia/.
	"Advanced Technology, Advanced Training: A New Policy Agenda for U.S. Manufacturing." MIT Initiative for Knowledge and Innovation in Manufacturing, May 2021. https://ipc.mit.edu/wp-content/uploads/2022/03/Adv-Tech-Adv- Training-final-May-2021.pdf
	"Manufacturing USA: Evaluation and Recommendations." Manufacturing Policy Initiative at O'Neill, October 2019. https://policyinstitute.iu.edu/doc/mpi/insight/2019-10.pdf
Analysis	Kanter, Rosabeth Moss, and Tuna Cem Hayirli. "Creating High-Impact Coalitions." Harvard Business Review, February 18, 2022. https://hbr.org/2022/03/creating-high-impact-coalitions.
	Probasco, Emelia. "Building the Tech Coalition." Center for Security and Emerging Technology, August 2024. https://cset.georgetown.edu/publication/building-the-tech-coalition/.
	Takeuchi, Mayu, and Joseph Parilla. "How Regional Technology Hubs Can Advance Inclusive Innovation." Brookings, June 17, 2024. https://www.brookings.edu/articles/how-regional-technology-hubs-can-advance-inclusive-innovation/.
Parallel Reports	"Coalition Guide Resource." Society for Public Health Education, n.d. https://www.sophe.org/wp-content/uploads/2016/10/Full-Resource-Guide.pdf
	"Coalition-Building Primer." Oak Ridge Institute for Science and Education, n.d. https://www.orau.gov/hsc/cdcynergy30/ba/Content/activeinformation/resources/Coalition_Building_Primer.pdf
	Rabinowitz, Phil. "Section 5. Coalition Building I: Starting a Coalition." Chapter 5. Choosing Strategies to Promote Community Health and Development Tools Community Toolbox, n.d. https://ctb.ku.edu/en/table-of-contents/assessment/promotion-strategies/start-a-coaltion/tools.