

# North Carolina Evaluation Fund Annual Report

June 30, 2023

NC Office of State Budget & Management 116 West Jones Street Raleigh, NC 27603 www.osbm.nc.gov

# **Executive Summary**

Session Law 2021-180 Sec. 23.1 appropriated \$1 million for the 2021-2023 biennium "to provide grants to State agencies to . . . partner[] with research institutions [and] conduct research projects that will directly inform the agencies' policy and program decisions and . . . evaluate how well the agencies' programs are achieving their intended outcomes" (see Appendix A). The Office of State Budget and Management (OSBM) launched the North Carolina Evaluation Fund in April 2022. This report provides an overview of the program, award decisions, and project accomplishments to date. Subsequent reports will include updates on findings and associated program or policy changes.

### **Evaluation Fund Highlights:**

- Despite very limited notice and a rapid turnaround time (only 4 months from notice to application deadline), 9 agencies submitted 21 proposals, requesting over \$2M.
- OSBM selected 8 projects; topics included teacher and student outcomes, workforce development, juvenile recidivism, behavioral health and social service programs, and domestic violence.
- Awardees received technical assistance from OSBM and consultant experts to develop proposals, find research partners, and refine evaluation design plans.
- To further bolster research integrity, OSBM required awardees to submit in advance their plans for conducting the research and to publish these pre-analysis plans on an open science registry.
- As of June 2023, one funded research evaluation project has preliminary findings. Four projects expect complete findings in 2023 and the remaining four in 2024.

The large number of grant funding applications despite the short deadline highlights a strong agency interest in evaluating programs and proposed policies. This, coupled with continued agency inquiries and generation of research questions, underscores the need for recurring funding to support these activities.

## TIMFLINE

February 2022

Budget Certified

April 2022

Program Established

May 2022-Present

Outreach and Technical
Support (ongoing)

September 15, 2022

Award Decisions

November 2022-Present

Pre-Analysis Plans, Peer
Review, Data Access

Late 2023-2024

**Project Completion** 

# About the North Carolina Evaluation Fund

Decisionmakers want to know what works to improve outcomes for North Carolinians and how best to design and deliver government services while using taxpayer dollars efficiently. Many agencies do not have the in-house capacity to design and implement research to generate actionable evidence that can answer those questions. The North Carolina Evaluation Fund's (the Fund) competitive grants facilitate opportunities for state agencies to partner with outside experts to conduct rigorous evaluations of their programs and policies.

### Technical support and capacity-building

Through these partnerships, the Fund builds capacity across state government to generate and use evidence to drive policy decisions and accomplish strategic goals. Evaluation Fund projects aim to measure how well existing, modified, or new interventions work to achieve their intended outcomes; projects may entail preliminary work to lay the groundwork for such evaluation.

Agencies who are new to evaluation often need support to develop a proposal, find a research partner, and tailor an evaluation plan for the decision context. A unique feature of the Fund is the technical assistance available to applicants.

- OSBM supported potential applicants to develop their proposals, providing over 80 hours of one-on-one technical support and fielding many additional inquiries informally outside of structured office hours and information sessions.
- The Office of Strategic Partnerships (OSP) helped state agencies post and advertise their projects on the North Carolina Project Portal<sup>1</sup> to identify research partners.
- OSBM consulted with project teams to refine the details of their evaluation in a pre-analysis plan and coordinated peer review from external experts.
- From project inception through execution, OSBM's Chief Scientist continues to host office hours where applicants can receive feedback and guidance from an evaluation expert.

### Open science: promote rigor, transparency, and integrity

OSBM convened panels of expert researchers to score the proposals and provide peer review on planned research designs. This feedback was coordinated *before* the projects began, so that adjustments could be made in advance of project implementation. These discussions also empowered agencies with a streamlined way to confirm research designs would give them actionable information.

To promote the research integrity of funded projects, OSBM required grantees to publish a pre-analysis plan on the <a href="Open Science Framework">Open Science Framework</a> before beginning data analysis. Pre-analysis plans outline the technical details of the study design and key methodological decisions. Publication of a pre-analysis plan increases the quality and credibility of evaluations through better agency-researcher coordination and selection of methodological details *before* results are known. To learn more, see <a href="Yokum & Bowers">Yokum & Bowers</a>, 2021.

OSBM coordinated external expert methodologists to review and provide feedback on each team's draft pre-analysis plan. Peer review prior to analysis is a rare opportunity. It allows researchers to make adjustments before projects begin. The status of each project's pre-analysis plan and links to the completed plans are found below.

<sup>&</sup>lt;sup>1</sup> NC OSP recently launched the North Carolina Project Portal, a tool for developing and launching partnerships with government and for bolstering cross-sector collaboration. The Portal includes information about opportunities for partnering with state agencies on their research needs and how to express interest in pursuing those opportunities.

# **Applicants and Selection Process**

**\$2M+** Evaluation Funds Requested

**90+** Individuals Expressed Interest

**21** Applications Received

9 Agencies Represented

8 Projects Awarded

Statewide interest in evaluation opportunities exceeded expectations. Despite very limited notice and a rapid turnaround time (only four months from notice to application deadline), nine agencies submitted 21 proposals. Overall, agencies requested over \$2 million.

OSBM was unable to fund all worthy projects submitted (See Appendix C for proposals not selected.) If the Evaluation Fund receives further financial support from the General Assembly, OSBM expects that greater

awareness of the Fund and longer lead times would increase the number of proposals in future rounds. Furthermore, OSBM recommended applicants request around \$100K; increasing the maximum recommended level of funding request could attract more applicants and support a wider range of projects.

The diversity of applications demonstrates the broad scope of evaluation needs across state government and the versatility of the North Carolina Evaluation Fund to enable agencies to answer a variety of questions. Applications came from both cabinet and Council of State agencies, and they ranged across policy areas. They sought to address questions about program and policy impact, cost-effectiveness, and implementation design. Some were shorter-term analyses, while others required tracking outcomes for multiple years.

OSBM convened a <u>five-member panel</u> of external reviewers with expertise in evaluations and evidence-based decision-making to assess the applications. The panel scored applications on four criteria (see Appendix B for details on these scoring rubrics):

- 1. Clarity and usefulness of project question,
- 2. Rigor of methods to answer the question,
- 3. Ability to complete the project, and
- 4. Enhancement of state capacity to use and generate evidence.

The review panel's scores primarily determined awards, but in its final decision, OSBM also considered the overall portfolio of potential awardees to ensure a variety of agencies and research partners were represented.

# **Project Awards**

OSBM selected eight projects to receive NC Evaluation Fund grants, summarized below. Topics included teacher and student outcomes, workforce development, juvenile recidivism, behavioral health and social service programs, and domestic violence. Grantees also discussed their projects in an OSP Monthly Connect meeting attended by over 100 people from state government, research, philanthropy, and other sectors. View the <u>recording here</u>. Of the \$1 million appropriated, OSBM disbursed \$983,117 in grant awards.

### NC Evaluation Fund Grant Awards 2022\*

Award Total					
8. Certified Career Pathways	DOC	NCWorks Commission	NCSU	\$50,000	
7. Early Childhood Longitudinal Data Use Case	DPI, DHHS	Office of Learning Recovery and Acceleration	UPenn, GDAC	\$98,919	
6. WIC Enrollment	DHHS	Div. of Child and Family Well-Being	Duke	\$109,018	
5. Advanced Teaching Roles	DPI	Office of Licensure and Educator Preparation	NCSU	\$109,909	
4. Teen Courts	DPS	Div. of Juvenile Justice and Delinquency Prevention	Montreat College	\$111,740	
3. RESTART: Domestic Violence Intervention Program	DOA	Council for Women & Youth Involvement	UNC	\$133,762	
2. NC Responder Assistance Initiative	DPS	Div. of Emergency Management	RTI	\$175,321	
1. NC Integrated Care for Kids	DHHS	Div. of Health Benefits (Medicaid)	Duke, UNC, GDAC	\$194,448	
Short Title	Agency	Division/Office	Research Partners	Award Amount	

<sup>\*</sup>Presented in order of grant award amount

### Project summaries and accomplishments

1. NC Integrated Care for Kids (NC InCK) Kindergarten Readiness Evaluation – NC InCK is a child-centered local health service delivery and state payment model aimed at improving the quality of care and reducing expenditures for 97,000 children insured by Medicaid or CHIP. It financially incentivizes healthcare providers who deliver or refer children to 12 interventions during well-child visits to improve kindergarten readiness. The Department of Health and Human Services (DHHS) is conducting a pilot feasibility study to evaluate the early impact of the NC InCK Primary Care Kindergarten Readiness Promotion Bundle and its components on Early Learning Inventory (ELI) scores, an assessment that is administered to all children in NC within the first 60 days of kindergarten enrollment. Research partners: University of North Carolina (UNC), Duke University, and the Government Data Analytics Center (GDAC)

Pre-Analysis Plan: Reviewed, In Progress

### **Accomplishments and Next Steps:**

- Successfully linked Department of Public Instruction (DPI) data with NC Medicaid to test processes for data linking and producing first summary rates of Kindergarten Readiness as measured by DPI's ELI from the 2021-2022 school year;
- Amended an existing 3-way data use agreement between Division of Health Benefits (DHB), DPI and GDAC to allow for additional data related to InCK's Kindergarten

- Readiness Promotion Bundle to flow from NC Medicaid to GDAC for the Kindergarten Readiness Evaluation.
- Refined the evaluation design and drafted the project's pre-analysis plan in collaboration with team members at UNC, NC DHB, GDAC, and NC InCK (Duke); the preanalysis plan will be finalized following external peer review.
- A key next area of work will be NC DHB's collection and review of the first set of billing data from primary care clinics participating in the NC InCK Alternative Payment Model.

**Target Completion Date:** December 2024

2. Improving North Carolina Law Enforcement Access to and Utilization of Health and Wellness Programs – The Department of Public Safety's NC Responder Assistance Initiative (NC RAI; formerly known as Integrated Behavioral Health Services) is a specialized suite of mental health and wellness programming for NC state law enforcement. To understand the impact of NC RAI on service utilization and inform ongoing expansion efforts to other first responder contexts, the current evaluation examines the programmatic, policy, and/or structural changes that could maximize accessibility and perceived utility of NC RAI health and wellness services for first responders.

Research partner: RTI International

Pre-Analysis Plan: <a href="https://osf.io/cz3us">https://osf.io/cz3us</a>

### **Accomplishments and Next Steps:**

- Completed extensive outreach and recruitment efforts among law enforcement and program stakeholders.
- Completed seven focus groups with program stakeholders (i.e., clinicians, peer teams, law enforcement leaders, NC RAI leadership) and 13 interviews with law enforcement officers to identify key areas of concern related to state law enforcement's utilization of mental health and wellbeing services.
- Processing and analysis of data from the interviews and focus groups is underway.
- Protocols are under development for a statewide survey that will be delivered to all
  officers eligible for NC RAI services across North Carolina state law enforcement
  agencies.

**Target Completion Date:** October 2023

**3. Project RESTART Evaluation Planning Project** —The Department of Administration's (DOA) Council for Women & Youth Involvement and UNC Project RESTART will develop measures to assess the effectiveness of emerging innovative domestic violence intervention programs (DVIP) and strategies to help people who have committed acts of domestic violence learn better ways of interacting with their intimate partners and family members.

Research Partner: University of North Carolina

Pre-Analysis Plan: https://osf.io/nyhs4

**Accomplishments and Next Steps:** 

- Completed a literature review, focus groups, and scoping review to identify promising DVIP program components deemed both fundamental and innovative. Analysis is underway.
- Conducted interviews with five national and statewide experts on DVIPs about best practices and evaluation strategies and measures.
- A review of DVIP program curricula and program components inventory is underway.
- Identified next steps and sources for review measures to assess program effectiveness.

**Target Completion Date:** December 2023

**4. Teen Courts Evaluation** –Teen courts are a diversion program serving as an alternative to processing juveniles through the traditional justice system. Teen courts target youth with low-level offenses who agree to a hearing and judgment from a court led by their peers. Most teen court sanctions are designed to go beyond simply punishing the offender, encouraging juveniles to restore part of the damages their behavior caused to the community. The Department of Public Safety (DPS) Division of Juvenile Justice and Delinquency Prevention aims to evaluate the impact of the state's 57 county-level traditional teen court programs on juvenile recidivism.

Research Partner: Montreat College

Pre-Analysis Plan: <a href="https://osf.io/x6qvu">https://osf.io/x6qvu</a>

### **Accomplishments and Next Steps:**

- Completed data agreements. Vetted, verified, and transmitted statewide traditional teen court internal data to investigators. Dataset construction and cleaning is in progress.
- GDAC and Division are constructing an adult recidivism dataset for identified juveniles. Preliminary quantitative analysis to begin thereafter.
- Design and delivery of a survey of non-traditional teen court model implementation is planned for fall 2023.

Target Completion Date: May 2024

**5. Teacher Compensation Models and Advanced Teaching Roles Evaluation** – The purpose of the Performance Based Compensation and Advanced Teaching Roles Program (ATR) is to allow highly effective classroom teachers to impact an increased number of students and enable local school administrative units to create innovative compensation models that focus on classroom teacher professional growth and lead to measurable improvements in student outcomes. DPI has partnered with The Friday Institute for Educational Innovation at North Carolina State University to evaluate the impact of ATR programs on teaching and learning and better understand the implementation of these programs to identify conditions necessary for their success.

Research Partner: NC State University

Pre-Analysis Plan: <a href="https://osf.io/6753k/">https://osf.io/6753k/</a>

### **Accomplishments and Next Steps:**

- Constructed a database to identify schools and teachers participating in ATR. Merged with longitudinal administrative data from NCDPI.
- Designed and delivered a survey of ATRs and teachers.
- Conducted classroom observations and interviews with teachers and administrators.
- Completed early-stage analysis of qualitative and quantitative data, including interviews, classroom observations, administrative data, and ATR records.
- Collection and analysis of survey data, teacher retention records, and non-academic student outcomes is ongoing.

**Target Completion Date:** October 2023

**6. Cross-Enrollment in WIC and FNS to Increase Nutrition Security: An Evaluation of Tailored Outreach Based on Cross-Linked Data** – The DHHS Division of Child and Family Well-Being led a tailored outreach pilot to increase enrollment in North Carolina's Special Supplemental Nutrition Program for Women, Infants, and Children's (WIC) program. The goal of this evaluation is to test the feasibility, acceptability, and effectiveness of text messaging from DHHS to reach and engage individuals who are likely eligible for but unenrolled in WIC. This pilot leverages linked enrollment data from the WIC, Medicaid, and Food and Nutrition Service (FNS) programs to identify WIC-eligible individuals. Findings will inform refinements to the outreach to expand statewide.

Research partner: Duke University

Pre-Analysis Plan: https://osf.io/k3gzm

### **Accomplishments and Next Steps:**

- Completed baseline assessments with directors of both local WIC agencies that are participating in this pilot in February 2023; post-pilot assessment planned for July 2023.
- Text outreach: NCDHHS sent one-way texts to the pilot intervention group beginning February 24, 2023, and ended on March 31, 2023. The control group, or delayed intervention group, received text messages beginning May 2023. NCDHHS continues to send text messages for the control group and expects to end text messaging by the end of June 2023.
- Received IRB approval and will begin recruitment for interviews with recipients of text outreach.
- Quantitative analyses will begin in June.

Target Completion Date: December 2024

**7. Early Childhood NC Longitudinal Data System Data Use Case** – The goal of this project is to understand how selected pre-elementary education, health, and social services relate to academic achievement and engagement in kindergarten through third grade, and importantly, if these services mitigate the harmful effects of hardship on children's success in school. In partnership with the DPI and DHHS, the research team will examine the state's early support service programs such as NC PreK, Subsidized Child Care, IDEA B, and IDEA C.

Research Partner: University of Pennsylvania

**Pre-Analysis Plan**: In progress

### **Accomplishments and Next Steps:**

- A data use agreement is in progress between GDAC and the University of Pennsylvania (Penn). Penn is currently reviewing the data agreement and once the agreement is signed, GDAC will transfer the data to Penn.
- The team is deepening the literature review around early childhood predictors of being on grade level in 3<sup>rd</sup> grade, understanding of 3<sup>rd</sup> grade retention policy, and measurement of poverty, vulnerability, and "social vulnerability index".

**Target Completion Date:** May 2024

**8. Certified Career Pathways Evaluation** – The Department of Commerce's (DOC) NCWorks Commission and NC State University will examine participation and credential attainment through the state's <u>certified career pathways</u> (CCPs). They will also develop a research plan to evaluate CCPs' impact on employee retention in select industries.

Research Partner: NC State University

Pre-Analysis Plan: In progress

### **Accomplishments and Next Steps:**

- Received IRB approval.
- Data access agreements are in place and investigators have received all but one dataset.
- Completed data integration and data set construction.
- Data matching and cleaning is in progress (N=30,221 Unique IDs). Quantitative analysis will begin thereafter.

**Target Completion Date:** November 2023

### **Evaluation Fund future opportunities**

Since launching the North Carolina Evaluation Fund, it is apparent that **demand for these funds and technical support outstrips existing capacity**. OSBM requested replacing the nonrecurring grant funds provided in Session Law 2021-180 Sec. 23.1 with recurring funds of \$2 million per year. OSBM also requested recurring funding for a Chief Scientist position to advise leadership, support staff, and agencies through this grant program, as well as OSBM's other existing and future efforts to bolster evidence-based policymaking across state government. Additionally, OSP has requested funds to meet the increased demand for creating partnerships between state agencies, academic institutions, and philanthropic organizations. These investments would empower research partnerships that generate the evidence decisionmakers need to ensure effective and efficient operations.

# Appendix A: Session Law 2021-180 Section 23.1, Evidence-Based Grants

SECTION 23.1. Of the funds appropriated in this act to the Office of State Budget and Management (OSBM), the sum of five hundred thousand dollars (\$500,000) in nonrecurring funds in each year of the 2021-2023 fiscal biennium shall be used to provide grants to State agencies to do the following: (i) in partnership with research institutions, conduct research projects that will directly inform the agencies' policy and program decisions and (ii) pursuant to contract with an outside entity or in conjunction with OSBM, evaluate how well the agencies' programs are achieving their intended outcomes. OSBM shall develop guidelines and procedures for the administration and distribution of these funds to State agencies through a competitive process and shall, by June 30, 2022, and June 30, 2023, submit reports on the administration and use of the funds to the Joint Legislative Oversight Committee on General Government and the Fiscal Research Division. Each report shall include all of the following for both research projects and evaluation projects for each fiscal year:

- (1) The criteria used by OSBM to evaluate applications from State agencies for grant funds.
- (2) The number of applications received.
- (3) The number of applications accepted and rejected.
- (4) For each State agency, a description of the specific policies and/or programs that were included in the projects as well as the data and research methodology used.
- (5) The names of the research institutions that partnered with State agencies to conduct research projects.
- (6) The names of the outside entities with whom State agencies worked in conjunction to evaluate program outcomes.
- (7) The amount spent on each project.
- (8) The findings of each project.
- (9) A summary of all policy and program changes planned or enacted as a result of project findings.

# Appendix B: Evaluation Fund Scoring Rubric

The review panel scored applications according to the rubric below, awarding scores from 1 (lowest) to 5 (highest) for each criterion. The relative weight of that criterion is in parentheses.

- 1. Clarity and usefulness of project question (30%). The primary research question is clearly stated and, critically, there is a compelling explanation of how answering that question will inform policy or programmatic decisions and lead to action. The application includes relevant background context, discusses scope and significance of the project question, and shows how the question relates to agency or division goals/ policy priorities. Strong applications explore different possible results and how each result might tilt decisions (e.g., if a program is found to improve outcomes by 5%, then the results favor a decision to do X; but if less than 5%, then Y is favored instead).
- 2. **Rigor of methods to answer the question (30%)**. The method proposed is appropriate for answering the question. Projects involving impact evaluations—that is, research that aims to measure the causal effect of a program or policy—are particularly encouraged. Strong applications clearly explain what is being measured, what is being compared, and how relevant statistics will be calculated and reported. For proposals that include an impact evaluation, there is a compelling explanation for how counterfactuals will be conceptualized and how differences between controlled groups will be estimated.
- 3. **Ability to complete the project (30%)**. The scope of the project is feasible to complete within the requested timeline and budget and by the proposed project team. Strong applications will: demonstrate the availability of—or ability to collect—needed data in a timely fashion; provide a well-calibrated budget; and describe a compelling strategy for how results will be communicated to decision-makers and the public. Strong applications are also clear-eyed in their assessment of the biggest risk to the project; a big risk does <u>not</u> necessarily adversely impact a score, but rather the assessment is whether the applicant has a proactive strategy for mitigating and handling the risk if it materializes.
- 4. Enhancement of state capacity to use and generate evidence (10%). The project increases an agency's ability to use evidence within its operations and to pursue future evidence-building projects. For example, the project might: be the first time an agency or one of its divisions has completed a randomized controlled trial (RCT); establish a new partnership with a university; produce tools to ensure programs follow proven effective practices; or involve cleaning and documenting a dataset that could also be used in future research projects.

The above scores primarily determined awards, but in its final decision, OSBM also considered the overall portfolio of potential awardees to balance the following goals for the Fund:

- 1. Strive to ensure that a variety of agencies and research partners are represented.
- 2. Anticipate showing results within a year. Projects that can produce results before May 2023 or field a randomized controlled trial (RCT) before May 2023 (with results within 5 years) are particularly encouraged.
- 3. Aim to distribute \$1M across 5-10 projects.

# Appendix C: Proposals Not Awarded

Agency	Division	Research Partner Affiliation	Project	Requested Budget
Department of	Office of State	Requested help to	Reform of North Carolina's development permit process to	\$100,000
Insurance	Fire Marshal	find partner	support statewide economic development goals	
Department of	Office of State	Requested help to	(Round 2 ver.) Reform of North Carolina's development permit	\$150,000
Insurance	Fire Marshal	find partner	process to support statewide economic development goals	
Secretary of State Office	N/A	Carolina Small Business Dev. Fund	Evaluating Factors for Small & Medium-Sized Firm Failure in North Carolina	\$75,000
Department of Public Safety	Adult Corrections	Requested help to find partner	Effectiveness of In-service Education to Enhance the Knowledge of Medical Providers in the Application of a Functional Assessment tool in Corrections	\$5,250
Department of Public Safety	Prisons	Requested help to find partner	Evaluation of an Analytical Modeling Tool for Optimizing Prisons Assignment and Transportation	\$210,000
Department of Health and Human Services	Public Health	Duke University	Legacy lead contamination in city parks	\$100,000
Department of Health and Human Services	Health Equity	UNC-Chapel Hill	Healthier Together Initiative: Evaluation Study of a State-wide Covid Community Equity Intervention	\$128,542
Department of Health and Human Services	Public Health	UNC-Chapel Hill	NC DETECT: Enhance quality of NC Disease Event Tracking and Epidemiologic Collection Tool	\$150,000
Wildlife Resources Commission	N/A	Requested help to find partner	How Can the NCWRC Improve Compliance with Wildlife Regulations and, in turn, Public Safety?	\$151,250
Department of Commerce	Clean Energy and Economy	EBP	Assessing North Carolina's Needs for a Clean Energy Transition	\$100,000
Department of Commerce	NCWorks Commission	Requested help to find partner	(Round 1 ver.) Certified Career Pathways	\$100,000
Department of Natural and Cultural Resources	Natural Heritage	Duke University	Assessing implementation of NC's Natural & Working Lands Action Plan	\$80,000
Department of Administration	CFWYI	UNC – Chapel Hill	(Round 1 ver.) Project RESTART Evaluation Planning Project	\$147,860
			Total:	\$1,497,902