North Carolina Measurability Assessment Guidebook

Pursuant to Requirements of the North Carolina Measurability Assessment Act of 2016



Program Evaluation Division
North Carolina General Assembly

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NORTH CAROLINA GENERAL ASSEMBLY

Legislative Services Office

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Senator Phil Berger, President Pro Tempore Representative Tim Moore, Speaker of the House North Carolina General Assembly 16 West Jones Street Raleigh, NC 27601

Members of the General Assembly:

The North Carolina Measurability Assessment Act of 2016 (Session Law 2016-123) directed the Program Evaluation Division to establish standards for conducting and reporting measurability assessments and the format for independent assessors to submit measurability assessment reports. The purpose of this Guidebook is to satisfy those requirements, and it serves as a reference document for state agencies, the not-for-profit sector, and the general public.

As a result of this directive, the Program Evaluation Division now provides two means of examining state programs.

- **Evaluations.** Since 2007, the Program Evaluation Division has conducted in-depth studies of existing state programs to determine whether they are effective and efficient and operate in accordance with the law.
- Measurability Assessments. In 2017, the Program Evaluation Division began
 administering brief assessments of new and existing state programs to determine
 whether they are well-designed and collect the performance information necessary
 to inform any future inquiries into their effectiveness and efficiency.

For more information about the Measurability Assessment Program, please contact Kiernan McGorty at kiernan.mcgorty@ncleg.net or 919-301-1393.

The Program Evaluation Division is a central, non-partisan staff unit of the Legislative Services Office established to evaluate whether public services are delivered in an effective and efficient manner and in accordance with the law. We invite you to read more about us and see our reports by visiting our website at www.ncleg.net/PED.

Sincerely,

John W. Turcotte

Director

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Measurability Assessment Program

Pursuant to N.C. General Statutes Chapter 143E, the North Carolina Measurability Assessment Act allows the General Assembly to require that a measurability assessment be performed of any proposed or existing state program to determine whether the program is or will be capable of reporting on its performance and return on investment. The law defines a measurability assessment as an independent evaluation of a program's progress on 14 indicators. These indicators collectively represent characteristics of well-managed, low-risk programs. Measurability assessments are a means of holding public programs accountable to the public, the executive branch, and lawmakers.

It should be noted that most proposed and existing programs are unlikely to meet all indicators because the criteria specified by the Measurability Assessment Act are "stretch" standards and not otherwise required by law. However, programs that adhere to these standards are more likely to achieve success and thus represent safer investments of taxpayer funds. The purpose of the Measurability Assessment Program is to provide the General Assembly and agencies with a tool to inform their policy and budget choices as well as to indicate the extent to which a program's outcomes can be rigorously evaluated. After an assessment, the General Assembly can determine if the program's degree of measurability is satisfactory to justify new or continued funding.

Measurability Assessment Act of 2016

Chapter 143E.

The North Carolina Measurability Assessment Act of 2016.

§ 143E-1. Title.

This Chapter shall be known and may be cited as the "North Carolina Measurability Assessment Act of 2016." (2016-123, s. 1.)

§ 143E-2. Request for measurability assessment.

The General Assembly may require a measurability assessment of any proposed or existing State program to determine whether the program is or will be capable of reporting performance and return on investment. (2016-123, s. 1.)

§ 143E-3. Definition of measurability assessment.

- (a) A measurability assessment is an independent evaluation conducted on a new or existing State program.
 - (b) A measurability assessment must include or determine all of the following:
 - (1) Whether and to what degree the program is unique and does not duplicate or negate results of another public or private program or enterprise.
 - (2) The local, regional, or statewide problems or needs that the program is intended to address.
 - (3) Whether there is a program design portrayed by a logic model as defined by the Logic Model Development Guide by the W.K. Kellogg Foundation, including an evaluation of that logic model.
 - (4) Whether there is evidence that the program produces results attributable to the program to remedy the problem or need. The information required by this subdivision shall include the following, as applicable:
 - example a. For a proposed program, whether the evidence stems from a formative evaluation of proposed activities through a field trial using a valid and reliable instrument or method to measure changes in a randomized control group that was not subjected to the proposed activities to changes in a randomized group that did receive the proposed activities.
 - b. For an existing program asserting existence of evidence, whether the evidence stemmed from a post-program summative evaluation using an experimental or

- quasi-experimental research design.
- c. For both proposed and existing programs, if the evidence had been subjected to alternative interpretations and peer review.
- (5) The capacity of the administering entity to expand the program based upon existing evidence or results.
- (6) How the program proposes to engage in strategic planning.
- (7) How the program proposes to measure performance, including measurement of the following:
 - Total costs of program services with costs separately reported for each activity associated with each service.
 - b. Outputs or counts of units of services and for individual activities associated with each service.
 - Costs per unit of service and for individual activities associated with each service.
 - d. Outcomes or results attributable to each program service, including results upon completion of program service; results still evident one, two, and three years after completion; ultimate or permanent results; and when and how permanent results will be determined by the program.
 - e. Customer or client satisfaction with program services.
 - Statewide impacts of program outcomes as evidenced by census data or other statewide data.
 - g. Performance compared to standards and what standards the program intends to use.
- (8) How the program will continuously improve quality of program services and consistency with the strategic plan.
- (9) Whether the administering entity has conducted an assessment to identify financial and legal risks to the entity or the State and has plans for minimizing risk exposure.
- (10) Whether the program conducts five-year forecasts of annual recurring costs and sources of funding for each year.
- (11) Whether the program proposes to share costs with primary beneficiaries through a feefor-service, co-payment, or tuition basis and the extent to which any expected cost-sharing is or will be means-tested and by what method.
- (12) How program staffing requirements are determined and an evaluation of those requirements.
- (13) Whether the program has or proposes to have a financial accounting system capable of accounting for all assets, liabilities, receipts, and disbursements.
- (14) Whether the program is or will be post-audited and if there are any potential impediments to audits or evaluations by the State Auditor, agency internal auditors, or the Program Evaluation Division of the General Assembly.
- (c) The assessor must submit a written report containing the results of the measurability assessment to the Program Evaluation Division at a time and in a format required by the Program Evaluation Division. (2016-123, s. 1.)

§ 143E-4. Administration of measurability assessment process.

- (a) The Program Evaluation Division must use a competitive process to prequalify independent measurability assessors. The assessors will be independent contractors compensated through a uniform fee system established by the Program Evaluation Division, and there will be no guarantee that any prequalified assessor will receive assessment assignments. The Program Evaluation Division shall not assign an assessor to a measurability assessment if the assessor has been employed by or contracted with the entity within five years preceding the assessment.
- (b) The Program Evaluation Division shall establish standards for assessor qualifications, independence, and conducting and reporting measurability assessments. Individuals who do not meet the qualifications may not be used to conduct measurability assessments.
- (c) Whenever a measurability assessment is required, the Program Evaluation Division shall select the assessor and require the agency or institution to reimburse the Program Evaluation Division for the assessor's costs and for a share of the Program Evaluation Division's costs for administering the measurability assessment program. (2016-123, s. 1.)

Rationale for Measurability Assessment Program

The General Assembly has expressed a strong desire to receive clear, objective evaluations of new and existing programs. In 2008, the Fiscal Research Division reported that new pilot programs have common weaknesses including unclear goals, unclear criteria for assessing their success, flaws in evaluation design including a lack of control groups and selection bias problems, inadequate time frames for measuring outcomes, and inadequate numbers of pilot sites. Since that time, the Program Evaluation Division (PED) and Office of the State Auditor have conducted hundreds of in-depth studies of existing state programs to determine whether they are effective and efficient, and these two oversight units recently presented their most common findings to the Joint Legislative Program Evaluation Oversight Committee (JLPEOC).

- PED reported that agencies frequently had dysfunctional organization structures and operating procedures; underperforming programs and absence of performance targets and incentives; idle funds, surpluses, inefficiency, and waste; lax oversight of contractors, vendors, or state-funded entities; data paucity and inadequate data collection systems; limited or no strategic planning and lack of focus on funding and spending for program results; and persistent failures in contracting for services.²
- The Office of the State Auditor cited pervasive, impactful, and unresolved findings in agencies' management oversight of programs and processes, contract administration and oversight, information technology project implementation, and information technology security.³

In general, programs that experience such problems are at a high risk to experience administrative failures, budgetary overruns, inefficiency or waste, negative audit findings, recipient benefit delays and application backlogs, public complaints, and media criticism. Exhibit 1 shows recent PED and Auditor reports that found examples of these problems in state-funded programs.

¹ Fiscal Research Division. (2008, August). Ten questions to better pilot programs. Fiscal Brief. Raleigh, NC: General Assembly.

² Program Evaluation Division. (2016, August). Special report: Common findings and recommendations. Report to the Joint Legislative Program Evaluation Oversight Committee. Raleigh, NC: General Assembly.

³ Office of the State Auditor. (2016, September). *Pervasive findings*. Presentation to the Joint Legislative Program Evaluation Oversight Committee. Raleigh, NC: General Assembly.

Exhibit 1: Examples of Problems in State-Funded Programs

Problem	Examples from Evaluations and Audits			
Administrative failures	State agencies are responsible for three phases of contract procurement: sourcing evaluation, contract formation, and contract management. Program Evaluation Division report 2016-01, Enhanced Oversight of Service Contracts Can Help Ensure Cost-Effective Performance, found state agencies are not ensuring that procurement of contracted services achieves best value. The incentive to maximize cost-effectiveness is reduced along with the ability to ensure best value when the Division of Purchase and Contract waives a competitive bidding process or when agencies fail to document the determination to use contracted services, include necessary attributes in procurements, or ensure compliance with terms and conditions.			
In 2013, the Office of the State Auditor examined 84 Information Technology projects report, Office of Information Technology Services, IT Project Budget and Schedule Various Auditor found actual state agency IT project costs were more than twice (an additional million) the original agency cost estimates and took about 65% (389 days) longer to a than state agencies originally estimated. Inaccurate IT projects place the State at risk the Office of Information Technology Services approves state agency projects based those initial estimates. State agencies then contract with vendors and begin implement projects based on inaccurate and unreliable cost and time estimates.				
Inefficiency or waste	North Carolina's Department of Administration is responsible for managing the State's portfolio of real property, consisting of nearly \$28 billion in state-owned buildings and land and \$65 million in annual expenditures for leased space. In report 2015-04, North Carolina Should Dispose of Unneeded Real Property and Improve Portfolio Management to Reduce Costs, the Program Evaluation Division found the State lacks a systematic process and the data to identify unused and underutilized real property, resulting in inefficiencies.			
In a Fiscal Year 2014 Financial Statement Audit Report on the Department of Public In Office of the State Auditor found accounting managers failed to adequately review School Insurance Fund's financial statements before submitting them to the State Continuous in the government-wide Comprehensive Annual Financial Report. As a result department understated premium revenues and overstated unearned revenue by \$7 (56% understatement and 195% overstatement).				
Recipient benefit delays and application backlogs	In North Carolina, county departments of social services perform Medicaid eligibility determinations under the supervision of the Department of Health and Human Services. Program Evaluation Division report 2016-04, <i>Timeliness of Medicaid Eligibility Determinations Declined Due to Challenges Imposed by NC FAST and Affordable Care Act Implementation</i> , found county DSS offices failed to meet North Carolina's timeliness standard for processing Medicaid applications in Fiscal Years 2013–14 and 2014–15. Processing applications in a timely manner is essential to ensuring applicants receive benefits within a reasonable time period and do not forgo necessary health services.			
Public complaints	The Office of the State Auditor investigated allegations received through the State Auditor's Hotline concerning the operations of the Department of Transportation, Division of Highways, Division 14, and subsequently issued an <i>Investigative Report</i> . The Auditor found the District 2 Engineer authorized the use of fully operated rental equipment for a road project and did not properly monitor the costs incurred. The project, originally funded at \$1.8 million, suffered a \$3.7 million cost overrun in an eight-month period.			
Media criticism	The role of government in regulating the ability of individuals to legally practice certain occupations and professions has been a contentious issue covered extensively by the media. The Program Evaluation Division conducted an evaluation of the structure, organization, and operation of North Carolina's various independent occupational licensing agencies. Program Evaluation Division report 2014-15, Occupational Licensing Agencies Should Not be Centralized, but Stronger Oversight is Needed, found insufficient state-level oversight to ensure occupational licensing agencies are efficiently and effectively protecting the public.			

Source: Program Evaluation Division based on PED and State Auditor reports.

Full studies by PED and the State Auditor often take six or more months to complete. The Measurability Assessment Program is intended to provide rapid assessments of new and existing state programs to determine whether the programs are well-designed and collect the performance information necessary to carry out future, in-depth inquiries into their effectiveness and efficiency.

Assessment Process

The General Assembly may assign measurability assessments by law or special appropriations provision and the Joint Legislative Program Evaluation Oversight Committee (JLPEOC) may assign assessments through a directive stated in the biennial JLPEOC work plan for the Program Evaluation Division (PED). JLPEOC determines the order in which PED will undertake measurability assessments assigned by the committee itself as well as those assigned by the General Assembly that allow JLPEOC discretion as to scheduling. Some General Assembly assessments may specify deadlines for assessment results.

In cases in which the General Assembly or JLPEOC direct measurability assessments for an entire agency, PED has defined a "program" as an organized set of activities directed toward a common purpose or goal that an agency undertakes or proposes in order to carry out its responsibilities. Agencies have widely varying missions and achieve these missions through different programmatic approaches, so differences in the use of the term "program" are legitimate and meaningful. For this reason, agencies may identify programs consistent with the manner in which the agency uses programs to interact with key stakeholders and to execute its mission.

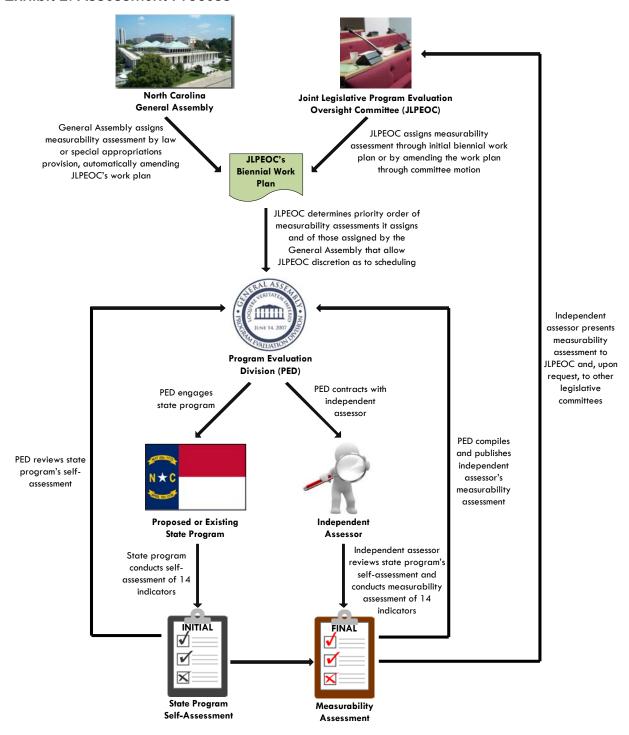
Exhibit 2 provides a flowchart of the role of the General Assembly and JLPEOC in selecting programs for a measurability assessment and the roles of PED, the state program, and the independent assessor during the measurability assessment.

- **PED** engages state programs in the process, hires an independent assessor, reviews the state program's self-assessment, and compiles and publishes the independent assessor's measurability assessment.
- The **state program** selected for measurability assessment conducts a self-assessment using the 14 indicators.
- The independent assessor reviews the state program's self-assessment, conducts an
 assessment to determine if the program meets the criteria for the 14 indicators, and
 presents measurability assessment results to JLPEOC.

Pursuant to N.C. Gen. Stat. § 143E-4, PED uses a competitive process to prequalify independent contractors as measurability assessors. Assessors must have advanced degrees and practical experience conducting scientific research projects or program evaluations. There is no guarantee that any prequalified assessor will receive assessment assignments. PED will not assign a project to an assessor if he or she has been employed by or contracted with the state program within five years preceding the assessment.

Pursuant to N.C. Gen. Stat. § 143E-4, PED established a uniform fee system to compensate assessors. State agencies or institutions must reimburse PED for the assessor's costs and for a share of PED's costs for administering the measurability assessment program.

Exhibit 2: Assessment Process



Measurability Assessment Framework

The 14 indicators specified by the Measurability Assessment Act collectively represent characteristics of well-managed, low-risk programs, which share common attributes.

- They have a unique and clearly defined mission, meaning they (1) do not duplicate other programs; (2) have clearly defined the problem they are intended to address; and (3) have developed logic models that describe the linkages between their resources, activities, and the results they seek to achieve.
- They focus on results, meaning (4) the program design has been tested by rigorous evaluation; (5) the program's scalability has been determined; and management takes a number of specific steps to (6) establish the program's long-range direction, (7) collect performance data, and (8) use data to track progress towards organizational goals.
- They have established sound financial management systems, meaning they (9) assess risks, (10) forecast future funding needs, (11) consider cost-sharing options, (12) analyze staffing needs, (13) track spending, and (14) have undergone audit and taken steps to correct any negative audit findings.

Exhibit 3 shows how each of the 14 indicators fall under these three attributes of well-managed, low-risk programs. The remainder of this Guidebook is divided into three sections, with more detail about each attribute and its related indicators.

CLEAR AND UNIQUE MISSION Avoids Problem Logic Duplication Definition Model WELL-MANAGED, **FOCUS ON FINANCIAL** LOW-RISK **RESULTS** MANAGEMENT STATE Risk Assessment Evidence-Based **PROGRAM** Strategic Plan Financial Forecast Scalability Analysis Cost Sharing Performance Staffing Analysis Measurement Accounting System Quality Audit Improvement

Exhibit 3: Measurability Assessment Framework

For each of the 14 indicators, the Guidebook explains

- what the indicator is;
- why the indicator is important;
- key elements that independent assessors should consider in determining whether the program meets the indicator; and
- how a program can develop the capacity to meet the indicator.

The key elements are the minimum criteria that independent assessors must use in their assessments of new and existing programs. Independent assessors can consider additional factors, which in their judgment are appropriate, in determining whether a program is well-designed, accountable, and/or ready for rigorous evaluation.

For each of the 14 indicators, the Guidebook also shows the portion of the assessment form that the independent assessor uses to determine if the program meets the indicator.

- **Step 1.** Independent assessor determines if a program meets, partially meets, or does not meet each key element of an indicator.
- **Step 2.** Based on key element ratings, independent assessor assigns an overall rating to each indicator using the following system:
 - Meets indicator. The program can document that it meets all of the key elements of the indicator, as well as other factors that the independent assessor has determined are appropriate to reaching a conclusion about the program's status on the indicator.
 - O **Partially meets indicator.** The program can document that it meets at least one or partially meets at least half of the key elements of the indicator, as well as other factors that the independent assessor has determined are appropriate to reaching a conclusion about the program's status on the indicator. This rating indicates the program should take additional steps to strengthen its status on the indicator.
 - Does not meet indicator. The program meets none and partially meets less than half of the key elements of the indicator.

Crosswalk between Framework and Chapter 143E

Chapter 143E of the North Carolina General Statutes establishes and defines the Measurability Assessment Program. Exhibit 4 provides a cross-walk between the framework the Program Evaluation Division created for the Measurability Assessment Program and the indicators specified by the program's enabling legislation.

Exhibit 4: Crosswalk between Measurability Assessment Framework and Statute

Indicator	Corresponding Section of N.C. Gen. Stat. § 143E-3(b)
Clear and Unique Mission	
1. Avoids Duplication	(1) Whether and to what degree the program is unique and does not duplicate or negate results of another public or private program or enterprise.
2. Problem Definition	(2) The local, regional, or statewide problems or needs that the program is intended to address.
3. Logic Model	(3) Whether there is a program design portrayed by a logic model as defined by the Logic Model Development Guide by the W.K. Kellogg Foundation, including an evaluation of that logic model.
Focus on Results	
4. Evidence-Based	(4) Whether there is evidence that the program produces results attributable to the program to remedy the problem or need. The information required by this subdivision shall include the following, as applicable:
	a. For a proposed program, whether the evidence stems from a formative evaluation of proposed activities through a field trial using a valid and reliable instrument or method to measure changes in a randomized control group that was not subjected to the proposed activities to changes in a randomized group that did receive the proposed activities.
	b. For an existing program asserting existence of evidence, whether the evidence stemmed from a post-program summative evaluation using an experimental or quasi-experimental research design.
	c. For both proposed and existing programs, if the evidence had been subjected to alternative interpretations and peer review.
5. Scalability Analysis	(5) The capacity of the administering entity to expand the program based on existing evidence of results.
6. Strategic Plan	(6) How the program proposes to engage in strategic planning.
7. Performance Measurement	(7) How the program proposes to measure performance, including measurement of the following:
	 a. Total costs of program services with costs separately reported for each activity associated with each service.
	b. Outputs or counts of units of services and for individual activities associated with each service.
	c. Costs per unit of service and for individual activities associated with each service.
	d. Outcomes or results attributable to each program service, including results upon completion of program service; results still evident one, two, and three years after completion; ultimate or permanent results; and when and how permanent results will be determined by the program.
	e. Customer or client satisfaction with program services.
	f. Statewide impacts of program outcomes as evidenced by census data or other statewide data.
	g. Performance compared to standards and what standards the program intends to use.
8. Quality Improvement System	(8) How the program will continuously improve quality of program services and consistency with the strategic plan.

Exhibit 4: Crosswalk between Measurability Assessment Framework and Statute

Sound Financial Management 9. Risk Assessment (9) Whether the administering entity has conducted an assessment to identify financial and legal risks to the entity or the State and has plans for minimizing risk exposure. 10. Financial Forecast (10) Whether the program conducts five-year forecasts of annual recurring costs and sources of funding for each year. (11) Whether the program proposes to share costs with primary beneficiaries 11. Cost Sharing through a fee-for-service, co-payment, or tuition basis and the extent to which any expected cost-sharing is or will be means-tested and by what method. 12. Staffing Analysis (12) How program staffing requirements are determined and an evaluation of those requirements. 13. Accounting System (13) Whether the program has or proposes to have a financial accounting system capable of accounting for all assets, liabilities, receipts, and disbursements. 14. Audit (14) Whether the program is or will be post-audited and if there are any potential impediments to audits or evaluations by the State Auditor, agency internal auditors, or the Program Evaluation Division of the General Assembly.

Measurability Assessment Indicators

Indicators of a Clear and Unique Mission

Legislative bodies pass laws authorizing programs in response to identified policy problems. These programs may be delivered by public employees and/or contractors and may involve the delivery of public goods and services or the regulation of the conduct of individuals or businesses. In addition, some programs use the government's power to tax, not only to raise revenue, but as an incentive or disincentive to encourage or discourage taxpayer behavior.

The rationale for public programs is generally to either increase the supply of an essential good or service that the free market does not deliver at sufficient levels (such as highways or health care) or to reduce the incidence of a negative condition that the market alone does not correct or address uniformly or equitably (such as pollution, crime, and natural disasters).

Programs should not duplicate the activities of other publicly-funded entities and should have a clear understanding of the problems they intend to address. Programs should also have a full understanding of how the activities they undertake with public resources are intended to lead to desired results. These foundational steps are essential to helping ensure that programs are effectively designed and targeted at achieving desired outcomes. Programs can demonstrate they have a clear and unique mission by having the three indicators enumerated 1-3, which are described on pages 15-21 and presented in Exhibit 5 below.

Exhibit 5: Indicators of a Clear and Unique Mission

CLEAR AND UNIQUE MISSION

A program **avoids duplication** by demonstrating whether and to what degree it is unique and does not duplicate or negate the results of other public or private programs or enterprises.

A **problem definition** describes the local, regional, or statewide problems or needs that the program is intended to address.

A **logic model** is a systematic and visual way to analyze and communicate a program's understanding of the relationships among its resources and activities and the results it seeks to achieve.

Indicator 1: Avoids Duplication

What is duplication?

For many public policy problems, there may be multiple programs, products, and services provided by government agencies, nonprofit organizations, and/or the private sector to address the situation. A program should ensure that it does not duplicate the activities of other entities.

Why is avoiding duplication important?

A state program should not duplicate the efforts of other entities because overlapping services can be confusing to customers and represent inefficient and ineffective use of limited public funds. A program inventory allows an agency to demonstrate that its activities are not duplicative of those of other programs designed to address the same problem.

How does a program identify duplication?

Programs should ensure they are not duplicative by conducting a scan of the public sector (both internal and external to their agency) and the nonprofit and private sector to identify any programs that are active in their policy area. Programs should create an inventory that lists and describes all programs that address the same goal (such as mentoring at-risk youth). Programs should resolve any identified duplication and coordinate their efforts with other entities to ensure that future duplication does not occur.

The inventory should demonstrate how the examined program is unique from related programs. At a minimum, the inventory should include the following elements:

- the names of other identified programs and their associated organizations;
- the purpose of each program;
- the specific services, products, or functions each program is providing;
- the specific target population served by each program; and
- how the program coordinates with other related programs to avoid wasteful competition and duplication.

The program should update the program inventory periodically to keep the information current. Exhibit 6 shows the portion of the Measurability Assessment Form pertaining to avoiding duplication that will be used to conduct measurability assessments.

How can a program avoid duplication?

If a program lacks an inventory of related programs, it should work with management and budget staff within its own organization and representatives of other entities inside and outside of state government that are active in the policy area. It should identify and profile programs that appear to serve the same overall purpose and identify potential duplicative functions. The program should discuss the results with the other programs to resolve duplication and explore opportunities for collaboration.

Exhibit 6: Avoids Duplication Portion of Measurability Assessment Form

		Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet		
1. Program does not duplicate other related programs.					
	Key	Element Ra	tings		
Key Elements of Indicator	Meets	Partially Meets	Does Not Meet		
1.1 Program has an inventory that identifies other current programs active in the policy area that address the same goal.					
1.2 Inventory demonstrates how the examined program is unique from the other related programs.					
1.3 Inventory identifies the purpose of each program.					
1.4 Inventory identifies the services, products, or functions each program is providing.					
1.5 Inventory identifies the target population served by each program.					
1.6 Inventory identifies how the program coordinates with other related programs to avoid wasteful competition and duplication.					
1.7 Inventory is updated periodically.					

Indicator 2: Problem Definition

What is a problem definition?

A problem definition, also referred to as a problem or needs statement, describes the local, regional, or statewide problems or needs that a program is intended to address. This definition should be clearly stated and based on data and other objective resources that substantiate the need for finding a solution to the concern. A problem definition does not describe the program's approach to address the need or problem.

Why is a problem definition important?

Problem definitions provide direction to a program. Success is more likely when those implementing the program have a clear sense of its mission, understand the importance of the problem they are addressing, and have a full understanding of what is expected of stakeholders.

Does the program have an effective problem definition?

Generally, an effective problem definition should

- be based on supportive evidence that clearly describes the nature and extent of the problem facing the individuals the program serves;
- identify the major factors contributing to the problem;
- identify current gaps in services or programs; and
- where applicable, provide a rationale for the transferability of "promising approaches" or "best practices" to the population the program serves.

Exhibit 7 shows the portion of the Measurability Assessment Form pertaining to problem definitions that will be used to conduct measurability assessments.

How can a program develop a problem definition?

If a program does not have a problem definition, it can create one using formats developed for grant writing.⁴ For example, one template for program definitions has the following components:

- The Nature and Extent of the Need/Problem. This section provides a clear picture of the
 incidence of the problem (e.g., the number of people per thousand in the population who
 experience the problem and the rates by ethnicity, gender, age, and educational level).
- Factors Contributing to the Problem or Conditions. This section addresses the causes of the problem and the needs of consumers (e.g., limited resources or access to services; institutional and systemic barriers including fragmented services; policies, practices, or laws that have negative consequences).
- Impact of the Need/Problem. This section looks at the impact the problem has on the
 consumer, the consumer's family, and the community at large and the benefits to be
 derived through intervention, treatment, or prevention of the problem.

⁴ Coley, S. M. & Scheinberg, C. A. (2013). *Proposal writing: Effective grantsmanship* (4th edition). Thousand Oaks, CA: Sage Publications, Inc.

Promising Approaches for Improved Results. This section discusses the theoretical
perspectives used in other geographic areas that have proven useful in designing
interventions and successful approaches.

Exhibit 7: Problem Definition Portion of Measurability Assessment Form

	Overall Indicator Rating		Rating
	Meets	Partially Meets	Does Not Meet
2. Program has a problem definition.			
	Key	Element Ra	tings
Key Elements of Indicator		Partially Meets	Does Not Meet
2.1 Problem definition is based on supportive evidence that clearly describes the nature and extent of the problem facing the individuals the program serves.			
2.2 Problem definition identifies the major factors contributing to the problem.			
2.3 Problem definition identifies current gaps in services or programs.			
2.4 If program is based on a "promising approach" or "best practice," problem definition provides a rationale for the transferability of the approach to the population the program serves. If program is not based on a "promising approach" or "best practice," enter N/A.			

Indicator 3: Logic Model

What is a logic model?

A logic model is a systematic and visual way to analyze and communicate a program's understanding of the relationships among its resources and activities and the results it seeks to achieve.⁵ It provides a picture or roadmap of how a program is expected to work, what activities need to come before others, and how desired outcomes are achieved.

Why is a logic model important?

The purpose of a logic model is to provide staff, key partners, stakeholders, and the general public with an easy-to-understand description of the relationships between what a program does and its results. Mapping a program helps staff visualize and understand how investments in dollars and staff are meant to support activities that are in turn intended to achieve desired outcomes. Logic models can also help identify "gaps" in the design of a program; build a shared understanding of what the program is all about and how its parts work together; focus attention on the most important connections between actions and results; and provide a way to involve and engage stakeholders in the design, implementation, and use of program evaluations.

Does a program have a logic model?

A basic logic model should include the types of components described in Exhibit 8.

- **Inputs** are resources that potentially enable program effectiveness. These resources may include *money*, *human resources*, and *supplies*. Examples include donations and contributions, governmental appropriations, potential collaborating partnerships, employees and volunteers, and facilities.
- Activities are the processes, techniques, tools, events, technology, and actions of the
 program intended to transform inputs into direct results. Activities are comprised of a
 series of related tasks or action steps. Examples of activities include preparing
 publications, receiving applications, performing facility inspections, and issuing permits.
- Outputs are the tangible and direct results of program activities. They are usually
 described in terms of the quantity and/or scope of the services and products delivered or
 produced by the program. They indicate if a program was delivered to the intended
 audiences at the intended "dose." Program outputs, for example, might be the number of
 classes taught, meetings held, or materials produced and distributed; rates of program
 participation and demography; or time duration such as hours of service.
- Outcomes are specific changes in attitudes, behaviors, knowledge, skills, status, conditions, or level of functioning expected to result from outputs and are most often expressed at an individual level. Examples include improvements in student test scores, graduation rates, and job placement rates.
- Impacts are organizational, community, and/or system-level changes expected to result from outcomes, which might include sustained improvement in per capita income or long term reductions in incidence rates of maladies such as crime or disease.

⁵ W.K. Kellogg Foundation. (2004). Logic Model Development Guide.

Exhibit 8: Logic Model Components

Program's Planned Work

Program's Intended Results

Component	Inputs	→	Activities	→	Outputs	 →	Outcomes	→	Impact
Definition	Resources which potentially enable program effectiveness	·	Processes, techniques, tools, events, technology, and actions of the planned program	·	Direct results of program activities described in terms of quantity and/or scope of services and products delivered or produced by the program		Specific changes, which are most often expressed at an individual level, expected to result from program outputs		Organizational, community, and/or system-level changes expected to result from program outcomes
Reasoning	Certain resources are needed to operate the program		If the program has access to certain resources, then it can use them to accomplish its planned activities		If the program accomplishes its planned activities, then it will hopefully deliver the amount of product and/or service that it intended		If the program accomplishes its planned activities to the extent it intended, then participants will benefit in certain ways		If these benefits to participants are achieved, then certain changes in organizations, communities, or systems might be expected to occur
Prompt	In order to accomplish a set of activities, the program will need the following:		In order to address a problem, the program will conduct the following activities:		Once completed or underway, these activities are expected to produce the following evidence of service delivery:		Short-Term If completed or ongoing, these activities are expected to lead to the following changes in 1–3 years: Long-Term If completed or ongoing, these activities are expected to lead to the following changes in 4–6 years:		If completed, these activities are expected to lead to the following changes in 7–10 years:
Examples	Funding Staff, volunteers Existing organizations, potential collaborating partners, existing organizational or interpersonal networks Facilities, equipment, supplies		Products — promotional materials, educational curricula Services — education, training, counseling, health screening Infrastructure — structure, relationships, capacity		Number of classes taught, meetings held, or materials produced and distributed Program participation rates and demography Hours of each type of service provided		Attitudes Behaviors Knowledge Skills Status Conditions Level of functioning		Improved conditions Increased capacity Changes in the policy arena

Source: Program Evaluation Division based on W.K. Kellogg Foundation's Logic Model Development Guide.

Logic models should be shared with program staff and key stakeholders, and program managers should update them periodically.

Exhibit 9 shows the portion of the Measurability Assessment Form pertaining to logic models that will be used to conduct measurability assessments.

Exhibit 9: Logic Model Portion of Measurability Assessment Form

	Overall Indicator Rat		Rating
	Meets	Partially Meets	Does Not Meet
3. Program has a logic model.			
	Key	Element Ra	tings
Key Elements of Indicator		Partially Meets	Does Not Meet
3.1 Logic model includes specified inputs.			
3.2 Logic model includes specified activities.			
3.3 Logic model includes specified outputs.			
3.4 Logic model includes specified short-term and long-term outcomes.			
3.5 Logic model includes specified impacts.			
3.6 The logic model has been shared with program staff and key stakeholders.			
3.7 The logic model is updated periodically.			

Source: Program Evaluation Division.

How can a program develop a logic model?

If a program does not have a logic model, it should consult the W.K. Kellogg Foundation Logic Model Development Guide, which describes the process of developing a logic model and includes exercises and templates to support this process. These exercises and templates help programs describe the results they plan to achieve and link their resources to the activities they plan to undertake.

In addition, the U.S. Government Accountability Office (GAO) and United Way have developed logic model templates that agencies may find helpful.⁷

⁶ The guide is available online at www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide.

⁷ The GAO template can be found in the U.S. Government Accountability Office's 2012 methodology transfer paper entitled *Designing Evaluations*. The United Way template is available online at http://strengtheningfamilies.unitedway.org/evaluating_steps.cfm.

Indicators of a Focus on Results

Programs that measure and focus on the results they achieve are more likely to be successful and generate positive returns on the investment of taxpayer dollars. Such programs have been tested through rigorous evaluations, and their scalability has been determined. Management takes proactive steps to establish the program's long-range direction; collect performance data; and use data to track progress towards clear, result-oriented goals. These actions help programs operate efficiently and deliver better outcomes.

Results-based program management encompasses the following broad principles.⁸

- Management systems should seek to balance the attention paid to procedures and process with the attention paid to measurable results produced for citizens and clients.
- Agencies are most likely to produce measurable results if they proactively plan for them, both through long-term, strategic planning and through shorter, annual plans connected to measurable objectives.
- To facilitate achieving results-oriented objectives, managers should aggressively redesign structures and streamline processes.

In sum, results-based management is an evidence-driven, proactive management approach that emphasizes results rather than procedures. Programs can demonstrate they are results-based by having the five indicators enumerated 4-8, which are described on pages 23-41 and presented in Exhibit 10 below.

Exhibit 10: Indicators of a Focus on Results

FOCUS ON RESULTS

Evidence-based programs are those that have been tested and found to be effective by multiple evaluations that used rigorous research methods.

A **scalability analysis** determines if a program shown to be successful on a small pilot scale or under controlled conditions can be expanded under realworld conditions.

A **strategic plan** defines what a program will do during the next three to five years and how it will achieve its desired results.

Performance measurement is the ongoing monitoring and reporting of program accomplishments.

A **quality improvement system** enables programs to use data to track their progress towards organizational goals and take corrective actions if performance shortfalls occur.

⁸ Swiss, J. E. (2013). Results-based management for government and nonprofit agencies. Raleigh, NC.

Indicator 4: Evidence-Based

What is an evidence-based program?

Evidence-based programs are those that have been tested and found to be effective by multiple evaluations that used rigorous research methods. Recognizing that programs vary in the level of evidence that has been collected regarding their effectiveness, the Pew-MacArthur Results First Initiative established the following definitions to classify programs:⁹

- **Evidence-based.** Evidence-based programs and practices have been evaluated multiple times and found to be effective using rigorous methods such as randomized controlled trials, statistically controlled evaluations, or a single large multisite randomized or statistically controlled evaluation. Typically, these programs have specified a set of procedures that allow for successful replication.
- **Research-based.** Research-based programs or practices have been tested using rigorous methods (usually a single randomized control study or multiple studies that use strong comparison group designs) but do not meet the evidence-based standard. These programs typically have specified a set of procedures that allow for successful replication.
- **Promising practices.** Promising programs and practices have been tested using less rigorous research designs that do not meet the research-based standard. These programs and practices typically have a well-constructed logic model or theory of change.
- **Non-evidence-based.** Non-evidence-based programs and practices lack sufficient evidence to meet the promising standard.

Why is being an evidence-based program important?

Governments make budget and policy choices each year that have long-term effects on both their fiscal futures and the outcomes they deliver for constituents. Policymakers can achieve substantially better results by using rigorous evidence to inform these decisions, enabling governments to select, fund, and operate public programs more strategically. By using rigorous evidence to inform these decisions, policymakers can fund and operate public programs that have been proven to work and achieve substantially better results for citizens.

Is a program evidence-based?

Programs can be classified as evidence-based in two ways—by undergoing a rigorous impact evaluation of their activities in North Carolina or by using a design that has been tested through multiple rigorous impact evaluations in other jurisdictions.

Evidence-based programs have been tested through impact evaluations, also known as impact assessments or outcome evaluations. These studies determine the extent to which a program produces desired outcomes and intended improvements in the social conditions it was intended to ameliorate. Impact evaluations produce an estimate of the net effects of a program—the changes brought about by the intervention above and beyond those resulting from other processes and events affecting the targeted social conditions.

⁹ Pew-MacArthur Results First Initiative. (2014). Evidence-Based Policymaking: A Guide for Effective Government.

Impact evaluations can be relevant at many points in the life course of a social program.¹⁰

- During policy formulation, an impact evaluation of a pilot demonstration can determine whether it has achieved sufficient outcomes to justify expansion.
- For an ongoing program, an impact evaluation can assess whether the program is achieving desired outcome levels and compare a program's impact to alternative means of dealing with the same problem.

The selection of evaluation methodologies involves considerations of cost, feasibility, and data availability. Whenever possible, agencies should use the strongest practicable research design when testing the effectiveness of their programs, and rigorous studies produce more reliable and valid assessments of program outcomes. There are two general categories of evaluation designs:

- Randomized field experiments. The gold standard of evaluations is a randomized field
 experiment, as it generates the most powerful conclusions when assessing causal effects.
 Participants are randomly assigned into at least two groups: the control group receives no
 intervention or an innocuous one, and the intervention group receives the intervention being
 tested. Any differences in outcomes between the two groups is attributed to the
 intervention.
- Nonrandomized quasi-experiments. When field experiments are not feasible,
 evaluations can use a quasi-experimental design in which intervention and control groups
 are formed by a procedure other than random assignment. In these studies, participants
 receiving the intervention are compared to a control group of selected, nonrandomly
 assigned individuals that do not receive the intervention. To the extent that the control
 group resembles the intervention group on relevant characteristics and experiences, or can
 be statistically adjusted to resemble it, program effects can be assessed with a
 reasonable degree of confidence.

Although well-implemented randomized field experiments are the preferred designs for impact evaluations because they yield unbiased estimates of program effects, programs must frequently rely on nonrandomized designs for ethical and practical reasons.

Exhibit 11 shows the portion of the Measurability Assessment Form pertaining to evidence-based programs that will be used to conduct measurability assessments.

How can a program become evidence-based?

A key resource that programs can use to determine whether their design has been tested in other jurisdictions is the Results First Clearinghouse Database developed by The Pew-MacArthur Results First Initiative.¹¹ This one-stop online resource provides program managers and policymakers with an easy way to find information on the effectiveness of more than 1,000 interventions as rated by eight national research clearinghouses. The database is not intended to serve as a

¹⁰ Before undergoing an impact evaluation, a program's theory and process should be assessed. Assessment of the program theory should indicate that the program's objectives are sufficiently well-articulated to make it possible to specify the expected effects and plausible that those effects could be produced by the program's actions. Assessment of program process should show that the intervention is sufficiently well-implemented to have a reasonable chance of producing the intended effects.

¹¹ The Clearinghouse Database is available online at http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/results-first-clearinghouse-database.

comprehensive list of all interventions that are worthy of funding. Rather, it is provided to assist program policymakers as they consider the multitude of factors that inform budget and policy choices.

If a program is not included in the Clearinghouse Database, managers may consult with other sources such as universities and professional organizations to determine if it or a similar program has already been evaluated and the results of any such evaluations.

For programs that have not been evaluated, the program should be subject to an impact evaluation. Few programs have staff with both the time and expertise needed to conduct an impact evaluation. Although some organizations have the capacity in-house, many will have to recruit someone else to carry out the study—usually a consultant, independent organization, or university that specializes in what is often called "measurement and evaluation." Hiring outside evaluators has the benefit of ensuring that results will be objective because independent contractors do not have a stake in the program's success.

Exhibit 11: Evidence-Based Portion of Measurability Assessment Form

	Overall Indicator Rating				
	Meets	Partially Meets	Does Not Meet		
4. Program is evidence-based.					
Key Elements of Indicator		Key Element Ratings			
		Partially Meets	Does Not Meet		
4.1 Program can demonstrate that its outcomes in North Carolina have been tested by a rigorous impact evaluation or that it uses a design that has been tested and found to be successful through multiple rigorous impact evaluations in other jurisdictions.					

Indicator 5: Scalability Analysis

What is a scalability analysis?

A scalability analysis determines if a program shown to be successful on a small pilot scale or under controlled conditions can be expanded under real-world conditions to reach a greater proportion of the eligible population, while retaining effectiveness.

Why is a scalability analysis important?

To achieve population-wide outcomes, pilot programs must be scaled up for widespread implementation. However, programs often encounter challenges in replicating their success when expanded beyond pilot sites due to problems such as the need to serve client populations with differing needs, the limited availability of staff with requisite experience and skills, and difficulties in managing expanding programs and maintaining fidelity with treatment protocols. Scalability analyses assess the factors that are critical to successful program expansion and identify strategies to ameliorate these challenges. They can provide policymakers with vital information to facilitate widespread adoption and maintenance of programs.

Does a program have a scalability analysis?

Exhibit 12 shows key factors that can increase the likelihood for programs to be successfully scaled up. Programs should maintain documentation that they have considered these key factors. In general, to be appropriate for scaling, programs should have robust evidence of effectiveness, have the potential for substantially expanded reach and system adoption, be acceptable to target groups and settings, and be delivered at an acceptable cost. Existing programs, even those that are already statewide, should perform scalability analyses to determine whether their programs could have greater impacts if they had more resources, such as more staff or newer technology.

Exhibit 12: Scalability Considerations

Effectiveness, reach, and adoption considerations

- The program has been rigorously tested and achieves a significant effect size (quantitative measure of the strength of a phenomenon).
- The program has the capacity to achieve significant reach (ability to serve the eligible population).
- The program currently has differential effect, reach, and adoption across target groups, socioeconomic status, and settings.
- The program avoids unintended consequences and adverse outcomes.

Workforce, technical, and organizational resource considerations

- The program can obtain the skills, competencies, and workforce required for wider implementation.
- The program can develop the organizational infrastructure required for wider delivery.
- The program can acquire needed technical expertise including information systems, training, evaluation, and performance monitoring.

Cost considerations

- The program has a reasonable cost to serve participants.
- The program has a reasonable cost to deliver key interventions.
- The program has considered the cost-effectiveness of alternative approaches to intervention delivery.
- The program can achieve economies of scale and lower marginal costs if expanded.

Intervention delivery considerations

- The program can maintain the degree of fidelity/adaption required to retain effectiveness with wider implementation.
- The program can maintain compatibility with similar interventions in the same setting.
- An expanded program will be acceptable to the target population.
- An expanded program is acceptable to key stakeholders.
- An expanded program would be able to access existing implementation protocols and resources.

Contextual considerations

 An expanded program would effectively fit within current individual, community, cultural, political, workforce, and organizational contexts.

Source: Program Evaluation Division based on Milat, A.J., King, L., Bauman, A.E., & Redman, S. (2012). The concept of scalability: Increasing the scale and potential adoption of health promotion interventions into policy and practice. Health Promotion International, 28(3), 285-298.

Exhibit 13 shows the portion of the Measurability Assessment Form pertaining to scalability analyses that will be used to conduct measurability assessments.

Exhibit 13: Scalability Analysis Portion of Measurability Assessment Form

	Overd	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet		
5. Program has conducted a scalability analysis.					
	Key	Element Ra	tings		
Key Elements of Indicator		Partially Meets	Does Not Meet		
5.1 Scalability documents determine whether the program has robust evidence of its effectiveness.					
5.2 Scalability documents determine whether the program has the potential for substantially expanded reach and system adoption.					
5.3 Scalability documents determine whether an expanded program is acceptable to target groups and settings.					
5.4 Scalability documents determine whether an expanded program can be delivered at an acceptable cost.					

Source: Program Evaluation Division.

How can a program obtain a scalability analysis?

If a program has not determined its scalability, it should conduct a scalability analysis to determine whether it is ready for expansion. One useful methodology for conducting these analyses uses a three-step approach: 12

- 1. When establishing efficacy, focus on internal validity and outcome measures.
- 2. When programs are replicated and scaled up, emphasize external validity and process evaluation.
- 3. When programs are disseminated widely into policy and practice, implement quality control and performance monitoring systems.

¹² Milat, A. J., King, L., Bauman, A. E., & Redman, S. (2012). The concept of scalability: Increasing the scale and potential adoption of health promotion interventions into policy and practice. *Health Promotion International*, 28(3), 285-298.

Indicator 6: Strategic Plan

What is a strategic plan?

Strategic planning is a long-term, future-oriented process of assessment, goal setting, and decision-making. A strategic plan defines what a program will do during the next three to five years and the key activities it will undertake to achieve desired results. Establishing a sound strategic plan requires broad yet effective information gathering, identification and exploration of strategic alternatives, and an emphasis on understanding the implications of present decisions.

Why is a strategic plan important?

At its core, strategic planning seeks to influence the future rather than simply preparing or adapting to it. Strategic planning can help facilitate communication and participation, accommodate divergent interests and values, foster wise and reasonably analytic decision-making, and promote successful implementation. Strategic planning is the critical first step in creating a quality improvement system, which is the eighth indicator in this Guidebook.

Does a program have a strategic plan?

In 2009, Governor Perdue issued Executive Order No. 3, requiring each department to develop a strategic planning process and update its strategic plan in compliance with guidance from the Office of State Budget and Management (OSBM) and the Governor's Policy Office. These agency-wide strategic plans connect each agency's overall mission to specific goals with measurable objectives.

However, these agency-wide strategic plans may not be sufficiently detailed to guide individual programs. Accordingly, to complement their department's strategic plan, individual programs should have strategic plans that include the elements described in Exhibit 14.

- Mission statement. A mission statement is a declaration of a program's basic purpose and concisely identifies what the program does, why, and for whom.
- **Vision statement.** A vision statement is a coherent and powerful statement of what a program can and should be in the future.
- Values. Values are the principles that govern behavior within an organization.
- Goals. Goals are broad statements of what a program wants to achieve over a long period of time.
- Objectives. Objectives are measurable, time-based statements of intent that should be derived from and directly linked to a stated goal.
- **Performance measures.** Performance measures assess whether goals and objectives have been accomplished.

Programs should update their strategic plan periodically to reflect changes in their mission, funding levels, mandated activities, target populations, and operating environment.

Exhibit 15 shows the portion of the Measurability Assessment Form pertaining to strategic plans that will be used to conduct measurability assessments.

Exhibit 14: Strategic Planning Elements

Strategic Planning Element	Questions to Inform Element
Mission statement. The mission statement is a declaration of a program's basic purpose and concisely identifies what the program does, why, and for whom.	 In general, what are the basic social or political needs the program exists to meet, or what are the basic social or political problems it seeks to address? In general, what does the program do to recognize, anticipate, and respond to these needs or problems? How should the program respond to its key stakeholders? What are the program's philosophies, values, and culture? What makes the program distinctive or unique?
Vision statement. A vision statement is a coherent and powerful statement of what a program can and should be in the future. A vision statement describes how the organization should look when it is working extremely well in relation to its environment and key stakeholders. There are many key elements of quality vision statements, which include but are not limited to mission, basic philosophy, core values, cultural features, goals, basic strategies, performance criteria, important decision-making rules, and the ethical standards expected of all employees.	What would the program look like in 10 years if it is successful between now and then?
Values. Values are the principles that govern behavior within an organization. A statement of values sets out a desirable code of behavior to which the organization adheres or aspires. Effective values are clear and succinct and are widely and frequently communicated. They also remain consistent and relevant over long time periods and provide guidance for carrying out individual responsibilities.	How does the organization expect employees to conduct themselves?
Goals. Goals are broad statements of what a program wants to achieve over a long period of time. They challenge a program while being realistic and achievable. Goals should be clear and focused, address the primary external and internal issues facing the organization, and be easily understood by the public. The more specific the goal, the more likely it is to be achieved. Although there is no established limit, the number of goals the program develops should be reasonable in order to clearly establish the program's direction and define a set of manageable priority issues.	 Are the goals in harmony with the program's mission, and will they help fulfill the program's vision? Do the goals align with the vision and priorities of the State? Do the goals provide a clear direction for program action? Do the goals reflect program priorities?
Objectives. Objectives are measurable, time-based statements of intent that should be derived from and directly linked to a stated goal. Objectives should help to prioritize resource allocation and shape the results of program actions. Objectives should be Specific, Measurable, Achievable, Realistic, and Timely (SMART).	 Is the objective clearly related to the stated goal? Does the objective clearly state what the program intends to accomplish? Does the objective have specific targets and time frames? Can progress toward completion of the objective be measured? Is the objective aggressive and challenging yet realistic and attainable within available resources? How does it compare with the objectives of similar programs? Will someone unfamiliar with the program understand the objective?
Performance Measures. Performance measures inform whether goals and objectives have been accomplished. Measuring performance demonstrates program effectiveness and can be used as the justification for a program's existence. Measures are generally quantitative and ideally should include outcomes when possible. Most initiatives will require a mix of measures, quantifiable and non-quantifiable, short-term and long-term. There are many different types of measures, and a combination of these types may be needed to inform decision-making. The absence of performance information can create problems for an organization's stakeholders and can harden organizational conflicts.	Did the program achieve the results it expected or did it produce results it didn't want or expect? Should the program's strategy or approach be changed? Should the initiative continue or not?

Source: Program Evaluation Division based on John Bryson's Strategic Planning for Public and Nonprofit Organizations and OSBM's Strategic Planning Guidance: FY 2017–2019.

Exhibit 15: Strategic Plan Portion of Measurability Assessment Form

	Overall Indicator Ratio		Rating
	Meets	Partially Meets	Does Not Meet
6. Program has a strategic plan.			
	Key	Element Ra	tings
Key Elements of Indicator	Meets	Partially Meets	Does Not Meet
6.1 Strategic plan includes a mission statement.			
6.2 Strategic plan includes a vision statement.			
6.3 Strategic plan includes a values statement.			
6.4 Strategic plan includes identified goals.			
6.5 Strategic plan includes identified objectives.			
6.6 Strategic plan includes performance measures.			
6.7 Strategic plan is updated periodically.			

Source: Program Evaluation Division.

How can a program develop a strategic plan?

If a program lacks a strategic plan, it should consult John Bryson's *Strategic Planning for Public and Nonprofit Organizations*. ¹³ A program's strategic plan should not be the product of an individual or a small group of individuals but instead a collaborative effort that is driven by the top executive with contributions and support from all employees. The planning process should incorporate a broad range of perspectives from across a program. In his book, Bryson describes a 10-step strategic planning process that public organizations can use. Exhibit 16 provides a broad overview of the process, guided by basic questions that should prompt programs to assess their current environment, develop what they wish to achieve, determine how to achieve it, and track progress along the way.

¹³ Bryson, J. M. (2011). Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement (4th edition). San Francisco, CA: Jossey-Bass.

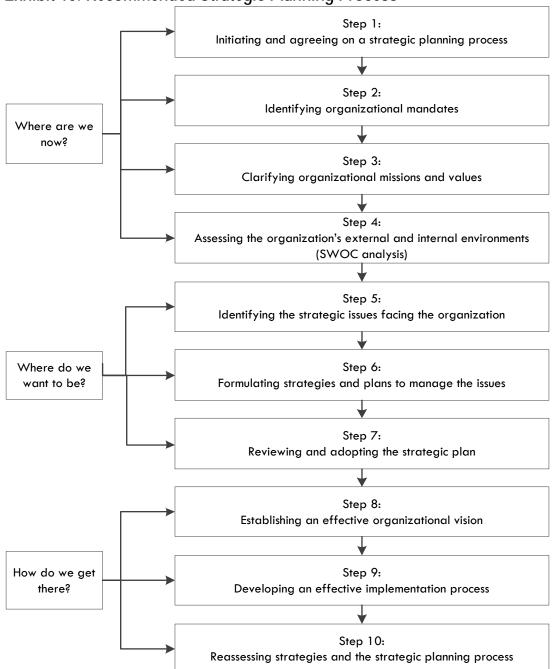


Exhibit 16: Recommended Strategic Planning Process

Source: Program Evaluation Division based on John Bryson's Strategic Planning for Public and Nonprofit Organizations.

A key component in the 10-step process is the SWOC analysis, which is a tool that helps programs evaluate their strengths, weaknesses, opportunities, and threats. This process allows a program to gain insight into the past and develop solutions to existing or potential problems. A SWOC analysis should include contributions and support from all employees. Exhibit 17 is an example of a SWOC graphic that programs can use to map ideas related to its four components.

Exhibit 17: SWOC Model Graphic

Present & Internal Focused	Strengths Program explores its internal environment— such as its inputs, outputs, or outcomes—to determine its current strengths.	Weaknesses Program explores its internal environment— such as its inputs, outputs, or outcomes—to determine its current weaknesses.
Future & External Focused	Opportunities Program monitors the external environment—such as social, political, economic, technological, and physical environment forces and trends—for potential opportunities.	Challenges Program monitors the external environment—such as social, political, economic, technological, and physical environment forces and trends—for potential challenges.

Source: Program Evaluation Division based on John Bryson's Strategic Planning for Public and Nonprofit Organizations.

Indicator 7: Performance Measurement

What is performance measurement?

Performance measurement is the ongoing monitoring and reporting of program accomplishments, particularly progress towards pre-established goals. Performance measures address the type or level of program activities, the direct products and services delivered by a program, and/or the results of those products and services.

Why is performance measurement important?

Performance measures provide the basis for continuous monitoring and evaluation of a program's progress toward achieving the goals or objectives stated in its strategic plan. They are also an important accountability tool to communicate progress to legislators and the public, and the data that they are based upon are essential to conducting full performance evaluations.

Performance measures enable managers to identify operating strengths and weaknesses, target areas for improvement, and recognize improvements when they occur. Managers can use the data that performance measures provide to account for past activities, manage current operations, and assess progress toward planned objectives.

- When used to assess past activities, performance measures provide accountability for the program results as well as the processes and procedures used to complete critical tasks.
- When used to manage current operations, performance measures show how efficiently resources, such as dollars and staff, are being used.
- When tied to planned objectives, performance measures assess how effectively a program is achieving the goals stated in its long-range strategic plan.

Does a program have performance measurement?

There are several steps that program managers should keep in mind when establishing performance measures. Managers need to (1) identify the measures to be used, (2) develop precise definitions of each measure, and (3) develop clear guidelines for implementing the measures.

Programs should have the types of performance measures listed in Exhibit 18.

Exhibit 18: Types of Performance Measures

Type of Measure	Definition	Examples
Input	Value of resources used to produce an output	Dollars budgeted/spentStaff hours usedMaterials
Output	Quantity or number of units produced	 Number of children vaccinated Number of tax returns processed Miles of road built
Efficiency/Process	Inputs used per unit of output (or outputs per input)	Cost per appraisalStaff hours to process a claimPlans reviewed per reviewer
Quality	Degree to which services are delivered in accordance with pre-determined standards and/or whether customers are satisfied with the services they receive	 Error rate per data entry operator Frequency of repeat repairs Average days to address a facility work order
Outcome	Actual impact or effect on a stated condition or problem	 Reduction in fire deaths/injuries Percentage of job trainees who hold a job for more than six months Percentage of juveniles not reconvicted within 12 months

Source: Program Evaluation Division based on GAO's (1992) Program Performance Measures: Federal Agency Collection and Use of Performance Data and OSBM's (2014) Planning Guidelines for North Carolina State Government.

Inputs are the resources that programs use to conduct activities and produce outputs. Managers should use uniform procedures to track all resources (such as appropriations, user fees, and staffing) that are used to operate the program. It is important to collect data on inputs on the same time frame as outputs so that efficiency measures can be accurately computed (e.g., input data should be collected on a monthly basis if outputs are measured on a monthly basis).

Outputs represent the amount of work performed or the activities completed by a program, such as the number of cases closed or number of training programs provided. Programs should focus on the production of high-quality outputs. Without an appropriate mix of quality and quantity, a program cannot achieve its intended results.

Efficiency is measured by the inputs used per unit of output. Efficiency measures establish a link between allocated funds and what an organization achieves with those funds, such as the average cost of closed cases or the average cost to investigate child abuse allegations. Programs should measure both the total cost of program services and the costs for each key activity needed to deliver these services (such as the costs to issue licenses to restaurants, conduct sanitation inspections, and take enforcement actions when violations are found). Programs can collect and track the expenses of program activities using an activity-based costing system, which assigns costs to key activities based on the resources used to carry out the activities. All direct costs (materials and labor directly involved) and indirect costs (overhead) can be recorded as they occur or through a formula within a cost-accounting system. To transition from a traditional cost accounting system to an activity-based costing system, programs need to identify key activities and develop mechanisms to track and assign expenditures to activities as they are performed.

Quality represents the degree to which services are delivered in accordance with pre-determined standards and/or whether customers are satisfied with the services they receive. This information can provide programs with important data regarding whether field staff is complying with service delivery protocols and whether client needs are being met. These data also can be useful in tracking the extent to which customer satisfaction and perceived problems have changed over time. Programs can solicit quality data through several mechanisms including client surveys, focus group sessions, and complaint systems.

Quality standards can be based on past program performance levels, national benchmarks, and compliance with professional standards, such as generally accepted accounting principles, road and bridge design standards of the American Association of State Highway and Transportation Officials, international product quality standards (ISO 9000), and specified levels of fidelity and accuracy established by evidence-based programs.

Outcomes are the substantive impacts that result from producing outputs. Outcomes are important to measure because they speak directly to the effectiveness and importance of a program. Programs should focus both on short-term results achieved upon completion of services and long-term outcomes that persist over time, such as those continuing one, two, and three years after completion of services.

Outcome measurement can be challenging for a number of reasons: because programs often lose contact with clients after services are completed, because they share responsibility for outcomes with other agencies (e.g., school districts when measuring the effectiveness of early childhood programs on reading success), and because long-term outcomes may be affected by unpredictable external factors such as economic conditions. Programs can mitigate these difficulties by considering what methods they will use to collect outcome measures when they are designing their programs, linking program databases to those of other entities, measuring results in stages over time, disclosing risks when limited data are available, and noting and accounting for contributions by related programs.

Programs should compare their performance against established standards and/or statistical benchmarks. Statistical benchmarking is the collection and comparison of performance data across a set of similar programs, such as other providers, regions, or states. Programs can use comparative data to set performance targets, identify star performers in order to identify leading-edge practices, and assess their performance. At a minimum, programs should measure the statewide impacts of their outcomes using census or other statewide data.

Programs should have a defined method for collecting performance data that explains what they are going to collect and how (e.g., who will be surveyed and how often). Programs also should have a standard format for reporting performance data that makes it possible to compare data from year to year. Performance measures are only as good as the data they are based upon, and programs should periodically validate the information that is being reported by reviewing data collection protocols and comparing reported information to a sample of source data. Programs also should ensure that performance data are regularly reported to managers, staff, and key stakeholders in formats that are user-friendly and meet their information needs. The use of performance measurement is more likely in cases where top management supports performance measurement and links the resulting measures to goals and objectives in strategic plans. In addition, performance measures should provide the level and type of data needed to conduct a rigorous evaluation of program impacts.

Exhibit 19 shows the portion of the Measurability Assessment Form pertaining to performance measurement that will be used to conduct measurability assessments.

Exhibit 19: Performance Measurement Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
7. Program has performance measures.				
	Key	Key Element Ratings		
Key Elements of Indicator		Partially Meets	Does Not Meet	
7.1 Performance measures assess key inputs.				
7.2 Performance measures assess key outputs.				
7.3 Performance measures assess efficiency/process.				
7.4 Performance measures assess quality.				
7.5 Performance measures assess key outcomes.				
7.6 Program has a defined method for collecting performance data.				
7.7 Program has a standard format for reporting performance data.				
7.8 Program validates performance measures periodically.				
7.9 Performance measures are regularly reported to managers, staff, and key stakeholders.				
7.10 Performance measures provide the level and type of data needed to conduct a rigorous evaluation of program impacts.				

Source: Program Evaluation Division.

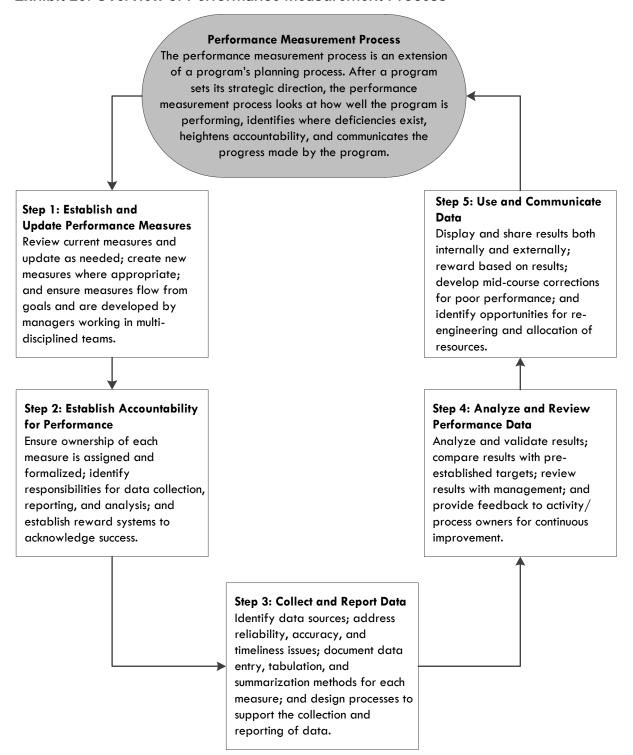
How can a program develop useful performance measures?

If a program does not have performance measures, it should consult OSBM's in-depth Planning Guidelines for North Carolina State Government. La Exhibit 20 provides an overview of the performance measurement process. In general, a strong set of performance measures should be able to answer the following questions:

- How is the program doing?
- Is the program meeting its goals?
- Are customers satisfied?
- Where are improvements necessary?
- What has been missed?

 $^{^{14}}$ The guidelines are available online at https://ncosbm.s3.amazonaws.com/s3fs-public/documents/files/Instructions1517_App7-1_StrategicPlanningGuidelines.docx.

Exhibit 20: Overview of Performance Measurement Process



Source: Program Evaluation Division based on OSBM's (2014) Planning Guidelines for North Carolina State Government.

Indicator 8: Quality Improvement System

What is a quality improvement system?

Continuous quality improvement, also referred to as performance management or data-informed decision-making, enables programs to use data to track their progress towards organizational goals and take corrective actions if performance shortfalls occur.¹⁵ These organizational goals should be set as part of the program's strategic planning process. Most quality improvement systems set annual objectives and then track performance towards these objectives on either a quarterly or monthly basis. This tracking provides a feedback loop and a recurring gauge of progress.

Why is a quality improvement system important?

Quality improvement helps make programs more efficient and effective in two ways:

- providing incentives for all organizational members to target their efforts towards activities that support program goals, and
- providing a basis for better managerial decision-making.

Once a quality improvement system establishes an objective, the objective serves double duty. At the same time that an objective is influencing the behavior of an organization's members by giving them something to work toward, it is also providing managers with information about how well the organization is functioning. If the organization does better or worse than the objective, the managers can reexamine their assumptions and make decisions based on the new knowledge.

Does a program have a quality improvement system?

Quality improvement systems, like all feedback systems, have three steps. Programs should have evidence that they are engaging in the three-step process.

1. Setting initial objectives. An objective is a statement of a specific, measurable level of performance that the program wishes to attain. Objectives should be consistent with the goals established in the program's strategic plan but may be more specific to a particular time period. For example, if a program's strategic plan establishes a five-year performance goal, the program should develop annual objectives that are intended to lead to the attainment of the five-year goal. These objectives should be updated at least annually.

Objectives have three components:

- an indicator, also called a measure, is a quantitative gauge of performance;
- a target, also called a standard, is an expected level of performance; and
- a date specifies a time frame for performance.

The indicator portion of an objective should identify the action that is to be taken to accomplish the goal, such as "recruit business partners" or "conduct sanitation inspections of restaurants."

The target portion of an objective should specify the level of performance that is expected and may be expressed in various ways.

¹⁵ Swiss, J. E. (2013). Results-based management for government and nonprofit agencies. Raleigh, NC.

- Quantity: "Investigate a minimum of 300"
- Proportion: "90% of cases received"
- Relative Change: "Increase by 10%," "Decrease by 5%"
- Combination: "Increase the number of investigations by 10% from 300 to 330,"
 "Decrease the percentage of negative indications from 90% to 85%."

The date portion of an objective should specify a time frame for accomplishing the action and may be expressed as a point in time, such as "by June 30, 2017" or "during FY 2018."

For example, a program may set as its objective "to place 500 clients in new jobs this year." In this example, "Place clients in new jobs" is the measure, "500" is the target, and "this year" is the date.

2. Monitoring progress towards objectives. Once the objectives have been established, the program should collect data on how the organization is performing. Many objectives will take a full year to achieve. However, a quality improvement system produces little useful feedback if the program waits until year's end to analyze progress towards objectives. To mitigate this delay in feedback, the program should establish a more detailed action plan, broken into specific steps for achieving each objective. To make the action plan meaningful, each of its steps must be measurable and tied to a date. These measurable steps (or sub-objectives), tied to dates, are termed milestones.

For example, "Have 125 clients been placed in new jobs this quarter?"

Taking remedial action if there is a shortfall. If performance monitoring reveals that
organizational objectives are not being attained, the program should take remedial
action to correct the shortfall.

For example, if 125 clients have not been placed in new jobs by the end of the quarter, program staff should determine the reason. If there is a staff shortage, more placement counselors could be hired or tasks could be reprioritized. If not enough employers have been contacted, outreach efforts could be started.

Common quality improvement programs include Lean, Total Quality Management (TQM), and Six Sigma.

Exhibit 21 shows the portion of the Measurability Assessment Form pertaining to quality improvement systems that will be used to conduct measurability assessments.

Exhibit 21: Quality Improvement System Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
8. Program has a quality improvement system.				
Key Elements of Indicator		Key Element Ratings		
		Partially Meets	Does Not Meet	
8.1 Quality improvement system sets objectives, which have indicators, targets, and dates.				
8.2 Objectives are consistent with those set by the program's strategic plan and are updated annually.				
8.3 Quality improvement system monitors progress towards objectives through an action plan and milestones.				
8.4 Program takes remedial action if there is a performance shortfall.				

Source: Program Evaluation Division.

How can a program develop a quality improvement system?

If a program does not have a quality improvement system in place, it should consult North Carolina State University professor James Swiss's *Public Management Systems: Monitoring and Managing Government Performance*. ¹⁶ In general,

- indicators should focus more on outcomes than on activities, focus on areas that are most important to the organization, and be measurable;
- targets should be measurable, be shaped through the participation of workers, and be stretches but attainable; and
- milestones should focus more on outcomes than on activities and have time frames that are at least as frequent as quarterly.

¹⁶ Swiss, J. E. (1991). *Public management systems: Monitoring and managing government performance*. Englewood Cliffs, NJ: Prentice Hall.

Indicators of Sound Financial Management

Sound financial management means a program has a set of strategies, policies, processes, and data systems to ensure that public resources are effectively and efficiently used and that financial and legal risks are minimized. Sound financial management is essential for maintaining accountability for taxpayer funds, appropriately setting user fee levels, and avoiding overspending. Programs that practice sound financial management represent better investment risks than those that fail to take these steps.

Programs can demonstrate sound financial management by meeting the six indicators enumerated 9-14, which are described on pages 43-56 and presented in Exhibit 22 below.

Exhibit 22: Indicators of Sound Financial Management

SOUND FINANCIAL MANAGEMENT

A **risk assessment** identifies potential financial, fraudulent, and legal hazards a program may face and analyzes methods of response if exposure occurs.

A **financial forecast** presents estimated information based on past, current, and projected financial conditions over a long-term period.

Cost sharing requires beneficiaries of a service to provide contributions to offset federal and/or state funding of the program.

A **staffing analysis** determines if a program's staffing levels are appropriate based on the volume of work it is required to perform.

An **accounting system** analyzes, records, summarizes, reports, and interprets financial transactions of programs.

An **audit** is an independent review, examination, or evaluation of government organizations, programs, activities, and functions.

Source: Program Evaluation Division.

Indicator 9: Risk Assessment

What is risk assessment?

Risk assessment is the process of identifying potential financial, fraudulent, and legal hazards a program may face and analyzing methods of response if exposure occurs.

Why is risk assessment important?

Risk assessments provide a basis for establishing appropriate policies and selecting cost-effective techniques to implement these policies. Since risks and threats change as time passes, it is important that programs periodically reassess risks and reconsider the appropriateness and effectiveness of the policies and controls they have selected.

Does a program have a risk assessment?

The U.S. Government Accountability Office created a framework for managing risk in government programs and identified five key risk assessment actions.

- **Identify inherent risks.** Programs should determine the types of risks they face, such as fraud related to financial reporting, misappropriation of assets, or corruption.
- Assess the likelihood and impact of inherent risks. Programs should conduct quantitative
 and/or qualitative assessments of the likelihood and impact of inherent risks, including the
 impact of fraud risks on the program's finances, reputation, and compliance. The specific
 methodology that programs should use to assess risks will vary because of differences in
 their missions, activities, capacity, and other factors.
- Determine risk tolerance. Eliminating all risk is not a realistic goal, and therefore
 programs should define and document their level of tolerable risk depending on their
 circumstances.
- Examine the suitability of existing controls and prioritize residual risks. Control activities are the policies, procedures, techniques, and mechanisms that minimize a program's risk.¹⁷ Programs should consider the extent to which existing control activities mitigate the likelihood and impact of inherent risks. The risk that remains after inherent risks have been mitigated by existing control activities is called residual risk. Programs should then rank residual risks in order of priority, using likelihood and impact analyses and risk tolerance to inform prioritization.
- **Document the program's risk profile.** Programs should effectively assess the risks they face by documenting the key findings and conclusions from the actions above.

Programs should have mitigation strategies that include the following five actions.

- Identify who is responsible for risk management activities. Programs should establish roles and responsibilities of those involved in risk management activities.
- **Determine what control activities the program will use.** Programs should describe their control activities for preventing, detecting, and responding to hazards.

¹⁷ Commonly used control activities include authorization, review and approval, verification, reconciliation, physical security over assets, and segregation of duties.

- **Establish when the program is implementing activities.** Programs should create timelines for implementing risk management activities.
- **Determine where the program is focusing its activities.** Programs should demonstrate links between risk management activities and the highest internal and external residual risks outlined in the risk profile.
- Document the program's mitigation strategy. Programs should communicate the mitigation strategy, which speaks to the actions above, to employees and other stakeholders.

Exhibit 23 shows the portion of the Measurability Assessment Form pertaining to risk assessments that will be used to conduct measurability assessments.

Exhibit 23: Risk Assessment Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
9. Program has a risk assessment.				
Key Elements of Indicator		Key Element Ratings		
		Partially Meets	Does Not Meet	
9.1 Risk profile identifies inherent risks, assesses the likelihood and impact of inherent risks, determines risk tolerance, and examines the suitability of existing controls and prioritizes residual risks.				
9.2 Mitigation strategy identifies who is responsible for risk management activities, determines what control activities the program is using, establishes when the program is implementing activities, and determines where the program is focusing its activities.				

Source: Program Evaluation Division.

How can a program develop a risk assessment?

If a program does not have a risk assessment, it should consult the Government Accountability Office's "A Framework for Managing Fraud Risks in Federal Programs." 18

¹⁸ U.S. Government Accountability Office. (2005, July). A Framework for Managing Fraud Risks in Federal Programs.

Indicator 10: Financial Forecasting

What is a financial forecast?

A financial forecast, also referred to as a budget projection, is a fiscal management tool that presents estimated information based on past, current, and projected financial conditions over a long-term period, such as the next five years.

Why is a financial forecast important?

A financial forecast helps identify future revenue and expenditure trends that may have an immediate or long-term influence on a program's goals, policies, and services. A multi-year forecast can provide an early warning sign of unbalanced budgets to come and, thus, can signal how a program's spending patterns may be changing, providing opportunities for course corrections. An effective forecast allows for improved decision-making in maintaining fiscal discipline and delivering essential program services.

Does a program have a financial forecast?

Most state agencies are required to follow the Office of State Budget and Management (OSBM)'s Instructions for Preparation of the Recommended State Budget.¹⁹ Because the recommended budget reflects a biennial budget, programs can supply their fund code sections for the most recent edition of the recommended budget to demonstrate they are conducting two years of financial forecasting.

During the budget development process, a program should build in a long-term focus by including revenue and expenditure projections for at least five years in its annual plan. Projections should be broken down into the revenue categories (e.g., taxes, grants, intra-governmental transactions) and expenditure categories (e.g., personal services, purchased services, supplies) required by the North Carolina Accounting System (NCAS).

Programs should perform one of the three basic models of forecasting:

- Extrapolation. Extrapolation uses historical revenue and expenditure data to predict future behavior by projecting the trend forward. Trending is very easy to use and is commonly employed by forecasters. Moving averages and single exponential smoothing are somewhat more complex but are within the capabilities of most forecasters.
- Regression/econometrics. Regression analysis measures the relationship between
 independent variables (factors that have predictive power for the revenue or expenditure
 source) and a dependent variable (expenditure source being predicted). Assuming a
 linear relationship exists between the independent and dependent variables, one or more
 independent variables can be used to predict future revenues or expenditures.
- Hybrid forecasting. Hybrid forecasting combines knowledge-based forecasting—which is
 based on the forecaster's own knowledge and feel for the situation, rather than data and
 statistics—with a quantitative method of forecasting (extrapolation or regression). Hybrid
 forecasting methods are very common in practice and can deliver superior results.

¹⁹ The instructions are available online at https://www.osbm.nc.gov/library/manuals-instructions.

Forecasts should attempt to explain the trends they reveal by discussing why revenue and expenditures are expected to increase or decrease.

Exhibit 24 shows the portion of the Measurability Assessment Form pertaining to financial forecasts that will be used to conduct measurability assessments.

Exhibit 24: Financial Forecast Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
10. Program has a financial forecast.				
Key Elements of Indicator		Key Element Ratings		
		Partially Meets	Does Not Meet	
10.1 Financial forecast is conducted at least annually.				
10.2 Financial forecast projects revenues and expenditures for at least 5 years.				
10.3 Financial forecast breaks down projections into revenue and expenditure categories.				
10.4 Financial forecast is based on a basic model of forecasting.				
10.5 Financial forecast attempts to explain trends by discussing why revenue and expenditures are expected to increase or decrease.				

Source: Program Evaluation Division.

How can a program obtain a financial forecast?

If a program does not conduct financial forecasting, it should consult the Government Finance Officers Association's best practice document regarding financial forecasting.²⁰ In general, the key steps in a sound forecasting process include the following:

- **Define assumptions.** Determine the time horizon for the forecast, the objective of the program's forecasting policy, the political/legal issues related to the forecast, and the major revenue and expenditure categories.
- **Gather information.** Use statistical data as well as the accumulated judgment and expertise of individuals inside and perhaps also outside the program to increase knowledge about the forces impacting revenues and expenditures.
- Conduct preliminary/exploratory analysis. Examine historical data and relevant
 economic conditions, looking for evidence related to business cycles, demographic trends,
 outliers and historical anomalies, and relationships between variables.
- **Select methods.** Determine the quantitative and/or qualitative forecasting methods that will be used: extrapolation, regression/econometrics, or hybrid forecasting.

²⁰ Government Finance Officers Association. *Financial Forecasting in the Budget Preparation Process*. Retrieved January 1, 2017, from http://www.gfoa.org/print/1746.

- **Implement methods.** Put into practice one or more of the forecasting methods and develop a range of possible forecast outcomes based on different scenarios, when appropriate.
- **Use methods.** Impart a long-term perspective to the budgeting process and emphasize financially sustainable decisions.

Indicator 11: Cost Sharing

What is cost sharing?

Cost sharing requires beneficiaries of a program's services to provide contributions of a specified amount or percentage to offset federal and/or state funding of the program. For the purposes of the Measurability Assessment Program, funding arrangements between one state agency and another state agency constitute cost sharing.

Why is cost sharing important?

Cost sharing is a way of assigning some or all responsibility for funding services to program beneficiaries instead of requiring taxpayers, some of whom may not receive services or benefits, to bear all of the cost. Proponents of cost sharing or copayment argue that sharing financial responsibility results in more appropriate consumer behavior by decreasing the demand for unnecessary services.

Does a program have cost sharing?

The General Assembly has the power to authorize a state program to establish or increase a fee or charge for rendering services or fulfilling public duties. Programs that receive federal funds or are subject to federal laws and regulations may be prohibited from requiring cost sharing or may have to follow federal guidelines when applying cost sharing.

Programs should assess whether cost sharing is appropriate and document their justification for the decision to assign or not assign cost sharing to program beneficiaries. Programs that have cost sharing should have a written description of their cost sharing requirements. Departmental receipts capture the fees, licenses, fines, penalties, tuition, and other similar collections or credits generated by programs in the course of performing their governmental functions.

Although not always applicable to state government, programs may consult U.S. Office of Management and Budget Circular No. A-25 when considering the appropriateness of user charges. This circular establishes federal policy regarding charges assessed for government services financed in whole or in part by federal funds and for sale or use of government goods or resources. It provides information on the scope and types of activities subject to user charges and the basis upon which user charges are to be set:

- user charges are sufficient to recover the full cost to the federal government of providing the service, resource, or good when the government is acting in its capacity as sovereign;
- user charges are based on market prices when the government, not acting in its capacity as sovereign, is leasing or selling goods or resources or is providing a service (e.g., leasing space in federally owned buildings); and
- user charges are set as rates whenever possible, rather than fixed dollar amounts, in order to adjust for changes in costs to the government or changes in market prices of the good, resource, or service provided.

In some cases, it may be appropriate for programs to charge consumers on a sliding scale based on a consumer's ability to pay for services. In this system, service charges may be reduced for those who have lower incomes, or alternatively, less money to spare after their personal expenses are considered, regardless of income. If a program charges on a sliding scale, it should have a written description of the method used to set the sliding scale.

Programs that require cost sharing should regularly review their levels of cost sharing and recommend modifications as appropriate.

Exhibit 25 shows the portion of the Measurability Assessment Form pertaining to cost sharing that will be used to conduct measurability assessments.

Exhibit 25: Cost Sharing Portion of Measurability Assessment Form

	Overall Indicator Rating		
	Meets	Partially Meets	Does Not Meet
11. Program has cost sharing documents.			
	Key Element Ratings		
Key Elements of Indicator	Meets	Partially Meets	Does Not Meet
11.1 If program does <u>not</u> require cost sharing, documents include a description of why program does not require cost sharing. If program does require cost sharing, enter N/A.			
11.2 If program does require cost sharing, documents include a description of cost sharing requirements. If program does not require cost sharing, enter N/A.			
11.3 If program does require cost sharing, documents describe the method used to set charges. If program does not require cost sharing, enter N/A.			
11.4 If program does require cost sharing, documents review cost sharing levels and recommend modifications as appropriate. If program does not require cost sharing, enter N/A.			

Source: Program Evaluation Division.

How can a program establish cost sharing?

If not prohibited from cost sharing by federal or state law, programs that believe that cost sharing is appropriate or that current requirements need to be adjusted should consult the Joint Legislative Commission of Governmental Operations.²¹ Before a program can establish or increase a fee or charge, it must provide the following information to the Commission:

- the amount of the current fee or charge, if applicable;
- the amount of the proposed new or increased fee or charge;
- the statutory authority for the fee or charge; and
- a detailed explanation of the need for the establishment or increase of the fee or charge.

²¹ N.C. Gen. Stat. § 12-3.1.

Indicator 12: Staffing Analysis

What is a staffing analysis?

Staffing analysis is a method to determine if a program's staffing levels are appropriate based on the volume of work it is required to perform. This process determines the number and types of employees or contract workers necessary to operate a program efficiently.

Why is a staffing analysis important?

Staffing analyses are important because proper staffing levels enable programs to more efficiently provide services. If staffing requirements have been sufficiently defined, the program will be able to stand up to challenges that it is over- or under-staffed.

Does a program have a staffing analysis?

Programs should have a rational basis for determining their staffing levels. Staffing analyses should measure the following factors:²²

- **Caseload.** Caseload is the number of cases that staff are assigned in a given time period. Caseloads may be measured for individual staff members, all staff assigned a specific type of case, or all staff in a particular office or service area.
- **Workload.** Workload is the amount of work required to manage assigned cases or perform certain tasks. Measuring workload is an assessment of
 - the underlying factors that impact the time it takes to work cases (caseload types and complexity), and
 - o staff time spent on activities not directly related to case responsibilities.

Staffing analyses should identify trends and establish internal benchmarks for efficient operations. Programs can use the following methods to inform staffing analyses:

- Historical Data Analysis. Historical data can be used to identify short-term seasonal
 shifts, differences in workload levels between sites and service areas, and long-term
 trends. This analysis can be crucial to understanding the impact of workload changes on
 staffing and costs.
- **Benchmarking.** Benchmarks set a standard to which other data can be compared. They can be used to identify offices, staff, or operations that are more cost-effective in performing their duties. To be valid and useful, benchmarks must be fair.
- **Business Process Mapping.** Business process mapping is the visual display of the steps involved in a business process from start to finish. Business process mapping can be used to help identify why differences in cost effectiveness exist and how operations can be streamlined if necessary.

In his book *Tools for Decision Making*, University of North Carolina professor David Ammons lays out methods that programs can use to conduct a staffing analysis. One such analysis is termed the staffing factor, which uses the following information to determine the number of employees needed to provide uninterruptible government service:

²² Washington State Auditor's Office, Local Government Performance Center. (2012, August). *Elements of a Well-Designed Staffing Model*.

- number of paid hours per employee per year,
- number of hours of paid absences per employee per year, and
- hours per year of operation.

Using this information, programs calculate appropriate staffing levels in two steps:

- 1. Number of paid hours per employee per year Number of hours of paid absences per employee per year = Number of effective hours per employee per year
- Hours per year of operation / Number of effective hours per employee per year = Staffing factor

Exhibit 26 shows the portion of the Measurability Assessment Form pertaining to staffing analysis that will be used to conduct measurability assessments.

Exhibit 26: Staffing Analysis Portion of Measurability Assessment Form

	Overall Indicator Rating		
	Meets	Partially Meets	Does Not Meet
12. Program has conducted a staffing analysis.			
	Key Element Ratings		
Key Elements of Indicator		Partially Meets	Does Not Meet
2.1 Staffing analysis measures caseload and workload.			
12.2 Staffing analysis identifies trends and establishes internal benchmarks for efficient operations.			

Source: Program Evaluation Division.

How can a program get a staffing analysis?

If a program has not already determined its staffing needs, it can refer to Chapters 24 and 25 in Ammon's *Tools for Decision Making*.²³ While analyzing staffing needs, programs should keep in mind that the appropriate number of workers should be based on the number needed when work is properly organized and department resources are properly deployed.

²³ Ammons, D. (2009). Tools for decision making: A practical guide for local Government (2nd edition). Washington, DC: CQ Press.

Indicator 13: Accounting System

What is an accounting system?

A governmental accounting system analyzes, records, summarizes, reports, and interprets financial transactions of programs. An accounting system provides more valid information than a program can glean from relying solely on bank accounts to process receipts and record payments.

Why is an accounting system important?

Accounting systems promote accountability by enabling programs to demonstrate their compliance with requirements governing how public dollars are raised and spent and whether or not programs can continue to meet their stated objectives. Accounting systems also disclose programs' assets and liabilities and changes from prior periods.

Does a program have an accounting system?

Most state agencies are required to enter program-level financial data into the North Carolina Accounting System (NCAS), a comprehensive accounting system that meets the State's budgetary and accrual reporting needs. Either through NCAS or their own accounting system, programs should be collecting the accounting elements described in Exhibit 27.

Exhibit 27: Account Types

Account Types	Definitions
Assets	What the program owns of value (e.g., cash, vehicles, computer systems, equipment)
Liabilities	What the program owes to others (e.g., mortgages, vehicle loans)
Fund Equity and Other Credits	Portion of total assets that the program fully owns because it has been paid for in full
Revenues	Money the program generates from its services
Expenditures	Money the program spends to provide its services (e.g., utilities, office supplies, travel)

Source: Program Evaluation Division based on NCAS Budget Management Training Course manual.

Program accounting systems should be able to track financial information on the following two bases:

- Cash Basis of Accounting. The cash basis of accounting involves recording revenues when
 cash is received and expenses when cash is paid. The State budgets and manages its
 financial affairs on the cash basis of accounting.
- Accrual Basis of Accounting. The accrual basis of accounting involves recording revenues
 when earned and expenses as incurred. Generally accepted accounting principles call for
 government entities to use the accrual basis of accounting, and N.C. Gen. Stat. §143B426.40H requires the Office of the State Controller to prepare a Comprehensive Annual
 Financial Report (CAFR) in accordance with generally accepted accounting principles.²⁴

²⁴ Bond rating agencies use states' Comprehensive Annual Financial Reports to determine bond ratings.

Depending on which types of funds a program receives (i.e., government, proprietary, and/or fiduciary), it should have an accounting system capable of producing the corresponding financial statements required by the Governmental Accounting Standards Board (GASB) (see Exhibit 28).

Exhibit 28: Financial Statements Required by GASB Depending on Types of Funds Received

CAFR Statement	Financial Statement	Description of Financial Statement				
	Financial Statements Required for Governmental Funds					
CAFR 11G	Balance Sheet	The balance sheet should report information about the current financial resources (assets, liabilities, and fund balances) of each major governmental fund and for non-major governmental funds in the aggregate. Balance sheet format means assets equal liabilities plus fund balances.				
CAFR 52G	Statement of Revenues, Expenditures, and Changes in Fund Balances	The statement of revenues, expenditures, and changes in fund balances should report information about the inflows, outflows, and balances of current financial resources of each major governmental fund and for the non-major governmental funds in the aggregate.				
	Financial Sta	tements Required for Proprietary Funds				
CAFR 11P	Statement of Net Position	The statement of net position can be presented in either a net assets format—assets less liabilities equal net assets—or a balance sheet format—assets equal liabilities plus net assets. Net assets should be displayed in three broad components—invested in capital assets, net of related debt; restricted (distinguishing between major categories of restrictions); and unrestricted.				
CAFR 53P	Statement of Revenues, Expenses, and Changes in Fund Net Position	The statement of revenues, expenses, and changes in fund net position should report revenues by major source and identify revenues used as security for revenue bonds. This statement should also distinguish between operating and nonoperating revenues and expenses and should present a separate subtotal for operating revenues, operating expenses, and operating income. Revenues from capital contributions and additions to the principal of permanent and term endowments, special and extraordinary items, and transfers should be reported separately.				
CAFR	Statement of Cash Flows	The statement of cash flows should use the direct method of presenting cash flows from operating activities (including a reconciliation of operating cash flows to operating income).				
	Financial Sta	atements Required for Fiduciary Funds				
CAFR 11F	Statement of Fiduciary Net Position	The statement of fiduciary net position should include information about the assets, liabilities, and net assets for each fiduciary fund type.				
CAFR 54F	Statement of Changes in Fiduciary Net Position	The statement of changes in fiduciary net position should include information about the additions to, deductions from, and net increase (or decrease) for the year in net assets for each fiduciary fund type. The statement should provide information about significant year-to-year changes in net assets.				
table above can be	obtained from the North	Financial Report. Whereas all the other CAFR Statements listed in the Carolina Accounting System (NCAS), the Statement of Cash Flows for led Comprehensive Annual Financial Report.				

Source: Program Evaluation Division based on GASB Statement No. 34.

Most state programs can demonstrate their accounting system meets the above requirements by looking up their programs' fund codes in NCAS and producing the applicable CAFR Statements depending on whether they receive government, proprietary, and/or fiduciary funds.

Exhibit 29 shows the portion of the Measurability Assessment Form pertaining to accounting systems that will be used to conduct measurability assessments.

Exhibit 29: Accounting System Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
13. Program has an accounting system.				
Key Elements of Indicator		Key Element Ratings		
		Partially Meets	Does Not Meet	
13.1 Accounting system includes assets, liabilities, fund equity and other credits, revenues, and expenditures.				
13.2 Accounting system tracks financial information on a cash and accrual basis.				
13.3 Accounting system is capable of producing financial statements required by the Governmental Accounting Standards Board.				

Source: Program Evaluation Division.

How can a program obtain an accounting system?

Most state programs will use NCAS to record financial data; if they do not use NCAS, whatever method they use for recording receipts and disbursements and tracking assets and liabilities should be equivalent to NCAS or a system that complies with generally accepted accounting principles for government entities. If a program lacks an accounting system that meets these requirements, it should consult the Office of the State Controller's Training Center for guidance on becoming part of NCAS or setting up an equivalent accounting system.

Indicator 14: Audit

What is an audit?

An audit is an independent review, examination, or evaluation of government organizations, programs, activities, and functions.

Why is an audit important?

The purpose of an audit is to help ensure full accountability and assist government officials and employees in carrying out their responsibilities. Audits are meant to assist in furnishing the General Assembly, the Governor, the executive departments and agencies of the State, the governing bodies and executive departments of the political subdivisions of the State, and the public in general with an independent evaluation of public program performance.

How is a program audited?

All state agencies and entities supported, partially or entirely, by public funds are subject to audit under the policy guidance of the State Auditor.²⁵ The North Carolina Internal Audit Act requires a state agency that (1) has an annual operating budget that exceeds \$10 million, (2) has more than 100 full-time equivalent employees, or (3) receives and processes more than \$10 million in cash in a fiscal year to have an internal auditing program that complies with the Standards for the Professional Practice of Internal Auditing.²⁶ In addition, every state department, agency, and institution is subject to independent, objective evaluations by the General Assembly's Program Evaluation Division.²⁷

In general, there are four types of audits:

- Financial Statement Audits. Financial statement audits determine whether a program's
 financial statements are fairly presented. The audit does not determine with absolute
 certainty that the financial statements are totally correct. Rather, the audit provides
 reasonable assurance that the financial statements are not wrong by an amount so large
 that it would mislead someone using them to make an important decision about the
 program's financial situation.
- Performance/Financial-Related Audits. Performance and financial-related audits
 provide independent and objective appraisals of management practices and operational
 results to state leaders and the public. They help improve performance, strengthen
 accountability, and enhance transparency of state government programs. Performance
 audits evaluate broad topics that could include program outcomes; financial-related
 audits have narrower scopes and do not evaluate program outcomes.
- Information Systems Audits. Information systems audits evaluate risks relevant to information systems assets and assess controls in place to reduce or mitigate these risks. Auditors verify systems and applications are appropriate for program needs, are efficient, and are adequately controlled to ensure valid, reliable, timely operation.

²⁵ N.C. Gen. Stat. § 147-64.2.

²⁶ N.C. Gen. Stat. § 143-745, 143-746.

²⁷ N.C. Gen. Stat. § 120-32.01(a), 120-36.11.

 CPA Audits. Some financial statement audits of community colleges, occupational licensing boards, and component units of the State are conducted on behalf of those agencies by private Certified Public Accountant (CPA) firms. The Office of the State Auditor receives these audits but does not verify their accuracy.

To assist state audits, internal audits, or evaluations, programs should be in a position to offer unimpeded access to

- persons involved with the program;
- books, records, reports, vouchers, correspondence, files, personnel files, investments, and any other documentation of the program; and
- property, equipment, and facilities of the program.²⁸

Programs should maintain a record of prior audits, examinations, and evaluations; their findings; and corrective actions taken in response to findings and recommendations.

Exhibit 30 shows the portion of the Measurability Assessment Form pertaining to audits that will be used to conduct measurability assessments.

Exhibit 30: Audit Portion of Measurability Assessment Form

	Overall Indicator Rating			
	Meets	Partially Meets	Does Not Meet	
14. Program is audited.				
	Key	Key Element Ratings		
Key Elements of Indicator		Partially Meets	Does Not Meet	
14.1 Audit documents include a description of audit requirements.				
14.2 Audit documents deomstrate accessibility of persons involved with the program; books, records, reports, vouchers, correspondence, files, personnel files, investments, and any other documentation of the program; and property, equipment, and facilities of the program.				
14.3 Program maintains a record of prior audits, examinations, and evaluations.				
14.4 Program maintains a record of corrective actions taken in response to audit findings and recommendations.				

Source: Program Evaluation Division.

How can a program get an audit?

The Office of the State Auditor performs financial statement audits for state agencies, state universities, community colleges, and other units of state government based on materiality and risk. Agencies that have to comply with the Internal Audit Act should have a schedule of planned audits. The Program Evaluation Division conducts its studies at the direction of the Joint Legislative Program Evaluation Oversight Committee and as assigned by state law. If a program is not

 $^{^{28}}$ N.C. Gen. Stat. § 120-32.01(a), 147-64.7.

already aware of when it will be audited or evaluated, it should consult with the Office of the State Auditor, its agency's internal audit division (if one exists), and the Program Evaluation Division. If a program is not on any entity's schedule for upcoming audit or evaluation, it may be prudent for the program to request an audit in the near future or contract with a private CPA firm.



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