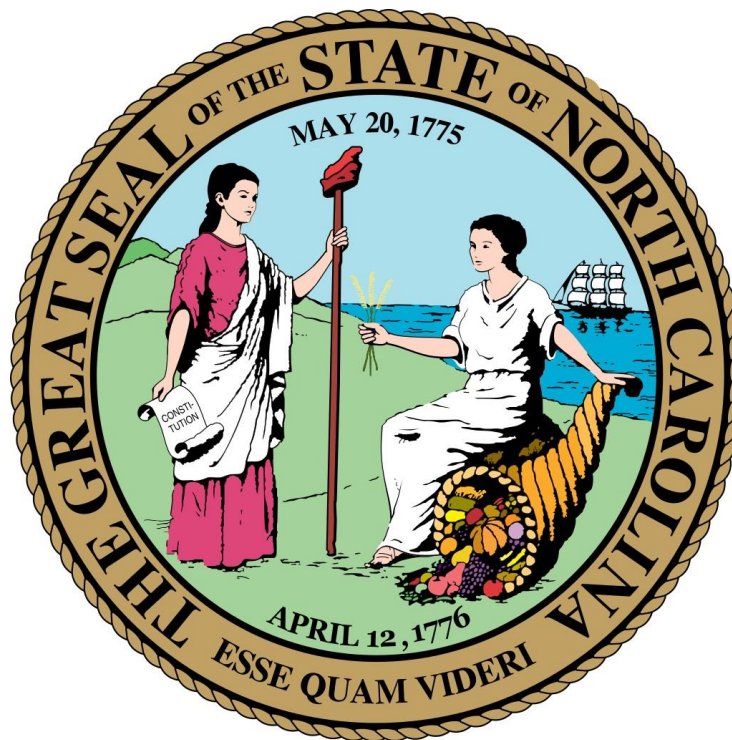**Progress Report**

Performance Management Pilot

November 2018

OSBM

Prepared by:

Office of State Budget and Management

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I.   Executive Summary

The Office of State Budget and Management (OSBM) is committed to fostering a culture of statewide organizational excellence. As part of that effort, OSBM has focused on strengthening the practices of evidence-based budgeting, data driven decision-making, and the use of performance information. To accomplish this, OSBM is partnering with state agencies to collaboratively build a performance management framework that works for North Carolina.

S.L. 2018-5, Section 26.1.(b) directed OSBM to research best practices in performance management, implement a pilot performance management initiative, and report on the progress of the pilot by November 30, 2018. As part of OSBM's wider effort to advance performance management statewide, OSBM conducted research from leading states and performance management organizations to develop a pilot performance management initiative.

OSBM's research revealed a set model for performance management across different states does not exist, but there are best practices and factors for increasing odds of success. A common factor in successful state efforts is building capacity and buy-in with state agencies. It is critically important for any performance management initiative by OSBM to be built on trust and partnership with agencies. Another factor for success is connecting different types of state leaders in a shared effort. OSBM identified a need for connecting budget, performance, and operational staff in this process. Of the states examined by OSBM, Utah demonstrated an innovative approach that not only built agency capacity but integrated budget, performance, and operational staff together in the process.

Utah's performance management framework, named SUCCESS, was born out of the reorganization of their state budget office in 2012 from a primarily budget-focused body to a full-fledged management and budget office. Under the new structure, a newly created Operational Excellence Team developed the SUCCESS Framework from leading theory and practices in performance management. Their Governor then challenged state agencies to reach a 25% improvement goal of the efficiency and effectiveness of state programs within four years. By 2016, they met their goal and more.

OSBM has taken the proven tools and theory from the SUCCESS Framework and created the Systems Analysis Pilot for North Carolina. Systems Analysis uses an approach to improving outcomes and service delivery for North Carolinians through targeted application of improvement strategies. Our method is to start from the perspective of what an agency serves to accomplish, understand how their processes fit together, and implement strategies where operations are bottlenecked.

To set an example, OSBM chose itself as the first pilot agency for Systems Analysis. As of this report, the OSBM pilot team is working to identify where the operational bottlenecks exist and what performance measures are necessary for determining success. OSBM has the goal of piloting Systems Analysis in three agencies by the end of FY 2018-19 and is currently in discussion with potential agency partners.

Rolling out Systems Analysis statewide will require thoughtful consideration in the future. Such a process, while tested in Utah, is not guaranteed to succeed in North Carolina and will require substantial investment of time, staff, and resources. Regardless of that future decision, the research and best practices behind the Systems Analysis Pilot are already contributing towards OSBM's effort to foster statewide organizational excellence.

II.   Background

In 2018, as part of OSBM's ongoing efforts to collaborate with agencies on evidence-based, data-driven decision making, OSBM began a performance management pilot called Systems Analysis. S.L. 2018-5, Section 26.1.(b) directed OSBM to research best practices in performance management, implement a pilot performance management initiative, and report on the progress of the pilot by November 30, 2018. Through research of best practices from leading states and performance management organizations, OSBM has sought to not only develop the Systems Analysis Pilot but incorporate lessons learned toward fostering a culture of statewide organizational excellence.

III.   Research and Lessons Learned

In accordance with S.L. 2018-5, OSBM staff conducted analysis and phone interviews with over a dozen leading states, professional organizations, and academic institutions on the topic of performance management.

OSBM's research began with a review of current efforts and best practices in performance management from organizations such as The National Association of State Budget Officers (NASBO), International City/County Management Association (ICMA), the Arnold Foundation, Pew-MacArthur Results First Initiative, and the University of North Carolina's School of Government. This research revealed while performance management is not a new concept for ensuring efficient and effective government operations, there is no one size fits all model for implementation. Furthermore, the different governance structures and functions among state governments creates an additional level of complexity when attempting to translate what works in other states to North Carolina.

While there is no one best model for performance management, research does point to a number of best practices to increase chances of success. A 2014 report by NASBO on using performance data to inform state budgeting reviewed performance budgeting at the state level and highlighted the need for agency engagement and buy-in in order to be successful.[1] To achieve this NASBO recommends high-level leadership involvement, demonstrating value to agencies, and building agency knowledge and capacity. Similarly, the Pew-MacArthur Results First Initiative recommends performance management efforts require regular communication between program staff, budget staff, and policymakers, as well as the development of strong executive and legislative champions.[2] Adopting a focus of building agency buy-in through collaboration is a common theme both infused in the pilot and on-going OSBM performance management practices.

OSBM conducted a comparative analysis of performance management efforts at the state level by identifying states with a similar structure as OSBM, active performance management efforts, and references from peer-reviewed research and national organizations. OSBM identified Colorado, Connecticut, Indiana, Iowa, Michigan, Minnesota, Rhode Island, Utah, Virginia, Washington, and Wisconsin as leading states in this field. A key finding in OSBM's comparative research was the need for a process that connects budgetary decision-making, agency operational management, and performance

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[1] *Investing in Results: Using Performance Data to Inform State Budgeting*. (September 2014). Washington, DC: The National Association of State Budget Officers (NASBO).

[2] Pew-MacArthur Results First Initiative (November 2014). *Evidence-Based Policymaking: A Guide for Effective Government.*

improvement processes. In particular, the element that was most missing in many of the states that were examined was a connection between performance improvement processes to budgetary decision-making. It was far more common to see state budget offices with strong connections to agency operations or central staff with performance expertise working with agency operational managers outside of the budget process. One notable exception is Utah, which demonstrated a very robust connection of budget, performance, and agency operations staff.

In addition to lessons learned from other states and professional organizations, OSBM reviewed reports and findings from prior performance related initiatives and reforms in North Carolina such as Results Based Budgeting (RBB) and NC GEAR (Government Efficiency and Reform). OSBM was keen to understand what has been tried before and what worked and did not work. A consistent trend for failed or discontinued efforts were:

- Lack of integration of performance to the budget process in a meaningful way
- Overly burdensome processes for agencies
- Measuring too much or not measuring meaningful data
- Lack of engagement and collaboration with agencies in the process

To quote a 2005 report from OSBM on budget improvement strategies, "The past failures have created a climate inside and outside of OSBM that will make any implementation of performance budgeting a challenging endeavor."[3] These words are as true in 2018 as they were over a decade ago. Making this process a collaboration with agency partners is paramount to success. Any new performance management practices or initiatives by OSBM will require substantial time, effort, and resources focused on engaging, training, and partnering with state agencies

Utah's Governor's Office of Management and Budget

In 2012, the Governor of Utah reorganized his Office of Planning and Budget to become the Governor's Office of Management and Budget (GOMB). This reorganization was part of a major shift from a strictly budget-focused office to a management and budget office with a strong emphasis on performance management. GOMB divided in to three major sections:

1. **Financial Operations** – managed the day to day budget execution work.
2. **Budget, Revenue, and Policy** – managed budget development, revenue forecasting, and policy analysis.
3. **Operational Excellence Team** – managed the implementation of performance management across the state.

GOMB was then charged with making Utah more efficient in allocating scarce resources. The Governor challenged the state to reach an ambitious 25% performance improvement goal within four years. To meet this goal, GOMB's Operational Excellence Team, comprised of approximately four full-time equivalent (FTE) positions, developed its own performance management framework known as SUCCESS.[4]

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[3] United States, North Carolina Office of the Governor, Office of State Budget and Management (OSBM). (September 2005). *Budget Improvement Strategies for Becoming the Best Budget Office in the Nation*. Page 2.

[4] GOMB additionally employed the services of consultants to aid in the development of their training materials as well as specific tools and mechanism for recording performance data.

Utah's SUCCESS Framework

The SUCCESS Framework is built around the concepts of Systems Thinking and the Theory of Constraints (TOC). Systems Thinking is a management approach that seeks to understand how all of the various functions, processes, and activities of an organization work together to achieve a common goal. TOC is a performance improvement process designed to identify bottlenecks, called constraints, in systems and maximize their performance. Together, these concepts establish a framework for how to identify what an agency seeks to accomplish, how to measure success, and ultimately identify opportunities to improve.

The SUCCESS Framework utilizes a consistent roadmap of training and activities to achieve the goal of building agency capacity and continually improving services. With each identified agency system, GOMB staff provide a training curriculum comprised of the basic principles, tools, and key concepts. After training is completed, agency staff with the assistance of a GOMB operational excellence consultant follow a five-step process for maximizing the efficiency and effectiveness of their system:

1. Articulate a clear and concise system goal
2. Create a visual work flow
3. Develop system performance measures
4. Identify the main constraints and challenges limiting system performance
5. Develop and implement improve strategies.

Once areas for improvement are identified, then strategies and concepts taught in popular tools such as Lean and Six Sigma can be employed to maximize system performance. Lean is a process focused on eliminating waste in a system thus increasing the value for customers or citizens. Lean organizations optimize the flow of products or services through a system while seeking to reduce waste to zero. Six Sigma is a set of techniques and tools to improve the quality of products or services. Six Sigma focuses on removing the causes of defects and minimizing variability in processes. While Lean and Six Sigma tools and techniques were first popularized in production and manufacturing environments, their approaches and concepts are still applicable to improving the efficiency and effectiveness of state services.

The performance data and evidence produced in the SUCCESS Framework is not just used for organizational management but also in the budget process. Utah requires state agencies to demonstrate their programs are operating at maximum capacity with performance data before granting budget expansion requests. Every new program or expansion request must detail how current resources are exhausted, alternatives have been considered, and what positive outcomes would be realized if the budget expansion was approved.

Utah's Measurement Process

Perhaps one of the most unique elements of Utah's SUCCESS Framework is the measurement process and how it is integrated in the budget process. The SUCCESS Framework measures three things:

- **Quality (Q)** – measure of accuracy, effectiveness, or reliability
- **Throughput (T)** – measure of capacity to serve or produce units of work (volume of work)
- **Operating Expense (OE)** – measure of the cost to operate the system

Many states have dashboards, performance indicators, and collect data, but Utah's process is unique in the way it brings operational, performance, and budget staff together for the measurement process. Each

type of staff is responsible for validating one of the metrics: operational staff for the throughput (T) metric, performance staff for the quality (Q) metric, and budget staff for the operating expense (OE) metric. Each perspective is now a part of the process and vested in its success. The three metrics are then merged together in a formula of Q*T/OE to create a singular performance measure for a system.[5] The end result is a performance measure that gives a snapshot of progress for a system's efficiency and its effectiveness.

Perhaps the greatest value of the Q*T/OE measurement formula is the accountability created after granting additional funding. By providing funding for a program the operating expense (OE) aspect of their performance measure would increase. This would of course lower their performance scores if throughput (T) or quality (Q) metrics did not increase accordingly. So not only are agencies required to demonstrate need on the front end, but the measurement process creates a way to hold state agencies accountable to results and inform future budget decisions.

Utah's approach of providing process improvement tools to agencies, using a unique measurement process, and holding the budget process accountable is what has made SUCCESS true to its name. The SUCCESS Framework was created to meet their Governor's improvement challenge and began collecting data at the start of 2013. By the end of 2016, statewide metrics had achieved a 27% average increase in measured results.

Colorado's Training Academy

Consistently, Colorado is mentioned in national settings as a leading state for performance management. Colorado's Office of State Planning and Budgeting (OSPB) demonstrates a very sophisticated integration of performance management concepts built into their state's budget process. However, many of Colorado's methods, tools, and strategies are not applicable to North Carolina without substantial changes to statute and budget procedures and therefore outside the scope of an OSBM pilot program.

One element from Colorado that can be applied to North Carolina is their method for offering training in budget and performance management. OSPB offers an annual six session Performance Management Academy covering operational excellence, customer focus, strategic planning, operational planning and evaluation, lean process improvement, and implementation and culture.

OSBM has recently partnered with the University of North Carolina's School of Government to begin to replicate parts of Colorado's Performance Academy. Training offered by OSBM in the Fall of 2018 included strategic public leadership and creating performance measures. Approximately 200 state agency leaders from nearly every department attended OSBM provided training, and OSBM intends to continue to formalize this process with more training opportunities in 2019.

IV.   OSBM Performance Management

OSBM is seeking to foster a culture of statewide organizational excellence through complimentary efforts in performance management such as strategic planning, process improvement tools, and evidence-based decision-making tools like Results First. Building a culture founded on data and evidence takes more than just one tool and requires significant investments in time, effort, and resources. OSBM is committed to

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[5] For ease of use purposes, Utah takes the raw number produced by the Q*T/OE formula and converts it to a monthly index score where the measurement baseline is 100. In example, if the Q*T/OE raw number reflected a 1% improvement then the displayed performance measure would be 101.

leveraging its unique position in state government to build partnerships through collaborative efforts and use these tools to increase agency capacity. To achieve this OSBM staff are working to provide regular training sessions, opportunities for inter-agency collaboration, and forums for sharing best practices.

An important aspect of OSBM's commitment to statewide organizational excellence is piloting and testing new and innovative tools. OSBM has taken the best practices and lessons learned from research of leading states, organizations, and academic institutions to build a pilot program called Systems Analysis.

Systems Analysis is largely based on the Utah SUCCESS Framework and is one part of the broader shift by OSBM to build a full-fledged performance management framework. The aim of Systems Analysis is to provide technical assistance to state agencies for operational performance improvement. Our approach is to provide training and expertise and work with agencies to collaboratively find solutions to maximize the efficiency and effectiveness of state programs. OSBM's role will be that of a trainer, facilitator, and consultant. Agency staff will take the lead on prioritizing areas for attention and developing solutions using the Systems Analysis approach.

Systems Analysis Pilot Process

Systems Analysis is an approach to improving outcomes and service delivery for North Carolinians through targeted application of improvement strategies. OSBM's method is to start from the perspective of what an agency serves to accomplish, understand how their processes fit together in *systems*, and implement strategies where systems are bottlenecked.

OSBM defines a *system* as a collection of functions and processes that fit together to meet a goal (i.e. deliver a service to North Carolinians). Systems Analysis is about improving the performance of the system as a whole to meet the system's goal as efficiently and effectively as possible. To achieve this, Systems Analysis uses a five-step process to focus time and effort on the bottlenecks, called *constraints*, that limit system performance the most.

Figure 2: Systems Analysis Process
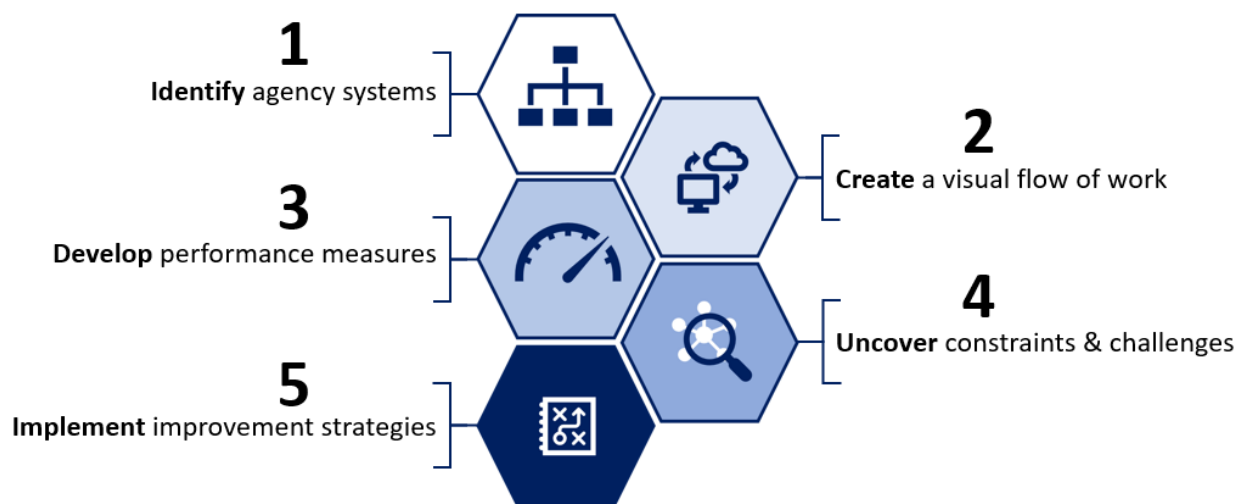
1. **Identify** agency systems by defining the goals the agency seeks to accomplish.
2. **Create** a visual flow of work to understand how different processes interact within the systems.

3. **Develop** performance measures specific to each system's goal.
4. **Uncover** the constraints and challenges that are the greatest bottlenecks to performance.
5. **Implement** improvement strategies to maximize performance of the system goal.

Systems Analysis Pilot Training

OSBM staff developed a training curriculum, using the five-step process as milestones for each level of training. Though OSBM staff will deliver the training and help guide the process, the expertise and knowledge of agency staff are required for completing each milestone.

Figure 3: OSBM's Systems Analysis Training Roadmap
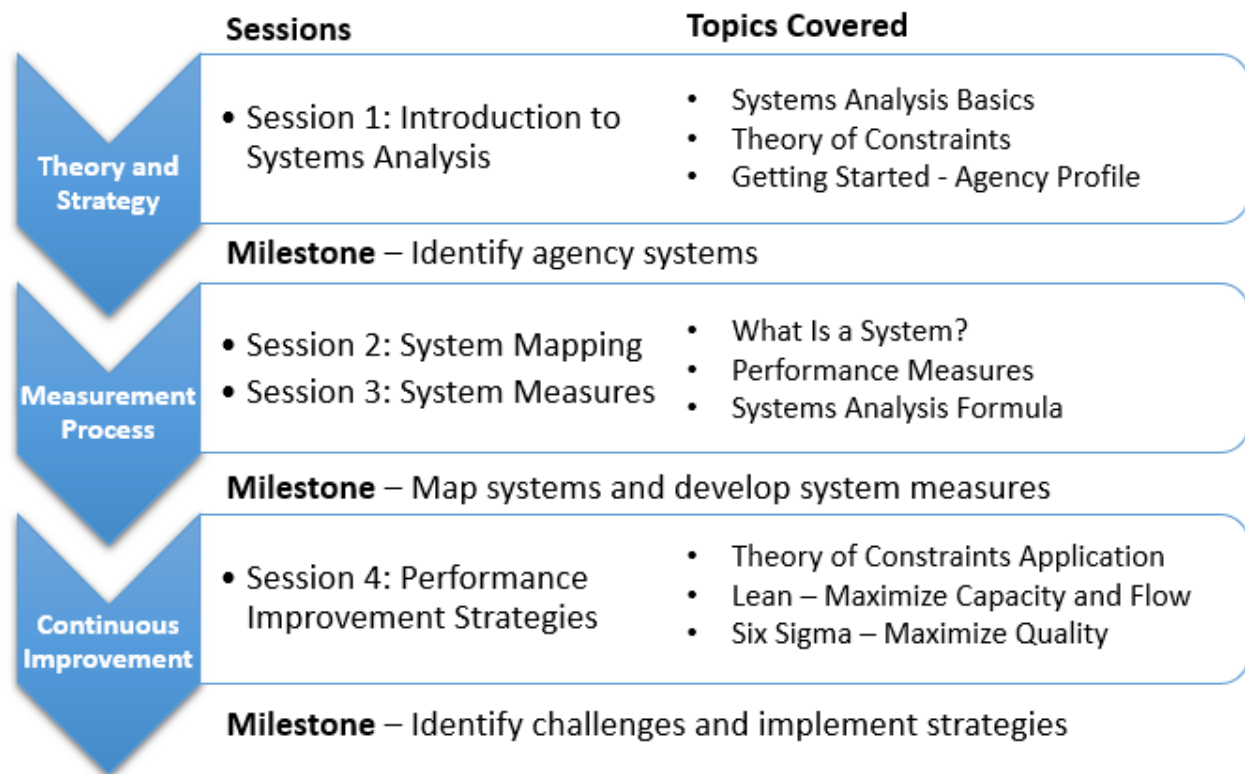
One unique element to OSBM's approach to training is dividing the sessions into three tiers of learning. The intent is to be able to provide appropriate levels of depth of training to different staff. All types of staff including executive leadership would receive the first tier covering theory and strategy to understand the basic process and foundational principles. The second tier of training is meant for managers and staff at the division and program level responsible for performance and results in their system. The last tier of training is meant for performance practitioners and individuals managing the improvement efforts for their agency's systems. These tiers are only meant to provide guidelines for appropriate audiences, and OSBM would work with agencies on a case by case basis to customize training to their needs.

Systems Analysis Pilot Measurement Process

With Systems Analysis, OSBM is piloting a similar measurement process as used in Utah. However, OSBM has customized the terminology to better match familiar terms already used in North Carolina. The Systems Analysis metrics are:

- **Quality (Q)** – measure of accuracy, effectiveness, or reliability
- **Output (O)** – measure of capacity to serve or produce units of work (volume of work)
- **Expense (E)** – measure of the cost to operate the system

As in Utah's process, this measurement approach still has the benefit of requiring validation from budget staff (expense metric), operational staff (output metric), and performance staff (quality metric) to validate their respective part of the system performance measure. Additionally, OSBM uses a similar formula Q*O/E to create a single system performance measure for providing a snapshot of progress in increasing the efficiency and effectiveness of a system.

V.   Systems Analysis Pilot Progress

OSBM believes strongly in leading by example and has selected itself as the first Systems Analysis Pilot agency. Internal training began in late August, and after a few delays due to the impact of hurricanes Florence and Michael, OSBM management has completed the first two tiers of training and identified the office's major systems and functions:

1. **Budget Execution** - Monitors and implements the enacted budget.
2. **Budget Development** - Supports the Governor in development of the recommended budget.
3. **Data and Analysis** - Provides data and analysis to the public, decision-makers, and agencies.
4. **Internal Audit** - Provides systematic reviews to improve agencies' risk management and controls.

OSBM leadership selected the Budget Execution system as the top priority for analysis. A budget execution systems analysis team was formed to participate in training and lead the improvement process. This team has completed the first two tiers of training and is currently determining their system's performance measures and identifying system constraints.

VI.   Next Steps

The goals for the OSBM Systems Analysis Pilot are to collect performance data and implement improvement strategies in three agencies by the end of FY 2018-19. Additionally, the pilot process will determine the necessary level of resources to implement and manage Systems Analysis at a statewide level. Currently, OSBM has one budget analyst FTE primarily focused on this effort and one budget analyst assisting in a limited role as time and other duties permit. Moving forward, should Systems Analysis prove to be a viable process for improving the efficiency and effectiveness of state operations, a full team such as the 4 FTE team in Utah will likely be necessary to train and manage a similar framework in North Carolina.

Regardless of future determinations for implementing Systems Analysis, the lessons learned in development of the pilot have greatly contributed to building a culture of organizational excellence both in OSBM and across the state. Moving forward, OSBM is working towards increasing agency capacity and implementing more routine performance management training such as that seen in Colorado's Performance Management Academy. The goal is to offer at minimum quarterly training events on topics such as strategic planning, creating performance measures, and evidence-based budgeting. Additionally, OSBM has reformed its own budget processes such as the questions and required data for agencies submitting budget expansion items for the Governor's Recommended Budget. These changes are directly

attributable to practices seen in leading states and designed to increase the quality of information for future budget decisions.

VII.   Glossary

FTE – Full-time Equivalent

GOMB – Utah's Governor's Office of Management and Budget

NASBO – National Association of State Budget Officers

NC GEAR – North Carolina Government Efficiency and Reform

OSBM – North Carolina's Office of State Budget and Management

OSPB - Colorado's Office of State Planning and Budgeting

Performance Management - an ongoing process of measuring, evaluating, and adjusting actions to improve outcomes.

RBB – Results Based Budgeting

SUCCESS – Utah's performance management framework.

Systems – a collection of functions, processes, and resources that exist to achieve a common goal.

Systems Analysis – OSBM-led performance management pilot.

Systems Thinking – a management approach that seeks to understand how all of the various functions, processes, and activities of an organization work together to achieve a common goal.

TOC – Theory of Constraints, a performance improvement process designed to identify bottlenecks, called constraints, in systems and maximize their performance.