EXECUTIVE SUMMARY

PURPOSE
The objective of this audit was to determine whether the Department of Commerce’s (Department) performance measurement plan provides reasonable assurance that accurate and meaningful information is available to measure the Department’s performance and make budgeting decisions.

BACKGROUND
The Department is the state’s lead agency for economic, community, and workforce development. The Department works with local, regional, national, and international organizations to fulfill its mission to “improve the economic well-being and quality of life for all North Carolinians.”

North Carolina General Statute Chapter 143B-428 contains the Declaration of Policy that outlines the Department’s six primary statutory responsibilities. The Department’s 2017-2019 Strategic Plan includes five major goals relevant to the Declaration of Policy.

KEY FINDING
The Department’s performance measurement plan provides the start of a firm foundation to provide information to measure the Department’s performance and make budgeting decisions. However, three weaknesses limited the plan’s usefulness for assessing performance.

- The Department’s plan lacks adequate outcome-based measures
- The Department’s plan contains gaps in measurement
- The Department uses unreliable data to measure some performance

KEY RECOMMENDATIONS

- The Department should review their performance measurement plan and approve specific measures to ensure they are outcome-based
  Recommendations for effectiveness, efficiency, and outcome-based performance measures can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report located in the Appendix pages 20-31

- The Department should review their performance measurement plan to ensure that specific performance measures are clearly linked to the mission, goals, and sub-goals so that decision makers can measure goal achievement and evaluate performance
  Recommendations for closing gaps in the Department’s performance measurement plan can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report located in the Appendix pages 12-14, 19-20

- The Department should implement a formal review process to help ensure the accuracy and completeness of data used in the Department’s performance measures

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1 Report prepared by Dr. Dale J. Roenigk, Benchmarking Director, and Dr. Jonathan Q. Morgan, Associate Professor of Public Administration and Government, School of Government, University of North Carolina at Chapel Hill. Dr. Roenigk and Dr. Morgan served as the subject matter experts on this engagement.
The Honorable Roy Cooper, Governor
Members of the North Carolina General Assembly
Anthony Copeland, Secretary, North Carolina Department of Commerce

Ladies and Gentlemen:

We are pleased to submit this performance report titled *Department of Commerce Performance Measurement*. The objective of this audit was to determine whether the Department’s performance measurement plan provides reasonable assurance that accurate and meaningful information is available to measure the Department’s performance and make budgeting decisions.

The North Carolina Department of Commerce Secretary, Anthony Copeland, reviewed a draft copy of this report. His written comments are included starting on page 34.

This audit was conducted in accordance with *Article 5A of Chapter 147 of the North Carolina General Statute*.

We appreciate the courtesy and cooperation received from management and the employees of the North Carolina Department Commerce during our audit.

Respectfully submitted,

Beth A. Wood, CPA
State Auditor
Article V, Chapter 147 of the North Carolina General Statutes, gives the Auditor broad powers to examine all books, records, files, papers, documents, and financial affairs of every state agency and any organization that receives public funding. The Auditor also has the power to summon people to produce records and to answer questions under oath.
BACKGROUND
The Department of Commerce (Department) is the state’s lead agency for economic, community, and workforce development. The Department works with local, regional, national, and international organizations to fulfill its mission to “improve the economic well-being and quality of life for all North Carolinians.”

Taking a comprehensive approach to economic development, the Department’s work reaches many areas. It helps people find jobs and employers find and retain a qualified workforce. It administers the state’s employment security system, supporting workers during career transitions. It also provides local communities with grants and planning services to spur infrastructure development and economic growth, and administers the state’s economic incentive programs.

The Department is also responsible for recruiting companies to the state, helping existing North Carolina companies expand, encouraging business start-ups, enabling companies to export, and marketing North Carolina as a business and visitor destination. In October 2014, the Department entered into a contract with a new public-private organization, the Economic Development Partnership of North Carolina (EDPNC) to take the lead in these recruiting and marketing functions.

North Carolina General Statute Chapter 143B-428 contains the Declaration of Policy that outlines the Department’s six primary statutory responsibilities. The Department’s 2017-2019 Strategic Plan consists of five major goals relevant to the Declaration of Policy.

<table>
<thead>
<tr>
<th>Statute Declaration of Policy</th>
<th>Relevant Department Strategic Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively encourage the expansion of existing environmentally sound North Carolina industry</td>
<td><strong>Goal 1:</strong> To support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars</td>
</tr>
<tr>
<td>Actively encourage the recruitment of environmentally sound national and international industry into NC through industrial recruitment efforts and through effective advertising, with an emphasis on high-wage-paying industry</td>
<td><strong>Goal 1:</strong> To support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars</td>
</tr>
</tbody>
</table>
| Promote the development of NC’s labor force to meet the State’s growing industrial needs      | **Goal 2:** To promote job creation and business expansion in collaboration with the Economic Development Partnership of North Carolina, while addressing the needs of public infrastructure in all areas of the State  
**Goal 3:** To deliver quality, timely, and consistent services to businesses and recipients of unemployment benefits, while simultaneously fostering the advancement of a skilled workforce and job place services |
| Promote the growth and development of our travel and tourist industries                      | **Goal 1:** To support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars  
**Goal 5:** To provide best-in-class customer service, executed with the appropriate sense of urgency and commitment in an environment of collaborative communication and partnership. |
<table>
<thead>
<tr>
<th>Statute Declaration of Policy</th>
<th>Relevant Department Strategic Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote the development of our State's ports</td>
<td><strong>Goal 1:</strong> To support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars</td>
</tr>
</tbody>
</table>
| Assure, throughout State government, the coordination of NC’s economic development efforts | **Goal 1:** To support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars  
**Goal 4:** To make available high quality labor statistic, economic information and analysis and to advise on the role of science, technology and innovation  
**Goal 5:** To provide best-in-class customer service, executed with the appropriate sense of urgency and commitment in an environment of collaborative communication and partnership |

The Department currently employs approximately 1,451 individuals\(^2\) and had approximately $492,789,308\(^3\) of budgeted expenditures in state fiscal year 2017.

\(^2\) Figure obtained from www.nc.gov.  
\(^3\) Figure obtained from the Office of State Budget and Management (OSBM).
OBJECTIVE, SCOPE, AND METHODOLOGY
The objective of this audit was to determine whether the Department of Commerce’s (Department) performance measurement plan provides reasonable assurance that accurate and meaningful information is available to measure the Department’s performance and make budgeting decisions.

The audit scope included a review of Department activities between July 1, 2016 and June 30, 2017.

To accomplish the audit objective, the Office of the State Auditor (OSA) contracted with a subject matter expert in the field of performance measurement and public administration to evaluate the Department’s performance measurement plan (Plan) with its connection to and construction of performance measures used in the Plan.

The subject matter expert’s full assessment of the Department’s Plan, including findings and recommendations, can be found in this report’s Appendix starting on page 9.

Additionally, to accomplish the audit objective, auditors interviewed personnel, observed operations, reviewed policies, analyzed records, and examined documentation supporting transactions, as considered necessary. Whenever sampling was used, auditors applied a nonstatistical approach. Therefore, results could not be projected to the population. This approach was determined to adequately support audit conclusions.

Because of the test nature and other inherent limitations of an audit, together with limitations of any system of internal and management controls, this audit would not necessarily disclose all performance weaknesses or lack of compliance.

As a basis for evaluating internal control, auditors applied the internal control guidance contained in professional auditing standards. As discussed in the standards, internal control consists of five interrelated components, which are (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

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Dr. Dale J. Roenigk, Benchmarking Director, and Dr. Jonathan Q. Morgan, Associate Professor of Public Administration and Government, School of Government, University of North Carolina at Chapel Hill.
RESULTS AND
CONCLUSIONS
We determined that the Department of Commerce’s (Department) performance measurement plan provides the start of a firm foundation to provide information to measure the Department’s performance and make budgeting decisions. However, three weaknesses limited the plan’s usefulness for assessing performance.
FINDING, RECOMMENDATIONS, AND RESPONSE
FINDING, RECOMMENDATIONS, AND RESPONSE

THE DEPARTMENT’S PERFORMANCE MEASUREMENT PLAN CONTAINS WEAKNESSES THAT LIMITS ITS USEFULNESS

The Department of Commerce’s (Department) performance measurement plan (Plan) provides the start of a firm foundation to provide information to measure the Department’s performance and make budgeting decisions.

However, three weaknesses in the Department’s Plan limit its usefulness in assessing the Department’s performance. Specifically, the Department’s Plan lacks adequate outcome-based measures, contains gaps in measurement, and uses unreliable data.

As a result, improvements are necessary in order for the Plan to provide Department management with useful performance measures.

Lack of Outcome-Based Measures

First, the subject matter expert determined that the Department’s Plan lacks adequate outcome-based measures. Instead, the Plan mostly relies on workload or output measures.

The Department’s Plan contains 25 distinct performance measures. According to the subject matter expert, only three of the 25 were outcome-based measures, and two of those were improperly designed.

The use of more outcome-based measures could help improve performance because they inform on the quality of services and the extent to which objectives have been achieved. In contrast, workload (output) measures only report the direct results of activities and programs.

For example, the Department’s Plan included specific performance measures that reported the number of companies served, grant awards made, visitors to websites, and persons attending training sessions or webinars.

While those output measures are useful for assessing basic levels of activity, they are not useful for assessing program impact and effectiveness or showing whether expected results were achieved. Outcome measures such as “number of new jobs created from sessions attended” could better measure program impact and help improve performance.

Best Practices recommend using outcome-based performance measures. According to the subject matter expert:

“Whenever possible, efficiency and effectiveness measures are desirable additions to performance measures and indeed should be viewed as preferable and of higher value over workload measures alone.”

Consequently, the subject matter expert provided several specific recommendations for effectiveness, efficiency, and outcome-based performance measures. These can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report located in the Appendix pages 20-31.

5 The Department has an additional 115 performance measures that are not included in their Plan. See “Gaps in Performance Measurement” section below. These were not individually reviewed by the subject matter expert and are therefore not included in this analysis.

6 See Appendix for subject matter expert’s analysis.
FINDING, RECOMMENDATIONS, AND RESPONSE

Gaps in Performance Measurement

Second, auditors and the subject matter expert determined that the Department's Plan contains gaps in activity and program measurement. There are sub-goals with no associated performance measure, and there are performance measures with no associated goal or sub-goal.

The Department’s Plan contains five major goals. Those goals are further developed into 20 sub-goals. Additionally, the Department’s Plan contains 25 distinct performance measures associated with a goal or sub-goal.

However, auditors identified:

- 6 sub-goals that did not appear to have any associated performance measure
- 115 additional performance measures used throughout the Department that do not appear to be associated with a sub-goal, goal, or the Plan as a whole

Failure to link performance measures to goals may increase the risk that the goals will not be achieved. Additionally, time and effort could be wasted if spent gathering data for and reporting on unnecessary performance measures.

Best practices identified by the Government Accountability Office (GAO) recommend that agencies link performance measures to agency goals. The GAO states:

“Performance goals and measures should align with an agency’s goals and mission. A cascading or hierarchical linkage moving from top management down to the operational level is important in setting goals agency wide, and the linkage from the operational level to the agency level provides managers and staff throughout an agency with a road map that (1) shows how their day-to-day activities contribute to attaining agency wide goals and mission and (2) helps define strategies for achieving strategic and annual performance goals.”

Consequently, the subject matter expert provided recommendations for closing gaps in the Department’s Plan. These can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report located in the Appendix pages 12-14, 19-20.

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7 (1) Implement Rural Division programming within established Prosperity Zones that will meet the legislative intent to provide services to communities within the Zones; (2) Utilize the Ag-Gas Fund to assist farmers in rural North Carolina increase their productivity and lower their energy costs; (3) Identify and align international and domestic investors with investment opportunities to grow North Carolina’s economy, while also taking necessary measures to minimize risk to the State and our Nation; (4) Develop pathways for matching worker preparation to employer need, training program enrollees for existing and future career opportunities and providing continuous learning opportunities; (5) Support NC Veterans through the Jobs for Veterans Grant; (6) Provide high quality personal customer service at Welcome Centers at Interstate points of entry to increase visitor expenditures through responsive sales and marketing initiatives.

Unreliable Data

Third, auditors determined that the Department used inaccurate and unsupported data to track, monitor, and measure some of its performance.

Auditors sampled 27 of 128\(^9\) performance measures that the Department currently tracks and measures. Auditors found that 18 of 27 (66\%) measures tested were calculated with inaccurate or unsupported data. Specifically:

- 9 of 27 (33\%) measures were calculated with inaccurate data - the data in the information system differed from the data in source documents
- 9 of 27 (33\%) measures lacked supporting data - the source documentation was missing or unavailable

These exceptions were spread across specific measures used by five of the Department’s divisions or units. For example:

- The number of low-to-moderate households receiving a community development block grant from the Division of Rural Development in 2016 (42 recipients) was overstated by 36 recipients (46\%)
- The number of visitor calls received by the N.C. Correctional Institution for Women in 2017 (7,875) was overstated by 1,848 calls (23\%)
- The number of unemployment insurance appeals listed on the Division of Employment Security’s 2017 aging of appeals were understated by a range of 15 to 27 cases for 12 consecutive months (number of appeals average 201 cases a month)
- The number of attendees (1,943) for 2017 training sessions reported by the Labor and Economic Analysis Division had no source documentation to support it

Failure to use reliable data for performance measurement could result in erroneous decision-making. As noted by the Committee on Sponsoring Organizations (COSO),\(^{10}\)

“\text{Inaccurate or incomplete data, and the information derived from such data, could result in potentially erroneous judgements, estimates or other management decisions.}”

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\(^9\) This number includes the 25 measures in the Department's Plan plus the additional 115 measures that auditors identified. However, 12 measures were removed from the sampled population due to subject matter expert’s opinion that they contained design flaws or lacked usefulness.

\(^{10}\) The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a joint initiative of five private sector organizations and is dedicated to providing thought leadership through the development of frameworks and guidance on enterprise risk management, internal control, and fraud deterrence.
Additionally, best practices identified by GAO require management to use reliable data. The GAO requires that: 11

"Management obtains relevant data from reliable internal and external sources in a timely manner based on the identified information requirements... Reliable internal and external sources provide data that are reasonably free from error and bias and faithfully represent what they purport to represent. Management evaluates both internal and external sources of data for reliability."

**RECOMMENDATIONS**

The Department should review their performance measurement plan and approve specific measures to ensure they are outcome-based. Specific recommendations for effectiveness, efficiency, and outcome-based performance measures can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report 12 located in the Appendix pages 20-31.

The Department should review their performance measurement plan to ensure that specific performance measures are clearly linked to the mission, goals, and sub-goals so that decision makers can measure goal achievement and evaluate performance. Specific recommendations for closing gaps in the Department’s performance measurement plan can be found in the “Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links” report 12 located in the Appendix pages 12-14, 19-20.

The Department should implement a formal review process to help ensure the accuracy and completeness of data used in the Department’s performance measures.

**AGENCY RESPONSE**

See page 34 for the Department’s response to this finding.

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12 Report prepared by Dr. Dale J. Roenigk, Benchmarking Director, and Dr. Jonathan Q. Morgan, Associate Professor of Public Administration and Government, School of Government, University of North Carolina at Chapel Hill. Dr. Roenigk and Dr. Morgan served as the subject matter experts on this engagement.
APPENDIX
Assessment of North Carolina Department of Commerce Performance Measurement and Strategic Plan Links

Prepared by
Dale J. Roenigk and Jonathan Q. Morgan
School of Government
University of North Carolina at Chapel Hill

January 25, 2018

Report prepared for the North Carolina State Auditor’s Office
Introduction
At the request of the North Carolina State Auditor’s Office, we have reviewed the North Carolina Department of Commerce’s Strategic Plan and Information Technology Plan FY 2017-2019. The charge was to evaluate the Plan with its connection to and construction of performance measures used in the plan. Our objective was to evaluate those performance measures and suggest possible improvements or additions. The analysis here is limited to only the Strategic Plan portion of the Commerce document and does not in any way consider the portion of the Commerce document addressing information technology.

Overall our assessment of the Commerce Plan and its performance measurement is that in its current form it provides the start of a firm foundation to provide information to measure the Department’s performance. We believe, though, with a number of changes as will be suggested in this report, the performance measurement can be elevated to a notably higher level that will enable more useful assessment of Commerce’s efforts and also support more effective management of the Department. The most significant change Commerce could pursue would be to move from the current predominance of workload or output performance measures and make much greater use of efficiency and effectiveness measures. Along with other changes which we will discuss below, we believe moving forward in this way could produce an exemplary model of performance measurement for a state commerce department.

In its current form, the Commerce Department’s effort adequately addresses two of three major elements that should be part of any effective performance measurement system but does not address a third element to provide sufficient measures to show how well these goals are being accomplished in terms of efficiency or effectiveness. The three elements and Commerce’s efforts are assessed as follows:

1. Goal Clarity – Effective performance measurement should be more than just what can be measured but measuring what is important. Agencies may choose to identify goals with a strategic plan, with budget planning documents, or other means. This identification of goals is important as it clearly indicates agency priorities and thus highlights what should be measured to assess performance. The Commerce Strategic Plan does a good job of this by laying out its five major goals though there may be some small gaps to address. These goals are further developed into a large number of sub-goals permitting a deeper dive into goals. This key element provides a good foundation.

2. An extensive set of performance measures – Performance particularly in agencies with a large and varied mission such as Commerce is not unidimensional. Rather than relying on just a single or few measures, the Commerce Plan lists a wide array of measures connected to its goals and its various efforts. Nearly all of the sub-goals have one or more measures defined for them. The only shortcoming to point to here is that a small number of sub-goals do not currently show any performance measures. We would encourage Commerce to take on the challenge of identifying possible measures for those sub-goals currently not showing any measures.
3. Performance measures focused on effectiveness and efficiency—Good performance measurement systems should include more performance indicators looking at quality, efficiency, and outcomes. Inclusion of more “higher order” measures as will be explained below are associated with a change in management thinking and possibly higher performance as it causes users to focus on how well rather than simply how much performance efforts are. Currently the Commerce Plan performance measures are mostly output or workload measures. The Commerce Plan would be notably improved if efforts were made to add efficiency and effectiveness measures throughout the document.

In addition to the gap noted here around the need for efficiency and effectiveness measures, a number of other topics will be raised below. We believe some of these other topics if addressed would further add to the usefulness of the Commerce Plan performance measurement. Finally, we would also note that while not a focus of this report, the subject of how to move from performance measurement to performance management is an important one for the Commerce Department to consider. This means considering how the Department will make use of performance measures to guide its decision making and operations beyond the obvious use of performance measures for accountability. Suggestions will be offered on specific issues where changes in the performance measurement portion of the system could support performance management decision making.

The analysis in the report is presented in two major sections. First, a number of overarching themes were identified during the review that crossed multiple goals and performance measures. This first section will explain these major themes suggesting big picture issues that merit consideration and have implications across the Strategic Plan. The second section in this report goes through each of the major goals, sub-goals, and specific measures in the current Plan providing detailed observations and suggestions for change.

Major Themes
This section of the report will focus on seven major themes that came up from a high level review. These themes arose either as cross cutting concerns or as repeated issues across multiple measures. These themes are:

- Use of a model to show links between activities and goals
- Goal and metrics for widespread prosperity
- Assigning credit for performance
- A need for higher order performance measures
- Balancing between and accountability versus operational focus
- Possible concerns on the value of performance targets in the plan
- Possible gaps in other activities and missing performance measures
Use of a Model to Show Links between Activities and Goals

The Strategic Plan lays out a vision of work based around five key goals. The goals are clear and appear to be a reasonable fit for the Commerce Department. Strategic plans are often high level documents aimed at providing just a vision. In this case the Commerce Plan is also very specific with its use of performance measures designed to measure accomplishment of the goals. Although the specification of the measures and sometimes the language in the goals provides some clues as to how these goals will be accomplished, the connection to Department activities is generally not laid out or as clear as it could be. While the current framework is reasonable, we’d raise the issue of whether some alternative framework either for the plan or for internal purposes might be more helpful.

We have in mind something along the lines of the Program Logic Model though other forms and modifications might be helpful. We think the value of making clearer the connection between resources and activities, outputs, outcomes, and goals would be useful. A possible tabular presentation similar to the structure used in the IT portion of the plan might be employed. The argument for making these connections clearer is to improve the outsider’s understanding of how Commerce specifically has set up its activities to accomplish the goals. Internally a framework along the lines of the program logic model should also help staff more clearly see the connections of their day to day activities with the higher level mission and goals. We don’t think this means changing any of the goals but would require the more explicit connection of current programs and activities to the goals and their measures. Changing the framework in this way might just be done for internal purposes but it might also inform the update of the strategic plan when it is next revised.

Goal and Metrics for Wide Spread Prosperity

The Plan emphasizes in the opening pages that as the lead agency on economic development the Commerce Department’s mission is “to improve the economic well-being and quality of life for all North Carolinians” (p. 4 in the Plan). The concern of whether all are participating in improved economic prosperity shows up in a number of different current public problems facing North Carolina and the country more broadly. Moreover this theme of widely shared prosperity has been included in many previous economic development strategic plans or reports for the state most often framed in terms connected to rural areas. Examples of past reports prepared in North Carolina include:

- A 2008 report prepared by Commerce titled Developing Strategies for Widely Shared Prosperity with a focus on rural-urban integration.
• A 2013 North Carolina Jobs Plan prepared by the now dissolved state economic
development board which set as a goal to “spread prosperity, jobs, and investment to the
rural areas of the state” with various steps laid out to accomplish that goal (see page 18).
• The 2016 Annual Evaluation of NC Economic Development put out by the Commerce
Department with a sub-goal to “ensure the state directs support to those communities
most in need” with discussion around creating an index to replace the tier system to
prioritize infrastructure investments (see Community Development goal, Objective V11.2
on page 15).

The various sub-goals connected to rural development under Goals 1 and 2 in the Commerce Plan
already touch on the rural aspect of this theme. Collecting data to look at these issues around
disparities may already fit in with Goal 4 around providing information to inform and advise on
economic issues. This might suggest some reports specifically addressing the issue of the degree
of wide-spread participation in economic activity.

The issue we are posing for Commerce is whether it would be worth considering adding a specific
goal and metrics around the theme of widely shared prosperity. In addition to the rural
development aspect, other dimensions of widely shared prosperity may include support for
minority-owned business, job training and career pathways for low-wage workers, and
maintaining job quality standards within Commerce grant and incentive programs. A concern
about “who benefits” from growth and prosperity is implied in the mention of “all North
Carolinians” in the Commerce mission statement. The question we recommend Commerce
consider is whether it makes sense to translate that into a more explicit strategic goal with related
metrics around “widely shared” or “inclusive” or “equitable” prosperity.

Assigning Credit for Performance
A critical concern in many areas of government work, particularly in the economic realm where
Commerce operates, is what drives changes in performance. Many forces are obviously at work
here and the programs and activities that Commerce pursues are just one additional factor. The
concern that is being raised here is to carefully assess whether performance measures used are as
closely linked to the programs and activities as possible and not connected to measures of
economic activity where the Commerce Department may not be the primary driver. Many of the
measures around jobs or businesses are almost certainly being driven by broader economic
trends at the local, state, and national levels. We would simply caution to make sure the
measures being used are as closely tied to Commerce’s effort as possible. While broad economic
expansions may push many of the measures up, regardless of Commerce’s efforts, the opposite is
also true that economic contractions (statewide or locally) could lower apparent performance
even if Commerce’s efforts were reasonably successful. If the measures being used are principally
being driven by larger economic trends, the Department may find that the utility of these
measures is of limited benefit. Keeping measures as closely tied to the efforts of the programs
and activities should keep this issue manageable For example measuring the statewide
unemployment rate would probably not be a helpful measure of actual Commerce efforts.
However, changes in unemployment status for those individuals receiving Commerce sponsored
trainings would be more likely to capture the hoped for effects of Commerce programs.
A related issue that should be considered is the connection of the work of the Commerce Department with the Economic Development Partnership of NC (EDPNC). The EDPNC is now contracted with the Commerce Department to do many economic development functions. A question that needs to be addressed is whether EDPNC efforts are being captured in their impact on the various measures in the Commerce Plan or whether there is a gap in reporting total activity. If EDPNC’s programs are being included in the Commerce measures, it might be reasonable to also split them out so that the EDPNC effort can be evaluated separately as well as the total combined impact. If EDPNC’s efforts are not being included in the reported Commerce numbers, it may be worth adding them, even if only separately, to capture the full effect of state funded economic development programs. An argument can also be made that given the contracted relationship, none of the EDPNC’s efforts should be included in the Commerce measurement as they are separate entities. Whichever approach is taken the Commerce report should clearly indicate what is and isn’t included to eliminate this reporting uncertainty.

Related to this uncertainty is reporting on tourism and travel promotion. This function appears to remain with the Commerce Department but the work is described as being performed by a public-private partnership with EDPNC. If this has led Commerce to exclude any reporting around travel and tourism performance efforts this should be noted to clarify where the lines are being drawn. If however, Commerce wants to include these as part of the broad reporting, then this should be noted along with possible sub-goals and performance measures as appropriate.

A Need for Higher Order Performance Measures

The most notable issue in the Commerce Plan is the overwhelming reliance on workload or output measures for assessing performance. The predominance of workload measures in the Commerce Plan is actually typical for most governmental organizations and so this is not a unique criticism of Commerce’s Plan. While workload measures are useful, higher order measures that focus on efficiency or effectiveness of performance create a different mindset and reliance on such measures is associated with higher performanceii.

Workload or output measures are the easiest to capture as they typically just entail reporting the direct result of activities and programs. So for example in the Commerce Plan there are measures reporting the number of companies served, grant awards made, visitors to websites, and people attending sessions. These workload measures are helpful to assess basic levels of activity but they do not tell us how well the agency did in carrying out these activities. A shift to higher order measures that capture efficiency or effectiveness cause a change to what has been labeled “managerial thinking”iii where managers and staff are prompted to reflect on service quality or efficiency. For example, knowing the number of businesses contacted has some value as a workload measure. Knowing how much we are spending per contact (efficiency) or some outcome from those contacts such as new jobs created or changes in economic activity elevate both our understanding and our interest in knowing what might further improve this performance. Whenever possible, efficiency and effectiveness measures are desirable additions to performance measures and indeed should be viewed as preferable and of higher value over workload measures alone.
Creating efficiency measures should be fairly easy if an organization tracks dollars and staff resources by program activity. The efficiency measure simply represents a ratio between these outputs (workload) and the inputs (dollars or staff). Whether the input or the output is the numerator or denominator depends partly on what makes the most sense from an explanatory perspective. For example, budget dollars spent on contact activities divided by number of businesses contacted would produce a ratio of a cost per contact ($XXXX per contact). Flipping the relationship (contacts/dollars) would produce a results of something like X.X contacts per thousand dollars spent. The first ratio is probably more intuitively obvious as it translates into a cost per unit. The second ratio could still be valid as an efficiency measure but if its meaning was confusing or not aligned with program operation it would be less helpful. However, there are times when inputs in the denominator may make more sense. If we expressed the efficiency ratio between contacts and staff, the ratio of contacts per staff FTE makes more intuitive sense as it gives us a sense of the contact activity per staff member. Since workload is available as in most of the current measures in the Plan, we would encourage Commerce to consider extracting cost or staffing data for the corresponding activities to construct efficiency ratios.

Effectiveness or outcome measures typically measure the quality of services or the extent to which objectives have been achieved. There are several effectiveness measures already in the Commerce Plan. Measures of jobs created and capital investment made (assuming these are realized jobs and investment) clearly represent at least a basic outcome that is being pursued. Although no data has been reported yet, there is also a measure of customer satisfaction for just the data reporting activities which is a useful way to measure service outcomes. Finally, there are two measures, Quality of Initial Separation Determinations and Timeliness of First Payments (Goal 3.7), which appear to be measuring key dimension of effectiveness although not defined in the Plan. We would again encourage Commerce to look for more opportunities to measure the outcomes desired from the various outputs.

Outcome measures are typically harder and possibly more costly to measure as they may be outside of the observation and control of the organization. However, given the usefulness of understanding the outcomes and not just the outputs, it is a worthwhile exercise to see if data can be collected on the eventual outcomes. Rather than simply the number of people served, determining how many people seeking job assistance have a job after some defined period or measuring whether the person saw an increase in job pay and benefits would prove a more powerful expression of Commerce’s activities and effectiveness. For some of these outcome type measures, it may be useful to consider whether some form of follow-up even if only among a sample would be helpful.

Another category of effectiveness measures that Commerce might consider captures qualities of the process such as the quality of the client or customer experience but also simply characteristics of the process steps before reaching the final outcomes desired. The measures Quality of Initial Separation Determinations and Timeliness of First Payments (Goal 3.7) are useful examples here. Timeliness is a critical issue in many government services and can be captured in a number of different ways. Average times (days, hours) for how long it takes to fulfill different services may be available in existing data (consider time stamps) and could be extracted readily. Timeliness may also be measured by a fractile measure such as percent of services delivered within a defined time frame to emphasize the proportion being served within some appropriate time standard.
Measures of quality sometimes appear to be more complicated as they require us to think about how we define quality. But if we consider quality in terms of percent of services with errors or meeting some service level there are again probably existing data that could be used to report here. Delays and defects (timeliness and errors) are two areas where there probably are existing data in the system used for administrative purposes that could be used to report on the effectiveness of the process performance.

Balancing Between Accountability and Operational Focus

In the context of reporting in a strategic plan, it is natural to focus on performance measurement as an exercise in accountability. Here performance measures provide useful data to inform citizens, elected officials, and management of what is being accomplished with public money and how well dollars are being spent. However some research has begun to suggest that a measurement system focused more on operational decision making may lead to better performance. The question should not be a choice between accountability or on operations but looking for opportunities to meet both needs. It is also useful here to keep in mind that performance measures constructed to be more useful for operational decision making needn’t necessarily turn up in the strategic plan. However, we emphasize to Commerce that the operational aspects of a performance measurement system should be considered and addressed as part of this discussion connected to the strategic plan.

The critical concern here is for data that is actionable by Department staff. In some cases this shift may simply be taking existing measures presented in the strategic plan and having data that lets users drill down or stratify the data in a form that would support operational decision making. Several key dimensions to consider including are:

- Frequency or Timeliness – data that is only available once per year will usually be too late for management and staff to address problems. Producing measurement on a monthly or quarterly basis at least for internal purposes improves the likelihood that performance issues can be identified early and assessment of possible change is possible.
- Geographic Stratification – The performance measures in the Strategic Plan are statewide. Presumably the various programs and activities are not uniformly spread. Being able to look at regional or even county level measures may be helpful in assessing simple workload measures but also impact in the form of outcomes. Programs may have varying impact by geography and being able to see this should prove useful. This ties back to the related theme of widespread prosperity.
- Sector Stratification – Assuming that the various programs Commerce runs have targets that are focused on specific sectors of the economy, it may be useful to split out performance measures (workload, efficiency, and outcomes) by the target sector.
- New or Existing Business – Being able to break out activities and their impacts by whether they are addressing existing businesses or recruiting new businesses would seem to be a critical dimension to capture in Commerce’s performance measures.

In addition to having data that is more focused on specific groups or purposes and more frequently reported, Commerce may want to consider whether having a particular measure
informs critical operational decision making. This may mean the need to consider measures which may focus more on the processes and activities in an effort to have the data to monitor whether performance is meeting the needs which will eventually lead to better outcomes. As an example, a performance measure looking at the ratio of actual business recruitments relative to the number of prospective leads may help management and staff better assess whether these efforts are producing the result of new companies relocating to North Carolina.

Possible Concerns on the Performance Targets in the Plan
The Commerce Plan in addition to providing usually two years of historical data, then provides targets for three years for the various performance measures. The use of targets is a common practice. However, the Commerce Plan does not explain how these targets were set. Left unclear is whether these are soundly based goals backed by reasonable plans for how they are to be achieved and whether they take into account variation or noise in the data. It is important to emphasize this is not a rejection of goals nor of performance measurement. Rather the focus is on what can be done to improve the use of specific numerical performance targets. Failure to understand these issues may lead to unintended effects from the use of targets.

There is no discussion in the Commerce Strategic Plan on the basis for how these targets were set. We have assumed that these targets represent goals rather than forecasts. Sometimes the use of the term target is applied where organizations simply want to convey some sense of the expected direction of outputs or a projection of trends. If that is in fact the case for the Commerce targets we recommend changing the terminology from target to forecast. If the numbers are in fact forecasts it would be useful to explain how these forecasts were produced possibly including why the projected trend is expected to continue.

If we assume the targets in the Commerce Plan are in fact goals which Commerce is aiming to achieve which seems more consistent with our reading of the Plan, some explanation of how these targets were set would still be helpful. What made Commerce select these particular target numbers? Examination of the various targets in the Commerce Plan suggests a variety of possible methods or rules were used for setting these targets. In many cases the targets appear to be simply “stretch targets” where the last year of data is taken and a simple percentage increase is put forth to stretch oneself to a new higher level. Three percent shows up in many of the measures as the target increase. There may be specific reasons that could be advanced for the selection of particular targets. For example, a review may suggest on average the output measures have been increasing by three percent per year so that was used as a basis for the coming years but implicitly assumes that growth can made to continue. Alternatively, staff may have figured out how to be three percent more efficient and therefore that was used as a projection figure for what could be accomplished in the coming years. If performance follows in a perfectly mechanical way this may be a good target or forecast. However, if the targets are simply stretch goals or other vaguely derived numbers then the reasonable question is if we could do three percent more next year (with existing resources and activities) why wasn’t this done last year? What reason is there for thinking the outputs will simply grow in a straightforward manner? Our recommendation is for Commerce to make sure its target choices have some sound basis for
being set at the levels they used that is tied to planned programmatic changes or expectations that changes are being driven by trends that will not be interrupted.

A more significant problem with the use of specific numeric targets is that it fails to recognize the likelihood that outputs and outcomes from the various processes an organization has in place naturally vary from year to year (or other periods). The examination of the limited two years of data for the various measures provided would certainly support the observation that variability is at work here. Looking at the limited two years of data provided in the Commerce Plan do not always even support that growth is assured or consistent. The consequence of this simple observation is that if we don’t take into account variability, we may incorrectly conclude that agency performance has changed (gone up or down) when in fact it is simply varying up or down within its normal range even while programs and processes remain unchanged. Commerce may meet or miss these numerical performance targets for reasons having nothing to do with Departmental efforts. Instead reaching or missing the targets may simply have been the result of the underlying data varying and getting lucky or unlucky.

We would suggest analytical techniques such as control charts used in quality improvement methods like Lean Six Sigma as a reasonable method helping separate out the noise from the true signals that most data carry. As an example below is a control chart showing the percent of users indicating satisfaction by month over a two year period (this is not data about or provided by the NC Commerce Department). The chart calculates statistically based bands and a middle average which take into account the variation present. The organization averages 90.7 percent satisfied by month. But the monthly variation is such that before we conclude there has been a change in this stable process, the satisfaction level would need to rise to 97 percent or fall to 84 percent. The lower satisfaction levels seen in the middle of 2016 while not desirable do not indicate the underlying process behind this data has actually changed; it simply varied within definable bounds. The control charts helps the user distinguish between months that are aberrant with exceptional variation and should be addressed by focused fixes versus stable processes such as this graph that represent common variation and call for system or process reengineering if the overall level shown by the average is unacceptable. Learning how to see and understand these types of variation in performance data helps users to not overreact to data every time the number changes.
A final concern here is that having numeric targets may cause unintended effects. For those with oversight looking at the performance targets as implicit promises or even just forecasts, the danger is they may incorrectly conclude performance is being met when in fact random variability caused a lucky outcome. In the other direction if performance were to fail to meet a target, this might lead an organization to make changes that were not warranted if in fact performance simply varied within some bounds. For staff the potential problems from targets are potentially more serious. When the consequences of missing performance targets is high (loss of funding, loss of jobs, or other negative impacts) staff may be motivated to distort the system or even the actual data. Examples from other states in recent years where education staff have altered test scores for students in order to meet performance targets are one of the more visible and egregious examples of these unintended effects when the stakes are high for missing performance targets. We are not asserting here that unintended effects are happening or even likely for the NC Department of Commerce. Instead we want to suggest caution in setting specific numeric targets that are vague or where we lack an idea of how performance is to be improved. Setting targets that require us to stretch to new levels without a plan and capability for how to do so risks undesired outcomes if the pressure is high.

To set better numeric targets then we would recommend making sure three steps are addressed. First make sure that the basis for setting targets is sound. Second that targets particularly when set at growing numbers or improving performance are connected with some idea of how this level of performance is expected to be attained. Third, consider what level of variation is present in historical data and use this to screen out noise from true changes in performance. Taking these steps should increase the likelihood that if numeric targets are used they support the performance Commerce is seeking to improve.

Possible Gaps in Department Activities or Missing Performance Measures
A last concern to raise is gaps in the Strategic Plan’s performance measurement of two types. First, there are a number of sub-goals in the Plan which have no identified measures. We recognize these may not be the most critical efforts or that they may appear to be hard to measure. However, we would encourage Commerce to wrestle with whether there may be ways to roughly measure achievement of these goals. While bad or even poor measures would not be desirable, failure to measure may leave these goals at risk of being ignored precisely because there is no corresponding measure. We would encourage staff to think about the outputs or workload if only as a start. Even without measurable data, Commerce may want to determine what rigorously defined qualitative evidence can be assembled to assess performance. Other state commerce agencies or even non-state economic development agencies may have come up with appropriate measures which could be adopted or adapted for use in North Carolina. Under specific goals and measures in the second section of this report, we’ve tried to make some suggestions but we expect that Department staff will have additional ideas that could be offered or at least could be searched for among the nationwide set of economic development agencies.

A second possible gap in the Commerce Plan is whether the Plan captures all critical activities and programs. First, other than a brief mention around visitors to welcome centers, there is no mention about a goal or performance measures connected to tourism and travel. If this omission
was intentional given that it appears this work is primarily contracted out this gap may not need filling. However it would appear that someone, Commerce or the contractor, should be reporting on travel and tourism goal achievement with performance measures. Second, there may be other lower gaps. Commerce departments at the state frequently are given other tasks not directly connected with their primary mission. As an example Commerce at one point handled the NC Weatherization Program (though that has been moved into another agency). A quick review of the Commerce website did not reveal any other such “orphan” programs but if they are in place consideration should be given to whether they merit performance measures even if only for internal operational measurement. Additionally, there may be other functions in Commerce that have not risen up to specification of measures but should be considered. As an example the Office of Science, Technology and Innovation (STI) appears on the Department web pages and STI is mentioned in Goal 4 but no measures are offered in the Plan. These efforts and possibly others may be small in scale or not central to the core mission. At a minimum we might suggest there could be performance measures for these smaller functions that would be used in internal operational reporting. Whether they should be added to the Departmental Strategic Plan is worth consideration.

Specific Comments to Strategic Plan and Performance Measures
Following the initial section of the report with general themes and issues that came up across many of the performance measures, this section goes through the full list of reported performance measures in Commerce’s Strategic Plan. There is no discussion included for any portions of the IT Plan as this was outside the scope of work. The commentary here will frequently touch back to the earlier themes. Additionally suggestions are offered here for additional or alternative performance measures where it seemed likely the data might be available. Other suggestions that might entail more substantial data collection efforts are mentioned but not necessarily listed separately. These ideas are not meant to be an exhaustive list of all possible measures but rather provide some examples to hopefully spur Commerce to take their performance measurement efforts to a higher level. Commerce should consider whether these or other ideas may be worth developing based on the value of the possible measures weighed against efforts and costs to collect the data.

1  **Goal 1 To Support the growth of North Carolina’s economy through collaborative partnerships with businesses, communities and citizens, while ensuring responsible stewardship of tax dollars.**

1.1  **Recruit companies and grow businesses to create jobs and capital investment in NC**

1.1.1  **Number of existing NC businesses served**

1.1.2  **Number of announced jobs created (new and expanding businesses)**

1.1.3  **Dollar amount of announced capital investment**

Objective 1.1 mentions business recruitment. Jobs created and new capital investment represent important outcomes. Based on conversations with the Auditor’s office it appears that metrics for “announced” jobs and capital investment only count actually realized numbers from earlier
announcements. At a minimum, the language here should be corrected to indicate it is not “announced numbers” but realized jobs and capital investment. If Commerce is actually referencing “announced” jobs then a separate category of “realized” jobs would be desirable. If the numbers being reported are just “realized” jobs, then the language definitely should be adjusted. An additional concern for clarification is whether this distinction between “announced” and “realized” jobs is only for incentive based recruitments. Some job or business efforts may not entail tax incentives and whether they are tracked as closely is unclear when it comes time to count “realized” jobs is unknown.

A further drill down may be helpful to specify how many of the “realized” (or “announced” if they are not actually counted) jobs and how much of the capital investment come from new companies versus existing ones. The number of existing businesses served is directly connected to the agency’s effort to grow existing firms. Including some metrics that focus squarely on the business recruitment activities such as prospective business leads, number of new business locations tied to agency efforts, and so forth could be additional measures of effort here.

Possible effectiveness or efficiency measures to consider

- Program Costs/“Realized Jobs” – Efficiency measure: assumes the costs associated directly with recruitment or working with existing NC businesses can be separated in the budget. This measure could be viewed as the cost per realized job. Separating this out by existing versus new businesses would be helpful. A question here would be whether the costs would be just for program activities or whether it could ideally include incentives as part of the cost.
- Incentive Dollars per Job Created – Efficiency measure: A commonly used project specific and aggregate program metric for states is incentive dollar amounts per job created.
- Program costs/Million Dollars of “announced capital investment – Efficiency Measure: assumes costs can be separated out. For scaling purposes the denominator would need to be in some unit like millions of dollars or thousands of dollars so that the value is greater than one. Alternatively could be investment/ program costs which represents a return on the program costs in terms of investment produced.
- Incentive Dollars per Million Dollars of Capital Investment – Efficiency measure: a parallel measure for the job related measure would be focused just on the incentive dollars relative to realized capital investment.
- Average Wages (possibly benefits) per Job Created – Effectiveness measure: Data on the pay of jobs produced would help show the quality of the jobs being produced.

The targets under recruiting new companies and growing existing companies appear to suggest an increase in activity for the first year (CY16) but then hold steady. The effort measure, contacts, goes up by 15 percent but the announced jobs doesn’t keep pace (up only 9 percent) and the capital investment target actually declines (down 9 percent).

1.2 Implement Rural Division programming within established Prosperity Zones that will meet the legislation intent to provide services to communities within the Zones.
Currently no proposed measures are shown. It would appear these positions will be doing similar work to general economic development.

Possible performance measures to consider:

- Number of contacts or other measures of interaction – Workload measure: This would be a minimum of what might be done to register the activity of these staff.
- Other measures of jobs or investment created would be appropriate here assuming these positions are designed to directly have that type of effect.

1.3 Support recruitment and expansion of businesses through targeted use of incentive programs

1.3.1 Number of Job Development Investment Grant and One NC Grant awards made
1.3.2 Number of One NC Small Business Grants Made

The workload measures under targeted incentive programs provide some level of activity in the form of grants made but do not tell us what the level of business activity/performance is among firms that receive the targeted incentives.

Possible measures include:

- Job creation – Outcome: Need to be realized and not announced.
- Capital Investment - Outcome: Need to be realized and not announced.
- Efficiency measures as before, Grant dollars per job created and Grant dollars per Million dollars of Capital Invested
- Average Wages per Job Gained – Effectiveness: Measuring the quality of the jobs produced.

The targets under NC Small Business Grants rise by 37.5 percent in the first year (FY16-17) and then hold steady. Presumably an increase is planned for grants made but capped.

1.4 Utilize the Ag-Gas Fund to assist farmers in rural North Carolina increase their productivity and lower their energy costs

No measures provided here. Possible ideas include:

- Number of grants made to farmers – Workload: simple counts but the numbers may be small here and appear to be volatile.
- Raw dollars in awards per year – Workload: Clearly the number of grants here is small and this number appears likely to be erratic.
- Identified Energy Savings – Effectiveness: this would probably be based on some form of estimate of the energy savings (lifetime, five years, etc.). This would need to be clearly defined.
- Identified Energy Savings per grant dollar – Efficiency: again this would be probably be based on some estimate of savings to show a return on the investment.
1.5 To identify and align international and domestic investors with investment opportunities to grow North Carolina’s economy, while also taking necessary measures to minimize risk to the State and our Nation.

No measures identified here. Unclear if the primary intent here is about foreign recruitment or about minimizing risk and what kinds of risk. The risk might be related to global uncertainties (economic or geopolitical) or they may have in mind security risks of some kind. The first part of the goal appears simply to be the internal version of recruitment efforts and so it might have the same types of measures. The risk goal appears quite vague and needs further specification in order to assess if there are appropriate ways to measure what is of interest here.

Possible measures include:

- Job creation – Outcome: Need to be realized and not announced.
- Capital Investment - Outcome: Need to be realized and not announced.
- Efficiency measures as before, Grant dollars per job created and Grant dollars per Million dollars of Capital Invested
- Average Wages per Job Gained – Effectiveness: Measuring the quality of the jobs produced.

2 Goal 2 To promote job creation and business expansion in collaboration with the Economic Development Partnership of North Carolina, while addressing the needs of public infrastructure in all areas of the state.

2.1 Improve the infrastructure of rural communities

2.1.1 Number of infrastructure and building reuse grants to rural communities (including CDBG and Utility Fund)

2.1.2 Dollar Amount of infrastructure grants to rural communities

2.1.3 Number of announced jobs associated with infrastructure grants to rural communities

This goal may and its connection to the Economic Development Partnership of NC may need to be revised depending on how the changes have affected this relationship. It was uncertain to us whether the recent changes here may need updating when the plan is revised. The first set of goals and measures relate to rural community infrastructure programs. The basic measures for the first two sub goals are simply workload measures of number of grants and dollars of grants. Without knowing if there are consistent qualities of the grants, it is hard to suggest specific measures to supplement the workload measures. However, if there are cost sharing requirements, a measure might look at the additional local investment that was leveraged with these grants. Additionally, if the grants are designed to fix particular problems, it may be possible to identify those improvements but they may be particular to individual grants making a summarized measure inappropriate.
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The sub goal and measure for announced jobs associated with infrastructure grants to rural communities does not specify what types of jobs. As before, there should be explanation given whether these are “announced jobs” or realized jobs. Furthermore, given that these are infrastructure grants, one would presume that many of the jobs created are short-term construction jobs. The dollar amounts of the grant per job announced is mostly in the $15-16,000 range further supporting that these are short-term jobs. If there is a distinction in the outcomes that can be tracked it would be useful to distinguish between short-term jobs and any permanent positions associated with actual development projects spurred by the infrastructure grants. As with earlier job creation measures it may be useful to have an outcome measure on the wages of the jobs created to capture the quality of jobs created.

Possible measures to include:

- **Program Cost per Job Created – Efficiency**: A simple ratio would help see how efficient these grants are at creating jobs.
- **Infrastructure Grants as a Percent of Local Capital – Effectiveness**: For the communities that get infrastructure grants, presumably this is adding to the effective capital assets of the local community or county. Public financial assets for the communities targeted should be readily available from local government audits. Assuming this is for public infrastructure, a ratio of the grants awarded relative to the existing local capital assets would provide a measure of how much the grants effectively added to the assets of the local communities.
- **Changed in Capital Assets Condition Ratio in Local Governments – Effectiveness**: Again assuming this is for public capital assets, using local government audits it would be possible to determine the change in the capital assets condition ratio (undepreciated assets / total asset value). This effectively would be a measure of how much the grants improved the underlying condition (age) of local public capital assets.

The performance targets under rural infrastructure grants appear to be driven by future budget numbers increasing by $3 million per year. The targets for jobs associated with these grants doesn’t show a clear consistent pattern, increasing nearly 19 percent in the first year but then 8-9 percent in the latter years with a varying ratio of grant dollars per job. It’s not clear what is driving these target numbers.

2.2 Award Grants and loans that assist communities with economic enhancements

2.2.1 Number of community development grants awarded (including ARC and Main Street)

2.2.2 Number of jobs created from Main Street programs

2.2.3 Amount of private investment generated from Main Street programs

The prior comments on rural grants apply here. The first measure of workload simply counts the number of grants awarded. Given the reporting under rural grants, we would question why the dollar value of these grants was not shown if the distribution of dollars is being held out as a performance measure. The sub-goal for job creation may again need to distinguish between short-term jobs and permanent jobs.
Possible measures to include:

- Program Cost per Job Created – Efficiency: A simple ratio would help see how efficient these grants are at creating jobs.
- Grant Dollars per Job Created – Efficiency: An alternative simple ratio.
- Program costs/Million Dollars of “announced capital investment” – Efficiency: assumes costs can be separated out. A simple ratio would help see how well these grants attract investment.
- Grant Dollars per Million Dollars of Capital Investment – Efficiency: another alternative efficiency ratio.

The FY16-17 job creation target for Main Street programs is only 10 which seems very low particularly compared to other years. The targets for each of these three goals appears to jump around in a manner which raises questions about what these targets represent and how they are being set or estimated. Possibly these targets are simply budget numbers that have been projected forward.

2.3 Utilize the Film Grant program to bring movie and television production to North Carolina, increasing jobs in this industry in the state.

2.3.1 Number of jobs created and spending consumption

The measures for jobs created and spending consumption probably need careful definition. Our assumption would be that these are time limited jobs and spending associated with production of a given movie or TV show that will not necessarily continue. The spending per job created starts off at $16-19,000 in the actual years dropping to roughly $12,000 in the target years. Presumably the dollar targets are budget projections.

Possible measures to include:

- Number of productions – Workload: A simple count of the number of productions might be useful here to have a sense of the sheer number of operations. The number of grants might be a simpler alternative but there would be a need to specify where a single production might receive more than one grant.
- Program costs per job created – Efficiency: assumes film grants costs can be separated out. Shows direct return on investment.
- Grant Award per Job Created – Efficiency: Alternative ratio for specifying the efficiency.
- Program costs/Million Dollars of “spending consumption” – Efficiency: assumes costs can be separated out.
- Grant Award per Million Dollars of “Spending Consumption” – Efficiency: alternative ratio for measuring efficiency.
3 Goal 3 To deliver quality, timely, and consistent service to businesses and recipients of unemployment benefits, while simultaneously fostering the advancement of a skilled workforce and job placement services.

3.1 Develop and retain a globally competitive workforce for high-quality, sustainable jobs.

Consider adding measures for job quality to get beyond the basic workload measure of numbers served. Objective 3.1 mentions "high-quality" jobs, but there is no corresponding performance measure that addresses job quality such as average wage, full-time position, or fringe benefits. Additionally, Commerce might consider if the objective of retention could be captured either with some type of turnover or job length measure.

3.1.1 Number of people served by Workforce Innovative and Opportunity Act
3.1.2 Number of companies to which incumbent Workforce funds distributed
3.1.3 Visitors to NC Works Online

The measures provided here are basic workload measures and would ideally be improved if appropriate efficiency or effectiveness measures could be added. The objective of Workforce Innovation and Opportunity Act (WIOA) is largely about job placement services and job training. The objective of the NC Works Online is not clear. If the intent is to elevate job quality again measures that attempt to measure changes in wages for those served would be useful. If the effort is to lower unemployment, a change in employment status would be valuable. For both of these programs what is the intended objective and can any changes or improvements be measured to capture the effect of this program rather than just the raw workload numbers?

Possible measures to include:

- Cost per Person Served by Workforce – Efficiency: assuming program costs can be separated out, a simple ratio of the cost per person served would be helpful.
- Cost per Person Visiting NC Works Online – Efficiency: assuming program costs can be separated out, a simple ratio shows the cost to provide this presumably relatively low cost service.

The targets for companies served simply goes up by 2 per year but all of the targets are down markedly from the FY14-15 actual number. The targets for people served by WIOA after declining the second actual year is then projected to grow by 5 percent per year in the target years. Finally, the targets for visitors to the NC Works Online system are simply up by 3 percent per year. Each of these would appear to be simply stretch goals or a simple forecast.

3.2 Provide programs, services, and policies for improving conditions for distressed populations.

3.2.1 Number of registrants served through the Wagner-Peyser Act programs
3.2.2 Number of services provided through the Wagner-Peyser Act programs

The measures provided here are simple workload measures. The large numbers of registrants suggest this is a very large program but some definition of what it is and is supposed to accomplish would be helpful. The numbers suggest each registrant receives 2-3 different services
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on average. Commerce should consider seeing if it can measure the intended outcome of distressed populations being served. Is it to lower unemployment, shift people to different jobs, or other purposes? If the intent can be consistently identified, it would be helpful to include some form of effectiveness measure.

Possible measure to include:

- Cost per Registrant served by Wagner-Peyser Act – Efficiency: assuming program costs can be separated out, a simple ratio of the cost per registrant served would be helpful. This alternatively or additionally be done with cost per service but it is unclear how these two separate items.

The performance targets for both of these measures are both simply 3 percent growth over time. Presumably stretch targets or forecasts.

3.3 Trade Adjustment Assistance: Assist workers impacted by foreign trade and its economic effect on communities due to layoffs and business closures

This measure lists four different types of help or assistance but then only reports one number over time. The measure needs to be more clearly defined to explain what is being counted (just certain of the services, all combined, duplicates). Possibly if each of the four types of assistance is important enough, a separate reporting of the workload measures for each counting people served, trainings provided, income provided, and reemployment assistance would be warranted. If the provided measure is simply a combined number, the detail about the four types of assistance may not be needed for the Plan. As with earlier comments, separating out the numbers if only for internal purposes by geography and economic sector may be useful additions.

Possible measures to include:

- Cost per worker assisted – Efficiency: assuming program costs be separated out, a simple ratio of cost per worker assisted would be helpful. Depending on whether each of the four types of assistance warrants breaking out, this might suggest four efficiency measures.
- Some form of effectiveness measure would be desirable here. Lacking further detail, we would presume that some measure of reemployment after an appropriate time period would be the intention behind these services. It might also be useful to look at average wages per worker after the assistance to evaluate the quality of the jobs found if available.

3.4 Promote the development, registration and completion of apprenticeship programs that provide employers with highly skilled workers

The performance measure provided is a simple workload measure of number of apprenticeships. It would seem this goal is intended to advance objectives for improving job and career opportunities for individual workers while also helping employers get better
trained and skilled workers. The sub goal talks about development and completion of programs and could be useful measures. It may be worth considering if there is some way to capture the demand or desire for these apprenticeships by employers versus the number that actually got offered as a measure of whether the development efforts are meeting the demand. Numbers of potential applicants per apprenticeship position might also be useful as a measure of the demand from future employees for these positions. Whether this data is available is not clear. As in other areas, sector stratification of the data for operational performance measures would be useful.

Possible measures to include:

- **Cost per Registered Apprentice – Efficiency:** assuming program costs can be separated out, a simple ratio of the cost per registrant served would be helpful.
- **Percent of Apprentices Successfully Completing Training – Effectiveness:** Given that this program appears to register people, presumably the number who successfully complete their apprenticeships could be added out of all who enter these programs.
- **Average Wages per Apprentice – Effectiveness:** This might need to be based on only those completing training but is as in previous examples meant to provide some measure of the job quality of job training results.

The targets for apprenticeships goes up by about 2,187 positions per year. Given the dramatic jumps compared to the actual data this would appear to be a very ambitious target. Explanation of this expected growth may be needed.

### 3.5 Career Pathways local teams develop pathways

No measures are provided for this sub goal. Objective 3.5 about career pathways could be more specific and better targeted. What industry sectors and/or occupational categories are the focus here? What segments of the workforce would benefit the most by having clearly defined career pathways? If performance measures, at least workload, could be provided it would be a useful start. Possibly numbers of people contacted or trained could be provided. If the dollars associated with this activity could be combined with workload numbers, some efficiency measure would also be possible. If the intention in part is to improve career pathways, it would be useful if something is collected that gets at improvements in employment such as work status, pay, or other characteristics.

### 3.6 Support NC Veterans through the Jobs for Veterans Grant focused on Intensive Services from local Veteran Employment Representatives and Disabled Veteran Outreach Program managers.

The workload measure for this sub goal appears to track numbers of people served by this outreach program. There may be a question of whether these requests should be subdivided by different request types such as either the services requested or by type of requestor (disabled, unemployed, etc.) particularly for operational purposes. Presumably the objective of these programs is connected to job placement for veterans but lacking detail we don’t have specific ideas to suggest for effectiveness but some effort to measure what changes these programs are
designed to produce would be useful. Probably something around lowering unemployment or raising the quality of the jobs obtained.

Possible measures to include:

- Cost per Veteran Served – Efficiency: assuming program costs can be separated out, a simple ratio of the cost per person served would be useful. This alternatively or additionally be done with cost per service but it is unclear how these two separate items

The targets for number of veterans served grows by 3 percent per year suggesting stretch goals or simple forecasts.

3.7 Deliver quality, timely, and consistent services to businesses and recipients of unemployment benefits

3.7.1 Quality of Initial Separation Determinations

3.7.2 Timeliness of First Payments

There is no definition offered for either of these two measures. Presumably these are process measures that deal with accurate and timely completion of unemployment benefits. A definition of what constitutes a “quality determination” and a “timely” payment would be helpful.

The targets for “quality determination” is set at 75 percent which appears to be just a stretch away from the actual numbers. Since it is unclear what a “quality determination is, it is hard to know if this is a reasonable goal. Would we not want all of determinations to be quality ones even if we have trouble reaching that goal? The eventual target for “timeliness” of first payment is 87 percent. This seems outside the range of what Commerce has reported in the past and may be ambitious. Again we would ask whether the real goal should be 100 percent timely payment. The targets for these two measures represents a good example of what may be problematic about specific numeric performance targets.

4 Goal 4 To make available high quality labor statistics, economic information and analysis and to advise on the role of science, technology and innovation

4.1 Develop and publish new information delivery website that replaces Labor and Economic Analysis Division workforce delivery applications, Access NC and D$ and grow number of users accessing the site and other existing workforce information online.

4.1.1 Projected Number of users accessing the site

4.2 Develop and publish new career information delivery website, benchmark the number of users, and increase access by 10% per year.

4.2.1 Projected number of users accessing the site

4.3 Develop new webinars, presentations, and training sessions and grow the number of attendees by 10% per year

Goal 4 combines labor statistics and economic analysis with advising on the role of science, technology, and innovation. It is not clear which performance measures capture the science and innovation piece and this may represent a gap that needs addressing. Perhaps objective 4.3 is only measuring training connected to the STI work. The challenge of measuring the value of any
information dissemination is not easy. Level of access to these services may the best that can be done.

The number of attendees at training and webinars doesn’t provide any detail about the nature of this training. The small numbers suggest this is a more targeted program. Given its placement under Goal 4, presumably this is some form of training related to accessing and using data or alternatively connected to the Science, Technology and Innovation activities. The nature of the trainings/webinars in terms of the audience ought to be specified. Assuming this is somehow aimed at raising knowledge, perhaps a survey measure (online or in trainings) asking attendees to rate the event would be valuable.

Possible measures to include:

- Number of reports Issued – Workload: This would probably be a simple measure but might be helpful if Commerce is producing lots or reports.
- User Penetration Rate for New Careers– Effectiveness: Depending on whether the potential user base can be defined (all NC adult citizens, working age adults, unemployed), a measure of the amount of the potential population using the website could be a better measure than just counts of users. The measure would simply be number of users divided by the potential population base. Presumably the counts of users is a duplicated count and this would need to be noted or adjusted if possible.
- User Penetration Rate for Webinars and Training – Effectiveness: Again depending on whether the population who might take advantage of these webinars and training could be defined, a measure of what percentage of this population is being reached would be preferable over simple counts of attendees.
- Cost per Users Accessing Websites – Efficiency: program costs assuming they can be separated out relative to the number of users would give a basic measure of the efficiency of these online services. It may be that all of the online services have to be combined into a single measure if IT costs cannot be easily separated out into basic information versus the career information delivery website.

The targets for users accessing the website are projected to grow by 10 percent per year after the development year. Similarly the target number of attendees at trainings and webinars is set to grow by 10 percent (rounded to nearest 5). Is there a basis for why these users are expected to grow at this rate or does it simply represent a higher stretch goal?

5 Goal 5 To provide the best in-class customer service, executed with the appropriate sense of urgency and commitment in an environment of collaborative communication and partnership

We would question why the "best-in-class" customer service theme is only applied to visitor expenditures connected to state welcome centers and customer satisfaction with Labor and Economic Analysis services. Is this theme not relevant and applicable to major agency functions such as business assistance, workforce development, and other activities? Measurement of customer satisfaction is not easy but some measures of service experience in the other areas may be at least as important and arguably more so for the Departments mission. Commerce may
want to consider whether other forms of user/customer feedback would be helpful in other programs. This could be done by surveys of only some users or if done online perhaps to all.

5.1 **Provide high quality personal customer service at Welcome Centers at Interstate points of entry to increase visitor expenditures through responsive sales and marketing initiatives**

No performance measures are provided for tourism and visitor spending. We would assume some group in North Carolina tracks or estimates these numbers. There also appears to be a question whether this responsibility is still part of just Commerce’s duties or whether it has been transferred to EDPNC or performed jointly. Overall numbers may be problematic as state efforts are likely to be only one small part of the forces at work here. Presumably, Commerce’s effort might be tracked as marginal changes rather than overall numbers. If Commerce is using “responsive sales and marketing initiatives” it might be possible to focus on tourism and visitor spending most closely connected to those target efforts. For example if a campaign were directed at a particular region or tourism activity, it would be useful to know if there was any measurable impact in tourism spending in that region or activity. At a minimum, it might be worth reporting the dollars or numbers of initiatives. If these dollars could be combined with outcomes in the targeted areas, it could be possible to create efficiency measures aimed at assessing the return on departmental efforts.

5.2 **Conduct a survey assessment of the Division of Labor and Economic Analysis’s core customers and obtain at least an overall 90% good-to-excellent satisfaction. Maintain and grow satisfaction scores annually.**

The use of customer satisfaction for the Labor and Economic Analysis’ core customers seems appropriate but we would again raise the question of why this would be limited to just this one group. Additionally the same question about targets set at less than 100 percent should be asked. Presumably Commerce would like everyone to be satisfied to a good if not excellent level even while recognizing that that level of achievement may not be possible. Is there any evidence to suggest why 90-94 percent represents the appropriate estimate of how high satisfaction should go from other Commerce or IT projects? Experience with use of customer satisfaction surveys in other settings would suggest this is probably not too high but this may be a case where even if the targets are to be set, some actual experience may be needed after the development year before setting a target.
Additional Resources
Some additional resources were identified in this report writing that may be helpful for the issue of state level economic development performance measures.

Reports from agencies that are broad looks at the topic and not focused on a single state.

- Pew Center on the States Report, Evidence Counts, April 2012.
  - Report on the use of incentives by states for economic development. Rates NC high for its efforts to evaluate tax incentives promoting business economic development.
  - [http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobil...](http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobil...)

Some other neighboring states’ reporting connected to economic development with performance measures. We aren’t endorsing these but offering the links to show how others present this type of information and for further ideas for possible measures.

- South Carolina’s Fiscal Accountability Report for SC Department of Commerce
  - South Carolina’s strategic planning template for economic development with defined performance metrics and data. Internally focused planning document.
- Georgian Department of Economic Development Report for FY16
  - Annual report for Georgia’s economic development work. Not set up as a performance metric report but does report data.
  - [https://online.flowpaper.com/79590748/yearinreview2016/](https://online.flowpaper.com/79590748/yearinreview2016/)
- Tennessee Department of Economic and Community Development Web Dashboard of Performance Metrics
  - Part of “Transparent Tennessee”
  - Good example of a live dashboard of economic development performance metrics.
- Virginia Agencies Dealing with a variety of commerce activities. Full website is part of “Virginia Performs” with plans and performance metrics for each agency.
  - Full list for Virginia Performs by agency and all measures combined
Assessment of North Carolina Commerce Department Strategic Performance Measures

- VA Tourism Authority

- VA Employment Commission

- VA Economic Development Partnership

- VA Department of Small Business and Supplier Diversity

- VA Department of Housing and Community Development

Endnotes

i See for example a blog post around equity and economic development prepared by one of the authors of this report. [https://ced.sog.unc.edu/equity-and-economic-development-whats-the-connection/](https://ced.sog.unc.edu/equity-and-economic-development-whats-the-connection/)


RESPONSE FROM THE DEPARTMENT OF COMMERCE
May 9, 2018

The Honorable Beth A. Wood
State Auditor
Office of the State Auditor
20601 Mail Service Center
Raleigh, NC 27699-0600

Dear Ms. Wood:

One of my first actions upon being appointed Secretary of Commerce in January 2017 was to request an audit of the Department’s performance from the State Auditor. It was important to me to gain an immediate assessment of how the Department was operating and if there were specific areas that needed my attention and direction.

With the results of this performance audit that was based on the Strategic Plan dated October 31, 2016, we now have an important area on which to focus in the coming weeks — specifically working to strengthen and better integrate our strategic planning, performance measurement and budget decision-making processes.

Audit Findings

The Department’s performance measurement plan provides the start of a firm foundation to provide information to measure the Department’s performance and make budgeting decisions. However, three weaknesses limited the plan’s usefulness for assessing performance.

- The Department’s Plan lacked adequate outcome-based measures
- The Department’s Plan contained gaps in measurement
- The Department used unreliable data to measure some performance

Recommendations

- The Department should review their performance measurement plan and approve specific measures to ensure they are outcome-based

  Recommendations for effectiveness, efficiency, and outcome-based performance measures can be found the Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links report located in the Appendix pages 20-31
The Department should review their performance measurement plan to ensure that specific performance measures are clearly linked to the mission, goals, and sub-goals so that decision makers can measure goal achievement and evaluate performance.

Recommendations for closing gaps in the Department’s performance measurement plan can be found in the Assessment of North Carolina Department of Commerce Performance Management and Strategic Plan Links report located in the Appendix pages 12-14, 19-20.

The Department should implement a formal review process to help ensure the accuracy and completeness of data used in the Department’s performance measures.

Agency Response

The Department agrees with the findings and recommendations stated in the audit report.

The Department’s FY 17-19 Strategic Plan that was the basis of this audit, was developed in the Fall of 2016 as part of OSBM’s strategic planning and budgeting process. As the attached guidance document indicates, the Department’s resulting strategic plan met the objectives and requirements of what was needed for this effort; however, it did not provide the best measures or data for assessing performance of the many Commerce programs.

Thanks to the detailed evaluation provided in this audit, the Department now has feedback that will improve the development of a new Strategic Plan and guide our performance management assessment. We envision that our new strategic plan will easily support any budget documentation required by OSBM.

The Department of Commerce submits more than 50 reports on our various programs to the NC General Assembly over the course of each year as well as federal performance reports associated with the federally funded Commerce programs. There is no shortage of data that is tracked, and many of the improved measures that were suggested in the audit can be found in these reports.

I have appointed a Strategic Planning Task Force from the members of my senior staff who will have direct responsibility for building the FY 19-21 Strategic Plan. This team will carefully review the recommendations prepared by the School of Government and incorporate as many of the suggestions as feasible in the development of the new plan. I have directed the Task Force to complete its work by November 2018.

Thank you for completing this performance audit and for working with the School of Government on making these recommendations for improvement.

Sincerely,

Anthony M. Copeland
This audit required 1,600 hours of auditor effort at an approximate cost of $164,800. The cost of the specialist's effort was $15,498. As a result, the total cost of this audit was $180,298.