How to Measure the Results of Tax Incentives: Promising Practices and a Proposal for Nebraska

A report to the Nebraska Tax Incentive Evaluation Committee

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Table of Contents

Executive Summary

Due to the importance of tax incentives for both states' budgets and economies, it is vital to know whether these policies are achieving their goals. To this end, states should evaluate their tax incentives regularly and rigorously so policymakers have the most up-to-date, reliable information. When states evaluate all of their tax incentives, they are able to identify how well their incentives are working and how they can be improved. In turn, state lawmakers can use this information to get the best possible results for taxpayers and the economy.

In this report, The Pew Charitable Trusts lays out a plan for the regular evaluation of tax incentive effectiveness for consideration by Nebraska's Tax Incentive Evaluation Committee. This proposal is based on examples of proven evaluation strategies in other states, but is customized to meet the needs of Nebraska. The plan, like successful evaluation processes elsewhere, is guided by four principles:

1) All tax incentives will be reviewed regularly according to a strategic schedule.
2) Evaluations will draw clear conclusions based on measurable goals.
3) Rigorous evaluations will determine benefits and costs.
4) Evidence from evaluations will inform policy choices.

Based on these principles, our proposal includes the following recommendations:

- **Designing a strategic evaluation schedule:** Evaluate each tax incentive once every three years on a rotating schedule. Organize the schedule so that incentives with similar goals are reviewed at the same time and, to the extent practicable, incentives are evaluated prior to their sunset dates. (pgs. 2-4)
- **Identifying metrics for Nebraska's tax incentives:** Adopt guidelines for setting metrics for tax incentives. Before beginning evaluations each year, require the analysts conducting the evaluations to develop an evaluation plan, including the metrics they plan to use. Offer legislators an opportunity for input through committee hearings. (pgs. 5-11)
- **Collecting and accessing relevant data:** Develop a plan to collect the data needed to measure each tax incentive's success at the same time metrics are developed for each incentive. Consider whether a comprehensive review of tax incentive reporting requirements for businesses and state agencies would be valuable. (pgs. 12-13)
- **Determining which office should conduct the evaluation:** Assign lead responsibility for evaluation to the Legislative Audit Office, while allowing the office to work with outside experts or the Department of Revenue to help measure economic impact. (pgs. 14-15)
- **Measuring economic impact with and without economic models:** Ensure that the office in charge of conducting the evaluations has access to TRAIN or another economic model, but provide the evaluators with flexibility on whether and how to use the model for each evaluation. (pgs. 16-19)
- **Ensuring the evaluations inform the policymaking process:** Create a new legislative committee to oversee tax incentive policy, hold hearings on evaluations, and make recommendations to the full legislature. (pg. 20)

Section 1: Designing a strategic evaluation schedule

States need to evaluate their tax incentives frequently enough so that policymakers have up-to-date information, while also providing enough time for the analysts conducting the evaluations to produce rigorous, detailed studies. In this section, we describe how states have struck this balance. We also outline a potential approach for Nebraska to use to review incentives with similar goals in the same year, thereby allowing lawmakers to compare the results of similar programs to one another.

How other states have done it

- **Require all tax incentives to be evaluated every three to five years.** States with processes in place to review all of their major economic development tax incentives, including Connecticut, Florida, Indiana, Maryland, Mississippi, and Rhode Island, generally have required that each incentive be reviewed at least once every three to five years. Evaluating this frequently allows policymakers to have reasonably current information, while giving the authors of the reports enough time to go into more depth than if every incentive were evaluated annually. (States with processes that include review of other types tax expenditures in addition to economic development tax incentives typically operate on a longer timeframe.)
- **Develop a multi-year review schedule.** While Connecticut evaluates all of its tax incentives in a single report that is required to be published once every three years, most other states with incentive-review processes have adopted schedules so that some incentives are evaluated each year. This approach helps balance out the workload for staff conducting the evaluations, while letting lawmakers focus more closely each year on a subset of incentives. States also typically have created a process to add any newly created incentives to the schedule.
- **Evaluate tax incentives with similar goals in the same year.** Oregon has grouped its tax credits so that those with similar purposes are reviewed in the same year. For example, credits designed to promote education are evaluated in one group, while credits designed to promote economic development are evaluated in another. Washington also uses this approach. For instance, the state is evaluating 11 tax expenditures that benefit the aerospace industry as a group this year. The advantage of this approach is that it helps lawmakers consider incentives as a portfolio of interrelated policy choices, rather than in isolation. Evaluations can compare the effectiveness of incentives with similar goals, identifying which strategies are getting the best results. They can also show whether incentives with similar goals have been coordinated effectively.
- **Schedule evaluations to take place prior to sunset dates.** Statutory expiration dates (or “sunsets”) on tax incentives provide an opportunity for policymakers to review the programs and decide whether they should be extended, altered, or allowed to end. Evaluations can help lawmakers make these decisions. With that in mind, Oregon has placed sunsets on virtually all of the state’s tax credits and the state schedules evaluations to be completed the year before they’re set to expire. Washington and Maryland have also made efforts to coordinate their evaluation schedule and sunsets.

How Nebraska could do it

Evaluate each tax incentive once every three years on a rotating schedule. Organize the schedule so that incentives with similar goals are reviewed at the same time and, to the extent practicable, incentives are evaluated prior to their sunset dates.

There is a great deal of value in evaluating tax incentives with similar goals in the same year. Several of the best tax incentive evaluations states have conducted in recent years, including reports in Connecticut, Kentucky, Minnesota, and North Carolina, have focused on comparing the effectiveness of incentives to one another to help policymakers invest in the programs with the strongest return on investment. Evaluators have an easier time making these comparisons when similar incentives are evaluated in the same year.

Adopting this approach would require identifying and categorizing the goals of Nebraska's tax incentives. Each of Nebraska's six incentive programs identified in Legislative Resolution 444 includes in law a "legislative findings" section describing both specific goals for incentives and, in some cases, strategies to achieve those goals. As the Legislative Audit Office noted in its November 2013 report, these various goals and strategies can be organized and grouped into a set of overarching goals for Nebraska's tax incentives.

Specifically, based on the legislative findings, Nebraska's tax incentives appear to be designed to achieve three broad goals:

1) To strengthen the state's economy overall (such as by attracting new businesses to the state, increasing employment, creating high-quality jobs, and increasing business investment).
2) To revitalize rural areas and other distressed areas of the state.
3) To stimulate entrepreneurial, high-tech, and renewable energy firms, in order to diversify the state's economy and position Nebraska for the future.

Most of Nebraska's incentives are primarily focused on only one of these three goals, making it easy to determine where they fit in the review schedule. However, the Advantage Act is intended both to strengthen the state's economy overall and to assist entrepreneurial, high-tech, and renewable energy firms. To address this issue, one option is to separate the evaluation of the Advantage Act by its components. For example, the specific parts of the Act's Tier 2 that are focused on entrepreneurial and high-tech firms could be evaluated alongside other incentives with a similar purpose including the Research and Development Tax Credit and Angel Investment Tax Credit rather than the portions of the Advantage Act that are designed around encouraging jobs and investments overall.

Evaluating the Advantage Act in this way would encourage evaluations to reach more detailed, nuanced conclusions on the results of the program. Rather than simply making a judgment on the program as a whole, the reports could do things like point out a tier of the act with a particularly strong result and explain the reasons for the success or identify a tier that few businesses have utilized and explain why.

A potential review schedule for Nebraska could consist of the following:

- Evaluate tax incentives designed to strengthen the state's economy overall by late 2016 and every third year thereafter. These incentives include Tiers 1-6 of the Advantage Act, except the portions Tier 2 and Tier 5 of the act targeted to entrepreneurial, high-tech, and renewable energy firms.
- Evaluate tax incentives designed to diversify the state's economy and position Nebraska for the future by late 2017 and every three years thereafter. These incentives include the Angel Investment Tax Credit, Nebraska Advantage Research and Development Act, and the portions of Tier 2 and Tier 5 of the Advantage Act targeted to entrepreneurial, high-tech, and renewable energy firms.
- Evaluate tax incentives designed to benefit rural and distressed areas of the state by late 2018 and every three years thereafter. These incentives include the Nebraska Advantage Rural Development Act, the Beginning Farmer Tax Credit, and the Nebraska Advantage Microenterprise Tax Credit.

This schedule, which assumes the legislature approves a tax incentive evaluation bill in the 2015 session, is designed to provide more than a year between when the law passes and the first evaluations are due. That should provide ample time for the office conducting the evaluations to overcome any challenges that come along with analyzing tax incentives for the first time, such as collecting relevant data.

To help the legislature make informed decisions, this schedule also ensures that Tiers 1, 3, and 6 of the Advantage Act will be evaluated more than a year before their sunset dates and that the Angel Investment Tax Credit will be evaluated well in advance of its sunset date at the end of 2019. (The Research and Development Tax Credit and Nebraska Advantage Microenterprise Tax Credit would not be reviewed in time for the legislature to use the evaluations to make decisions about the programs before they sunset.) In the future, when incentives are extended, the legislature could set new sunset dates in order to coordinate the evaluation schedule and the sunsets.

Section 2: Identifying metrics for Nebraska's tax incentives

Effective evaluations answer a key question: Have tax incentives achieved their goals? Answering this question depends on the development of metrics—quantifiable measures that states can use to determine whether the program is working as intended.

In this section, we discuss specific metrics used by other states and potential lessons for Nebraska. **However, we propose that before Nebraska adopts specific metrics, a logical first step would be to agree on a set of general guidelines for determining what metrics are appropriate. One of the biggest challenges in deciding on metrics is that there are so many options for what to measure—many of them reasonable—that it's difficult to know where to start. Agreement on guidelines could help with this challenge.**

Below, we outline what these guidelines might be and describe a potential process for using them to set metrics. Under this process, the office conducting the evaluations would propose metrics for each tax incentive that follow the guidelines. Then, the legislative committee overseeing the evaluations would have the option of providing input.

The goals of Nebraska's tax incentives

Since metrics are based on measuring whether the goals of tax incentives have been achieved, states need to start by identifying the goals for their tax incentives. As noted in Section 1, each of the Nebraska's tax incentives have "legislative findings" in statute that describe the goals of the programs. Using these legislative findings, it appears Nebraska's tax incentives have three overarching goals:

1) To strengthen the state's economy overall.
2) To revitalize rural areas and other distressed areas of the state.
3) To stimulate entrepreneurial, high-tech, and renewable energy firms, in order to diversify the state's economy and position for the future.

Metrics used in other states

Many other states have evaluated incentives with objectives similar to those of Nebraska's. (There have been relatively few evaluations of incentives designed to specifically help rural areas, but states have often evaluated other geographically targeted incentives, especially ones intended to benefit distressed areas whether they are rural or urban.) As a result, as Nebraska considers how to translate its incentive goals into metrics, the measures other states have used could help provide the state with direction.

Metrics related to strengthening the state's economy overall

Evaluators have numerous options for measuring tax incentives' impact on the economy overall. Many evaluations have studied the number of jobs created, the size of the increase in business investment, the increase in the state's GDP, the increase in per capita income, and many variations on each of these options (jobs could be presented as hours of employment, annualized full-time equivalents, etc.). Rather than try to identify the single best metric—a very difficult task—most evaluations have studied multiple measures to get a reasonably complete picture of the results of the incentives.

Here are some potential lessons from these evaluations:

- **Focus on outcomes that affect the economic well-being of state residents.** Some metrics such as jobs and income relate directly to how well-off a state's residents are. Others, such as business investment, matter indirectly—states tend to care about business investment because it can lead to more jobs and higher incomes. This isn't necessarily a reason to avoid measuring the more indirect factors. Instead, it may be valuable to present them in terms of how they translate to direct benefits for the state.

  For example, one reason a state might be especially interested in increasing investment is that certain types of investments represent a long-term job commitment. If a company builds an expensive new factory, it would be giving up a lot if it shuttered it the next year and moved the jobs elsewhere. So, investment could be presented in terms how it will affect employment in the state long-term. An evaluation in Washington state, for example, showed to what extent additional research and development spending caused by an incentive translated into higher employment at those firms.

- **Calculate fiscal impacts, but not to the exclusion of economic metrics.** One of the most common metrics states have used is the extent to which their tax incentives pay for themselves—for every dollar invested in the incentive, how many cents are returned to the state treasury? Tax incentives are important fiscal choices, so there's value in measuring their costs. To get a more complete picture of fiscal impact, states can consider the taxes paid by workers in newly created jobs, the cost of administering the incentive, and the cost of paying for services for new residents attracted by the incentive. But because incentives have economic goals—not just fiscal goals—these metrics are most useful when considered along with others.

  Furthermore, sometimes states have judged tax incentives as a success or failure based on whether they entirely pay for themselves, which may be an unfair standard. When states have rigorously measured the impact of tax incentives—such as taking into account the extent they changed business behavior—relatively few tax incentives pay for themselves, but they could still represent a cost-effective means to grow the state's economy compared to alternative economic development strategies.

- **Go beyond wages when measuring job quality.** Often, part of measuring whether incentives are strengthening a state's economy is considering the quality of the jobs created (one of the goals of the Advantage Act is creating quality jobs, based of its legislative findings). Many states have measured the average salaries of incentivized jobs as one metric for job quality. But there are also other factors that may play into the quality of the jobs created by incentives, including the benefits of the jobs, whether they are ongoing (as opposed to temporary), and whether they are filled by Nebraska residents. Additionally, whether jobs allow state residents to move up the economic ladder may be just as important as their absolute wages—helping a Nebraskan who's earning $30,000-a-year to make $40,000-a-year may be just as valuable as helping a Nebraskan who's earning $130,000 to make $140,000.

A North Carolina evaluation identified metrics to take into account many of these factors. To see whether jobs were going to North Carolinians, the authors studied the percentage of workers at incentivized jobs that had been employed in the state the previous year. To understand whether the jobs were ongoing, they studied the percentage of the workers hired to incentivized jobs who filed unemployment claims over the next two years.

To help show whether the jobs are high-quality for the community in which they're created, some evaluations have compared average wages at incentivized jobs to the average wages of all jobs in that community (such as jobs in the same county). A Kentucky evaluation had a twist on this concept, comparing whether incentivized jobs paid higher or lower than the average for that industry in the state. Finally, evaluations can consider jobs' total compensation, rather than just salaries. For example, a Louisiana evaluation measured the dollars per hour in health benefits at incentivized jobs.

Metrics related to revitalizing rural and distressed areas

Evaluations of incentives for specific geographic areas use some of the same metrics as evaluations designed to boost the economy overall, but there are also special considerations for these types of incentives.

- **Consider to what extent the incentives are reaching their target areas.** Several states have assessed to what extent the benefits of geographically focused tax incentives are going to the places for which they were intended—based on the idea that if a large share of the benefits are going elsewhere, then there are likely ways to target the incentive more effectively. For example, a New York evaluation compared the dollar value of incentives going to downstate New York (the wealthier part of the state), compared to upstate (the poorer part of the state) relative to the size of the two regions' economies. Using this metric, they were able to show that downstate was benefitting from the incentives more than upstate. Similarly, a Minnesota evaluation studied whether an area's economic distress was statistically correlated with higher job creation under an incentive that was designed to relieve that distress.
- **Assess whether people living in the areas are benefitting.** New economic activity in a distressed area does not guarantee that the people living there will be better off. It's possible that people living elsewhere will fill newly created jobs, for example. To study this issue, a Maryland evaluation of the state's Enterprise Zone program studied the level of educational attainment of zone residents compared to the level of education required by employers in the zones. This metric helped the report identify a skills mismatch—many zone residents lacked the skills required for the jobs, making it unlikely the incentive alone could help them find employment.
- **When comparing different geographic areas, use broad indicators with caution.** Some evaluations have compared target areas to other parts of the state or to the state as a whole based on measures of distress such as the poverty rate, unemployment rate, or housing vacancy rate. The idea is to use the other locations as a control group, to see whether the incentives are making a difference in the distressed areas over time. The potential danger in this approach is that there are so many other

factors that influence something like the poverty rate or unemployment rate in different locations, that it's difficult to isolate the impact of the incentive. For example, a severe drought could cause economic hardship in rural areas without affecting urban areas, regardless of the effectiveness of the state's incentives.

Metrics related to stimulating entrepreneurial, high-tech, and renewable energy firms

Measuring the results of these types of incentives creates a challenge around timing. The programs are designed to position the state for the future, but policymakers can't simply wait 10 or 20 years to find out whether the incentives worked. States have used creative metrics to help determine whether the programs are on track.

- **Measure incentives' effects on business outputs and outcomes.** Several evaluations of these types of incentives have focused on patents. Reports have investigated whether the incentives are leading businesses to submit more patent applications and have more patents accepted. They've also studied patent productivity, such as the ratio of overall employees or research employees to the number of patents produced. Patents are just one option, but the reason they've proven to be a popular metric is likely that they provide at least some evidence of whether the businesses are thriving and likely to continue to thrive in the future. A business could have a lot of employees and be spending a lot of money, but unless that spending eventually translates into new products and inventions, its future prospects will not be bright. Similarly, a 2012 Michigan evaluation studied whether incentives were affecting firm survival rates—obviously for a business to have a promising future, it has to stay in business.
- **Study whether state incentives help businesses to receive financing from other sources.** One rationale for providing incentives for entrepreneurial and high-tech firms is that doing so helps these companies receive financing from other sources such as venture capitalists or the federal government, magnifying the impact of the help the state provided. Some evaluations have measured whether incentives are having this effect. For example, the 2012 Michigan evaluation studied whether incentives made it more likely that companies would later receive awards under the federal Small Business Innovation Research program and receive private venture capital funding. An evaluation of Minnesota's Angel Tax Credit used a number of metrics to try to determine whether the program was encouraging angel investments that would not otherwise have taken place. The report looked at the proportion of investors in the program who were "inside investors," including officials in the companies and their family member, based on the idea that these people would have been likely to invest even without the incentives. Likewise, the evaluation studied proportion of participants in the program who were new to angel investing in Minnesota, since this group was more likely to have been influenced by the incentive.
- **Consider job creation, while understanding that programs are designed to work over the long-term.** An Iowa evaluation used as a metric the number of PhD scientists and engineers in the state, while many other evaluations have measured job creation at companies receiving incentives. While it makes sense to measure job creation, it's also important to acknowledge that many of the businesses benefitting from these incentives may be small by definition (e.g. when the programs are

targeted toward startups). As a result, comparing job creation from these programs to other incentives with different goals requires caution.

A process Nebraska could use to develop metrics for its tax incentives

Adopt guidelines for setting metrics for tax incentives. Before beginning evaluations each year, require the analysts conducting the evaluations to develop an evaluation plan, including the metrics they plan to use. Offer legislators an opportunity for input through committee hearings.

A logical first step for Nebraska is to agree to a set of guidelines for translating the goals of the state's tax incentives into metrics. As other states' experiences show, there are a vast number of potential tax incentive metrics. Guidelines could provide Nebraska with a basis for sorting through the different options. As ideas for metrics are proposed, they could be assessed on whether they follow the guidelines.

Potential guidelines for setting metrics

1) **Select metrics that reflect the goals of incentives.** The right metrics are ones that reflect the state's goals for the specific program and help answer whether those goals have been achieved. If an incentive is supposed to produce high-quality jobs, for example, it wouldn't be adequate to only count the number of jobs because that doesn't say anything about quality.
2) **Consider what data is available.** It makes sense to plan for data collection as metrics are identified because if evaluators don't have the right data they will not be able to make the calculations. We discuss this topic in more detail in Section 3.
3) **Use clear and consistent definitions.** It's crucial that metrics be defined because even the simplest terms can mean multiple things. Take "jobs," for example. Does the duration of the job matter, or whether it is part-time of fulltime? Do the wages and benefits matter?
4) **Coordinate to allow for comparisons between programs with similar goals.** If two incentives share a goal, then it may make sense for them to share a metric as well, to help compare the effectiveness of the programs. These comparisons will be most reliable if the state is using consistent definitions and the same data sources for multiple incentives. Also, when making comparisons, states should consider that costs and benefits occur on different timeframes for different incentives. Some incentives provide benefits only after a company has created jobs or made investments, while others provide incentives upfront, even though the benefits will not materialize until later.
5) **Choose and define metrics to rigorously measure economic impact.** In Section 5, we identify three questions for measuring the economic impact of tax incentives and discuss various approaches states have used to answer them (1. To what extent did the incentive change businesses' behavior? 2. Will the incentive produce a net economic benefit? 3. Is using a tax incentive a cost-effective approach to achieving its goals compared to alternative policies?). Metrics should be defined with these questions in mind. For example, it wouldn't be adequate to count the numbers of jobs at companies receiving incentives without asking whether the jobs were created because of the incentive or would they have been created anyway.

Lawmakers could also develop guidelines for specific types of incentives based on the discussion earlier in this section. For example, the state could adopt as a guideline that evaluations of incentives designed to benefit rural and distressed areas should include metrics related to the extent the incentives benefit those areas.

In Section 1, we suggest an evaluation schedule where each incentive is evaluated once every three years, with evaluations to be completed at the end of each year beginning in 2016. This schedule provides an opportunity during the interim the year before the evaluation is conducted (starting in 2015) for the staffers in charge of the analysis to present lawmakers with an explanation of the metrics they plan to use for the next year's incentives and why they're consistent with the adopted guidelines. The legislative committee selected to oversee the evaluations could hold a hearing on the plans and provide feedback. Other states, including Florida and Maryland, also require the staffers conducting the analysis to submit evaluation plans, but this approach would allow for a greater degree of legislative input.

Section 3: Collecting and accessing relevant data

Tax incentive evaluations are only as good as the data on which they are based. The analysts conducting the evaluations need reliable, relevant information on incentives' economic benefits and fiscal costs to be able to effectively measure their results. In this section, we discuss ways states have had success collecting and sharing data. We also discuss how Nebraska could develop data collection plans in conjunction with identifying metrics for the state's tax incentives.

How other states have done it

- **Ensure evaluators have access to existing state information (while protecting confidential information).** When the North Carolina General Assembly commissioned an evaluation by a team from a university research center, the legislature also passed a law that authorized the authors of the report to access tax data from the state's Department of Revenue and employment data from the state's Department of Labor. To gain access to this data, the authors signed agreements that they would not disclose confidential company-specific information. This data was essential to one of the report's central findings: Companies receiving tax credits under the state's largest incentive program were adding jobs more slowly than companies that had not received the incentives. The evaluation recommended the state invest in other incentives that were getting better results.
- **Require businesses to provide data as a condition of getting the benefit.** Detailed budgets provided by film production companies helped the Massachusetts Department of Revenue conduct a rigorous evaluation of the state's film tax credit. With film tax credits, one key data question is to what extent the production's dollars will go to salaries of actors and directors—many of whom live out-of-state and are likely to spend their money out-of-state—as opposed to people and businesses locally. By distinguishing between these different types of employees, the production company budgets allowed the evaluators to estimate how much money from the films was being spent in Massachusetts and how much was being spent elsewhere.
- **Ensure state agencies collaborate and share relevant information.** Louisiana has a law that requires all state agencies to assist in the coordination of economic development programs. This provision allows the Department of Economic Development (DED) to obtain company-specific data that other agencies may have gathered, provided that DED ensures the same level of confidentiality as the agency providing the data. Related to this law, Louisiana's tax code includes a section authorizing the tax department to share tax data with DED. Many states, including Florida, Maryland, Mississippi, Rhode Island, and Washington, have also included provisions requiring state agencies to share data in their laws setting up evaluation processes.
- **Conduct a comprehensive review of business reporting requirements.** In 2013, Washington state passed a law requiring the state's Department of Revenue to review the information that businesses receiving tax incentives are required to report. Revenue's study recommended ways to streamline reporting requirements for businesses, identifying duplicative information and data of little value for evaluation that companies were required to report. The study also identified new data businesses could report to help facilitate higher quality evaluation.

How Nebraska could do it

Develop a plan to collect the data needed to measure each tax incentive's success at the same time metrics are developed for each incentive. Consider whether a comprehensive review of tax incentive reporting requirements for businesses and state agencies would be valuable.

The data a state needs to conduct a high-quality tax incentive evaluation depends on what it is attempting to measure. As a result, it may make sense to connect the process for collecting and sharing data with the process for identifying metrics for Nebraska's tax incentives.

In Section 2, we discussed the idea that the office leading the evaluations could annually present the metrics it intends to use for the following year's evaluations to the relevant legislative committee during the interim, providing an opportunity for lawmakers to have input on metrics. At this point, the evaluation office could also present a plan to gather the data necessary to utilize the identified metrics. Combining consideration of metrics and data in this way would encourage the evaluation office to think about what is possible when identifying metrics—a promising-sounding metric will be of little value if the state lacks the data to make the calculations. It could also provide an opportunity for the evaluation office to alert lawmakers if legislation, such as changes to confidentiality rules or requirements for interagency collaboration, could facilitate better evaluations.

Additionally, the Legislative Audit Office's February 2013 report on tax incentives noted that far more performance data is publicly available for the Advantage Act than for the Nebraska Advantage Rural Development Act, the Nebraska Advantage Microenterprise Act, and the Nebraska Advantage Research and Development Act. Given this discrepancy, it may be valuable to conduct a study similar to the one in Washington state to review both the data businesses are required to report and the data that state agencies are required to publish. This study could focus not only on how to collect and report the right data to facilitate evaluation, but also identify opportunities to streamline reporting requirements.

Such a study could be informed by a new project we launched this spring in partnership with the Center for Regional Economic Competitiveness, a non-profit focused on economic development that provides information and technical assistance to policymakers, to improve tax incentive data collection and reporting. One goal of this project is to identify a set of national best practices in this area—findings we will be happy to share with Nebraska policymakers as they are developed through mid-to late-2015.

Section 4: Determining what office should conduct the evaluations

Selecting the right state office to lead tax incentive evaluations is crucial to ensuring the documents provide independent, well-informed analysis to policymakers. In this section, we discuss the traits of successful evaluation offices, who other states have assigned to conduct evaluations, and which of these approaches may work best for Nebraska.

Key characteristics of effective evaluation offices

Ideally, an office selected to conduct tax incentive evaluations would have several key traits:

- **Experience at program evaluation.** Evaluating a tax incentive program requires many of the same skills needed to evaluate any government program. Evaluators frequently synthesize interviews with stakeholders, research national best practices, and study the details of how incentives are administered to help determine whether they can work more efficiently. Often, this type of qualitative analysis is just as important to an effective evaluation as quantitative research.
- **Experience measuring economic impact.** To determine a tax incentive program's results, evaluations need to generate an accurate picture of its benefits and costs. Doing so involves more than just counting the numbers of jobs companies participating in the program created or the size of the investments they made. Evaluation offices should have the expertise to answer key questions, such as to what extent tax incentives influenced businesses' choices, how those decisions affected the state's economy, and what it cost to achieve the results (See Section 5 for a discussion of how states can answer these questions).
- **An impartial, non-partisan perspective.** Evaluations should base their findings on the evidence at hand, free (to the extent possible) from preexisting biases and political influence.
- **A willingness to make policy recommendations.** The primary reason to evaluate tax incentives is to help lawmakers identify how to make state economic development policy as effective as possible. To serve this purpose, evaluators need to be willing to draw clear conclusions about what is working, what isn't, and how tax incentives can be improved.

How other states have done it

States have assigned several different types of offices and agencies the responsibility of regularly evaluating tax incentives:

- **Legislative staff** (including legislative auditors and revenue committee staff): The most common approach, used in Florida, Indiana, Maryland, Oregon, and Washington.
- **Tax-collecting agency**: Iowa and Rhode Island.
- **Economic development agency**: Connecticut.
- **Outside experts**: Mississippi assigned the task to the state's University Research Center, an office within the Mississippi higher education system that regularly conducts economic analysis for state government.

- **Hybrid approach**: Arkansas legislative auditor's office leads the evaluations, but in the past has outsourced some of the economic analysis to a research institute at the University of Arkansas, Little Rock.

How Nebraska could do it

Assign lead responsibility for evaluation to the Legislative Audit Office, while allowing the office to work with outside experts or the Department of Revenue to help measure economic impact.

With its experience at program evaluation, non-partisan perspective, and willingness to make policy recommendations, the Legislative Audit Office is well-positioned to produce high-quality tax incentives evaluations. The office's three reports on tax incentives also demonstrate the knowledge its staff have built on the subject since the start of 2013. The office lacks a background in economic analysis, but could develop this expertise internally as part of the implementation of the evaluation process. Alternatively, the office could partner with a university or consulting firm to handle the more technical aspects of measuring economic impact or work with the Department of Revenue to use the TRAIN model for this purpose. (See Section 5 for a discussion of the TRAIN model). Under this option, the Legislative Audit Office could still be responsible for providing direction to the outside analysts conducting the impact analysis to ensure that they are answering the questions lawmakers want answered. The office would also conduct the more qualitative research on the programs and translate the findings into policy-relevant conclusions.

The audit office appears to be a better fit to take the lead responsibility than either the Nebraska Department of Revenue or the Nebraska Department of Economic Development (the other offices in Nebraska most similar to those in other states that have conducted evaluations). As the Audit Office's February 2013 report on tax incentives noted, the Department of Revenue has traditionally declined to make recommendations on tax incentives or other types of tax expenditures because the department's staff view themselves as having an administrative role, not a policy development role. This is a reasonable perspective—and one shared by many revenue departments around the country—but a substantial drawback for evaluating tax incentives.

It may be surprising that few states have charged economic development agencies with formally evaluating tax incentives, given the role they play in advertising, promoting, and administering tax incentives. But it is this very role that has tended to lead states to consider other options—it's challenging to make an impartial judgment on a program you administer.

However, both Revenue and Economic Development will be key partners in this effort by providing tax incentive data to help facilitate high-quality analysis. This topic is discussed at greater length in Section 3.

Section 5: Measuring economic impact with and without economic models

The best tax incentive evaluations consider a variety of available resources—including academic literature, historical data, common sense, and economic models—to arrive at reasonable, well-informed conclusions about the results of the programs. In this section, we discuss factors for Nebraska to consider when determining whether and how to utilize the Tax and Revenue Analysis in Nebraska (TRAIN) model, as well as methods for evaluating tax incentives with and without the use of an economic model.

Background on economic models

Economic models are one method to calculate the effects of government policies, including tax incentives, on a state's economy. The most common types are input-output models, econometric models, and computable general equilibrium (CGE) models such as TRAIN. In all cases, these models are based on a series of equations that represent economic relationships, such as the amount of a specific industry's goods that are consumed by households and the amount of their goods consumed by other industries (e.g. to what extent are the services of law firms bought by individuals as opposed to businesses). The models differ in the data and methods of measuring those relationships, but they can all be used to measure how one change in the economy can spread out to other areas of the economy.

Pros and cons of using economic models for tax incentive evaluation

Economic models have several advantages when used for estimating the economic impact of tax incentives. For instance, some models can be regionally customized. In Nebraska's case, TRAIN is customized for the state's tax structure and major industries. These customizations improve accuracy when estimating a policy changes' effects on government revenue or industry makeup. For instance, the model can capture how an increase in the corporate tax rate might cause one industry to produce goods or services at a slower rate, leading consumers to shift their purchasing habits.

Additionally, TRAIN and other general equilibrium models estimate how tax changes impact prices, such as when a business charges a higher price to "recover" revenues when tax rates increase. The model estimates how other industries and consumers adjust their behavior in response to the business' price change by finding the new equilibrium where supply meets demand. These adjustments help to improve the overall estimates of the model.

Further, TRAIN can produce incremental estimates of impact, such as annual changes over a 10-year period. This is an improvement over other models that only estimate the total change over the entire 10 years without being able to examine shorter time periods.

On the other hand, economic models require extensive training for users to understand the assumptions and calculations within a model. The highly technical nature of the model creates challenges when analysts try to communicate the finding to policymakers. In order for lawmakers to make informed policy decisions, analysts need to clearly articulate and justify the assumptions they used.

Key questions when estimating economic impact

Many states also have estimated economic impacts without models. Below we highlight three key questions to ask when measuring the results of tax incentives and show how analysts have answered them both with and without a model. These examples show that Nebraska could reasonably estimate the economic impact of its incentives in multiple ways.

#1. To what extent did the incentive change businesses' behavior?

Tax incentives provide economic benefits to states to the extent they change businesses' behavior, such as by encouraging businesses to create jobs or make investments they wouldn't otherwise have made. Therefore, high-quality evaluations estimate the extent an incentive spurred those changes as opposed to rewarding what businesses would have done anyway.

With a model: One approach to answering this question is to calculate the impact based on multiple possible scenarios and then analyze which scenario is most likely. For example, in Connecticut, a 2010 report by the Department of Economic and Community Development estimated the impact of tax incentives based on three scenarios: that 20 percent, 50 percent, and 100 percent of business activity for which incentives were awarded would not have taken place without the incentives. The authors used REMI (an economic model used by many state and local governments that combines elements of an econometric, CGE, and input-output model) to measure impact under these scenarios. They analyzed the results for measures such as net employment, net state revenue, and Connecticut's gross domestic product.

Without a model: A Minnesota Legislative Auditor's report estimated the extent to which jobs created by companies participating in the state's Job Opportunity Building Zones (JOBZ) program were brought about by the incentive. To do so, they started with an estimate of how large of a reduction in businesses' taxes JOBZ provided. That estimate was valuable because many economists have conducted research on the extent to which state and local taxes influence business behavior. The idea is, for example, that an incentive that reduces a company's costs by 10 percent is more likely to spur action than one that reduces costs by 1 percent.

By knowing the size of the companies' tax reductions, the authors were able to use this economic literature to estimate that 21 percent of the new jobs created by JOBZ businesses resulted from the incentive. This figure allowed the legislative auditor to produce a realistic assessment of the program's economic benefits.

#2. Will the incentive produce a net economic benefit?

The impact of incentives is not limited to the companies that receive them and the people they employ. They can have either positive or negative effects on other businesses and individuals as well. Providing incentives for some companies may help other businesses indirectly, when the incentivized business and its employees spend money on local goods and services. On the other hand, an incentive might give an advantage to some businesses, thereby harming their competitors. High-quality evaluations examine these broader effects to measure the overall effect on the state economy.

With a model: When consultants hired by the Minnesota Department of Revenue studied the state's angel investor tax credit, they used REMI to answer a key question for determining the program's effect on the state economy: Were newly created jobs filled by Minnesotans or people from outside the state? Bringing in workers from outside the state has different economic implications than hiring state residents. It can be a boon to a state that is seeking population growth and increased revenues, but a detriment to a state that recruited a new business with the hopes of reducing its unemployment rate. With the model, the authors calculated that the program created an average of 414 jobs per year, including both direct and non-direct jobs. It also allowed them to determine that Minnesota's existing labor market did not offer enough workers with the necessary skills to fill all of these jobs, and this led the state population's to increase by an average of 114 people per year as more workers came in to fill those positions.

Without a model: An evaluation in New Jersey showed how a state can use a survey of businesses to help assess the effects of tax incentives. Generally speaking, businesses that sell their products and services to out-of-state customers are more likely to grow the state's economy because they bring in money from outside of the local economy. Consultants studying New Jersey's Urban Enterprise Zone program surveyed participating businesses on what percentage of their customers were located outside the state. They found that the majority of businesses participating in the program had fewer than 10 percent of their customers located outside of New Jersey.

Likewise, an evaluation in Louisiana of the state' Enterprise Zone program used academic literature to estimate the extent to which new jobs at participating businesses were displacing jobs at other Louisiana businesses (rather than increasing overall employment in the state). This academic research showed that in certain industries and economic sectors, new jobs are more likely to come at the expense of other employers in the state. For example, if a grocery store received an incentive without increased demand for groceries (e.g. from population growth), the incentivized business might merely take customers from other local grocery stores. The other stores would then be forced to cut jobs—negating the positive effect. Using the academic literature, they estimated that many of the incentivized jobs in certain economic sectors—retail, restaurants, hotels, and health—were displacing existing jobs. As a result, they concluded the program created about 3,000 net jobs, not the 9,000 jobs that participating businesses reported.

#3. Is the tax incentive an effective approach to achieving its goals compared to alternative policies?

Like all state budget decisions, offering tax incentives involves a trade-off. A dollar used by a state on an incentive is a dollar it can't spend on state services or to fund general tax cuts—actions that also are likely to create some jobs and some economic activity. To analyze the results of tax incentives, states must consider the economic effects of these tradeoffs. One way states have done so is to compare the effectiveness of tax incentives to alternative economic development strategies the state is pursuing or might pursue to achieve the same goal.

With a model: In Oregon, evaluators hired by the state Department of Energy estimated the net economic impact of incentives for renewable energy projects such as wind farms and solar farms. To do so, they used IMPLAN, which, like REMI, is an economic model frequently used by states. Using IMPLAN, they modeled the economic results of the tax incentives, and they modeled an alternative scenario where the money was used to increase spending for other government programs instead. The authors found that spending the money on the renewable energy projects led to more jobs and higher wages than spending it on the alternative policy, which led them to conclude that the incentives were a comparatively effective option.

Without a model: Much like in the Oregon evaluation, when consultants working for Washington state evaluated the state's research and development tax credit, they considered the possibility that the dollars committed to the incentive could have been used for other public spending. Rather than using a model, though, they based their calculation on an estimate from economic research on the relationship between public spending and job creation. Essentially, the research showed that if the state had spent the $24.3 million on other public spending programs, then it would have created 176 jobs. That was less than the 484 jobs created by using the $24.3 million on the tax credit, meaning that taking into account this alternative use of the funds offset some of the positive impact of the program, but not all of it.

How Nebraska could do it

Ensure that the office in charge of conducting the evaluations has access to TRAIN or another economic model, but provide the evaluators with flexibility on whether and how to use the model for each evaluation.

As the examples above illustrate, economic models have proven to be a valuable tool for tax incentive evaluation in other states, but are not the only method to evaluate tax incentives well. As a result, it makes sense to ensure that the office put in charge of conducting the analysis has access to a model, while also granting the evaluators the leeway to only use it in circumstances when they judge that it is the best approach.

Whether Nebraska ultimately uses TRAIN may depend on what office is selected to lead the evaluations. In Section 4, we note that one promising option for Nebraska may be to place the Legislative Audit Office in charge of the evaluations, but provide them with outside assistance on the more technical aspects of measuring economic impact such as using a model. The Department of Revenue could partner with the audit office in this role and use TRAIN or economists from a university or consulting firm could do so and employ a different model with which they have experience.

Section 6: Ensuring the evaluations inform the policymaking process

The reason to evaluate tax incentives is to help legislators make better-informed decisions. To serve that purpose, tax incentive evaluations can't be documents that simply sit on a shelf. In this section, we discuss several approaches states have adopted to connect the findings of evaluations back to the policymaking process and present an option for how Nebraska could do so.

How other states have done it

- **Holding legislative hearings on evaluations.** Several states, including Arizona, Iowa, Indiana, Oregon, Maryland, Mississippi, and Washington, have assigned specific legislative committees to oversee tax incentives. These committees hold hearings to discuss the results of evaluations, receive input from stakeholders (including the businesses receiving the incentives and the agencies administering them), and consider whether policy changes are needed.
- **Requiring legislative recommendations.** Arizona, Indiana, and Maryland require the legislative committee assigned to oversee tax incentives to make recommendations on the programs when they are up for review. This approach allows a group of lawmakers to study the program carefully and consider the results of evaluations before providing guidance to the full legislature. Likewise, while Oregon's Joint Committee of Tax Credits isn't required by law to make recommendations, in practice the panel's proposals on whether to continue or alter tax incentives are an integral part of the state's evaluation process—and have greatly influenced the actions of the full legislature.
- **Incorporating the results of evaluations into the budget process.** Under a 2013 law, analysts in Rhode Island's Department of Revenue will evaluate the state's tax incentives on a rotating schedule. The law requires the governor's budget proposal to include a recommendation on whether to continue, change, or end each incentive evaluated in the last year. These recommendations will then be the subject of legislative hearings, providing lawmakers with an opportunity to review evaluation results and consider tax incentives alongside other state spending.

How Nebraska could do it

Create a new legislative committee to oversee tax incentive policy, hold hearings on evaluations, and make recommendations to the full legislature.

Similar to the approaches used in Arizona, Indiana, Maryland, and Oregon, a Nebraska committee could be responsible for holding hearings on each evaluation and then making recommendations to the full legislature. While the Tax Incentive Evaluation Committee is temporary, one option is for the legislature to create a permanent committee with a similar membership, with representation from the Legislative Performance Audit Committee, the Appropriations Committee, and the Revenue Committee. Given tax incentives' relevance to both fiscal and economic policy, participation and input from members of multiple committees would likely prove to be valuable.

Existing Nebraska law also authorizes the governor to make recommendations on tax incentives as part of the budget he or she submits to the legislature. That provision offers the governor the opportunity to respond to evaluations, similar to the approach used in Rhode Island.