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Memo

To: Megan Moore, Montana Legislative Services Division

From: John Hamman, The Pew Charitable Trusts

Date: August 29, 2019

Subject: Options for approaching Montana's incentive evaluation criteria

Thank you for your interest in best practices for tax incentive evaluation. Montana's [tax credit evaluation law](#) requires a set of incentives be evaluated over a 10-year schedule according to specified criteria. This memo reviews these criteria and provides examples from evaluations in other states. It also provides additional criteria common in other state evaluation processes that policymakers in Montana may wish to consider.

The development of an evaluation process is often iterative. In many states, policymakers have refined their evaluation practices as their expertise and desire for more information grows. In Nebraska, the Legislative Performance Audit Committee built its evaluation [recommendations](#) off feedback gathered through a series of hearings and responses to previous analyses (see page 2). Legislators codified many of these recommendations in the state's [evaluation law](#) a few years later. Similarly, lawmakers in North Dakota [sought to develop](#) economic modeling expertise after the success of their first round of evaluations fostered legislators' desire to learn more about the fiscal effects of the state's incentives.

The criteria in Montana's incentive evaluation law provide for an ambitious start and should strengthen your understanding of the effects of your tax incentive programs. The options for you to consider at the end of this memo provide some additional alternatives which are common to new evaluation processes, so they should be particularly relevant to policymakers in Montana.

Criterion a): But for

- a) *whether the credit changes taxpayer decisions, including whether the credit rewards decisions that may have been made regardless of the existence of the tax credit;*

Tax incentives only benefit states to the extent that they encourage people or businesses to do something that they would not otherwise have done. As a result, it is important for evaluations to assess the effectiveness of the programs at changing business behavior.

Evaluations have used different analytic approaches to make these assessments. Many have looked at a program in aggregate, making specific estimates of how much activity occurred throughout the state because of the incentive, and how much would have occurred otherwise. These are a few examples of how states have approached this topic in their evaluations.

Tax elasticity

A Minnesota Legislative Auditor's [report](#) on the state's Job Opportunity Building Zones (JOBZ) program estimated that JOBZ was reducing businesses' state and local taxes by 70 percent (see footnote 29 on page 96). Based on that figure, the authors were able to use academic literature on the responsiveness of businesses to changes in their tax burden to estimate that 21 percent of the new jobs at JOBZ businesses were created because of the incentives.

Price elasticity

Similarly, researchers in Iowa estimated the effect of the state's research and development tax credit by modeling how much more research firms were willing to conduct due to the cost reduction from the credit. The Iowa Department of Revenue [estimated](#) that each dollar foregone under the tax credit resulted in \$1.68 spent on qualified research projects in Iowa.

Sensitivity analysis

Evaluations have also calculated results using multiple scenarios of how effective incentives are at changing behavior (e.g. 30 percent of business activity occurred because of the incentive or 50 percent of business activity occurred because of the incentive). Evaluators can then analyze which scenario is most likely. A 2014 Connecticut [evaluation](#) used this approach. For several of the state's incentives, the analysts modeled four scenarios attributing varying degrees of business activity to the incentive: 100 percent, 50 percent, 20 percent, and 0 percent (see page 4).

Break-even analysis

In other cases, evaluations have, in effect, worked backwards. They've estimated how much activity would need to be caused by the incentive for it to be a superior option compared to a policy alternative. For example, a Washington state [evaluation](#) estimated that 45 percent of film spending would need to be caused by the credit for it to increase state employment by a greater amount than using the dollars for general government spending. By estimating the break-even point, Washington's evaluation provided a starting point for policymakers to determine whether the incentive is likely to induce enough economic activity to be worth the cost.

Gap analysis

Evaluators also have examined the likelihood that each particular project would have moved forward without state funding. Then, they've used that analysis to draw conclusions about the effectiveness of the program as a whole.

In Oregon, an [evaluation](#) studied tax credits for renewable energy projects such as wind farms and solar farms. The report examined what return on investment would make the various projects financially viable, based on the insight that whether an energy project makes sense for a company depends on the amount of energy it can produce, the cost of producing it, and the price that buyers will pay. Then, using financial models for representative companies (e.g. a utility-scale wind farm), they studied whether the incentives were large enough to make otherwise unfeasible projects financially viable. This approach allowed the evaluation to conclude that smaller-scale projects needed the incentives in order to go forward, but larger ones likely did not. Later, lawmakers amended the program to focus on smaller-scale projects.

Eliminating spending based on local demand

Many evaluations remove projects from their economic analysis if they depend on local demand. For example, a Massachusetts Department of Revenue review of the state's film incentive [culls projects](#) that likely would have been filmed in the state absent the presence of the incentive, specifically, local programming for educational, public affairs, and sports-themed productions.

Business surveys

Not all techniques require detailed program data or economic modeling expertise. Surveys of program participants are sometimes part of effective evaluations, but they need to be carefully designed. It's often not useful to ask businesses directly whether they value the incentives they receive—most will say yes—but more thoughtful questions can reveal important information about how the programs are influencing decisions.

An [evaluation](#) of Minnesota's angel investor tax credit included a survey of participating investors and businesses. One thing the survey showed is that many program participants were "inside investors" who had a personal stake in the companies in which they were investing. The evaluation concluded that these inside investors—often executives or board members—were less likely to need the incentives to encourage them to invest than were venture capitalists not affiliated with the companies. In response, the Legislature limited the ability of inside investors to participate in the program.

Criterion b): Displacement

b) to what extent the credit benefits some taxpayers at the expense of other taxpayers;

Incentives can have harmful indirect effects if they give some businesses a competitive advantage at the expense of others. One effective way to approach this issue is to think through the industry sector in which the businesses are located. Incentives are more likely to grow the state's economy when they are provided to businesses in sectors that sell their products and services to out-of-state customers.

Economists at Mississippi's University Research Center, for example, [questioned](#) the effectiveness of an incentive for "cultural retail attractions" such as outlet malls (see page 69). The incentive hurt other Mississippi retailers, the evaluation argued, since many of the shoppers at the attractions were likely to be Mississippi residents who would have spent much of their disposable income elsewhere in the state. The report concluded that focusing on projects that would draw a greater share of customers from out of state would have a bigger impact.

Likewise, an [evaluation](#) of Louisiana's Enterprise Zone program showed that providing incentives to manufacturers produced better results than for sectors that are limited by local demand, including hospitals, hotels, restaurants, and retailers (see page 12).

Criterion c): Leakage

c) whether the credit has out-of-state beneficiaries;

Some economic benefits induced by incentives flow outside the state (known as "leakage"). Factors influencing leakage include whether workers will live out of state, the number of products or services a beneficiary will purchase from outside the state, and whether incentivized business activity is located inside the state.

Evaluations have addressed this concern a few ways. For example, the Massachusetts' film [evaluation](#) discounts wages paid to non-residents since they don't benefit the state's economy (see page 8). Evaluations of film incentives often pay special attention to this assumption, as wages going to the primary cast, directors, and producers are significant contributors to production costs but are rarely spent in-state.

In North Dakota, an interim review committee identified a significant flaw in the Angel Fund Investment Credit that had allowed credits to be awarded to companies outside of North Dakota for years. From 2011 to 2015, 55 of 116 companies claiming the credit were located [out of state](#). In response, lawmakers enacted [legislation](#) in 2017 that included reforms intended to increase the in-state impact by more directly targeting North Dakota businesses.

Criterion d): Timing effects

d) the timing of costs and benefits of the credit and how long the credit is effective;

Timing is an important element of incentive design, affecting both how incentives impact the state's budget and how they affect the economy broadly.

How timing design affects fiscal risks to the state

Lengthy redemption windows can present budget risks for a state—it is hard to estimate how much an incentive will cost in a given year if recipients can save up credits to redeem later. Michigan [learned](#) this in 2014 when the state paid out \$729 million in credits for the state's signature economic development program. That year, most of the redemptions (\$678 million) were earned in previous years (see page 7).

Conversely, incentives that are awarded entirely upfront present risks if funds are paid before investments are verified. In 2010, Rhode Island made a \$75 million loan guarantee to a startup video game company known as 38 Studios. By 2012, 38 Studios had collapsed—leaving the state to pay the bill to bondholders, [more than \\$100 million with interest](#). Requiring businesses to meet performance standards in order to receive incentives can help prevent such a situation.

Controlling the timing of how and when incentives are awarded and paid out is one component of incentive design that affects the fiscal risk posed by incentives. For other strategies to mitigate these risks, including program and project caps, budgeting of incentives, and pay-for-performance, see our 2015 publication [Reducing Budget Risks](#).

How timing affects calculations of economic returns

Incentives promised to businesses long into the future affect more than just the state's fiscal position. [Research](#) from Tim Bartik of the Upjohn Institute shows that, in general, incentives spread out over long periods of time are likely to have diminished effectiveness, as businesses discount the value of future revenue (see page 66 for a discussion of up-front vs ongoing incentive designs).

In contrast, frontloading incentives increases their value for businesses. An [evaluation](#) of Michigan's Business Development Program conducted by Bartik found that one component contributing to the program's positive return-on-investment was that it provided benefits to recipients up-front. The study recommended policymakers consider supplementing the payroll data used to verify job-creation with unemployment insurance records as an added level of protection.

For more on how timing affects the economic impact of incentives, see our 2019 [brief](#) and [interactive](#), *What Factors Influence the Effectiveness of Business Incentives?*

Criterion e): Opportunity costs

- e) *any adverse impacts of the credit or its elimination and whether the benefits of continuance or elimination outweigh adverse impacts; and*

Like all state budget decisions, the decision to provide incentives involves a trade-off. Dollars states use on incentives are not available for other purposes. To analyze whether states are investing in the best policy options, evaluations have often compared the results of incentives to the expected impacts of alternative uses of the funds. For example, evaluations have compared the results of incentives to other incentive programs or policy alternatives such as across-the-board tax cuts or increases in general fund spending.

The Massachusetts' film incentive [evaluation](#) presents another example here. In addition to discounting projects that likely would have been filmed in the state without the incentive and spending that went to out-of-state residents, the evaluation further discounts the total economic activity by a balanced budget assumption. Though the incentive created an estimated 1,860 full-time equivalent (FTE) jobs, the evaluation assumed the state budget would have been cut to offset the additional spending required by the incentive, resulting in only 922 **net new** FTE's (see page 2).

A [study](#) by legislative staff of North Carolina's film tax credit modeled the effects of the film incentives and an alternative scenario where the dollars were dedicated to a cut in business tax rates instead. It found that the state's \$30 million in film incentives created between 55 and 70 jobs in 2011, but that the business tax cut would have had a bigger economic impact, yielding between 370 and 450 jobs (see page 5).

Criterion f): Effects on the economy

- f) *the extent to which benefits of the credit affect the larger economy.*

The impact of tax incentives goes beyond the businesses that receive them and the workers they employ. They can also have either positive or negative effects on other people or businesses. For that reason, high-quality evaluations consider the net results—taking into account any indirect effects.

States have often used economic models such as REMI and IMPLAN to estimate the indirect effects of incentives. The strength of these models is that they can be used to measure how one change in the economy can spread out to other businesses and residents. For example, a 2014 [evaluation](#) from legislative staff in Indiana estimated how effectively incentives changed behavior and then the used IMPLAN to study the ripple effect for the broader economy (see pages 15–17).

Other criteria for the Committee to consider

Though the criteria to be used by the Revenue Interim Committee is set in statute, there are other concepts in tax incentive evaluations the Committee may wish to consider.

Goals

Identifying the purpose of a tax incentive is the first step to determining to what extent it has been successful. In some cases, lawmakers write the goals of incentives into statute and evaluations can simply point to these

official statements of purpose. In many instances, though, lawmakers across the country have created incentives without clear goals.

The staff of Washington's Joint Legislative Audit Review Committee (JLARC) has developed a helpful [list](#) (see page 3) of potential sources for goals of incentives, ranging from media coverage to statements from supporters of the incentive. Another approach is to consider whether goals are implied in the design of the incentives. For example, if a job creation incentive includes wage thresholds for a business to qualify, you could conclude that one of the goals of the program is to create high-paying jobs. JLARC also put together a [drafting manual](#) to help legislators think through the goals of their programs before they are introduced.

In North Carolina, evaluators requested clarification from lawmakers because the goals of incentives weren't clear. Working with legislators and legislative staff, they [identified](#) (see page 12) three primary goals for the incentives: creating quality jobs, benefiting distressed areas, and making the state more economically competitive. Identifying those broad goals helped the analysts determine how to specifically measure the success of the incentives. For quality job creation, for example, lawmakers were interested not only in the number of jobs but also their wages, whether they were in industries the state was targeting, and whether the businesses were hiring North Carolina residents.

Before estimating the impact of any of the evaluated incentives, Tennessee's 2016 [evaluation](#) consistently and thoroughly provided information about the goals, history, and design of the incentives evaluated. The report also provided useful details about the typical usage and cost of each incentive over multiple years and features of the program's design. Understanding how, when, and where an incentive is used is central to getting an idea of its impact on the state.

Data

Reviews of tax incentives are often limited by inadequate access to detailed information on the use and users of incentives. A proactive assessment of the quality and quantity of data available to policymakers in Montana will help them get a head start on their analysis. Pew has developed three recommendations for states as they develop their evaluation practices: ensure access to existing data, collect new information, use this data to conduct high-quality analysis. To read more about these recommendations, see our issue brief [How States Can Gather Better Data for Evaluating Tax Incentives](#).

Tax incentive administration

Evaluators frequently synthesize interviews with stakeholders and study the details of how incentives are administered to help determine whether they can work more efficiently.

For example, an [evaluation](#) of New Jersey's Urban Enterprise Zone program calculated that administering the incentive involved 135 state and local employees, costing the state \$6.3 million a year (see pages 23–24). These administrative costs were much higher than similar programs in other states, which is one reason the report recommended replacing the incentive with a new program.

In 2018, Florida's Office of Program Policy Analysis and Government Accountability (OPPAGA) [reported](#) on four substantive administrative improvements to the state's sports and entertainment incentives. The improvements were the result OPPAGA's recommendations in an [evaluation](#) published three years earlier. The changes included improvements to expense documentation, audit functions, application backdating, and cost-benefit analysis and reporting.