ADVANCING EVIDENCE-BASED REGULATION IN COLORADO

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Colorado House Business Affairs and Labor Committee
Sunset Review Hearing for the Requirements and Procedures Regarding the Preparation of a Cost-Benefit Analysis of Proposed Rules

February 1, 2018

Chair, vice-chair, and members of the committee:

Thank you for granting me the opportunity to submit this testimony on Colorado's benefit-cost analysis (BCA) requirements for regulations. My name is James Broughel, and I am a research fellow at the Mercatus Center at George Mason University, where I study state regulatory issues as part of the State and Local Policy Project.

My message here today can be summarized in three points:

1. Colorado has demonstrated a commitment to evidence-based policy generally and to benefit-cost analysis (BCA) for regulations specifically. The state should be commended for its leadership in this area.
2. Institutional hurdles, however, make BCA less useful than it should be. These hurdles appear to be a structural feature of the administrative procedures in Colorado.
3. Fortunately, a few very simple and uncontroversial reforms that the General Assembly can make to Colorado's rulemaking procedures would make BCA more central to the process and help to ensure that state regulations are based on sound evidence.

BACKGROUND

We are here today because of Colorado's sunset review process for expiring boards and programs. Specifically, the requirement that state regulations receive the scrutiny of a BCA in certain circumstances is set to expire later this year. BCA is a decision-making tool that helps policymakers organize the best available information about different ways to solve a problem. When BCA is useful, it helps ensure that the regulators we rely on to protect the health, safety, and well-being of state

1 Throughout my comments, I will refer to this type of analysis as “benefit-cost analysis” or “BCA,” though “cost-benefit analysis” or “CBA” is the more common parlance in Colorado. The terminology is simply a matter of preference, and there is no difference between the two sets of terms.

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The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University.
residents can make decisions in an informed way, based on the most up-to-date and credible evidence. At the federal level, BCA has been a fixture of the regulatory process for going on 40 years.\(^2\)

**COLORADO BCA CAPABILITIES ARE ADVANCED RELATIVE TO OTHER STATES**

Colorado is actually ahead of most states when it comes to its commitment to evidence-based policy. Last year, the Pew-MacArthur Results First Initiative released a study that found that Colorado is “established” in its use of evidence-based policy, meaning the state has pursued more evidence-based actions than most other states.\(^3\) The focus of the Pew study was broader than just regulation, but Colorado has also demonstrated impressive capabilities when it comes to analysis of state regulations.

While most of the BCAs that Colorado agencies write appear to be very short, consisting of several pages of standardized forms, examples of more technical analysis exist. Some are of comparable quality and sophistication to the analyses produced by the federal government.

In some circumstances, these analyses appear to have been commissioned by the government from outside consulting firms, so it is unclear the degree to which the technical capability to produce BCA exists within the career civil service staff working at Colorado regulatory agencies. Nonetheless, it is notable that the state of Colorado is willing to devote the resources and time needed to commission such documents. One such example is a 2010 analysis from the Department of Natural Resources’ Colorado Water Conservation Board (CWCB).\(^4\) The analysis studied the potential consequences of changes being made to rules governing floodplains in Colorado. The report was quite sophisticated in that it included monetized estimates of both benefits and costs, and it discounted benefits and costs to present value to account for the fact that impacts accrue across different time spans. The analysis also referred to technical concepts such as the value of a statistical life, which is used to apply dollar values to the health benefits of regulations.

At the federal level, these components of BCA are common, but in my experience, they tend to be quite rare as part of analysis of regulations at the state level. While most of the analyses produced by regulatory agencies in Colorado are not nearly as sophisticated as the 2010 CWCB analysis, other examples of best practices are not too hard to find. For example, the “regulatory analysis” document—a separate but similar analysis often required in Colorado—can also be quite sophisticated. One notable example is a 2014 regulatory analysis from the Colorado Department of Public Health and Environment's Air Pollution Control Division.\(^5\) The document reported the anticipated impacts of changes to a Colorado air quality regulation. It included an evaluation of the baseline scenario—which represents the state of the world as it would evolve in absence of a new regulatory change—and included cost-effectiveness estimates for various regulatory alternatives.

In addition to these analyses, other BCAs have been commissioned by the Colorado government over the years, sometimes unrelated to specific regulations. A 2007 study requested by the Governor’s Energy Office and produced by an outside consulting firm analyzed the costs and benefits of LEED energy efficiency certification for buildings.\(^6\) The analysis was informed by original surveys of individuals with experience of going through the LEED certification process.

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\(^2\) Executive Order 12291, signed by President Reagan in 1981, formalized the role of BCA in federal rulemaking. See Exec. Order No. 12291, 46 Fed. Reg. 13193 (February 19, 1981). However, BCA has a long history in the federal government that dates back decades earlier.


\(^5\) See Colorado Department of Public Health and Environment, Air Pollution Control Division, Regulatory Analysis for Proposed Revisions to Colorado Air Quality Control Commission Regulation Number 3, Part F, Section VI, November 13, 2014.

These examples demonstrate that Colorado currently devotes significant resources to analysis, even if not all analytic expertise is held by career civil servants. The threat of litigation may have played a role in some cases where analysis was of higher-than-average quality, which highlights how oversight from third parties—in this case the courts—can give agencies incentives to produce more careful and detailed analysis.

**SHORTCOMINGS OF THE COLORADO REGULATORY PROCESS**

While Colorado can be proud that fairly sophisticated analyses get produced for some regulations, this is not the normal state of affairs for a typical rule. In fact, there are some serious shortcomings with respect to the process by which this analysis is carried out, which leads to questions about the overall quality of BCA in Colorado and concerns that the analysis is not being used to inform policy decisions.

These problems can be summarized as follows:

First, only a small number of rules ever receive the scrutiny of a BCA. For fiscal years 2013 through 2016, the Department of Regulatory Agencies (DORA) reviewed 1,383 rule submissions from Colorado state agencies. During the same time period, however, BCAs were required and submitted by agencies for just 10 rules. This suggests that fewer than 1 percent of rule reviews have accompanying BCAs.

Second, the rules that receive a BCA may not be the most important. A BCA is triggered when a request is made by a member of the public. DORA then makes a determination as to whether a BCA should be required. Some important rules will therefore be overlooked if, for example, industry supports a regulation, but the rule is otherwise contrary to the public interest and the general public is not attuned to state rulemaking activity.

Third, Colorado has multiple analytic requirements for regulations that are very similar and somewhat redundant. One is a requirement for a BCA, and the other is the requirement for a “regulatory analysis.” Air quality regulations in Colorado sometimes require an additional “economic impact analysis.” The duplicative nature of these requirements likely leads to unnecessary work for regulators and expense to taxpayers.

Fourth, BCA in Colorado may come too late to meaningfully inform how regulations are designed. The analysis requirement is triggered after a regulation has already been formally proposed by an agency. Crafting analysis after the decision to regulate has been made puts the cart before the horse. This is known as the “ready, fire, aim” problem with regulations. This backwards process threatens the objectivity of analysis because it increases the likelihood that a BCA will be written to justify a predetermined policy decision rather than to inform that decision.

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7 One can look up typical examples of Colorado BCAs by visiting the Colorado Secretary of State’s website and running a search for the term “cost-benefit.” Most documents that show up in the search are formulaic, running just a few pages, and lack substance in terms of data or analytic rigor. See Colorado Secretary of State, Wayne W. Williams, “Website Search,” accessed January 27, 2018, http://www.sos.state.co.us/pubs/search/main.html.  
9 Some analyses are conducted voluntarily by agencies. For example, the 2010 CWCB analysis cited above was initiated by the agencies’ staff voluntarily, perhaps because of concerns about litigation. See Colorado Department of Natural Resources, Colorado Water Conservation Board, 2010 Proposed Rules and Regulations for Regulatory Floodplains in Colorado: Cost, Benefit and Regulatory Analysis, October 14, 2010, 5.  
10 This requirement may partly explain why environmental regulations seem to have more sophisticated analysis. See Colorado Revised Statutes § 25-7-110.5 (2017).  
11 Jerry Ellig, “Ready, Fire, Aim!: A Foundational Problem with Regulations,” Economic Perspectives, Mercatus Center at George Mason University, November 6, 2015.
Fifth, it appears that agencies typically have only a few days to produce a BCA—the time between when a regulation is published in the *Colorado Register* and when a public hearing is held. At the federal level, a rigorous analysis can take months to produce. It is therefore likely that analysis is rushed in Colorado, which leads to questions about its quality.

**SIMPLE ADMINISTRATIVE REFORMS WILL IMPROVE COLORADO REGULATORY ANALYSIS**

Fortunately, these problems are not insurmountable, as there are a few simple changes that (1) can help improve the quality and objectivity of analysis, and (2) can help ensure analysis is actually used to inform regulatory decisions:

*The legislature should clearly define the factors that trigger an analysis.* Too few rules receive the scrutiny of a BCA, and the rules that do may not be the most important rules. The simplest form of trigger would be to set an economic threshold (e.g., $1 million in financial costs) that triggers when an analysis is required. The most logical time to make this determination is when agencies submit their annual regulatory agendas.\(^\text{12}\)

*The BCA and regulatory analysis requirements should be combined.* There should be a single requirement for one comprehensive form of analysis that includes the following: a description of the problem the agency is trying to solve; multiple potential regulatory or nonregulatory solutions to that problem; the costs and benefits of those alternative solutions; a distributional analysis explaining how different subpopulations are impacted; and a commitment to tracking the future progress of the rule. Combining analytic requirements would simplify Colorado rulemaking and save state taxpayers money.

*Tie analysis to a preproposal notice.* Agencies should be required to publish an advance notice of proposed rulemaking (ANPRM) whenever a BCA is triggered. In the ANPRM, the regulating agency would present the regulatory options it is considering, along with an accompanying analysis of those options, and would then seek public feedback to this information. Critically, the agency would not move forward with a formal proposal until after it received public input. Such a process gives the analytic body more time to produce a detailed analysis, ensures analysis is made early on in the process so analysis can assist in the design of regulations, and increases the likelihood that analysis will be objective, since analysis predates any formal proposal.

*Third-party oversight or production of analysis is needed to ensure that it is high quality and objective.* Although DORA already reviews agency BCAs and can urge changes to rules based on analysis, part of DORA’s statutory mission should be to ensure that the analysis is of sufficient quality. This role would be akin to the role that the Office of Information and Regulatory Affairs (OIRA) plays in federal rulemaking. For decades, presidents of both parties have recognized the importance of OIRA’s review of regulations and their accompanying analysis.\(^\text{13}\) Legislators may also want to consider appropriating funds to hire additional personnel—such as economists—capable of producing or reviewing BCAs. Other methods of improving the quality and objectivity of analysis include housing analysis production in an independent regulatory analysis agency or granting an oversight role for the courts.\(^\text{14}\)

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\(^\text{12}\) For example, the regulating agency could make an initial determination as to whether a BCA is triggered, which could then be certified by a reliable third party, such as DORA.

\(^\text{13}\) Executive Order 12866, which governs the OIRA regulatory review process, was signed by President Clinton, but remains in effect to this day, having been embraced and expanded upon by subsequent presidents. See Exec. Order No. 12866, 59 Fed. Reg. 51735 (October 4, 1993).

\(^\text{14}\) Regulators often have policy agendas they are advancing, as do the political personnel who lead agencies. These agendas can jeopardize the objectivity of analysis, so separating the role of analyst from the role of regulator helps resolve these problems. Similarly, judicial review of BCA creates incentives for more objective analysis.
CONCLUSION
Colorado has a lot to be proud of with respect to its commitment to evidence-based policy and evidence-based regulations. But there are institutional hurdles that stand in the way of BCA being as influential as it should be. Fortunately, the Colorado General Assembly has the power to change these institutions through its ability to modify administrative procedures in the state. A few simple tweaks to the process should lead to better analysis, better-designed rules, and ultimately better outcomes for state residents.

Thank you again for the opportunity to submit this testimony.

Sincerely,

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ATTACHMENTS (3)
“A Snapshot of Colorado Regulation in 2017” (Mercatus Policy Brief)
COLORADO IS A STATE WITH AN EXTENSIVE sunset review process. Sunset provisions are expiration dates attached to specific provisions of law. In Colorado, the sunset review process, first established in 1976, attaches expiration dates to various regulatory programs and boards and requires a review of the effectiveness of expiring entities so that the legislature can make informed decisions as to whether those entities should be reauthorized. The Department of Regulatory Agencies (DORA) is an executive branch agency in the state that plays a critical role in this process, reviewing sunsetting programs and writing reports that include recommendations to the legislature as to whether the sunsetting program or board should be continued.

One example of a provision in Colorado law that is about to expire is the benefit-cost analysis (BCA) requirement for regulations, set to expire on September 1, 2018. BCA is an analytic tool that regulators use to lay out the various policy options that are available to them. As part of this process, regulators organize the best available information—scientific, economic, and legal—about different ways to solve a problem, and then quantify the pros and cons of each possible solution. This decision-making process helps regulators identify the solution with the best results for society.

This short policy paper reviews the Colorado benefit-cost analysis requirements and makes recommendations as to how to improve the system going forward. A key takeaway is that, while Colorado is ahead of many states when it comes to its use of technical analysis to shape regulations, problems remain. Certain institutional features of the current system make it unlikely that analysis is being used effectively. Given the resources already being invested in
this area, the state can do more to improve the well-being of state residents through evidence-based policy.

BACKGROUND ON COLORADO REGULATORY PROCEDURES AND ANALYSIS REQUIREMENTS

Like most states, Colorado has an Administrative Procedure Act (APA) that outlines the process by which state regulatory agencies promulgate—or write and put into effect—rules. That process is fairly straightforward. When an agency first proposes a regulation, it must file the proposal with the Secretary of State’s office. The relevant agency also has to submit the proposed regulation, along with a plain-language explanation of the regulation, to DORA for review. Shortly thereafter, the proposed regulation is published in the Colorado Register, a publication of state government activities, and comments are solicited from the public. A public hearing is scheduled as well.

Up to five days after the publication of the proposed rule in the Colorado Register, any person can request that DORA require the agency to produce a BCA. The executive director of DORA, or a designee, makes a final determination as to whether the regulating agency has to produce the BCA. If required, the agency must complete the BCA at least 10 days before the hearing and make it public. In theory, the agency can delay the hearing indefinitely in order to have adequate time to produce a quality BCA, but in practice it appears that delays rarely happen.

A BCA, according to Colorado statute, must include the following elements:

- The reason for the rule or amendment
- Anticipated costs and economic benefits of the rule (including costs to the government and benefits to economic growth, among other factors)
- A description of any adverse effects on the economy, consumers, private markets, small businesses, competitiveness, or job creation
- At least two alternatives to the proposed rule, including costs and benefits of those alternatives

Once the analysis is completed, DORA reviews it and can urge the agency to revise the rule based on the findings presented. Economic factors, especially small business impacts, are a central focus of Colorado BCAs. The initial statutory requirement for BCA, put in place in 2003, was partly inspired by a concern over the impact of state regulation on small businesses. The emphasis on growth, job creation, and competition suggests that economic growth and efficiency are also of general concern.

Since 1988, any member of the public also has the opportunity to request a document known as a “regulatory analysis.” This document must be requested at least 15 days before the public hearing for a new regulation, and the analysis must be completed and made public by the agency at least 5 days before the hearing. This provision, unlike the BCA provision, does not have a sunset clause. The regulatory analysis document, by statute, must include items such as the following:

- A description of who will be affected by the proposed rule, including who will bear the costs and reap the benefits
- A quantitative or qualitative description of the impacts on affected classes of persons
- The costs to the agency in implementing and enforcing the rule, plus any impacts on state revenues
- A description of alternative methods that were considered by the agency, including less costly alternatives, and a description of why they were rejected

DRAWBACKS OF THE CURRENT SYSTEM

Colorado should generally be commended for its commitment to evidence-based policy. A 2017 report from the Pew-MacArthur Foundation noted that
Colorado should generally be commended for its commitment to evidence-based policy. . . . However, some limited use of data does not ensure sound public policy.

Colorado is one of 11 states “established” in its use of evidence-based policy making, meaning the state pursues more evidence-based actions than most other states (but either not as frequently or not in as advanced a manner as in some “leading” states).\(^{17}\) Pew puts particular emphasis on Colorado’s use of data to inform policy.\(^{18}\) However, some limited use of data does not ensure sound public policy, and the current Colorado regulatory system (which creates a narrower subset of law than Pew’s evaluation of state policy more generally) is less than ideal in some important respects.

First, only a tiny fraction of Colorado regulations ever receives the scrutiny of a BCA. For fiscal years 2013 through 2016, just 35 BCA requests were made for 24 regulations (some regulations received multiple requests).\(^{19}\) In response, DORA required an analysis for only 10 rules. By comparison, during this same period, 1,383 rule submissions were reviewed by DORA, suggesting that less than 1 percent of rule reviews have corresponding BCAs associated with them. Figure 1 illustrates this trend.

Even those rules that receive a request may not be the most important, as requests will tend to come from groups that have a particular stake in the outcome of a regulation. A 2010 study from New York University’s Institute for Policy Integrity found that “Colorado’s analytical requirements are at best inconsistently applied, and at worst may be simultaneously too broad and too narrow, imposing analytical burdens on some minor rules while not covering all major rules.”\(^ {20}\)

It is also unclear whether analysis, when produced, even gets used. A 2012 DORA report—published before Colorado BCA requirements were set to sunset the last time around—included information from a survey of state regulators. That survey revealed that a majority of responding agencies said that “rarely, if ever, is a rule changed as a result of information contained in the [BCA].”\(^ {21}\)

A more recent 2017 report from DORA included a similar survey with slightly more optimistic findings. It found that “29 percent of respondents stated that their agency has revised its rules based on a completed [BCA].” An even larger percentage of respondents, 45 percent, noted having made changes to rules in response to a regulatory analysis.\(^ {22}\)

These findings may not be inconsistent if analysis does result in some significant changes, even if only infrequently. A core reason why the analysis does not influence decision-making more—aside from
the fact that very few rules even receive a BCA—is likely because analysis comes too late to inform decisions. It makes little sense for a BCA to be produced after a regulation is proposed because the purpose of analysis is to inform regulatory decisions. Proposing a regulation and then crafting an analysis is putting the cart before the horse. DORA even acknowledges this issue, stating that “the [BCA] may come too late in the process to inform decision-making.”

It is also troubling that regulatory agencies in Colorado typically have only a short time to complete a BCA or a regulatory analysis. Analysis appears to be produced in a matter of days, between the time when a regulation is proposed and when a public hearing takes place. The survey in DORA’s 2017 report revealed that 22.9 percent of respondents said BCAs are completed in 20 hours or less. Furthermore, the public in Colorado has only 10 days to review the BCA (and 5 days for the regulatory analysis) before a public hearing, which is not very much time. At the federal level, a thorough analysis will take months or sometimes even a year to produce, depending on the complexity of the issue. The public usually gets 30 to 60 days to review an analysis as part of the notice and comment process. In short, the process in Colorado appears to be rushed.

A further issue with the analytic requirements in Colorado is the blurred distinction between a BCA and a regulatory analysis. The BCA and the regulatory analysis documents in Colorado share some requirements—for example, both must include alternative forms of regulation considered, and both must consider impacts on the government’s budget. In the context of federal regulation, BCA is typically thought of as a component of regulatory impact analysis rather than as a standalone type of analysis. The Colorado regulatory analysis, with its emphasis on who benefits and who bears the cost, sounds more like a distributional analysis, which is also typically considered to be a component of a regulatory impact analysis.

A final problem is the objectivity of analysis produced in Colorado, or rather, the possible lack thereof. The 2017 DORA report notes that “there are legitimate concerns with the [BCA] process as it stands now. . . . The same personnel who drafted the proposed rule, rather than a disinterested third party, conduct the [BCA].” Because regulatory agencies have a stake in the outcome of a regulation, and because they wish to show that their choice of regulatory options is optimal, they are unlikely to be fair evaluators of their own rules. Establishing a more independent and objective system of rule evaluation is almost certainly desirable.

**RECOMMENDATIONS**

Given the problems identified above, I recommend several ways to streamline the Colorado administrative process, improve the allocation of resources being invested in Colorado regulation, and enhance the usefulness and objectivity of regulatory impact analysis in the state.

1. **The two types of regulatory analysis in Colorado should be combined.**

It makes little sense to have both a regulatory analysis requirement and a BCA requirement for regulations. The two kinds of analysis ask for similar information from agencies. Traditionally, a BCA is a part of a regulatory impact analysis, and what is currently called regulatory analysis in Colorado could instead be viewed as a distributional analysis, which is also traditionally a component of a regulatory impact analysis. Agencies in Colorado should be required to produce a comprehensive “regulatory impact analysis” that includes an analysis of the problem being addressed through regulation, consideration of various policy and nonpolicy alternatives, a BCA for those alternatives, and a distributional analysis.

2. **Regulatory impact analysis should happen earlier in the process, giving analysts more time to prepare it and the public more time to review it.**

The purpose of an analysis is to organize pertinent information so that decision makers can make informed policy decisions and stakeholders can be
informed about the likely consequences of those decisions. If analysis comes after a decision to regulate has already been made, then it comes too late to be useful and the resources invested in analysis are wasted. Regulators in Colorado could be required in some cases to issue “advanced notices of proposed rulemaking” (ANPRMs) that would occur before the issuance of a proposed rule. Alongside an ANPRM, the regulating agency could be tasked with producing an analysis. The agency would then seek comments from the public on the ANPRM and the corresponding analysis. Only after the agency has considered these comments would it formally propose a regulation. The benefit of this approach is that it puts decision-making in the right order. Rather than ready, fire, aim—which describes the current system in Colorado—the process would be ready, aim, fire. This approach would also give the regulating agency more time to craft an analysis before a rule is proposed and more time for the public to review and comment on the analysis.

3. The General Assembly should define the factors that trigger when an analysis is produced, even when no public request for one has been made.

In DORA’s 2012 review of the Colorado benefit-cost analysis requirement, the department argued that when rules are deemed to have a significant impact, the BCA requirement should be triggered. DORA argued that “significant” should be defined by the General Assembly in statute. The legislature, however, appears not to have followed this recommendation.

At the federal level, the definition of a significant regulation is outlined in section 3(f) of Executive Order 12866, which was signed by President Bill Clinton in 1993. In that order, significance broadly means that a regulation

- is expected to have a certain economic impact,
- will materially impact the government’s budget,
- raises novel legal issues, or
- requires coordination across multiple agencies.

The simplest form of trigger would be to set an economic threshold (e.g., $1 million in financial costs). If a regulation is expected to have an impact over the threshold in a year, then a BCA would be required. Some public entity will have to make a determination as to whether a regulation hits this threshold. The agency writing the regulation could first produce a rough estimate of the impact, and an oversight body like DORA could provide the final determination as to whether the impact estimate is credible. This process should happen early in the process. For example, under state law, regulatory departments are required to submit a regulatory agenda to the legislature each year and to post the agenda on their website. Included in these agendas could be the agency’s initial determination of whether rules in process are significant. DORA could then certify these determinations.

4. Colorado should either create an independent regulatory analysis agency to conduct analysis, or the state should enhance third-party review of regulatory analysis.

As DORA itself has pointed out, analysis conducted by agencies in Colorado may not be objective. There is considerable evidence at the federal level, based on interviews with agency economists, that analysts are often asked to produce analysis to justify regulations rather than to inform how regulations are designed. This problem may also be relevant to Colorado analysis.

One way to address this issue is to separate analytic responsibilities from regulator responsibilities. This could be done by removing analysts at regulatory agencies and placing them in a separate analysis agency. Such a body could be modeled after the Planning, Evaluation, and Regulatory Division of the Virginia Department of Planning and Budget, an executive branch office which produces economic and regulatory analysis. This role could also be housed in a legislative agency like the Congressional Budget Office at the federal level. Another possible model is the Washington Institute for Public Policy,
a quasi-governmental body that conducts analysis at
the request of the Washington State legislature (or at
the request of its board of directors, which includes
members from academia and the public sector). An alternative to having independently con-
ducted analysis is to strengthen third-party over-
sight of agency analysis. A model for such a system is
the review that takes place at the federal level by the
Office of Information and Regulatory Affairs (OIRA).
OIRA analysts review new agency regulations and
their corresponding analyses, recommending alternative
solutions that an agency may have failed to con-
sider and identifying ways in which analysis could be
strengthened to improve the design and effectiveness
of regulations. While DORA currently reviews new
regulations and can urge changes to rules in some
cases, it has been criticized on the ground that its
“review lacks teeth and mostly focuses on minimizing
small business impacts.”

Colorado's legislature could do two things to
strengthen third-party oversight: (1) make ensuring
the quality of economic analysis part of DORA's stat-
utory mission, and (2) ensure that analysis is used to
inform rulemaking. DORA should be able to return
rules to the promulgating agency if the accompanying
analysis is deemed poor or does not appear to have
influenced the decision of how and whether to regu-
late. Proceeding with incomplete analysis could also
be grounds for courts to strike down regulations.

CONCLUSION

BCA in Colorado is in need of reform. Analysis is con-
ducted for only a tiny fraction of rules, the rules for
which it is conducted may not be those that are the
most important, and the analysis generally comes too
late to be useful anyway. Furthermore, analysis may
not be objective, and the current third-party review
process for rules and accompanying analysis is prob-
ably too weak to be effective.

As the General Assembly in Colorado considers
whether to renew the sunsetting BCA requirement,
it should also consider whether other changes to the
administrative procedures in Colorado are neces-
sary. DORA itself notes that “meaningful solutions
might require a comprehensive overhaul of the
[Administrative Procedure Act].” This report has
offered several ways to improve the administrative
procedures in Colorado to ensure that better analy-
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NOTES


2. The sunset review process and DORA’s role in it are spelled out in the Colorado Revised Statutes § 24-34-104.

3. This kind of analysis is referred to as “cost-benefit analysis” or “CBA” throughout the Colorado government. The terminology used in this report is “benefit-cost analysis” or “BCA,” which is the more common parlance used by practitioners of the analysis. See, for example, the Journal of Benefit-Cost Analysis.


8. The agency is only required to promulgate a rule within 180 days of the last hearing.

9. Personal communication with an employee at DORA revealed that only one or two hearings had been delayed in the previous 18 months owing to a BCA request. In one of these cases, the rule was with-
drawn after receiving the request.


13. Colorado Department of Regulatory Agencies, 8.
15. Nor is there any mention in the Colorado Revised Statutes of delay-
ing hearings to produce an analysis, implying that regulatory analysis
is generally produced in a 10-day timeframe. A further difference
between the regulatory analysis requirement and the BCA require-
ment is that DORA plays no role in determining whether a regulatory
analysis gets produced. A request from the public is sufficient to
trigger the analysis.

17. Pew Charitable Trusts, “How States Engage in Evidence-Based
Policymaking: A National Assessment” (Pew-MacArthur Results First
18. Sarah Dube and Kristen Pendergrass, “In Colorado, the Use of Data Is
Changing the Way Government Operates” (Pew-MacArthur Results
First Initiative, Philadelphia, PA, May 9, 2017).
20. Jason A. Schwartz, 52 Experiments with Regulatory Review: The
Political and Economic Inputs into State Rulemaking (New York: Institute for Policy Integrity at NYU School of Law, 2010), 181.
21. Colorado Department of Regulatory Agencies, Office of Policy,
Research, and Regulatory Reform, 2012 Sunset Review: Requirements
and Procedures Regarding the Preparation of a Cost-Benefit Analysis of
24. Of the respondents, 65.7 percent were “not sure” how long it takes,
and 11.4 percent said it takes “more than 20 hours.” So there is con-
siderable uncertainty surrounding the length of time it takes to pro-
duce an analysis. Nonetheless, it is telling that the question involved
hours, not weeks or months. See Colorado Department of Regulatory
25. John Morrall and James Broughel, The Role of Regulatory Impact
Analysis in Federal Rulemaking (Arlington, VA: Mercatus Center at George Mason University, 2014).
Distribution in Regulatory Impact Analysis” (Mercatus on Policy,
Mercatus Center at George Mason University, Arlington, VA, May
2015).
28. Jerry Ellig, “‘Ready, Fire, Aim!’: A Foundational Problem with
Regulations,” Economic Perspectives, Mercatus Center at George
Mason University, November 6, 2015.
31. At the federal level, this impact level is $100 million in a single year, but
a lower threshold probably makes sense for state rules.
32. Department regulatory agendas are required pursuant to Colo. Rev.
Stat. § 2-7-203(4).
33. See Stuart Shapiro, Analysis and Public Policy Successes, Failures
and Directions for Reform (Northampton, MA: Edward Elgar, 2016);
Richard Williams, “The Influence of Regulatory Economists in Federal
Health and Safety Agencies” (Mercatus Working Paper, Mercatus Center
at George Mason University, Arlington, VA, July 2008).
34. Virginia Department of Planning and Budget, “Economic and
Regulatory Review,” Virginia.gov, accessed December 19, 2017,
35. Washington State Institute for Public Policy, “About WSIPP;” accessed
37. Schwartz, 52 Experiments, 181.
Analysis: Why Not the Best?” (Mercatus Working Paper, Mercatus
Center at George Mason University, Arlington, VA, March 2017).
About the Author

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GUEST COLUMN: Time is right for changes in Colorado regulation

By: James Broughel • October 6, 2017 • Updated: October 6, 2017 at 4:10 am

Sometimes the most important government actions are highly technical, and therefore easy to miss. For example, this month a small, little-known state entity called the Office of Policy, Research and Regulatory Reform will finalize a report on Colorado's benefit-cost analysis (or "BCA") requirements for state regulations.

It sounds like an obscure topic. But Coloradans may want to pay attention to this one.

The report will help the state legislature and governor decide whether Colorado’s BCA requirements should continue, because they are set to expire (or "sunset") in late 2018. The report should also help legislators consider changes to the process.

In an upcoming Mercatus Center at George Mason University study, I calculate that the Code of Colorado Regulations contains more than 11.5 million words and 151,000 restrictions (measured by words like "shall" and "must"). It would take 16 weeks to read all of it, assuming 40 hours per week of reading.

With more rules added each year, it's critical that they be backed by solid evidence. Regulations, while necessary, can impose costs on the public that increase prices for consumers, affect business investment, and slow economic growth. Some of these costs fall disproportionately on the poor.

Regulations also produce benefits like safer workplaces and a cleaner environment. But unless rules are crafted carefully using the best available evidence, they may not actually achieve those goals.

That's where BCA comes in. First, analysts lay out the various policy options that are available; then they quantify the pros and cons of each option. As part of this process, regulators organize the best available information-scientific, economic, and legal - about different ways to solve a problem, helping them identify the solution with the best results for society.

Without careful analysis, it is unlikely that regulators will solve the real-life problems people are experiencing without imposing unreasonable burdens. Plus, without rigorous analysis, regulators have no particular advantage in crafting policy over legislators who are accountable to voters.

Colorado, it turns out, is one of the more advanced states in its use of data. According to a Pew-MacArthur study published earlier this year, it is one of 11 states established in evidence-based policymaking.

But other states have set a pretty low bar, and being somewhat data-savvy is not enough. A 2010 report from New York University's Institute for Policy Integrity found that "Colorado's process is not well matched to its resources.agencies have the analytic capacity to be doing more analysis more consistently." Little has changed since. Luckily, there are some easy ways to improve Colorado BCA without a whole lot of additional costs to taxpayers.

First, merge the two remarkably similar types of analysis that Colorado regulatory agencies are tasked with producing. One is called a "regulatory analysis" and the other is a BCA. Since agencies report similar information in both, why not combine these reports into a single document?

Second, make sure BCA analyses don’t come too late to be useful. Colorado regulators are usually asked to write a BCA after a proposed regulation has already been written. This makes little sense - why not produce it early enough to actually help shape the regulation?
Finally, require BCAs for important rules even when no public request has been made. Public input is very important, but shouldn’t be the only driving force. There is no guarantee someone will make a request for all of the most consequential rules, while other more frivolous regulations may get an analysis. There should be a requirement that certain economic or legal factors trigger an analysis.

Given Colorado’s analytic capabilities and the resources it already invests in them, hard evidence should play a more central role in rule making. Colorado lawmakers can be proud of their state’s record on data-driven policy, but should make use of their opportunity over the coming year to set a higher bar that could serve as a model for other states.

- James Broughel is a research fellow with the Mercatus Center at George Mason University and author of the upcoming study "A Snapshot of Colorado Regulation in 2017."
A Snapshot of Colorado Regulation in 2017
151,860 Restrictions, 11.5 Million Words, and 16 Weeks to Read

by James Broughel and Daniel Francis
October 2017

It would take an ordinary person more than two and a half years to read the entire US Code of Federal Regulations (CFR), which currently contains more than 103 million words.¹ The sheer size of the CFR poses a problem not just for the individuals and businesses that want to stay in compliance with the law, but also for anyone interested in understanding the consequences of this massive system of rules. States also have sizable regulatory codes, which add an additional layer to the enormous body of federal regulation. A prime example is the online version of the 2017 Code of Colorado Regulations (CCR).²

A tool known as State RegData³—a platform for analyzing and quantifying state regulatory text—was developed by researchers at the Mercatus Center at George Mason University. State RegData captures information in minutes that would take an ordinary person hours, weeks, or even years to obtain. For example, the tool allows researchers to identify the industries that state regulation targets most by connecting text relevant to those industries with restrictive word counts. Known as regulatory restrictions, the words and phrases shall, must, may not, prohibited, and required can signify legal constraints and obligations.⁴ As shown in figure 1, the three industries with the highest estimates of industry-relevant restrictions in the 2017 CCR are ambulatory healthcare services, chemical manufacturing, and utilities.

State RegData also reveals that the CCR contains 151,860 regulatory restrictions and roughly 11.5 million words. It would take an individual 640 hours—or about 16 weeks—to read the entire CCR. That’s assuming the reader spends 40 hours per week reading and reads at a rate

³ State RegData is part of a broader project called QuantGov, which seeks to quantify legal text. See Patrick A. McLaughlin and Oliver Sherouse, “QuantGov—A Policy Analytics Platform,” QuantGov, October 31, 2016.
⁴ Restrictions can also occur in legal text for other purposes, such as for definitional purposes. At times, restrictions may relate to government employees rather than the private sector.
of 300 words per minute. For comparison, in 2017 there are slightly more than one million additional restrictions in the federal code. Individuals and businesses in Colorado must navigate these different layers of restrictions to remain in compliance.

Figure 1. The Top 10 Industries Targeted by Colorado State Regulation in 2017

<table>
<thead>
<tr>
<th>Industry-Relevant Restrictions</th>
<th>Number of Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory Healthcare Services</td>
<td>12,210</td>
</tr>
<tr>
<td>Chemical Manufacturing</td>
<td>8,981</td>
</tr>
<tr>
<td>Utilities</td>
<td>5,488</td>
</tr>
<tr>
<td>Mining (except oil and gas)</td>
<td>5,338</td>
</tr>
<tr>
<td>Nursing and Residential Care Facilities</td>
<td>5,020</td>
</tr>
<tr>
<td>Insurance Carriers and Related Activities</td>
<td>4,082</td>
</tr>
<tr>
<td>Animal Production and Aquaculture</td>
<td>3,337</td>
</tr>
<tr>
<td>Transportation Equipment Manufacturing</td>
<td>3,070</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>2,659</td>
</tr>
<tr>
<td>Waste Management and Remediation Services</td>
<td>2,166</td>
</tr>
</tbody>
</table>


Rules in the CCR are organized by regulatory department, board, or commission. Figure 2 shows that the Department of Public Health and Environment oversees more than 40,000 restrictions. By this measure, this is the biggest regulator in Colorado. Coming in second is the Department of Regulatory Agencies—which includes many of the state’s occupational licensing boards—with more than 27,000 restrictions. These two departments combined are responsible for about 45 percent of all the restrictions in Colorado.

Federal regulation tends to attract the most headlines, but it is important to remember that the more than 103 million words and one million restrictions in the federal code significantly underestimate the true scope of regulation in the United States. States like Colorado write millions of additional words of regulation and hundreds of thousands of additional restrictions. State-level requirements carry the force of law to restrict individuals and businesses just as federal ones do.

Researchers are only beginning to understand the consequences of the massive and growing federal regulatory system on economic growth and well-being in the United States. Meanwhile, the effects of state regulation remain largely unknown. If this snapshot of Colorado regulation in 2017 is a good indicator, then the states are also active regulators, suggesting that the true impact of regulation on society is far greater than that of federal regulation alone.


### Figure 2. The Top 10 Regulators in Colorado in 2017

<table>
<thead>
<tr>
<th>Department</th>
<th>Restriction Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Public Health and Environment</td>
<td>40,638</td>
</tr>
<tr>
<td>Department of Regulatory Agencies</td>
<td>27,317</td>
</tr>
<tr>
<td>Department of Human Services</td>
<td>17,453</td>
</tr>
<tr>
<td>Department of Natural Resources</td>
<td>15,445</td>
</tr>
<tr>
<td>Department of Revenue</td>
<td>13,643</td>
</tr>
<tr>
<td>Department of Health Care Policy and Financing</td>
<td>8,757</td>
</tr>
<tr>
<td>Department of Labor and Employment</td>
<td>6,316</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>5,384</td>
</tr>
<tr>
<td>Department of Education</td>
<td>4,152</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>2,938</td>
</tr>
</tbody>
</table>


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### ABOUT THE AUTHORS

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