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How Existing State Revenues can be Reallocated to Fix Colorado's Roads

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Introduction

Colorado officials say the state needs to raise taxes to fund needed road repairs. The state will spend almost \$22 billion in this fiscal year. The amount needed to fix the roads amounts to around two pennies out of every dollar of state spending.

Officials prefer funding the roads with tax increases because raising taxes produces less legislative and bureaucratic conflict than reducing spending on other programs. A variety of interest groups suffer when spending cuts reduce their jobs and their funding. They often have far more at stake than individual taxpayers. These asymmetric incentives make reducing spending much more difficult than increasing it, and they are one reason why government spending programs tend to grow over time.

The purpose of this paper is to suggest how Colorado state government might fix the roads without increasing taxes by reallocating current state spending away from duplicative, ineffective, or wasteful programs, especially those outside of the core responsibilities of state government. It identifies a few, though certainly not all, possibilities within state government as it existed prior to the 2017 legislative session.

Why would officials call for a tax increase if money from other programs could be reallocated to road projects? The answer is the Washington Monument strategy, a widely used bureaucratic practice that responds to threatened funding cuts by maximizing public pain. It concentrates proposed cuts on the most obviously necessary or popular public programs, and counts on the resulting public furor to pressure legislators to restore funding for all projects, necessary and unnecessary. US Park Service Director George Hartzog provided a famous example of the strategy in 1969. Unhappy with the Nixon

Administration Park Service budget, Mr. Hartzog retaliated by closing all park sites, including the Washington Monument and Grand Canyon, for two days a week. In the face of complaints from people with long planned vacations who were summarily denied access, resistance collapsed and Congress gave the Park Service exactly what it wanted.

In the last decade, Colorado state officials have become adept practitioners of the Washington Monument Strategy. They constantly threaten the public that unless it agrees to a tax increase high profile public programs face disaster. Though overall inflation-adjusted state revenues rose 34.2 percent from 1999 to 2014, officials told voters in 2011 and 2013 that the state public education would fail to educate children without significant tax increases. Colorado voters understood that state officials simply wanted more money and that they were expending little effort to end ineffective state programs or to prune educational spending that was ineffective or outdated. Taxpayers saw through the attempt to cast the children as the Washington Monument, and soundly defeated both measures.

Colorado roads are the new Washington Monument. Without adjusting for inflation, Colorado state spending increased by 96 percent from FY 2003-04 through FY 2015-16. Colorado transportation spending increased 21 percent over the same period, including spending on mass transit programs. In 1999, voters approved up to \$1.7 billion in Transportation Revenue Anticipation Notes (TRANS) for use on a list of 28 prioritized projects, one of which was the T-REX project to widen I-25 through Denver. Most of the borrowing occurred between 2000 and 2004. The final TRANS payment was scheduled to occur

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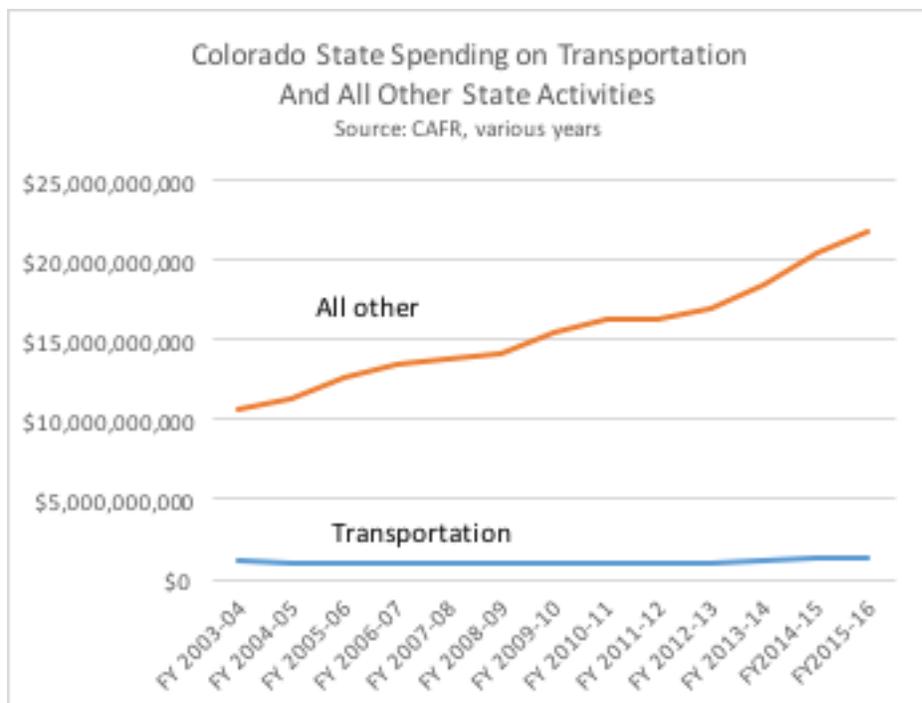
in December, 2016. The amount borrowed plus debt service costs was \$2.3 billion.¹

Like someone who never quite saves enough to pay off his credit card, this year's House Bill 17-1242 proposed that voters be asked to approve another round of borrowing in the form of up to \$3.5 billion in Transportation Revenue Anticipation Notes at a cost of up to \$5.0 billion. Senate Bill 17-267 would allow the state to issue up to \$1.35 billion in certificates of participation at a cost of up to \$100 billion a year for roads, transit, and capital construction.

Whether the new money will increase spending on roads is an open question. Colorado state government has raided the roads budget since the mid-1990s. From 1999 to 2014, the state's inflation-adjusted spending on higher education went up 618.4 percent, its spending on various kinds of social assistance went up by 149.6 percent, and its spending on K-12 education went up by 43.7 percent. Its inflation-adjusted transportation spending went down by 9 percent. Rather than paying for the debt service out

of current revenues, HB 17-1242 proposed raising state sales and use taxes from 2.9 percent to 3.52 percent.² According to the Tax Foundation, Colorado already has the 15th highest average state and local sales taxes. Up to 30 percent of the new sales tax funds would not be used for roads. It will instead be spent on "Multimodal Transportation Options" and a new "Pedestrian and Active Transportation Account."³ SB 17-267 funds payments of certificates of participation out of current revenues for up to the next 20 years without discussing where the extra money will come from. Both it and HB 17-1242 spend considerable sums on bike paths, pedestrian walkways, and slow mass transit systems. Spending on these things does not repair, repave, or expand Colorado's road system.

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A Look at Current State Transportation Spending

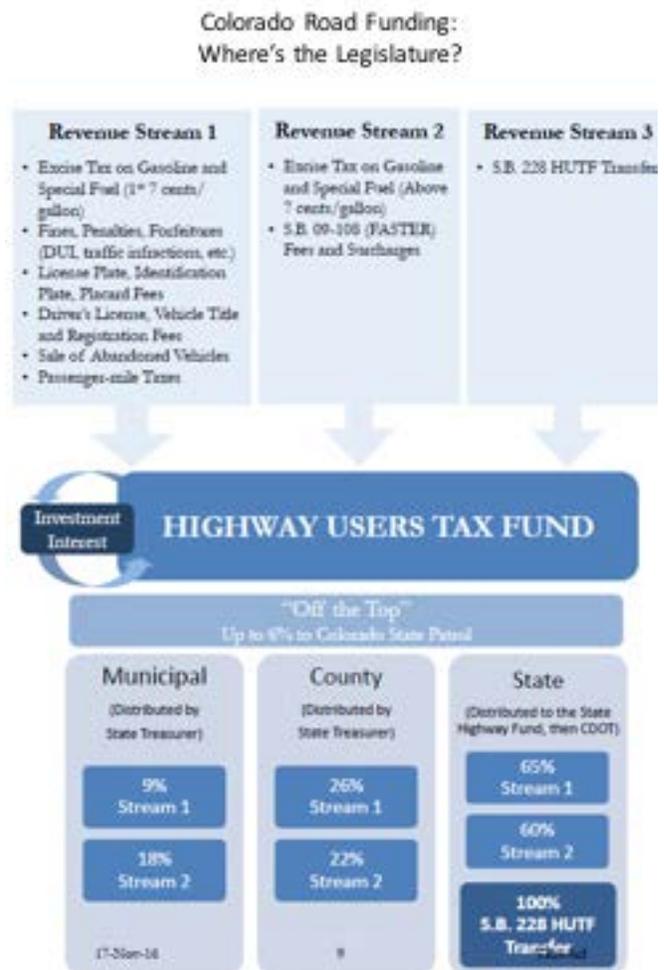
Colorado’s Department of Transportation (CDOT) maintains 23,000 lane miles of road. Federal funds account for about 46 percent of its budget. State funds for CDOT flow through the Highway Users Tax Fund (HUTF). State taxes on gasoline and other fuels are major sources of revenue for the HUTF. The diagram to the right provides a general overview of HUTF revenues and expenditures. Between FY 2009-10 and FY 2015-16, revenues from the state gasoline tax increased by about 12 percent.

additional \$230 million each year for the next 10 years to simply maintain the current condition of existing infrastructure. Some of the hearing responses suggest that there are plans to spend money on other things than roads. As the written responses to hearing questions points out, the “balance of the funding gap is the cost of upgrading, expanding, and *offering additional travel choice* [emphasis added].”⁵

The Colorado Bridge Enterprise has operated as a government owned business within CDOT since 2009. It is responsible for financing the repair, reconstruction, and replacement of bridges. Bridge Enterprise is primarily funded by surcharges on vehicle registration fees. They generate about \$100 million a year and show up as part of the FASTER Fees and Surcharges under Revenue Stream 2 in the diagram on the right.³

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How much will it cost to fix the roads? In 2015, CDOT reported that pavement, bridges and maintenance “comprise roughly half of the Department’s annual budget.”⁴ In FY 2017-18 hearings before the Joint Budget Committee, CDOT estimated that it would need an additional \$1.0 billion a year to provide “proper expansion and maintenance of the transportation system to meet the needs of Colorado’s growing population.” It said it would need an



How Much Extra Spending Do the Roads Need? The 2015 CDOT Transportation Deficit Report

	Deficit, 10-Year Constrained Goal	Deficit, 10-Year Unconstrained Goal
Repair Highways	\$188 million	\$938 million
Manage Bridges	\$41 million	\$105 million
Annual Maintenance	\$221 million	\$900 million
Total	\$450 million	\$1,943 million

CDOT’s 2015 Transportation Deficit Report presented a much less expensive picture when tax hikes were not on the table. It estimated that having 80 percent of state highways being in good enough condition to have at least 4 to 10 years of acceptable driving left would require about \$2.4 billion over the next 10 years even after assuming a decline in CDOT’s annual pavement budget from \$235.9 million in 2016 to \$201.1 million in 2025.

Assuming an average budget of \$221.2 million a year over the decade and an estimated need for \$240 million a year to reach its pavement goal of 80 percent of highways having 4 to 10 years left, CDOT calculated an average annual deficit of \$188 million a year over the next ten years. Its maximum deficit was \$39 million in 2025. It estimated that it would need \$938 million over 10 years to bring 90 percent of roads to the 4 to 10 year standard, and that the average deficit to do that would be slightly less than \$100 million a year.⁶

The CDOT goal for the state’s 3,464 major vehicular bridges is to maintain 90 percent of bridges in a Not Structurally Deficient condition. Colorado’s bridges have been improving in recent years. In 2011, 92 percent of bridges were Not Structurally Deficient. In 2014 the percentage had risen to 94 percent. Under the current budget, there is no bridge deficit.

Based on budget projections assuming the budget for bridges falls from \$164.1 million in 2016 to \$148.4 million in 2025,

CDOT estimates a 10-year deficit of \$41 million. An extra \$4 million a year would be needed to reach the goal of 90 percent, a goal that has already been exceeded. The estimate includes \$50 million a year in payments on “a potential bond to help finance replacing the Interstate 70 viaduct.”

CDOT estimates that putting 95 percent of bridges into Not Structurally Deficient condition would cost an additional \$2.65 billion over the next 10 years, roughly \$265 million a year. Maintaining the current percentage of 94 percent Not Structurally Deficient would cost an estimated \$1.67 billion over 10 years. As CDOT’s budget projections forecast a 10-year budget deficit of \$105 million, this would require an extra appropriation of \$10.5 million annually.⁷

Highway maintenance funding includes whatever is needed to keep a roadway open and safe from its centerline to its right-of-way fencing. Maintenance covers fixing potholes, repairing railings, controlling vegetation, removing trash, maintaining signals, signs, and lighting, painting bridges, repairing expansion joints, patching decks, maintaining rest areas, paying for snow and ice control, and paying for equipment and buildings like rest areas. Assuming the maintenance budget rises from \$254.4 million a year in 2016 to \$324 million a year in 2025, CDOT predicted a 10-year deficit of \$221 million, an amount requiring extra funding of \$22.1 million a year.

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Added together, these amounts suggest that an additional \$45 million a year over 10 years would put Colorado's roads and bridges into good condition within 10 years. An additional \$200 million a year would put them into enviable condition. Even by CDOT estimates, estimates that may be padded to allow room for budget horse-trading, an additional \$300 to \$400 million a year would both bring existing roads up to standard and fund highway expansion. This is less than half of the amount officials said they would require in the FY 2017-18 CDOT budget hearings before the Joint Budget Committee.

In FY 2016-17 the State of Colorado had a budget of \$27.1 billion. Roughly \$19.0 billion of that total was state funds. Just over \$8.1 billion came from the federal government. The \$300 to \$400 million needed to expand roads and put them into excellent shape is about 2 percent of the state funds.

Those who argue that tax increases are needed to improve the roads generally defend their proposition in two ways. Their first defense is that all existing state programs are necessary, each uses every cent of funding efficiently, and every single one of them produces more good

works than they would if the funds were left in private hands. This paper takes a careful look at some of the uses of funds in state government and concludes that the evidence to support this claim is weak.

The second defense claims that statutory and constitutional restrictions on revenue use make it almost impossible for the legislature to change funding by the amount required. This makes little sense as the legislature clearly has the power to change statutes. It also has the power to refer Constitutional Amendments to the voters. A larger problem is that arguing for a tax increase requires less work than addressing the waste created by low value programs buried deep in the state budget or outdated statutes and Amendments that require specific kinds of state spending. Taxpayers who want a frugal government need to help officials find, publicize, and eliminate ineffective and harmful programs that waste scarce funds. Taxpayers also need to help legislators resist special interest pleading.

What Funds Could be Shifted to Roads?

The table on the next page summarizes some suggestions for shifting funding from existing state programs to fixing the roads. The rest of the paper explains the logic behind them in more detail. The focus is on easily understood programs with obvious funding sources. More complex programs are ignored even though an expert review of them would likely find substantial additional opportunities for significant savings. The suggestions are based on the budget as it existed at the

beginning of the 2017 legislative session. Preference is given to new spending recommendations in the FY 2017-18 budget that would allow the legislature to reallocate funds.

Even though a legislature ready to hold a popular vote on tax increases should be equally eager to hold popular votes on spending changes that would reduce the tax burden, these recommendations focus on funding streams that can be redirected

Program	Amount	FY 2016-17 Funding (FY 2017-18)
Office of Economic Development and International Trade	\$55 million + \$150 million in tax credits	General Fund: \$25 million (\$22.6 million) Limited Gaming Fund: \$30.8 million (\$32 million) FTE Staff: 60.3 (62.3)
Colorado Energy Office	\$2 million + \$8 million	General Fund Severance tax transfers when revenue is sufficient
Department of Local Affairs	Up to \$25 million + \$20 million	State housing subsidies A portion of the projected increase in state energy impact grants
Department of Transportation	\$3 million \$2 million \$1 million	Bustang subsidy for state intercity bus system Safe routes to school Slow or stop the natural gas conversion
Raises for State Employees	\$1 million \$21 million	For judges, lawyers, and some elected officials General state employee raise, FY 2017-18
University of Colorado	\$1 million + \$25 million?	Boulder pre-collegiate development program Programs that provide credit for activism
Higher Education	\$16 million	Unnecessary General Fund increase
Department of Public Health	\$16 million +61 million	Excess money in cash funds One time VW settlement windfall
Department of Health Care Policy and Financing	\$13 million \$20 million \$3 million +200 million \$85 million	Scale back accountable care collaborative "Delivery system reforms" of questionable value No increase School Health Services fund Prune able-bodied expansion adults from Medicaid (hospital provider fee cash fund by FY2020-21) Reallocate Hospital Provider Fee Quality Payments
Senior Property Tax Rebate	\$125 million	Annual amount saved if tax rebate is suspended
Total	\$409 to \$703 million	

by the legislature without a popular vote. Some recommendations would require statutory changes, others would not. In two cases, ending program spending entirely would both free up money for

roads and end inefficient state meddling in the private sector. These are general suggestions. Dollar amounts are rounded to the nearest million dollars.

Office of Economic Development and International Trade (OEDIT)

Unless the legislature acts to keep it, the Economic Development Commission is scheduled to end on July 1, 2017. Although legislative staff do not take a position on whether the legislature should extend the Commission, the Joint Budget Committee Staff Budget Briefing notes that:

the use of State tax revenue to provide incentives to private companies falls outside of the core functions of state government... it is staff's opinion that funding incentives for private companies moves moneys from a core

function [education] to a non-core function at a time of ongoing discussion regarding appropriate funding levels for K-12 education.⁸

The Staff Budget Briefing also notes that the Commission's practice of rolling its funding forward without explicit authorization from the General Assembly allows the Commission to spend money in multiple fiscal years without an annual appropriation.

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Limited Gaming Discretionary Tax Revenue Transfers to OEDIT per SB13-1333⁹	
Travel and Tourism	\$15.0 million
Advanced Industries	\$5.0 million
Creative Industries	\$2.0 million
Film, TV, Media	\$0.5 million
Total	\$22.5 million

The Economic Development Commission oversees many aspects of the Office of Economic Development and International Trade (OEDIT). In FY 2014-15 the OEDIT spent \$52.2 million in state funds. Spending grew to \$56.7 in FY 2015-16, and remained about the same in FY 2016-17. The FY 2017-18 budget requests a slightly lower appropriation of \$55.2 million. About \$26 million comes from the state General Fund. The amount listed in the table rounds down to create a conservative estimate. The legislature controls General Fund revenues and can reallocate them as it sees fit each year. OEDIT also has authority to award about \$150 million in tax credits. Tax credits allow tax payers to pay less in taxes in future years. Tax credits reduce state revenues in future years by reducing future tax collections.

A brief introduction to funding from the Limited Gaming Fund

Colorado has two cash funds that collect tax revenues from limited gaming, the Limited Gaming Fund and the Extended Limited Gaming Fund. The first, the

Limited Gaming Fund, levies a tax on the adjusted gross proceeds of casinos, the amount of money collected from gamblers minus the amount paid out in winnings. It provides about \$30.8 million in funding to the OEDIT. The second, the Extended Gaming Fund, was created by voters in 2008 through Amendment 50. It allowed Colorado casinos to remain open for 24 hours, to offer \$100 maximum bets, and add the games of craps and roulette. The tax revenues generated by these extra operations are distributed from the Limited Gaming Fund to the Extended Gaming Fund. The Extended Gaming Fund provides about \$10 million to community colleges and the counties and towns where gaming is conducted.

Amendment 50 dictated how funds in the Extended Gaming Fund are to be spent. The legislature cannot change that allocation without amending the Colorado Constitution. The Constitution dictates that 78 percent of the additional revenue from higher stakes gambling go to public community colleges, junior colleges, and local district colleges, 12 percent be remitted to Gilpin and Teller Counties, and 10 percent be paid to the cities of Black Hawk, Central City, and Cripple Creek in proportion to the gaming revenues they generate.¹⁰ The table below shows the amounts distributed through the Extended Gaming Fund in FY 2013-14 and FY 2014-15.¹¹

Annual Funding Amounts from the Extended Limited Gaming Fund		
	As of June 30, 2015	As of June 30, 2014
78 percent to Public Community Colleges, Junior Colleges, and Local District Colleges	\$7,702,884	\$6,535,622
12 percent to Gilpin and Teller Counties in proportion to the tax revenues generated	\$1,185,059	\$1,005,480
10 percent to Cripple Creek, Central City, and Black Hawk in proportion to the tax revenues generated by each	\$987,549	\$837,900
Total Extended Gaming Fund	\$9,875,492	\$8,379,002

Colorado has two cash funds that collect tax revenues from limited gaming, the Limited Gaming Fund and the Extended Limited Gaming Fund.

Although the Constitutional limitation is binding, money is fungible. Colorado Public Community Colleges, Junior Colleges and Local District Colleges, receive funding from a variety of sources. If Amendment 50 funding is viewed as a base appropriation for these institutions, funding from additional sources may be adjusted as necessary.

How OEDIT uses tax money

In FY 2015-16, the Limited Stakes Gaming Cash Fund distributed \$97.2 million after expenses.¹² The legislature had complete discretion over \$48.6 million. As the table on the right shows, about half of the Limited Gaming discretionary funding has historically been used to fund OEDIT.

OEDIT says that its mission is to advertise Colorado as a good location to do business. It uses tax money to recruit, support, and develop businesses that it thinks are worthwhile, emphasizing firms in “advanced industries” and “analytics.” It wants to create a “data driven strategic plan” for “business development” and develop a “Colorado Business Brand.” It throws around fashionable terms like economic ecosystems, key employment brackets, “COIN 2.0 strategy,” and “world class eco devo sites.” It even has its own venture capital funds.¹³

What OEDIT does not do is display much interest in supporting people who create and run successful businesses like nail salons, car repair shops, daycares, lawn services, cleaning companies, accounting services, roofing companies, plumbing companies, general home repair services, or small construction companies. It takes money from existing Colorado businesses in the form of taxes and redistributes it to businesses that it favors in the form of loan guarantees, venture capital investment, tax credits, free employee training paid for by grants to community colleges, and grants

of cash. In short, OEDIT makes existing businesses pay for the development of new businesses that may end up competing with them for space, equipment, staff, and customers.

OEDIT generally subsidizes firms that promise to create high paying jobs. Favored businesses are those OEDIT considers associated with advanced technology, businesses that attract tourists, and businesses that promise to relocate some of their operations to Colorado. Frankly discriminatory, OEDIT has a minority business office that helps woman and minority owned businesses get certified for special treatment in government contracts. Eligibility for employee community college tuition subsidies requires firms in urban areas to have an average wage greater than \$12 per hour.

OEDIT spends up to \$27.5 million a year to subsidize firms with a mix of grants and tax credits. The largest chunk is \$15.5 million for “Advanced Industries.” “Advanced Industries” are defined as advanced manufacturing, aerospace, bioscience, electronics, energy and natural resources, infrastructure engineering, and technology and information. In 2016, OED awarded \$4.1 million in the Advanced Industry Accelerator

How Tax Credits Drain Future State Revenues

Entities with tax credits calculate their state taxes, subtract the amount of the credit given to them by the state, and pay the remainder to the state. They pay less in taxes than they would have had they not had a tax credit.

The Colorado Venture Capital Authority is supposed to create new jobs and industries with venture capital investments in select companies. It was given \$50 million in tax credits to auction off to Colorado insurance companies. The companies paid an average of 86 cents for each dollar of tax credit. A private fund manager was selected and two venture capital funds were created.

The Colorado Fund I began investing its \$24.3 million in 2005. The Colorado Fund II began investing its \$24.7 million in 2010. At the beginning of 2015, the Colorado Fund I had earned \$19.0 million from its and incurred fund management expenses of \$3.7 million.

For comparison, taxpayers would have been better off investing the tax credit auction proceeds in a Standard & Poor's 500 index fund. A dollar invested in 2005 would have been worth about \$1.86 by 2014.

In early 2015, the Authority claimed that the Colorado Fund I investments had created 623 jobs. The question is whether more jobs would have been created had the money been left with the private insurers or spent on traditional government activities like maintaining roads.

Grant Program. It consists of Proof of Concept Grants, and Early State Capital and Retention Grants.¹⁴ OEDIT states that these grants “should provide significant economic impact or competitive advantage for Colorado and the advanced industries by accelerating the pace of applied research and leading to the rapid commercialization of products and services.”¹⁵

In theory, Proof of Concept Grants “pull technologies from research institutions where they were discovered and connect them to the private sector.” Preference is given to projects from nonprofit research institutions. The institutions must put up \$1 for every \$3 awarded. In practice, this means the people who are already on government payrolls through state and federal research institutions receive a high proportion of these grants. Of the 13 grants awarded in 2016, 4 were awarded to state and federal research institutions or people already on their payrolls.¹⁶

Why OEDIT funds should be redirected to the roads.

OEDIT is a prime example of unnecessary spending. There are many companies in the private sector that do a much better job of what OEDIT says it does at no cost to taxpayers. Private companies provide information on business trends, advise on location decisions, and help small firms develop. They have strong incentives to discover whether Colorado is a good place to do business. Private firms also provide detailed information on existing markets, market expansion, export markets, the details of shipping and international trade, and financial arrangements at a level of granularity that OEDIT cannot hope to match.

OEDIT supporters assert that its subsidies create jobs by attracting firms that create them and increasing research and development activity. They do not

discuss the jobs lost when tax revenues are extracted from the private sector to fund OEDIT activities. Although subsidizing research and development tends to encourage people to produce more of it, they ignore the fact that there is no guarantee that increased research activity will lead to economic gains for the people who paid for it. Even studies that do find long-term benefits from government funding designed to create jobs or increase research activity suggest that the benefits from it tend to be relatively small. The effects that such programs have on general welfare and long-term growth are unknown.

Part of the difficulty in determining the effect of business subsidies stems from the fact that they create an incentive for businesses to substitute government funds for the funds that they would have spent anyway. If government offers subsidies for development projects that firms were already planning to undertake, businesses may apply for government subsidies first. If they receive a subsidy they use the money they would have spent for another purpose.

Grants to accelerate early stage business development are unlikely to have large effects because the odds of choosing a successful business are slim. Successful entrepreneurial firms are exceedingly rare and it is unlikely that government does a better job of identifying them than people in the private sector whose specialize in identifying promising companies and have a great deal of experience helping them grow. Even firms that do attract private venture capital backing have a high failure rates. Hall and Woodard concluded that roughly 75 percent of entrepreneurs with businesses that attracted venture capital end up exiting their firms with no gains.¹⁷

The large small company failure rate makes it unlikely that state spending on

There are many companies in the private sector that do a much better job of what OEDIT says it does at no cost to taxpayers.

Changes in Colorado Gross Tax Rates and Average Business Subsidies as a Percent of Business Value Added				
	1990	2001	2007	2015
Gross Colorado Tax Rates as Percentage of Value-Added	4.44	3.71	3.87	4.36
Average Present Value of Subsidies, as Percent of Present Value of Value-Added	0.07	0.07	0.07	0.69

subsidies for small firms will materially improve employment prospects or overall state economic growth rates. Healthy economies have many new firms entering their markets each year. They have almost as many firms exiting their markets. Many new firms struggle, and struggling firms typically do not produce as much research or as many jobs as well established ones. In fact, recent research suggests that “entrepreneurial firms are less innovative, less productive, and do not seem to be associated with GDP growth.”¹⁸

Finally, it is theoretically possible that the programs funded through OEDIT can harm economic growth by stimulating too much entrepreneurship. Excessive market entry, especially subsidized market entry, may depress the profits of higher quality firms and constrain their growth.¹⁹ While state spending on direct business subsidies encourages short-run growth and immediate hiring, state and local subsidies may displace enough private sector activity to inhibit long-term growth from state subsidy spending.²⁰

The Small Business Innovation Research (SBIR) program is a federal program offering a range of grants to small companies. Its stated goals are like those of OEDIT and it is available to Colorado companies. Its results have been studied for years. At best, the evidence suggesting that it creates value is weak. Some results suggest that the SBIR program replaces private investment on an almost dollar for dollar basis.²¹ Others find that while it increases innovation in small firms, it decreases R&D spending by larger firms.²² Over 40 percent of firms receiving SBIRs reported no employees when their grants

ended.²³ As one would expect, the relatively few firms that do well enough to create intellectual property using SBIR grant funds were more likely to retain employees after their SBIR grants concluded. Even then, the effect on employment was small. Lerner concludes that “public initiatives to provide capital for new firms may have only a limited economic impact... [and act] much more as a complement to the venture capital organizations and other private institutions” in areas that already have substantial venture capital activity.

New analysis from the Upjohn Institute for Employment Research suggests that Colorado’s business tax burden has grown along with its business subsidies. Rather than raising taxes, state officials might more profitably explore the possibility that eliminating the OEDIT subsidies and reallocating the money to the projects that improve the business climate would do a better job of raising long-term growth.

Subsidies like those administered by OEDIT have had little to do with Colorado’s strong economy over the years as they were a tiny part of the state budget. When the Democrats gained control of the state Executive Branch and General Assembly in 2007, they increased by more than 800 percent as a fraction of the state budget. At the same time, effective gross tax rates may have increased as a fraction of Colorado’s value-added. The table at the right shows the growth in Colorado’s direct business subsidies and the estimated business tax burden as a percentage of the state’s value added. The data are from a subsidy database developed by Timothy J. Bartik of the Upjohn Institute for Employment Research.²⁴

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In 2008, the Wharton Residential Land Use Regulation Index listed Colorado as the 11th most heavily regulated state in the United States.

A good business climate helps all firms thrive by reducing the cost of doing business, making it easier to attract new customers and serve existing ones. Projects that are less fashionable than “Advanced Industries” and known to be helpful in creating a good business climate include good highway systems, reasonably priced electricity, and a low cost of living.²⁵ Housing costs are an important component of a low cost of living, and the evidence suggests that heavy land use regulation increases housing costs. In 2008, the Wharton Residential Land Use Regulation Index listed Colorado as the 11th most heavily regulated state in the United States.²⁶ Its metropolitan areas subset listed Denver as the 7th most highly regulated city, just behind San Francisco.

secure, predictable, property rights, live up to their infrastructure maintenance responsibilities, oversee a stable, sensible, regulatory environment, and impose predictable, lowest possible cost taxes on a broad base. OEDIT increases taxes on successful businesses by spending tax money to support businesses that should be raising their own capital from knowledgeable private sources. The general welfare of Colorado’s residents would likely be improved if funding for it was reallocated to fixing the roads.

Governments that do the best job of creating good business climates foster

Some Examples of Recent Business Subsidy Spending in Colorado	
Colorado First Customized Job Training Existing Industry Customized Job Training. Money to new and existing businesses for tuition scholarships for attending community college. ²⁷ In 2014, Fidelity Brokerage Services received \$232,000 in tuition subsidies, Vestas Towers America received \$298,000. ²⁸	\$5.7 million
Subsidies for films, television, video games and other media to UC Health Sciences Center, Coors, Toyota, Andrew Wommack Ministries, Kia, Xfinity Latino Entertainment, the Joey Canyon Show, and several feature film production companies. ²⁹	\$3 million.
Council on Creative Agencies, the state arts agency. Created in 1977 by the legislature, it controls the Art in Public Places Program which receives 1 percent of the capital funds for new or renovated state buildings for the purchase of works of art for the project site.	\$2.8 million
Lufthansa Airlines for operating a nonstop flight from Denver to Munich.	\$300,000
Rural movie theaters for the purchase of digital cinema projectors	\$140,000
OnDeck Capital, a New York based financial services firm specializing in small business loans.	\$10.1 million
Charles Schwab, a bank and brokerage firm based in San Francisco.	\$1.9 million
Lockheed Martin Space Systems, an operating unit of Lockheed Martin Corporation	\$1.6 million
ReadyTalk, a privately held meeting services coordinator in Denver, Colorado	\$2.4 million
Macaroni Grill, a restaurant chain purchased by Redrock Partners LLC in 2015. Rockies owner Dick Monfort is a major participant in Red Rock partners. Macaroni Grill was planning to move its headquarters from Houston to Denver in 2017. ³⁰	\$1.2 million
National Western Center Project in Denver.	\$121.5 million
Northern Colorado’s “Go NOCO Project” for building the PeliGrande Resort and Windsor Conference Center, the Indoor Waterpark Resort of the Rockies, the U.S. Whitewater Adventure Park, and the Stanley Film Center, billed as the permanent home of the horror film genre. Funded by the Regional Tourism Act.	\$86.1 million

Colorado Energy Office

Like the Economic Development Commission, the Colorado Energy Office is involved in activities that are not core functions of government. Federal money created the Office as in the 1980s as part of the national response to the “energy crisis” created by OPEC’s increase in oil prices. As private sector discoveries increased domestic oil supplies and oil prices fell, federal funding diminished along with concerns about the energy crisis. Rather than end the office when the problem went away, HB12-1315 (Reorganization of Governor’s Energy Office) changed its statutory mission from promoting renewable energy and energy efficiency to encouraging energy development. The Colorado Energy Office is slated to spend \$15.5 million on its mix of welfare and energy subsidy programs.³¹

There is no particular reason why individuals should be paid to reduce energy consumption more than food consumption, clothing consumption, child care consumption, health care consumption, or building products consumption. Individuals in a free economy with healthy price competition are perfectly capable of choosing how to best spend their income on energy and other products without government help. Given a choice, a lot of citizens might prefer a simple cash grant or road spending to a program that plans to fund geothermal working groups or and “create” savings of \$208 a year for 2,000 households through heating system and appliance replacement.³² Spending money to encourage municipalities to adopt energy conserving building codes might also be of questionable value given recent evidence suggesting that the codes have little effect on residential energy use and that weatherization assistance programs may cost more than they save.³³

Although the statute enabling the office emphasizes energy development of all types, the Department’s FY2016-17 Performance Plan still emphasizes “promoting innovative energy production and efficient energy consumption,” stresses helping “clean technology developers,” and plans to subsidize private individuals provided they purchase vehicles that run on natural gas or electricity.

Department goals include increasing the sales of compressed natural gas fuel by 500 percent between 2013 and 2018. It plans to increase the number of publicly funded natural gas fueling stations and the number of electric vehicle charging stations. It wants to reduce energy consumption by 12.5 percent through weatherization assistance for private homes, public schools, and dairy farms. Finally, it wants to run a welfare program to “reduce the amount of household income expended by low-income households on energy by 1.5 percent from 2013 to 2018.” It does not explain why any of these goals were chosen or why taxpayers should spend money on private homes and dairy farms rather than on improving the state’s roads. Nor does it consider whether these goals make sense in a time of falling oil prices and failing roads.

Statute funds the Office from severance taxes and the General Fund. For 5 years, \$1.6 million a year was automatically transferred from the General Fund to the Clean and Renewable Energy Fund. That automatic transfer ended on July 1, 2016. As automatic funding means money shows up without having to ask the legislature for it, the Energy Office has naturally requested another 5 years of it. The table on the next page shows the sources and amounts of last year’s Energy Office Funding.³⁴ The table assumes that Tier 2 severance taxes will likely be zero for the

Individuals in a free economy with healthy price competition are perfectly capable of choosing how to best spend their income on energy and other products without government help.

Cash Fund	Source	Amount	Final Statutory Transfer
Weatherization Low-Income Energy Assistance Fund	Severance Tax, Tier 2	*\$6,500,000	July 1, 2018
Energy Outreach Low-Income Energy Assistance Fund	Severance Tax, Tier 2	*3,250,000	July 1, 2018
Clean and Renewable Energy Fund	General Fund	1,600,000	July 1, 2016
Innovative Energy Fund	Severance Tax, Off-the-top	1,500,000	July 1, 2016
Public School Energy Efficiency Fund	Severance Tax, Interest	210,000	September 1, 2015

*Under current law, the amount available for FY 2016-17 and FY 2017-18 is forecast to be zero.

If Colorado government wants to help lower income families, it might get more value for the money if it shifted Energy Assistance Funding to roads so that lower income people could get to work faster, have a wider choice of jobs, and more housing choice.

next two years due to tax refunds required by the Colorado Supreme Court’s decision that the state had assessed too much severance tax.³⁵ Severance tax funding will also be affected by the Colorado Supreme Court’s ruling that the state has been collecting too much severance tax and that taxpayers are due refunds. Program officials want to make up their deficit with additional funding from the General Fund. General Fund money dedicated to Energy Office pursuits is money that is not available for road repair.

The Low-Income Energy Assistance Fund spends money to increase home energy efficiency for a small number of low-income households. Low income is defined as less than \$23,000 a year for one person, \$48,600 for a family of 4. Households in “energy poverty” are defined as those that spend more than 7 percent of household income on energy. The average award is between \$200 and \$300

The percentage spent on “home energy” will obviously vary with individual choices about home size, condition, and age. The

average household in the US with these income levels spends about 4 percent of household income on electricity, 1 percent on natural gas, and 9.5 percent on all utilities, fuels, and public services including water and telephone. It spends almost 17 percent of income on transportation. If Colorado government wants to help lower income families, it might get more value for the money if it shifted Energy Assistance Funding to roads so that lower income people could get to work faster, have a wider choice of jobs, and more housing choice.

The Innovative Energy Fund, the fund eligible for automatic transfers from the General Fund, is another government attempt to use state funds to alter market outcomes and create “energy independence” for the state. Half of the Innovative Energy Fund grant funds are earmarked for OEDIT Advanced Industries grants.³⁶ The state also offers up to \$6,000 in tax credits for electric or plug-in hybrid electric vehicles.

Department of Local Affairs

The Department of Local Affairs (DOLA) channels money from the severance tax, federal mineral leases, limited gaming and the general fund to housing programs, local government programs, and property tax reductions for certain groups. It provides training for local governments and enforces property tax limits. It also administers federal funds. Its FY 2016-17 budget was \$306 million. Unlike many state agencies, the bulk of its state funding comes from the Severance Tax,

Federal Mineral Leases, the Conservation Trust Fund, and the Limited Gaming Fund rather than the General Fund. The Conservation Trust Fund contains the proceeds from the state lottery. A formula dictates their distribution to local entities for parks, recreation, and open space purposes.

Its FY 2015-16 plan says that the major goals of the DOLA are to build housing, expand broadband service in rural

GENERAL FUND AFFORDABLE HOUSING APPROPRIATIONS					
	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Low-income Rental Subsidies	\$0	\$445,524	\$1,248,287	\$1,360,813	\$2,660,938
Affordable Housing Grants and Loans	2,200,000	4,200,000	8,200,000	8,200,000	8,200,000

FY 2015-16 RENTAL SUBSIDIES IN COLORADO		
	FY 2015-16 VOUCHERS/SUBSIDIZED UNITS	CORRESPONDING FUNDING
All federal rent subsidies – state and entitlement community administered		
Subsidized Units (public housing, PBV, 811, 202)	30,304	
Rental vouchers (housing choice voucher)	29,752	
Total Federal Statewide*	60,056	\$428.0 million²
State Vouchers (Community Choice; Mental Health)	211**	\$1,360,813

*Of the total, the Department of Local Affairs administers 6,553 with a value of \$49.4 million.

**350 in FY 2016-17

communities, increase funding to rural towns under the Main Street Projects program, and funnel federal disaster funds where needed. Apart from disaster funding, none of these activities is within the core functions of state government.

DOLA Spending on Housing—up to \$25.5 million

State spending on housing has increased rapidly in recent years. State residents are told that their tax dollars are being spent on housing to end homelessness and provide “affordable housing.” According to Joint Budget Committee staff, Colorado has increased the number of beds for the homeless by 30 percent since 2011.³⁷ The table above compares General Fund spending on housing with federal rental subsidies in Colorado.³⁸ The federal government provides very large subsidies for housing. State efforts are about 2 percent of the amount of federal money available in Colorado for housing subsidies.

The Department wants to expand its housing budget with an additional \$2 million for the housing grants and loan program, a continuing appropriation of \$4 million for permanent supportive housing for selected groups, and \$12.3

million in funds from the Marijuana Tax Cash fund for supportive housing and rapid rehousing. The total increase is \$16.3 million.

The problem, as is discussed in the FY 2017-18 JBC Staff Budget Briefing, is that while these programs provide money for people who build houses there is little evidence that such programs achieve the intended result of reducing homelessness.³⁹ Though the Department cites data showing large savings from certain housing programs, the Briefing stresses that “evidence suggests that these kinds of savings only hold for a certain high-utilizer subsection of the homeless population.”³⁰ Whether the state has exhausted those savings is unclear.

The table on the next page shows how Division of Housing appropriations have increased each year. Given the enormous increase from FY 2015-16 to FY 2017-18 and the fact that it is unlikely to do much about homelessness, even poor people in the state might be better off if the \$25.5 million is money is switched to roads. The Department emphasizes the jobs created by local housing spending. It is important to note that building and repairing roads also increases jobs and spending in local communities.

The problem, as is discussed in the FY 2017-18 JBC Staff Budget Briefing, is that while these programs provide money for people who build houses there is little evidence that such programs achieve the intended result of reducing homelessness.

Spending by the Division of Housing in the Colorado Department of Local Affairs				
Amounts are in millions of dollars	FY 2014-15 Actual	FY 2015-16 Actual	FY 2016-17 Appropriation	FY 2017-18 Request
Total	\$67.0	\$73.0	\$80.1	\$98.5
General Fund	13.3	13.5	16.5	18.5
Cash Funds	1.0	1.0	1.2	17.5
Federal Funds	52.4	58.0	62.0	62.0

DOLA Local Government Energy Impact Grants--\$50 to \$100 million.

These are distributed to local governments. They typically account for less than 1 percent of county and municipal budgets. They total \$50 to \$100 million in any given year. Although originally conceived to mitigate problems that might be caused by energy extraction, the Department now assumes that the whole state is impacted by energy development and processing. It awards Energy Impact Grants without any particular requirement that they go to areas where energy is produced.

and broadband services. In recent years, the grants have been used for alternative fuel vehicles for localities and a \$20 million broadband grant program. The table below shows how spending on them is set to increase from FY 2016-17 to FY 2017-18. The projected increase in program spending for FY 2017-18 is \$24 million.

A key question for government officials is whether people in rural areas would prefer road repairs or government funded broadband?

A key question for government officials is whether people in rural areas would prefer road repairs or government funded broadband?

The grants are used for everything from local roads and drainage to sewer upgrades

Department of Transportation

Colorado statute requires that 10 percent of transfers to the Highway Users Trust Fund (HUTF) be used to fund transit and rail projects. In FY 2015-16, the result was an appropriation of \$19.9 million dollars to Phase 1 of the Bustang/Park and Ride project. In FY 2017-18, roughly \$10 million more will be spent on Bustang. The

exact amount depends upon the actual amount of the HUTF transfer.

The following table shows how the FY 2015-16 transfer of \$199.2 million from the General Fund to the HUTF was spent. The improvement of I-70 through Denver will consume the bulk of the money.

LOCAL GOVERNMENT MINERAL AND ENERGY IMPACT GRANTS AND DISBURSEMENTS				
	FY 2014-15 Actual	FY 2015-16 Actual	FY 2016-17 Estimated	FY 2017-18 Projected
Local Government Severance and Mineral Impact Fund				
Revenue (New Tax + Interest Income)				
Local Government Severance Tax Fund (50.0 percent severance tax revenue)	\$138,419,350	\$43,935,220	\$25,823,645	\$86,074,015
Local Government Mineral Impact Fund (40.0 percent state share of P&L revenue)	60,954,811	39,946,027	47,247,004	48,961,975
Total New Revenue	\$199,374,161	\$83,881,247	\$73,070,649	\$135,035,991
Carry-forward Adjustment				
Carry forward from prior year less carry-forward to subsequent year	(\$2,142,806)	\$106,797,289	\$33,971,357	(\$4,171,274)
Total Revenue Distributed/allocated during the FY	\$197,231,355	\$190,678,536	\$107,042,006	\$130,864,716

The HUTF transfers have been modified by legislation. In 2016, HB 16-1416 replaced the HUTF transfer formula in SB 09-228 with dollar amounts for FY 2015-16 and FY 2016-17. The transfer in FY 2015-16 was \$199.2 million. The transfer in FY 2016-17 will be \$158 million. Roads are so important to the Governor's office that it proposed a \$79 million reduction in both FY 2016-17 and FY 2017-18.⁴²

The table below details how the HUTF funds are spent when they are spent for things other than roads. The WinterPark Express Platform reflects the state subsidy to construct a "wheelchair-accessible, ADA-compliant platform" at Winter Park ski resort for the resumption of the Amtrak Winter Park Express. The ski train can handle a maximum of 500 passengers. It primarily benefits the resort. It is unlikely to have much effect on I-70 ski traffic given that the vehicle count on I-70 at the Eisenhower tunnel averaged over 35,000 a day in January, 2016.⁴³

According to the *Denver Post*, the total cost to build the platform was \$3.5 million.⁴⁴ If neither the ski resort nor Amtrak nor Winter Park local government nor Intrawest were willing to pay for the rail platform, why should other Colorado taxpayers, most of whom will never use the train and many of whom would probably prefer to spend the money on roads, be forced to subsidize an essentially private venture?

Bust Bustang

The Bustang project aims to provide a state-run bus transportation system reaching from Pueblo to Ft. Collins and from Denver to Grand Junction along the I-25 and I-70 corridors. This is hardly a core state responsibility. The regional study showed that at least 8 bus companies, along with a host of individual van and limousine services, provide intercity services in the I-70 and I-25 corridors.⁴⁵

As Bustang will be funded by the tax dollars provided by businesses that compete for the same riders Bustang does, simple fairness would dictate that they also be allowed to use Bustang's park and ride facilities, its special highway lanes, and its website and stations.

Thanks to its tax funding, Bustang can offer lower fares and better amenities than the existing private businesses. Bustang charges \$12 for a one-way ticket between Colorado Springs and Denver. Greyhound fares for one-way trips from Colorado Springs to Denver range from \$11 to \$15 depending upon day and time. Bustang charges \$28 for a trip from Denver to Glenwood Springs. Greyhound charges \$35.50 to \$45.50.

Even with a startup fund of \$10.9 million and an additional annual \$3 million a year subsidy from state FASTER Transit Funds for operations, maintenance, and new buses, Bustang is expected to operate at a loss. In 2015, it forecast a that it would pay

If neither the ski resort nor Amtrak nor Winter Park local government nor Intrawest were willing to pay for the rail platform, why should other Colorado taxpayers...?

2015-16 GENERAL FUND TRANSFER		
TYPE OF PROJECT	PROJECT	ALLOCATION
Highway	Central 70	\$178,280,000
Rail	Southwest Chief TIGER Match	1,000,000
	Program and Construction Management of Phase 1 Projects	1,920,000
	Winter Park Express Platform	1,500,000
	6 Branded Over-the-Road Coaches	2,500,000
Transit	Replacement of Existing Loveland Park-and-Ride at US 34/I-25	5,000,000
	Woodmen Road Park-and-Ride Replacement/Expansion (Colorado Springs)	3,000,000
	Lawson/Telluride/San Miguel County Park-and-Ride	1,500,000
	Frisco Transit Center Expansion	2,500,000
	Rifle Park and Ride	2,000,000
	TOTAL	\$199,200,000

for 60 percent operating costs by FY 2018 if all went well. In its worst case forecast it would cover 30 percent of operating costs. If the state budget cannot handle road repairs without raising taxes, how does it make sense to use tax funds to set up an operation that will require continuing subsidies?

Mr. Mike Timlin provided an overview of Bustang's quarterly report at the January 18-19, 2017 Transportation Commission meeting. The buses carried 73,380 passengers in a year. Ridership was up, and another increase was anticipated when the buses could use the I-25 North managed lanes. Fares were covering 42 percent of operating costs in the third quarter. Fares covered roughly 50 percent of operating costs through December 2016.⁴⁶ For comparison, the segment of I-25 that runs from 120th Avenue to the beginning of the I-25 express into Denver is six miles long and carries 175,000 cars a day, more than twice as many people as Bustang carries in an entire year. The Colorado Springs Business Journal reported that 60,000 cars travel between Colorado Springs and Denver each day.⁴⁷

Bustang also competes with charter bus operators by providing bus transportation for special events. Bustang fares currently cover operating costs only on two routes: The Colorado State University to Denver route, which runs buses to Denver on Friday afternoons with a return trip from Denver to Colorado State University on Sunday afternoons for \$9.50 each way, and the buses from Ft Collins and Colorado Springs to Bronco games with a round-trip fare of \$30.

The college route covered 126 percent of operating costs in Fall 2016. The Broncos roundtrips covered 109 percent. Additional charters were planned for the US Open Snowboard Championships in Vail on March 2 and 3, 2017. Vail Ski Area

service was planned for February 11th and February 25. According to a presentation made to the Colorado Transportation Commission, Bustang would "coordinate" with an existing private carrier and will charge \$50 per trip.⁴⁸ Unfortunately, ridership turned out to be "nearly non-existent." In March, 2017, Bustang carried 4,018 passengers and recovered 67 percent of operating costs on its West Route. It carried 5,336 passengers on its South Route and recovered 43 percent of operating costs.⁴⁹

Safe Routes to Schools: \$2.5 million

At present an estimated 10 percent of US children walk or bike to school. The Safe Routes to School project is supposed to provide health benefits by encouraging more children to walk or bike to school. The program began life as a federally funded effort. When it was ended as a specific set-aside, it, like the Energy Office, switched to state funds in order to cling to life. In FY 2016-17 the program allocated \$2 million for "infrastructure" projects and \$0.5 million for non-infrastructure projects.

Program advocates commonly cite how much walking and biking to school has declined since the 1960s. They appear to believe that 1960s school transportation should be replicated today. They do not discuss whether this is a reasonable goal given the consolidation of public schools into larger units with larger travel distances requiring more busing. They do not discuss how many children are being driven to and from school and would benefit from better roads so that they can take part in after school sports or other activities.

Infrastructure projects include striping school parking lots, fixing sidewalks, putting up pedestrian signs, building pedestrian over or underpasses, adding bicycle lanes, and providing bicycle racks. It is not clear why these cannot be handled

In March, 2017, Bustang carried 4,018 passengers and recovered 67 percent of operating costs on its West Route. It carried 5,336 passengers on its South Route and recovered 43 percent of operating costs.

as part of school district budgets or regular state and local road funding.

The non-infrastructure investments funded by Safe Routes to School tell children about traffic safety, hold bike rodeos, and develop school curriculums that “integrate bike/ped lesson plans into classrooms.” Transportation programs in the 1960s did not have such grants. Heroic Colorado teachers and parents still managed to both teach children the rules of the road and keep them physically fit even without annual gifts of half a million dollars of taxpayer money.

Stop the conversion to natural gas—save up to a million?

The annual fleet vehicle request in the Department of Personnel has a \$2.9 million increase for the Vehicle Replacement Lease/Purchase line item. The goal is “to replace 824 fleet vehicles statewide, including 408 designated as potential compressed natural gas (CNG vehicles). Natural gas vehicles generally cost more to purchase than comparable gasoline or diesel fueled vehicles. Whether operating costs are low enough to offset

the purchase price depends upon the specific vehicle under consideration, its operating environment, fueling costs, and fuel prices.

A case study analysis of experience with CNG fleets in Colorado by the Colorado Energy Office in August, 2012 reported that Republic Services, a waste management company, calculated that fuel savings accounted for about 60 percent of its returns from converting to CNG trash trucks. At the time, diesel averaged \$3.87 a gallon in the Rocky Mountain Region. Whether the extra cost of natural gas vehicles makes sense for the state fleet now that diesel prices are lower is an open question. Small differences are likely to recoup the higher initial cost only in high mileage vehicles.

The Department says it is possible that the state could save some money for roads by purchasing regular fuel vehicles rather than CNG ones.⁵⁰

Roll Back the Raises

Colorado legislators used to vote on a statute that set salaries. In 2015, SB15-288 put raises under the radar by making them automatic if judges get a raise. Beginning in FY 2019-20, the Governor will automatically get 66 percent of the salary awarded to the Chief Justice of the State Supreme Court.⁵¹ Salaries are adjusted every four years to preserve parity with judicial branch salaries.⁵² The July 20, 2015, Fiscal Note for the bill estimates that it will increase state spending for salaries of selected officials by \$1.3 million a year

Judicial salaries are determined by the General Assembly through a footnote in

the Long Bill. Recommended increases in judicial salaries depend upon the state of the market for legal talent, whether enough experienced people are applying to become judicial officers, compensation surveys, and adjustments for the cost of living.

According to the Mercer US Compensation Planning Survey, average base pay increases for salaried employees in mid-size and large employers in the US were 2.7 percent in 2012, 2.8 percent in 2013, 2.9 percent in 2014, 2.8 percent in 2015, and projected to be 2.9 percent in 2016.⁵³ With these raises a private employee

In 2015, SB15-288 put raises under the radar by making them automatic if judges get a raise.

Judicial salary increases from FY 2007-08. Salary Increases, Colorado Judicial Officer Salaries	
Fiscal Year	Annual Percent Change
FY 2007-08	5.07
FY 2008-09	8.09
FY 2009-10	0.00
FY 2010-11	0.00
FY 2011-12	0.00
FY 2012-13	0.00
FY 2013-14	3.60
FY 2014-15	9.00
FY 2015-16	9.71
FY 2016-17	0.00
FY 2017-18 Request	5.73

would have seen his wage increase by 11.68 percent from the beginning of 2012. A Judicial Officer's salary would have increased by 23.88 percent. Even if one assumes that the private sector increased salaries by 2.9 percent for every year from 2007 to 2016, salary increases for private sector workers would have been 29.34 percent from 2007 to 2016. Colorado Judicial Officers did much better, their increase was 40.7 percent.

Higher compensation rates for Judicial Offices may be warranted if it does indeed cost more to find people who are both qualified and willing to serve. But it is unlikely that the peculiar conditions in the judicial branch also create a need for higher salaries to attract people to run for the offices held by elected officials. If that is the case, money could be saved for the roads by limiting salary increase for elected officials to something more representative, say the salary increases enjoyed by people working in general managerial jobs for mid-sized and large US companies. Another approach would be to repeal the automatic increases and go back to having the legislature put salaries in statute.

A general salary increase for state employees is slated to take effect in FY 2017-18. The cost will be \$21.7 million with \$20.8 million from the General Fund.

While the legislature has limited control over the day to day functioning of institutions of higher education, there is no reason why it cannot identify unnecessary programs, estimate their costs, and cut state funding by that amount.

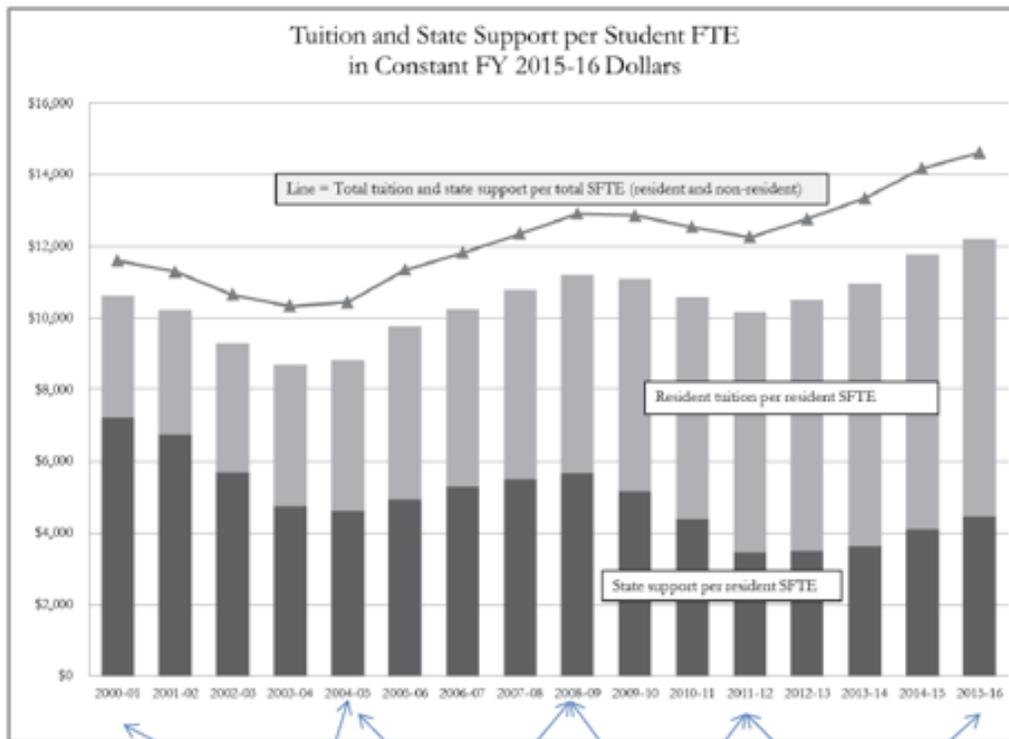
Higher Education

The cost of attending college at state institutions has risen far faster than the rate of inflation. In FY 2015-16, those institutions enrolled about 191,000 full-time equivalent students (FTE). This year's Joint Budget Committee staff documents ask whether the Department is asking for more than is necessary this year. The Department of Higher Education has asked for an additional \$16 million in General Fund appropriations and the authority to raise tuition by \$116.4 million in tuition (5 to 7 percent).

A large fraction of the rise in higher education is driven by administrative

and program bloat. While the legislature has limited control over the day to day functioning of institutions of higher education, there is no reason why it cannot identify unnecessary programs, estimate their costs, and cut state funding by that amount. The individual institutions would be free to decide whether to cut worthwhile programs or unnecessary ones.

Almost 75 percent of the Department of Higher Education's General Fund funding is used for the College Opportunity Fund program. Funds from the Opportunity Fund are dispersed to each of the governing boards of state institutions



*All data from budget data book (BDB) actuals.

AVERAGE ANNUAL RATE OF CHANGE AFTER ADJUSTING FOR INFLATION	FY 00-01 TO FY 04-05	FY 04-05 TO FY 08-09	FY 08-09 TO FY 11-12	FY 11-12 TO FY 15-16
State support/Resident SFTE	-10.6%	5.3%	-15.3%	6.6%
Resident Tuition/Resident SFTE	5.5%	6.9%	6.7%	3.7%
Revenue per resident	-4.5%	6.1%	-3.2%	4.7%

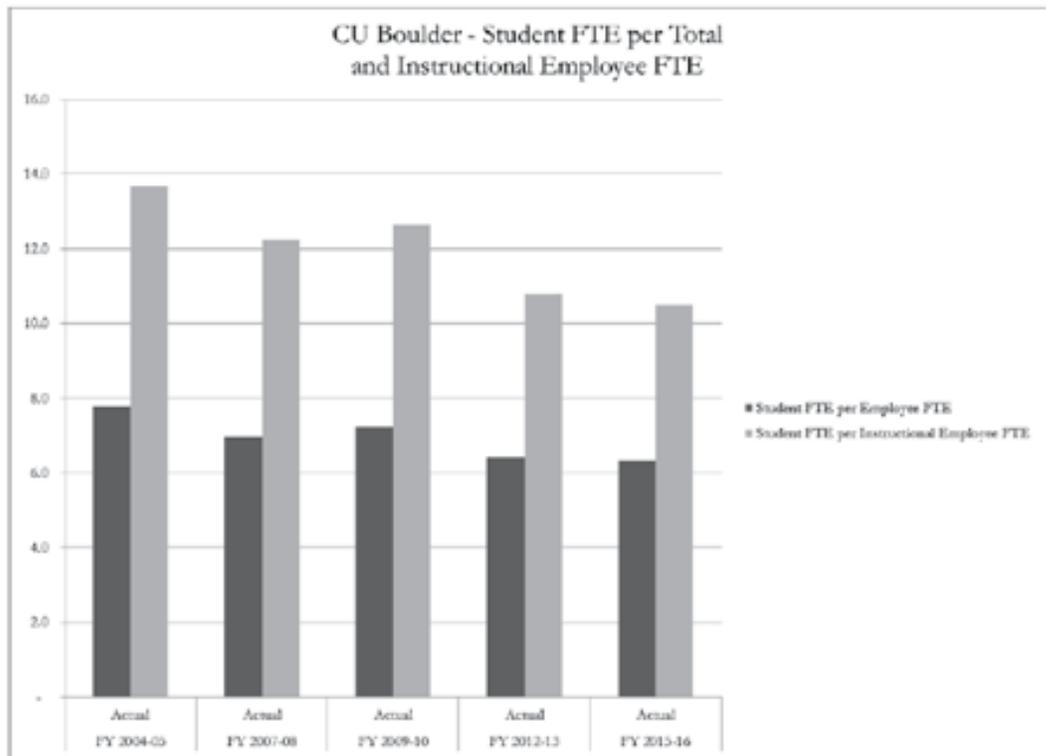
and to reduce tuition (“provide stipends”) for undergraduate resident students at Colorado’s public and participating private colleges. An additional 20 percent of General Fund appropriations are allocated for student financial aid awarded through the Colorado Commission on Higher Education. Appropriations from Limited Gaming revenues also support History Colorado. It is overseen by its own Board which distributes funding to support Colorado vocational education, the Colorado History Museum, regional and community museums, and preservation funding.

Though revenues consisting of total tuition and state funding fell by 10 percent or so during the 2007 recession, the increase in the total has consistently outstripped inflation. The figure below shows inflation-

adjusted tuition for resident and non-residents full-time equivalent students (SFTE) from 2000-01 to 2015-16. It also shows the fraction of state support per resident student full-time equivalent as a fraction of the resident tuition per resident student full-time equivalent. The line shows the total amount of state support and tuition payments per full-time equivalent student, both resident and non-resident.

The FY 2017-18 budget request asks for an increase of \$20.5 million from the General Fund for Colorado institutions of public education. This request was based on a minimum required for inflationary increases of \$74.1 million assuming a 2.2 percent inflation rate and a health benefits increase of 4.2 percent. Joint Budget Committee staff note that a second

Though revenues consisting of total tuition and state funding fell by 10 percent or so during the 2007 recession, the increase in the total has consistently outstripped inflation.



The higher operating costs per student FTE that plague Colorado's institutions of higher education appear to be driven by falling student to full-time employee ratios and an increase in staff compensation.

requested increase seeks authority to raise tuition by \$116.4 million, a 5 to 7.7 percent increase in undergraduate resident tuition depending on the institution. There is no limit on non-resident or graduate tuition or on mandatory fees.⁵⁴ This is \$42 million more than the institutions estimated was needed to meet inflationary increases.

The higher operating costs per student FTE that plague Colorado's institutions of higher education appear to be driven by falling student to full-time employee ratios and an increase in staff compensation. Judging from the data presented in the Briefing, administrative bloat is raising operating costs at Colorado's institutions of higher education just as it has at comparable institutions in the United States.⁵⁵ As the graph on the next page shows, the trend of more employees per FTE student in FY 2015-16 than a decade ago holds at Colorado State University, Metropolitan State University of Denver, and CU Boulder.⁵⁶

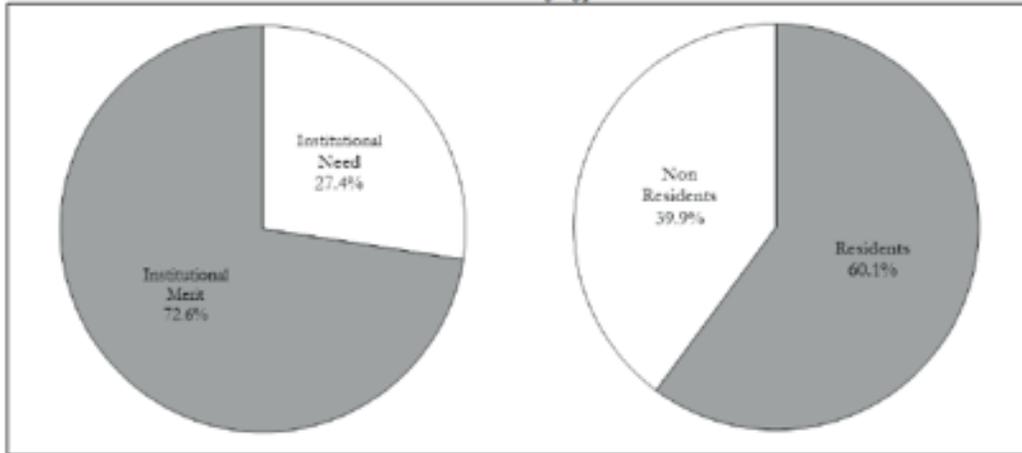
Increases in expenditures for scholarships is another area of concern. State colleges and universities have the power to grant lower tuition to students they want to attract. JBC staff are concerned that higher education will "seek greater authority for resident tuition increases than the actual revenue they expect to capture because they plan to offset higher published tuition rates with scholarship awards."⁵⁷ Artificially inflating the tuition "sticker price" and then lowering it for selected students gives administrators the ability to be price discriminators, charging different prices to different students based on the amount of revenue they believe they can harvest from them.

As the table and figures on the next page show, a significant portion of aid funding at the University of Colorado Boulder is made to non-resident students.⁵⁸ Boulder received more in tuition from non-residents than it did from residents: \$460.5 million from the former and \$428.1 million from the latter and institutions tend to be more solicitous of those who are their best revenue source.

*Table Three:
Institutional Aid Awards by Type FY 2015-16*

Residency	Institutional Need	Institutional Merit
Residents	\$ 40,277,086	\$ 60,014,832
Non Residents	\$ 5,437,958	\$ 61,127,072
Total	\$ 45,715,044	\$ 121,141,904

*Figure Eight:
Institutional Aid Awards by Type FY 2015-16*



Closely examine higher education budgets for unessential programs or harmful programs

Taxpayers began funding state universities to subsidize the transfer of useful bodies of knowledge to state citizens. Many of the programs now funded by higher education are of questionable effectiveness and have little to do with this mission. If they can be evicted from their hiding places in the sprawling higher education budget, their funding could be transferred to road funding without affecting the quality of higher education at state institutions.

Even though preparing students for college is properly the job of K-12 schools, several institutions in the University of Colorado system participate in the [Pre-Collegiate Development Program](#). In 2015-16, the overall program had 2,382 middle and high school students enrolled. Eligible students must have a minimum 2.5 grade point average in middle school, and at least one parent willing to attend one Saturday

event a semester with their child. They cannot have a parent who has completed a 4-year college degree.

It is impossible to know whether the Program improved college attendance because a large fraction of the students enrolled were from high schools that already place huge emphasis on college preparation. The University of Colorado Boulder Pre-Collegiate Development Program was attended by 1,159 middle and high school students from targeted schools. Its materials say that all participants planned to attend additional school and about half planned to attend a school in the CU System. Of the 126 high school seniors enrolled in 2015-16, 13 were from the Denver School of Science & Technology program, a school that [reports](#) that everyone in its senior class was accepted to a 4-year college whether they attended the university development program or not. The Denver School of Science & Technology only one of several high performing high schools that acted

Many of the programs now funded by higher education are of questionable effectiveness and have little to do with this mission.

as feeders to the Boulder development program. Ten 10 of the Boulder Program students attended the Mapleton 1 School District York International Baccalaureate program and 7 were from Mapleton's Science, Technology, Engineering, and Math focus high school.

Given the amount of selection and aid provided by the high schools feeding the program, it is probable that the Pre-Collegiate Development Program is spending money on students who will already be successful in college. In FY 2015-16, it spent at least \$1.3 million on it, money that could be redirected to roads by reducing the state General Fund contribution to higher education by a similar amount.

The CU Succeed Program is another example of a duplicative higher education program likely of low value. Offered by CU Denver, it is similar in form to the College Board's Advanced Placement program. It offers college courses for credit in 229 high schools. On average, the courses cost about \$77 a credit hour. Some, like Introduction to Ethnic Studies, and Introduction to Media Studies, are free. Though many Colorado schools do accept those credits, there is no guarantee that any particular course will satisfy degree requirements at any particular institution.

CU Denver does not provide information on any follow-up designed show whether the program's high school classes were a good substitute for courses taught on the college campuses. Some colleges have done such follow-ups for the College Board's Advanced Placement program. A number of them have stopped awarding college credit for AP classes because they found that students had a much more difficult time in college advanced courses when they substituted AP classes for introductory college courses.

The National Association of Scholars estimates that the University of Colorado, Boulder is spending \$25 million a year on what it terms the "New Civics," programs to create civic activists focused on advancing the core principles of progressivism.⁵⁹ Colorado State University and North Colorado University have similar programs.

The [CU Engage](#) is an example of these kinds of programs. It could be cut with little effect on learning. Located in the Education Department, it funds initiatives designed to highlight social discontent from a progressive perspective. It funds courses on women's rights, queer studies, social and environmental change. It has programs to bring social "justice" activism to grades K-12, subsidize and direct the creation of "youth-led social change projects," and finance of K-12 projects on the topics of "school and community-based social justice issues." Its INVST Community Studies program gives credit for "six hours of community-based action per week," and requires that students help with "outreach, fundraising, curriculum design, and staff hiring."

It charges \$1,500 to attend its "Justice Summers." During the Climate Justice Summer the focus is on climate change, environmental sustainability, energy & power. During the Economic Justice Summer the focus is on immigration, globalization and economic justice. The program promises that all travel will be by car and meals "accommodate a wide variety of dietary preferences."⁶⁰

The CU Succeed Program is another example of a duplicative higher education program likely of low value.

Department of Public Health and Environment

“The Department has a significant number of cash funds with large uncommitted fund balances that were not being utilized for FY 2015-16...the FY 2016-17 Long Bill includes a number of appropriation adjustments that will enable the Department to spend down cash fund balances without impacting fees.”⁶¹

The state survived without spending the money in the cash funds in FY 2015-16. This suggests that the money could be reallocated to roads without damaging existing programs. The table below shows the cash funds and some of the fund balances.⁶²

The Prevention, Early Detection, and Treatment Fund is a statutory creation funded by money from the Tobacco Tax Cash Fund. It collects cigarette and tobacco tax levied by Section 21 of Article X of the Colorado Constitution.⁶³ The money in the Prevention Fund does not constitute an important use of state resources. It is earmarked for grants for projects promising to provide a “cohesive approach” to “treatment of cancer, cardiovascular disease, and pulmonary disease.” Large amounts of money are being thrown at these diseases, and grants

are being funded by a variety of other entities better able to judge proposals to treat these diseases than the State of Colorado.

The State of Colorado is expert in Colorado roads, and is one of the few entities likely to pay for repairs to them. It is likely that the state would spend the money more efficiently if it used it to fund state experts in road repair than it would funding programs to cure cancer, cardiovascular disease, and pulmonary disease. If the legislature determines that the funds currently sitting in this fund can be used for other health related purposes currently funded by General Fund appropriations, then prevention fund moneys suited for those purposes can be redirected and the General Fund expenditures that they replace redirected to road repair.

Wasting Money from the Waste Tire Fund

A \$1.50 tax on every new tire sold in Colorado funds the Waste Tire Cash Fund. A 2015 report from the Department of Public Health & Environment says the fund collected \$6.6 million in 2015. The bulk of spending from the fund is used to provide subsidies of \$40 per ton for “applicants” who use approved tons of

The state survived without spending the money in the cash funds in FY 2015-16. This suggests that the money could be reallocated to roads without damaging existing programs.

CASH FUND BALANCES		
Cash Fund	Increase	Purpose
Prevention, early detection, and treatment fund balance	\$7,738,141	Funds competitive grants for activities and programs that work to provide a cohesive approach to the treatment of cancer, cardiovascular disease, and pulmonary disease.
Waste tire cash funds balances	3,339,759	Pays monthly rebates to in-state end users, retailers who sell tire-derived products, and processor of Colorado waste tires who sell their tire-derived products to out-of-state end users.
Recycling resources economic opportunity fund balance	2,000,000	Funds grants that promote economic development through the sustainable management of discarded materials.
Emergency medical services grants	1,750,000	Funds grants for Colorado emergency medical and trauma service (EMTS) agencies to purchase equipment and vehicles, provide training, add personnel, improve retention and recruitment programs and make system improvements.
Tobacco education, prevention, and cessation fund balance	1,051,983	Funds grants to programs aimed at reducing the use of tobacco by youth and funds grants designed to reduce health inequities among minority and high risk populations.

waste tires for fuel or tire derived purposes. In 2015, subsidies for waste tire derived products amounted to \$1,688,907 for 42,223 approved tons. Most waste tires are shredded and mixed with other fuels and are burned in concrete kilns, paper mills, and a few power plants.⁶⁴

In 2015, Colorado recycled all the waste tires it generated as well as waste tires brought in from other states. In 2015 Colorado recyclers accepted almost 1 million more waste tires than it generated, and inventories of waste tires fell by about 400,000 tires.

The Department has identified 26 illegal waste tire sites with 583,130 tires in them. Six of the sites had fewer than 1,000 tires in them. Unfortunately, the Department was unable to clean up any of the sites in 2015 due to “the development of an abatement list and creating new standard operating procedures.” It did manage to spend \$7,424 on 4 public “collection events” in which the public could drop tires off for little or no cost. Those events collected a total of 2,627 waste tires.

The Department funds a Waste Tire Market Development Fund. It paid for “outreach events.” As part of its incentive program, it has funded playground and athletic field resurfacing for school districts using waste tire products. It funds an annual Waste Tire Conference attended by 111 people, pays for meetings for other government officials, conducts “outreach,” and inspected 397 businesses to make sure that they collect and remit the proper fee.⁶⁵ It spent \$204,850 to hire Tetra Tech, to “implement many of the recommendations in the market development plan.”

This fund runs a surplus. Why not change the law so that some of the money can be used to fix the roads?

Recycling Resources Economic Opportunity Fund—an additional user fee on trash disposal

This fund is supposed to support “Colorado businesses and organizations that are actively collecting materials for recycling.” In FY 2015, 60 percent of its funding came from landfill tipping fees of \$0.11 per cubic yard.⁶⁶ FY 2017 grants included money for equipment at existing recycling centers and excess food collection groups, new county recycling facilities, and new equipment for a business that recycles PVC pipe.

The Department of Public Health & Environment wants to develop markets for recycled materials and develop an infrastructure to create supply. To this end awarded \$1.3 million to profit, non-profit, and government groups involved in recycling for infrastructure development and \$1.3 million to businesses that promised to use recycled materials. Earth Enterprises, a new company to manufacture sheets of plastic from mixed plastics using European technology, received \$933,209 of that. After the necessary equipment was purchased and installed, metals “appearing as a contaminant in all the plastics they have sourced” halted production until a “feasible method could be found to remove them.”⁶⁷ Another \$300,000 was spent on “rebates” to any “entity that incurred transportation/hauling costs associated with providing free public recycling drop off sites” to “reward companies and organizations that offer recycling services.”⁶⁸ Waste Management collected \$30,000 in rewards, Pitkin County collected more than \$23,000, Summit County collected almost \$19,000, and Gunnison County collected almost \$17,000.

If none of these efforts produce enough value to exist on their own, the question

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that should be asked is whether people in Colorado would rather reduce the transport costs of trash collection and recycling by reducing transportation costs with improved roadways.

The Volkswagen Settlement

Colorado will receive \$61.3 million from the Environmental Mitigation Trust Fund set up by Volkswagen's agreement to pay \$14.7 billion to settle claims that it cheated

on EPA emission standards. Under the terms of the agreement, the state can use the money to replace certain vehicles over 10 years. Presumably planned state vehicle acquisition costs, including those in the Department of Transportation, will be adjusted to reflect this windfall and the money originally earmarked for vehicle replacement can be shifted to benefit the state's roads.

Department of Health Care Policy and Financing

The Department of Health Care Policy and Financing (HCPF) is the Department that manages Colorado's Medicaid program. Its FY 2017-18 projected spending will be \$3.8 billion in General Fund and Cash Fund funding. It will likely spend another \$5.7 billion in Medicaid matching funds provided by the federal government. Three things drive Colorado Medicaid spending: an increase in the number of people eligible for Medicaid, the costs incurred by the state's determination to refashion Colorado Medicaid into an HMO like Kaiser-Permanente, and changes in expenditures on the services used.

In terms of expenditures for physical health, expanding Medicaid to the able-bodied adults covered by participation in the Obamacare Medicaid expansion increased state spending by \$2.3 million in FY 2016-17. It is expected to increase state spending by \$6.5 million in FY 2017-18. State spending depends upon the federal matching rate. If the federal government reduces the matching rate for the expansion population the state cost for Medicaid expansion will increase. There is little evidence that Medicaid expansion to able-bodied adults improves clinically important physical indicators.

Call a halt to the Accountable Care Collaborative Expansion--\$3.9 million, mostly from the hospital provider fund. Scaling back the Accountable Care Collaborative would save up to \$13.2 million.

Refashioning Medicaid has been expensive. The state estimates total administrative costs for the Accountable Care Collaborative at \$143.2 million. The Collaborative divides Colorado into 7 Regional Care Collaborative Organizations (RCCOs which will soon to be renamed Regional Accountable Entities or RAEs). They coordinate care for Medicaid patients by developing provider networks, assigning Medicaid patients to primary care practices based on their claims history, maintaining referral lists of specialists, identifying people who might need follow-up care, and encouraging providers to provide it. In FY 2015-16, the state spent \$107.1 million on the RCCOs.

Most of the administrative costs paid to the RCCOs, \$96.7 million, were per member per month payments intended to cover the cost of medical care. These

There is little evidence that Medicaid expansion to able-bodied adults improves clinically important physical indicators.

payments are based on the state's assignment of someone who enrolls in Medicaid to a RCCO. If someone assigned to a RCCO is not assigned a primary care provider within six months, the PMPM amount is reduced by 35 percent. Keeping track is expensive. The State Data Analytics Coordinator, which provides data to the RAEs and primary care practices for care coordination, cost \$3.4 million.

Two other types of funds were included in the administrative spending total. RCCOs received \$4.0 million in payments for meeting key performance measures. In FY 2015-16, the performance measures for Accountable Care Collaborative members not eligible for Medicare were emergency room visits, well child visits for children ages 3-9, and postpartum care. An additional \$6.5 million was placed in a pay-for-performance pool. It was distributed to RCCOs that agreed to participate in the State Innovation Model for physical and behavioral health integration and those who provided follow-up care within 30 days of a hospital discharge.

The Department of Health Care Policy and Financing says that even with administrative costs included, the Accountable Care Collaborative reduced state Medical costs by \$61.9 million in FY 2015-16. It says that it did this by "avoiding" \$205.1 million in medical costs, claiming that "coordinated primary care is less expensive than episodic or emergency treatment of medical conditions."

Excluding people eligible for Medicare, the Department estimates that it saved about \$2,316 per year per disabled child or adult, \$447 per previously eligible adult, and \$430 for Obamacare expansion adults.⁷⁰

These are exceptionally large savings. And the Department says that they occurred over just 11 months.

For an idea of just how large they are, consider them as a percentage of the per capita cost figures for various groups of Medicaid recipients provided by the Department. The \$2,316 savings for the Medicaid-Medicare group is almost 10 percent of the average per capita expenditure of \$24,169 of the highest expenditure disabled group in FY 2015-16. The claimed savings would have been 14 percent of the per capita expenditure of \$16,195 if everyone in the Medicaid-Medicare group was in the lowest per capita disabled spending group. A savings of \$447 for each previously eligible adult is equivalent to a 15 percent saving on per capita annual costs of about \$3,000 per person.

In FY 2012-13, the state claimed that the Accountable Care Collaborative reduced hospital readmissions by "15 percent, high cost imaging declined 25 percent and there was no meaningful change in ER room visits."⁷¹ These numbers refer to declines in the rate of occurrence rather than to absolute declines. The numbers given in the 2016 Accountable Care Collaborative annual report refer to absolute savings. The Department's claimed savings seem large when compared to findings for both consumer-directed health plans in the private sector and Medicaid Accountable Care Organizations. Results on savings from switching to consumer directed health plans in low deductible preferred provider organizations suggest that they reduce expenditure growth by 7 to 22 percent over the first three years with larger slowing in the first year and smaller slowing in the years thereafter. Most of the spending reductions occur in annual expenditures on pharmaceuticals and outpatient care. They have little effect on inpatient cost growth or emergency department care.⁷²

The Department's claimed savings are also far larger than those claimed for

In FY 2012-13, the state claimed that the Accountable Care Collaborative reduced hospital readmissions by "15 percent, high cost imaging declined 25 percent and there was no meaningful change in ER room visits."

Medicare coordinated care organizations. Although there are many claims that coordinated care will save money, various authors have pointed out that “the vast majority of studies describing substantial cost savings [from coordinated care] are not randomized trials” and the results from randomized trials are much less encouraging. Based on existing evidence, Brent C. Williams concludes that care management has a “limited or nonexistent” effect on costs.⁷³ A 2009 survey of 15 randomized trials of the effects of care coordination on Medicare expenditures and quality of care found minimal effect.⁷⁴ One trial out of the 15 reduced hospitalizations by 10 percent over 8 years. It did not reduce overall expenditures on Medicare Part A or B due, in part, to the high cost of running the program.⁷⁵ Savings are so small that after three years, the Medicare Shared Savings Program for Accountable Care Organizations has increased overall Medicare expenditures by an estimated \$216 million,⁷⁶ and care coordination is more likely to report savings if historical service use is high.⁷⁷

The most heavily coordinated Medicare-Medicaid option, the Program of All-Inclusive Care for the Elderly (PACE), appears to be associated with significantly higher Medicaid costs primarily due to nursing home use. The lower hospital admissions in PACE reduce costs, but not enough to offset the higher nursing home admissions. The program appears to have no significant effect on Medicare expenditures.⁷⁸ These results are tentative as they are based on older studies of differing quality, but they do suggest that all-inclusive care programs do not deliver the savings their advocates claim.

Several other factors suggest that the Department’s savings estimates are unrealistic. Five percent of the Accountable Care Collaborative patients withdraw from the program after they are enrolled. They become part of the roughly 20 percent of the Medicaid population outside of the Collaborative. The Department has provided little information about this group, and it is unknown whether they use more or less care than average. In addition, only 77 percent of the people assigned to the Collaborative have contact with a primary care medical provider. The state pays for them whether they use medical care or not.⁷⁹ If they were enrolled under traditional fee-for-service Medicaid, the state would pay nothing until they sought care.

The Accountable Care Collaborative Annual Report adds to the confusion by comparing results for “members” enrolled for 0-6 months and 7-11 months, for an 11-month period in FY 2015-2016.⁸⁰ As people come and go from Medicaid monthly, this compares different groups in uneven time periods. One would expect things like well child visits to increase

Selected Performance Metrics of the ACC		
	0-6 months	7-11 months
Primary care follow-up within 30 days of hospital discharge		
Standard ACC	43.8%	48.3%
Medicare- Medicaid ACC	48.8%	62.9%
Depression Screening		
Standard ACC	1.9%	4.0%
Medicare- Medicaid ACC	1.9%	3.4%
Well-child visits ages 3-9		
Standard ACC	27.4%	45.0%
Prenatal care (at least one visit)		
Standard ACC	59.2%	65.5%
Postpartum care		
Standard ACC	66.3%	72.9%
Chlamydia Screening		
Standard ACC	42.3%	48.1%
Emergency room visits per 1,000 members		
Standard ACC	782.5	782.7
Medicare- Medicaid ACC	1,493.4	1,333.7
Hospital readmissions within 30 days per 1,000 members		
Standard ACC	8.5	7.0
Medicare- Medicaid ACC	170.5	99.2
Imaging per 1,000 members		
Standard ACC	314.0	285.4
Medicare- Medicaid ACC	1,461.1	1,165.1
Potentially preventable hospital admissions per 1,000 members		
Medicare- Medicaid ACC	81.2	60.8

These results are tentative as they are based on older studies of differing quality, but they do suggest that all-inclusive care programs do not deliver the savings their advocates claim.

over a year because different people take children for routine physician visits at different times during the year. It is not surprising that after 11 months of enrollment the number of well child check-ups would be higher than they would after 6 months of enrollment—some people don't schedule check-ups until September. Similar reasoning would hold for increases in prenatal and post-partum care in months 7-11 compared to months 0 to 6.

If people enroll in Medicaid because they have a health crisis and are enrolled when they seek care, one would expect that emergency department usage, diagnostic imaging, and hospital admissions would be higher in the first six months of enrollment than they are in later months as health crises resolve and medical care utilization naturally declines. As the table shows, the Department reports that imaging and hospital admissions fell over the year as did emergency department visits for people on Medicaid and Medicare.

The Joint Budget Committee Staff Briefing notes that the Department's estimated savings depends heavily on assumptions about the people served. It is possible that the Accountable Care Collaborative increases the cost of caring for able-bodied adults even if it does reduce cost for people with expensive conditions. The problem is that there are many more able-bodied patients in Medicaid than there are disabled people, and the cost of coordination rapidly outweighs any potential savings. In all, JBC Staff estimate that while care coordination may have reduced General Fund spending for medical expenses by \$36 million, General Fund payments for the administrative structure required to run the Collaborative likely increased General Fund spending by an estimated \$50 million. All in all, the Accountable Care Collaborative increased state spending by \$13.8 million in FY 2015-16.

The Department is requesting an additional \$0.7 million to help local public health departments coordinate with the Collaborative. It wants \$0.6 million for an annual survey of member satisfaction.

For FY 2017-18 the Joint Budget Committee Staff estimate that delivery system reforms and a "rate bump" for primary care physicians will cost an additional \$53.1 million, \$19.7 of which will come from state funds.⁸¹ These amounts will rise to an estimated \$41.8 million in FY 2018-19, and FY 2019-20. Appropriations for PACE are increased by \$17.2 million in FY 2017-18. The Department claims estimated savings claim of \$77.5 million from the Collaborative in FY 2018-19. Part of the payment system reform requires that all Medicaid clients enroll in it, which allows the per capita savings estimates to be applied to the 20 percent of people who are not now in the Accountable Care Collaborative.

Prune Medicaid—up to \$83 million in FY 2017-18, up to \$222 million a year by FY 2020-21

SB 13-200 expanded Colorado's Medicaid program. For the first time, abled-bodied adults without children and with incomes above 10 percent of the FPL became eligible for the program. The evidence showing that expanded Medicaid improves clinical measures of health is surprisingly small and there is some evidence that Medicaid enrollment of able-bodied adults reduces work effort. In 2016 the Colorado Health Institute estimated that the Medicaid expansion would cost \$131 million FY 2017-18, \$83 million for people who would not previously have been eligible and \$48 million for people who were always eligible but did not sign up. The cost of the expansion population expands rapidly as federal matching rates decline. It is projected to cost \$222 million a year by FY 2020-21.⁸²

All in all, the Accountable Care Collaborative increased state spending by \$13.8 million in FY 2015-16.

Do not increase funding for the School Health Services program—consider transferring some of its cash to regular Medicaid to free up General Fund money for roads. Retaining just 10 percent of the program’s total Medicaid matching funds would generate \$3 million.

Under this program the Department of Health Policy and Financing (HCPF) certifies that participating school districts or their agent are spending their funds on services that qualify for federal Medicaid matching funds. The claims for the services are submitted to HCPF. HCPF makes an interim payment to the schools for the services rendered and bills the federal government. HCPF claims federal reimbursement on a quarterly basis but reconciles the federal payments to actual costs on an annual basis and adjusts payments to and from schools accordingly. HCPF subtracts 8% from the matching funds for its overhead costs. The fraction of funds distributed to the schools is generous. In New Jersey in the early 2000s, school health providers received 15 percent of the matching funds. The state retained 85 percent.⁸³

The distribution of the federal matching funds to schools is a matter of Colorado statute. As is detailed below, at least some of the money returned to the schools is wasted on what appear to be low value services, and high administrative cost programs of unproven effectiveness. In view of this, the legislature might consider redirecting some of these funds to pay for Medicaid. General Fund support for Medicaid could be reduced by the same amount and redirected to road funding. In the past, the program has also generated considerable claiming errors. Between July 1, 2008 and June 30, 2009, the Greeley and Aurora school districts claimed costs with a federal share of \$1.8 million. The federal government found that \$247,736 of that amount, 14 percent, was unallowable.

Under the federal rules for the School Health Services program, the schools can bill Medicaid for services to students who are both already enrolled in Medicaid and eligible for special education under the Individuals with Disabilities Education Act. Eligible children must have an Individual Education Program. Schools can bill Medicaid for medically necessary services given by a qualified provider. Covered services may include physical therapy, speech therapy, psychological counseling, nursing, and certain kinds of transportation. By state statute, the federal matching funds generated by Colorado School Health Services funding must be spent on delivering “additional health services to Colorado public school children.” The program was established in 1997 by SB 97-101.

In 2015, the Colorado Department of Education reported total public school enrollment of 899,112 students. Small school districts often choose not to participate because the program’s administrative overhead is too costly, but in FY 2015-16 the school districts participating in the School Health Services program enrolled 83 percent of Colorado school children. The School Health Services program billed Medicaid for additional services to 15,793 Medicaid eligible children, down from 16,239 children in FY 2014-15. These children were about 2 percent of total enrollment in participating schools. Most children, 12,075 of them, received speech therapy. Occupational therapy was provided to 4,767 children, and personal care services were billed for 3,146. In FY 2014-15, 16,239 children were provided with additional services.

There are two problems associated with increasing the size of the School Health Services program. The first is that Colorado’s program simply assumes that the health services the school chooses

...at least some of the money returned to the schools is wasted on what appear to be low value services, and high administrative cost programs of unproven effectiveness.

to spend matching funds on are worth the money spent on them. The implicit assumption is that additional funds spent on health cannot possibly be wasted. The second is that the large amounts of relatively unconstrained Medicaid money may encourage school administrative bloat. This in turn can lead to a loss of focus on a school's primary mission to teach students reading, writing, and arithmetic. Although the federal matching funds are free as far as the state health program funding is concerned, the schools must spend real money to receive them. Colorado's General Fund spending includes large school subsidies. State spending will increase if schools demand increased subsidies because their pursuit of "free" federal money increases their operating costs, and if they choose to overstate the harms flowing from "deficient" school health programs. Too much "free" money also encourages them to spend increasing amounts on relatively low value Medicaid services.

In FY 2014-15, the School Health Services program generated \$31 million in federal Medicaid matching funds.⁸⁴ The program has grown from \$31 million in FY 2014-15 to \$41 million in FY 2015-16. HCPF has requested budget authority to return \$43 million to the schools in FY 2017-18.⁸⁵

There is no guarantee that the funds are wisely spent. They can be spent on "health education," "insurance outreach," and a hodge-podge of efforts classified as nutrition services. Any activity that improves or enhances "the quality of School Health Services is also eligible. In 2013, Chalkbeat.org reported that the Medicaid coordinator and school nurse in Academy District 20 used Medicaid funds to hand out "magnets with healthy snack suggestions to all elementary families." The Adams 12 Five Star school district received about \$1.2 million from the program in 2013. It promptly created

a new school health manager position. Denver Public Schools funded a 4 person "Healthy Schools Team," spent \$18,000 on a suicide prevention curriculum for sixth and ninth graders, and trained 22 school psychologists and social workers as suicide prevention specialists.⁸⁶

The evidence of effectiveness for many of these services is thin. There are few randomized studies of the effectiveness of speech and language therapy interventions for children for who do not have "receptive language disorders."⁸⁷ They appear effective for certain conditions, but interventions by trained parents seem to be about as successful as interventions by clinicians. There doesn't seem to be much difference in outcomes for group or individual therapy. Evidence for the effectiveness of school-based suicide programs is also lacking. Although several school-based programs appeared to reduce suicidal ideation and improve general life skills, a 2013 literature review by Katz et al. reported that only 2 school-based programs reduced suicide attempts.⁸⁸

The broad definition of eligible health services allows both spending that duplicates other state programs and programs for which there is scant evidence of effectiveness. Schools somehow managed to provide routine vision and hearing exams as far back as the 1930s without any Medicaid funding. Many also managed to provide full or part-time school nurses.

In FY 2014-15, \$6.0 million was spent to provide more "school nursing services." Additional "mental health services" cost \$2.8 million, more "health technicians/ clinic aides cost \$1.7 million, and outreach to the uninsured cost \$1.2 million. Without specific information on what these programs do, it is difficult to determine their effectiveness.

The broad definition of eligible health services allows both spending that duplicates other state programs and programs for which there is scant evidence of effectiveness.

Whether more spending on school health programs is more important than more spending on roads is an open question. The percentage of children reported to be in fair or poor health in the National Health Interview Survey in 2010-2011 was unchanged from 2001-2002, as were reported school absences. Over the same period, parent reported child disability rose by 16 percent. A disproportionate increase occurred in higher income families. The disability case mix also changed. Although disability due to learning disabilities fell, and disability due to asthma fell by 24 percent, disability associated with speech problems, intellectual impairment, and other mental, emotional, or behavioral problems increased by at least 63 percent.⁸⁹ Some experts in the field suggest that “expanded use of diagnostic and treatment services may explain why more children are identified with disabilities.”⁹⁰ Others note that accurate accounting of state, district, and school-level spending on

health for students eligible for special education simply does not exist.⁹¹

Reconsider the allocations of the Hospital Provider Fee Fund

In 2017 the Hospital Provider Fee Cash fund collected over \$1.1 billion. Of that, \$85 million is devoted to a Hospital Quality Measure Program. The program rewards certain hospitals for participating in the Medicaid Accountable Care Collaborative. It includes measures that duplicate Medicare measures, and has anti-smoking, advance directive, and caesarian section quality measures that at best are crude measures of hospital quality. Legislation to re-appropriate the quality program millions to Medicaid payments could free up \$85 million for roads.

This paper examines selected state budget items and identifies more than \$400 million that might be reallocated to repair roads without raising taxes.

Senior Homestead Property Tax Exemption

The property tax exemption waives 50 percent of property taxes on the first \$200,000 of a home’s value if its owners are 65 or older and have lived in the home for at least 10 years. The state is constitutionally required to send money to county governments to replace the lost tax revenue. The cost of the exemption

is projected to grow as the population ages. Its average value is roughly \$500 per household. Since 2003, the General Assembly has had the power to adjust the market value of the exemption. Its market value was set at \$0 for fiscal years 2003-2005 and FY 2009-12.^{92, 93}

Conclusion

Colorado Department of Transportation publications suggest that an extra \$300 to \$400 million a year over 10 years would be more than enough to fix Colorado roads and provide for necessary expansion. This paper examines selected state budget items and identifies more than \$400 million that might be reallocated to repair roads

without raising taxes. If these suggestions are unpalatable for reasons that are not addressed, it is likely that more thorough scrutiny of these and other areas of state spending would produce similar savings.

Endnotes

- ¹ Colorado Legislative Council Staff. October 3, 2016. Fiscal Note, Bill 4. LLS 17-0180. https://www.colorado.gov/pacific/sites/default/files/17-0180_01%20Bill%204%20-%20FN%20Auth%20New%20Transportation%20Revenue%20Anticipation%20Notes_1.pdf
- ² Colorado Legislative Council Staff. March 21, 2017. Revised Fiscal Note, HB17-1242. https://leg.colorado.gov/sites/default/files/documents/2017A/bills/fn/2017A_HB1242_rl.pdf
- ³ The source for the diagram is the Colorado Department of Transportation, State Funding Sources, <https://www.codot.gov/about/cdot101/state-funding-sources>, accessed March 2, 2017.
- ⁴ “2015 Transportation Deficit Report” (Colorado Department of Transportation, 2015), 19, <https://www.codot.gov/library/AnnualReports/2015-transportation-deficit-report/view>.
- ⁵ “Colorado Department of Transportation, FY 2017-18 Joint Budget Committee Hearing,” § Joint Budget Committee (2016), 6, https://leg.colorado.gov/sites/default/files/fy2017-18_trahrg.pdf.
- ⁶ “2015 Transportation Deficit Report,” 8–9.
- ⁷ *Ibid.*, 13–15.
- ⁸ Kevin Neimond, “Staff Budget Briefing, FY 2017-18, Office of the Governor” (Colorado General Assembly, Joint Budget Committee, November 17, 2016), 26, https://leg.colorado.gov/sites/default/files/fy2017-18_govbrf.pdf.
- ⁹ *Ibid.*, 8.
- ¹⁰ Colorado Department of Revenue. Limited Gaming Fund. Accessed March 29, 2017. <https://www.colorado.gov/pacific/enforcement/node/39006>
- ¹¹ Division of Gaming, Department of Revenue, State of Colorado. July 21, 2016. Financial Statements, Independent Auditors’ Report and Supplementary Information Years Ended June 30, 2015 and 2014. Accessed March 29, 2017. <https://www.colorado.gov/pacific/sites/default/files/Division%20of%20Gaming%202015%20%26%2014%20Financial%20Statement%20Final%20Report.pdf>.
- ¹² Colorado Division of Gaming. 2015 Fact Book & Abstract. Online version, accessed February 24, 2017. <https://www.colorado.gov/pacific/sites/default/files/Fact%20Abstract%202015%20DRAFTv6-FINAL.pdf>, p. 15.
- ¹³ Statute limited investment by the venture funds to a politically favored segment of small businesses. The businesses could not be engaged in professional services provided by accountants, doctors, or lawyers. Business engaged in banking, lending, real estate development, insurance, oil and gas exploration, direct gambling activities were not eligible. Qualified businesses had to maintain their businesses in Colorado for 5 years. Information on the venture capital funds is from the “Colorado Venture Capital Program Venture Capital Authority Performance Audit” (State of Colorado, Office of the State Auditor, February 2007), https://leg.colorado.gov/sites/default/files/documents/audits/1830_venture_capital_perf_feb_2007.pdf. The rate of return on investments in 2005 in an S&P 500 index fund was calculated using the historical returns investing calculator on Bankrate.com. <http://www.bankrate.com/finance/investing/historical-returns-investing-calculator.aspx>.
- ¹⁴ Economic Development Council of Colorado. December 6, 2016. OEDIT Awards \$4.1 Million to Support Technology Start-ups in Advanced Industries. <http://edconline.org/oedit-awards-4-1-million-support-technology-start-ups-advanced-industries/> accessed April 10, 2017.
- ¹⁵ Colorado Office of Economic Development & International Trade, Advanced Industry Proof of Concept Grant Fact Sheet. http://choosecolorado.com/wp-content/uploads/2016/07/AIA-POC-Fact-Sheet_2016.pdf, accessed April 12, 2017.
- ¹⁶ 2016 grants went to groups at the Colorado School of Mines, the University of Colorado, Boulder, and the federal government’s National Renewal Energy Lab. A grant went to Kelvin Thermal Technologies. Its website lists two professors from the University of Colorado, Boulder, Mechanical Engineering Department as the company’s founders. <http://www.kelvinthermal.com/About-Us/>
- ¹⁷ Robert E Hall and Susan E Woodward, “The Burden of the Nondiversifiable Risk of Entrepreneurship,” *American Economic Review* 100, no. 3 (June 2010): 1163–94, doi:10.1257/aer.100.3.1163.
- ¹⁸ P. Nightingale and A. Coad, “Muppets and Gazelles: Political and Methodological Biases in Entrepreneurship Research,” *Industrial and Corporate Change* 23, no. 1 (February 1, 2014): 113–43, doi:10.1093/icc/dtt057.
- ¹⁹ For some examples see Christopher A. Erickson, Victor Owusu-Nantwi, and Fred Owensby, “The Government Spending Multiplier: Evidence from County Level Data,” *The Social Science Journal* 52, no. 3 (September 2015): 358–63, doi:10.1016/j.soscij.2014.09.008. Valerie A Ramey, “Can Government Purchases Stimulate the Economy?,” *Journal of Economic Literature* 49, no. 3 (September 2011): 673–85, doi:10.1257/jel.49.3.673.
- ²⁰ Anders Gustafsson et al., “The ‘Sugar Rush’ from Innovation Subsidies: A Robust Political Economy Perspective,” *Empirica* 43, no. 4 (November 2016): 729–56, doi:10.1007/s10663-016-9350-6.; Robert W. Fairlie, Dean Karlan, and Jonathan Zinman, “Behind the GATE Experiment: Evidence on Effects of and Rationales for Subsidized Entrepreneurship Training,” *American Economic Journal: Economic Policy* 7, no. 2 (May 2015): 125–61, doi:10.1257/pol.20120337.
- ²¹ Scott J. Wallsten, “The Effects of Government-Industry R&D Programs on Private R&D: The Case of the Small Business Innovation Research Program,” *The RAND Journal of Economics* 31, no. 1 (2000): 82, doi:10.2307/2601030.
- ²² See, for example, Raffaello Bronzini and Eleonora Iachini, “Are Incentives for R&D Effective? Evidence from a Regression Discontinuity Approach,” *American Economic Journal: Economic Policy* 6, no. 4 (November 2014): 100–134, doi:10.1257/pol.6.4.100.; Bronwyn H. Hall and Josh Lerner, “The Financing of R&D and Innovation,” in *Handbook of the Economics of Innovation*, vol. 1 (Elsevier, 2010), 609–39, doi:10.1016/S0169-7218(10)01014-2.; Scott J. Wallsten, “The Effects of Government-Industry R&D Programs on Private R&D: The Case of the Small Business Innovation Research Program,” *The RAND Journal of Economics* 31, no. 1 (2000): 82, doi:10.2307/2601030.
- ²³ Albert N. Link and John T. Scott, “Employment Growth from the Small Business Innovation Research Program,” *Small Business Economics* 39, no. 2 (September 2012): 265–87, doi:10.1007/s11187-010-9303-6.
- ²⁴ Timothy J. Bartik, “A New Panel Database on Business Incentives for Economic Development Offered by State and Local Governments in the United States” (Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research, February 2017).
- ²⁵ Matthew E. Kahn and Erin T. Mansur, “Do Local Energy Prices and Regulation Affect the Geographic Concentration of Employment?,” *Journal of Public Economics* 101 (May 2013): 105–14,

- doi:10.1016/j.jpube.2013.03.002.
- ²⁶ Joseph Gyourko, Albert Saiz, and Anita Summers, “A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index,” *Urban Studies* 45, no. 3 (March 2008): 693–729, doi:10.1177/0042098007087341.
- ²⁷ *Colorado Office of Economic Development and International Trade Annual Report*, 2016. (Colorado office of Economic Development & International Trade, 2016), 10, <http://choosecolorado.com/wp-content/uploads/2016/07/2016-OEDITAnnualReport.pdf>.
- ²⁸ Colorado Community College System. Report to the Joint Budget Committee, November 1, 2014. *Colorado First and Existing Industry Customized Training Program*, Fiscal Year 2014. https://www.cccs.edu/wp-content/uploads/documents/CFEI_JBCReport2014.pdf accessed April 16, 2017.
- ²⁹ *Colorado Office of Economic Development and International Trade Annual Report*, 2016. 20–21.
- ³⁰ *Denver Business Journal*. March 11, 2015. “Colorado Rockies owner Dick Monfort is becoming a restaurateur.” <http://www.bizjournals.com/denver/news/2015/03/11/colorado-rockies-owner-dick-monfort-is-becoming.html> accessed April 1, 2017.
- ³¹ Neimond, “Staff Budget Briefing, FY 2017-18, Office of the Governor,” 51.
- ³² “Department Performance Plan, FY 2016-17” (Colorado Office of the Governor, Energy Office, June 2016), https://www.colorado.gov/pacific/sites/default/files/atoms/files/CEO_FY16-17_Dept_Performance_Plan_6.14.16_revised.pdf.
- ³³ Meredith Fowlie, Michael Greenstone, and Catherine Wolfram, “Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program” (Cambridge, MA: National Bureau of Economic Research, July 2015), doi:10.3386/w21331. Arik Levinson, “How Much Energy Do Building Energy Codes Really Save? Evidence from California” (Cambridge, MA: National Bureau of Economic Research, December 2014), doi:10.3386/w20797. Kotchen, Matthew J. “Longer-run evidence on whether building energy codes reduce residential energy consumption.” *Journal of the Association of Environmental and Resource Economists* (2016).
- ³⁴ Neimond, “Staff Budget Briefing, FY 2017-18, Office of the Governor,” 5.
- ³⁵ For more information on the difference between Tier 1 and Tier 2 Severance Tax Trust Fund funding see the graphic by the Colorado Oil and Gas Association [here](#) or the Legislative Council Fiscal Note on HB17-1116. https://leg.colorado.gov/sites/default/files/documents/2017A/bills/fn/2017A_HB1116_00.pdf. The bill proposed spending up to \$13 million on energy assistance programs in FY 2019-20. For a detailed discussion of Severance Tax Issues see the Department of Revenue’s Joint Budget Committee June 20, 2016, hearing materials on the issue. http://www.tornado.state.co.us/gov_dir/leg_dir/jbc/SEVTAX-06-20-16.pdf.
- ³⁶ Colorado Energy Office, web site, Emerging Technologies. <https://www.colorado.gov/pacific/energyoffice/emerging-technologies>, accessed April 20, 2017.
- ³⁷ Amanda Bickel, “Joint Budget Committee, Staff Budget Briefing, FY 2017-18: Department of Local Affairs.” (Colorado General Assembly, November 29, 2016), 6, https://leg.colorado.gov/sites/default/files/fy2017-18_lochbrf.pdf.
- ³⁸ *Ibid.*, 15.
- ³⁹ *Ibid.*, 26.
- ⁴⁰ *Ibid.*, 20.
- ⁴¹ *Ibid.*, 61.
- ⁴² Christina Beisel, “Staff Budget Briefing FY 2017-18, Department of Transportation” (State of Colorado, Joint Budget Committee, November 17, 2016), 11–13.
- ⁴³ <https://www.codot.gov/travel/eisenhower-tunnel/eisenhower-tunnel-traffic-counts.html>.
- ⁴⁴ Jason Blevins. August 25, 2016. “Tickets to ride the Winter Park Express ski train between Denver, Winter Park start at \$39, *The Denver Post*, <http://www.denverpost.com/2016/08/25/winter-park-express-ski-train-tickets/>.
- ⁴⁵ Colorado Statewide Intercity and Regional Bus Network Study, Technical Memorandum #4, Potential Network. It is worth noting that almost none of the routes studied ran at a profit even when federal grants were included. <https://www.codot.gov/projects/intercityregionalbusnetworkstudy/intercitydocuments/tech-memo-4-5-15.pdf/view>.
- ⁴⁶ “Materials Provided for the July 18th and 19th Meeting of the Colorado Transportation Commission, January 2017” n.d., <https://www.codot.gov/about/transportation-commission/current-agenda-and-supporting-documents/january-packet.pdf>.
- ⁴⁷ Editorial, September 9, 2016. I-25 expansion can’t wait. *Colorado Springs Business Journal*. <http://www.csbj.com/2016/09/09/i-25-expansion-cant-wait/> accessed February 3, 2017; Colorado Department of Transportation, North I-25 Express Lane Project FAQs. <http://www.csbj.com/2016/09/09/i-25-expansion-cant-wait/> accessed February 3, 2017.
- ⁴⁸ “Materials Provided for the July 18th and 19th Meeting of the Colorado Transportation Commission, January 2017.”
- ⁴⁹ Transit & Intermodal Committee, Colorado Department of Transportation, April 19, 2017. Memo from Mark Imhoff. “Bustang Quarterly Update; FY 2017 Q3.” <https://www.codot.gov/about/committees/trac/Agendas-and-Minutes/2017/april-14-2017/q3-quarterly-report-bustang-april-2017>.
- ⁵⁰ Colorado Energy Office. August 2012. *Experience with Compressed Natural Gas In Colorado Vehicle Fleets*. http://www.afdc.energy.gov/uploads/publication/CNG_Colorado_Case_Study_Appendices.pdf.
- ⁵¹ Josh Abram. July 20, 2015. Fiscal Note, SB15-288. Colorado Legislative Council Staff Fiscal Note. [http://www.leg.state.co.us/clics/2015a/csl.nsf/billcontainers/945EE95CBD01503887257D9000776B67/\\$FILE/SB288_fl.pdf](http://www.leg.state.co.us/clics/2015a/csl.nsf/billcontainers/945EE95CBD01503887257D9000776B67/$FILE/SB288_fl.pdf).
- ⁵² Bickel, “Joint Budget Committee, Staff Budget Briefing, FY 2017-18: Department of Local Affairs.” 69.
- ⁵³ Press release. “US salary increase budgets remain flat despite upswing in the economy and job market, Mercer survey finds.” November 12, 2015. <https://www.mercer.com/newsroom/us-salary-increase-budgets-remain-flat-despite-upswing-in-the-economy-and-job-market-mercer-survey-finds.html>.
- ⁵⁴ Amanda Bickel, “Staff Budget Briefing, Department of Higher Education, FY 2017-18” (State of Colorado, Joint Budget Committee, December 13, 2016), 24, https://leg.colorado.gov/sites/default/files/fy2017-18_hedbrf.pdf.
- ⁵⁵ For an overview of “administrative bloat” at US institutions of higher education see Tom Lindsay, January 24, 2016. “University of Texas Looks to Limit Administrative Bloat,” *Forbes*, online edition accessed Feb 11, 2017, <http://www.forbes.com/sites/tomlindsay/2015/01/24/university-of-texas-looks-to-limit-metastasizing-administrative-bloat/#7e3d70d6458a>. For academic work on the subject see Robert E. Martin and R. Carter Hill, “Measuring Baumol and Bowen Effects in Public Research Universities,” *SSRN Electronic Journal*, 2012, doi:10.2139/ssrn.2153122.

- ⁵⁶ Bickel, “Staff Budget Briefing, Department of Higher Education, FY 2017-18,” 43.
- ⁵⁷ Bickel, “Staff Budget Briefing, Department of Higher Education, FY 2017-18,” 41.
- ⁵⁸ “Department of Higher Education, FY 2017-18 Joint Budget Committee Hearing Agenda,” § State of Colorado, Joint Budget Committee (2017), 19, https://leg.colorado.gov/sites/default/files/fy2017-18_hedhrg3_0.pdf.
- ⁵⁹ George Leef. February 15, 2017. “The Spread of ‘New Civics’ is Cause for Alarm.” The James G. Martin Center for Academic Renewal. https://www.jamesgmartin.center/2017/02/spread-new-civics-cause-alarm/#disqus_thread, accessed April 19, 2017.
- ⁶⁰ INVST Community Studies, University of Colorado—Boulder. Prospective students web page. <http://www.colorado.edu/invst/clip-apply>, accessed April 24, 2017. The program lists some of the organizations that cooperate with it at <https://outreach.colorado.edu/programs/details/id/164>. From the contents, it appears that the program is designed create progressive activists rather than provide a dispassionate analysis of the issues at hand.
- ⁶¹ Megan Davisson, “Staff Budget Briefing, FY 2017-18, Department of Public Health and Environment” (Colorado General Assembly, Joint Budget Committee, November 28, 2016), 10, https://leg.colorado.gov/sites/default/files/fy2017-18_pubheabrpf.pdf.
- ⁶² Ibid.
- ⁶³ C.R.S. 24-22-117
- ⁶⁴ Rubber Manufacturers Association, accessed February 13, 2017. <https://rma.org/scrap-tire/scrap-tire-markets/tire-derived-fuel>
- ⁶⁵ “Colorado’s Waste Tire Program--Status of Waste Tire Recycling in Colorado, 2015 Annual Report to the Transportation, Public Health and Joint Budget Legislative Committees and the Solid and Hazardous Waste Commission” (Colorado Department of Public Health & Environment, July 1, 2016), https://www.colorado.gov/pacific/sites/default/files/HM_sw-2015-waste-tire-rpt.pdf.
- ⁶⁶ Colorado Department of Public Health & Environment. May 2016. *Recycling Resources Economic Opportunity Program, Eighth Annual Report*, FY2015. https://www.colorado.gov/pacific/sites/default/files/DEHS_RREO_FY15AnnualReport.pdf, accessed April 25, 2017.
- ⁶⁷ Ibid, 22.
- ⁶⁸ Ibid, 25
- ⁶⁹ Katherine Baicker et al., “The Oregon Experiment--Effects of Medicaid on Clinical Outcomes,” *The New England Journal of Medicine* 368, no. 18 (May 2, 2013): 1713–22, doi:10.1056/NEJMsa1212321. S. L. Taubman et al., “Medicaid Increases Emergency-Department Use: Evidence from Oregon’s Health Insurance Experiment,” *Science* 343, no. 6168 (January 17, 2014): 263–68, doi:10.1126/science.1246183.
- ⁷⁰ “Accountable Care Collaborative Annual Report, FY 2015-16” (Department of Health Care Policy and Financing, November 1, 2016), 48, <https://www.colorado.gov/pacific/sites/default/files/Health%20Care%20Policy%20and%20Financing%20FY%202016-17%20RFT%203.pdf>.
- ⁷¹ Sidney D. Watson, “Testimony to the Senate Committee on Veterans Affairs and Health” (2014).
- ⁷² Amelia M. Haviland et al., “Do ‘Consumer-Directed’ Health Plans Bend the Cost Curve over Time?,” *Journal of Health Economics* 46 (March 2016): 33–51, doi:10.1016/j.jhealeco.2016.01.001.
- ⁷³ Brent C. Williams, “Limited Effects of Care Management for High Utilizers on Total Healthcare Costs,” *American Journal of Managed Care* 21, no. 4 (April 2015): e244.
- ⁷⁴ Deborah Peikes et al., “Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries: 15 Randomized Trials,” *JAMA* 301, no. 6 (February 11, 2009): 603, doi:10.1001/jama.2009.126.
- ⁷⁵ Sylvia M. Burwell. 2014. *Fifth Report to Congress on the Evaluation of the Medicare Coordinated Care Demonstration: Findings Over 10 Years*. US Department of Health and Human Services. <https://innovation.cms.gov/files/reports/medicarecoordinatedcaredemortc.pdf>.
- ⁷⁶ S. Lawrence Kocot and Ross White. September 21, 2016. “Medicare ACOS: Incremental Progress, But Performance Varies.” *HealthAffairs Blog*, <http://healthaffairs.org/blog/2016/09/21/medicare-acos-incremental-progress-but-performance-varies>.
- ⁷⁷ David Glass, Jeff Stensland, and Sydney McClendon. October 6, 2016. *Status Report on Medicare Accountable Care Organizations (ACOs)*. Presentation to Medicare Payment Advisory Commission meeting, http://www.medpac.gov/docs/default-source/meeting-materials/statusreportonmedicareaccountable_oct16_pres_sec.pdf?sfvrsn=0.
- ⁷⁸ Arkadipta Ghosh, Cara Orfield, and Robert Schmitz, “Evaluating PACE: A Review of the Literature” (Mathematica Policy Research, Inc, January 2014), <https://aspe.hhs.gov/system/files/pdf/76976/PACELitRev.pdf>.
- ⁷⁹ “Accountable Care Collaborative Annual Report, 2016” (Colorado Department of Health Care Policy and Financing, November 1, 2016), <https://www.colorado.gov/pacific/sites/default/files/Health%20Care%20Policy%20and%20Financing%20FY%202016-17%20RFT%203.pdf>.
- ⁸⁰ Ibid.
- ⁸¹ Eric Kurtz, “Department of Health Care Policy and Financing, Staff Budget Briefing, FY 2017-18” (Colorado General Assembly, Joint Budget Committee, December 5, 2016), 33.
- ⁸² “Medicaid Expansion in Colorado: An Analysis of Enrollment, Costs and Benefits--and How They Exceeded Expectations” (Colorado Health Institute, May 2016), http://www.coloradohealthinstitute.org/uploads/downloads/MK_Expansion_Report.pdf.
- ⁸³ Office of Inspector General, U.S. Department of Health and Human Services. May 2006. *Review of Medicaid Claims for School-Based Health Services in New Jersey*. <https://oig.hhs.gov/oas/reports/region2/20301003.pdf>.
- ⁸⁴ Department of Health Care Policy and Financing, November 1, 2015. Response to the Joint Budget Committee’s Request for Information #9 regarding the Public School Health Services program. <https://www.colorado.gov/pacific/sites/default/files/FY%202014-15%20Annual%20Report.pdf>, p. 9.
- ⁸⁵ Schedule 13 Funding Request for the FY 2017-18 Budget Cycle, Department of Health Care Policy and Financing, S-14 and BA-14 Public School Health Services Funding Adjustment. <https://www.colorado.gov/pacific/sites/default/files/HCPF%20FY17%20S-14%20B-14%20Public%20School%20Health%20Services%20Funding%20Adjustment.pdf>.
- ⁸⁶ Ann Schimke. September 25, 2013. “Medicaid Money a boon for wellness in schools,” Chalkbeat.org. <http://www.chalkbeat.org/posts/co/2013/09/25/medicaid-money-a-boon-for-wellness-in-schools/>.
- ⁸⁷ Frank M. Cirrin and Ronald B. Gillam, “Language Intervention Practices for School-Age Children With Spoken Language Disorders: A Systematic Review,” *Language Speech and Hearing Services in Schools* 39, no. 1 (January 1, 2008): S110, doi:10.1044/0161-1461(2008/012). J. Law, Z. Garrett, and C. Nye. 2008. “Speech and language therapy interventions for children with primary speech and language delay or disorder (Review).” The Cochrane Library, Issue 3.
- ⁸⁸ Cara Katz et al., “A Systematic Review of School-Based Suicide

Prevention Programs: Review: School-Based Suicide Prevention Review,” *Depression and Anxiety*, May 2013, n/a-n/a, doi:10.1002/da.22114.

⁸⁹ A. J. Houtrow et al., “Changing Trends of Childhood Disability, 2001-2011,” *Pediatrics* 134, no. 3 (September 1, 2014): 530–38, doi:10.1542/peds.2014-0594.

⁹⁰ *Ibid.*, 536.

⁹¹ Janie Scull and Amber M. Winkler, “Shifting Trends in Special Education” (Thomas B. Fordham Institute, May 2011), http://www.edexcellencemedia.net/publications/2011/20110525_ShiftingTrendsInSpecialEducation/ShiftingTrendsInSpecialEducation.pdf.

⁹² Robin J. Smart, “Staff Budget Briefing, FY 2017-18, Department of the Treasury” (Colorado General Assembly, Joint Budget Committee, November 15, 2016), https://leg.colorado.gov/sites/default/files/fy2017-18_trebrf.pdf.

⁹³ Kate Watkins, “History of Senior Property Tax Exemption,” Memorandum (Colorado General Assembly, Legislative Council Staff, November 9, 2016), https://leg.colorado.gov/sites/default/files/history_of_senior_property_tax_exemption_interested_persons_memo_11092016.pdf.

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