An Evaluation of Colorado's College Opportunity Fund and Related Policies

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Executive Summary

During the spring of 2004, the State of Colorado adopted a policy that finances its higher education enterprise principally through vouchers rather than through the more traditional approach of making direct appropriations to institutions. The enacting legislation created the College Opportunity Fund (COF), which established a stipend available to all lawfully present Colorado residents to use to offset their in-state tuition costs at the public (and eligible private) higher education institution of their choice. The legislation included two other prominent features: fee-for-service contracts were created to pay institutions to fulfill a set of specific state needs not covered by the stipend; and performance contracts negotiated between each institution and the Colorado Commission on Higher Education (CCHE) were to ensure accountability while allowing for greater institutional autonomy and deregulation.

Not only did the enacting legislation mark a significant departure from past practice in Colorado, it also represented the first and, to date, only attempt in the United States to experiment with a voucherbased system for financing higher education statewide. Recognizing the novelty of the approach, the Colorado Legislature inserted a requirement that the COF policy be formally evaluated within five years of passage. The Colorado Department of Higher Education (DHE), with support from the Donnell-Kay Foundation, contracted with the Western Interstate Commission for Higher Education (WICHE) to do this evaluation, and this report is the result.

The first step in the evaluation was to examine the original intent of the legislation, in order to better evaluate its effectiveness. Based on interviews with several of the policy's more prominent proponents, as well as individuals who were directly involved in its development, we found that the legislation was intended to accomplish three principal objectives. First, the policy was designed to provide the legal and philosophical grounds allowing public higher education institutions and the tuition revenue they collect to be exempt from the revenue and expenditure limitations imposed by the Taxpayers Bill of Rights (TABOR). Second, some proponents believed that the enhanced market forces introduced by the legislation would compel higher education institutions to become more disciplined and efficient in their operations, as well as more conscious of the need to recruit state residents. Finally, proponents intended that the stipend would promote access to higher education for underrepresented populations, including the poor, minorities, and males.

Despite these ambitions, the evidence suggests that COF has not succeeded in reaching these aims, other than providing for higher education to be exempted from TABOR's revenue and spending limitations. A data analysis of student enrollment records shows that the stipend's inception in the 2005-2006 academic year coincided with declines in the number of targeted populations enrolling in higher education. While the number of college students continued to climb rapidly throughout the nation, in Colorado overall enrollment records fell when COF went into effect. Students from underrepresented racial/ethnic and low-income backgrounds were less likely to be enrolled under COF than previously. The rate at which Colorado's high school graduates enrolled directly at an in-state institution showed a slight decline initially, while the mixture of males and females remained steady. The enrollment of adult learners over the age of 25 generally fell more significantly than did the enrollment of traditional-age students.

But what is especially clear is how enrollment patterns differed by institutional sector when COF went into effect: the policy change is associated with much larger declines in enrollment at Colorado's twoyear institutions than at its four-year institutions. While it is not possible to conclusively determine that the voucher program was a reason behind the observed decreases in enrollment, it is at least true that the COF policy did not succeed in ensuring better access to postsecondary education between 2005, when it went into effect, and 2007.

Among the principal findings is that the COF policy's implementation compromised its original intent. In particular, the way the stipend and fee-for-service components of the policy are used in conjunction to protect institutions' overall funding levels stifles their ability to incentivize institutions to enroll more targeted students or meet other identified state needs. Institutions recognize that they will not be rewarded for enrolling more students. Additionally, two-year colleges described how the requirement to authorize and determine eligibility for COF presents unique obstacles that they believe have complicated their ability to attract and enroll students from all backgrounds, but especially those from targeted populations. Focus group participants also revealed a general indifference to (if not ignorance of) the performance contracts and the expectations within them, in large part because they did not perceive there were any real rewards or penalties for performance. Consequently, the COF legislation has had a negligible effect on institutional decision making.

Yet the COF policy has marked a significant step forward in at least one respect: making Colorado's public higher education institutions exempt from TABOR. By any measure Colorado's higher education institutions are underfunded compared to most other states, partly because, prior to COF, TABOR largely prevented them from increasing tuition revenue. Assuring that Colorado's colleges and universities have a more reliable base of support is vital; even institutional representatives who have no love for COF generally are unwilling to once again be subject to TABOR's strict revenue limitations. Otherwise, COF has failed to live up to its original intentions to improve access and impose a more conscious market orientation on institutions, while making public policies relating to higher education less transparent overall.

The report concludes with three sets of options for approaching the set of issues addressed by COF. First, Colorado may choose to make no substantive changes and continue with the existing COF program. After four years under COF, it is apparent that institutions and students are increasingly familiar with the stipend and are now better able to address related issues, even if the two-year colleges face greater challenges in this regard. But taking this option would not address the issues raised in this evaluation, nor would it provide any real hope of achieving the goals related to access or performance that were originally intended when the COF policy was developed and enacted.

Second, Colorado may seek to abandon the voucher-based approach and consider restoring traditional direct appropriations as the principal means of financing its higher education enterprise. In doing so the state would risk bringing higher education back under the auspices of the TABOR amendment, which (after the tuition increases permitted under COF) would have significant implications for the state budget as a whole. Additionally, this option would result in the same performance issues that existed

prior to COF and that were viewed at that time as insufficient in terms of providing access and efficiently meeting Colorado's needs.

Finally, Colorado could amend the existing set of policies to enhance the likelihood of success in achieving state goals. The specific reforms that might be considered relate to all three of COF's components. With respect to the stipend, our evaluation revealed that several reforms might better ensure improved access, including: guaranteeing the stipend's value and increasing state need-based financial aid; eliminating the requirement to explicitly authorize the stipend and streamlining eligibility verification processes; eliminating the 145-credit-hour limitation; and increasing the state's efforts to market the stipend. Relating to the fee-for-service funding, reforms might include: more clearly articulating state needs to ensure that they remain appropriate for Colorado as a whole (not as a collection of institutions); tying a portion of the fee-for-service funding to successfully serving students (particularly those from targeted populations), as measured by completed courses or degrees; and disentangling the fee-for-service funding stream from the stipend funding stream, so that institutions are rewarded for enrollment increases and meeting identified state needs. With respect to the performance contracts, reforms might include: focusing such contracts more on outcome measures that truly reflect performance rather than input measures; and linking the fee-for-service payments for serving underrepresented populations to the accomplishment of explicitly identified, measurable goals related to serving students from those populations. Lastly, Colorado's administration of the COF stipend is less efficient and accountable than it might be if it relied on one (rather than two) separate but parallel databases to track enrollments and stipend usage and if it conducted annual data audits of stipend usage, using student-level data (which is especially important, so long as the credit hour limitation remains in place). This appears to be the option that holds the best prospect for change.

As no other state relies on a voucher-based funding mechanism for financing higher education, there has been great interest in Colorado's experiment. But given the many ways in which the COF legislation's original intent has been compromised, it is not clear whether the policy's failures lie with its philosophy or its implementation. Colorado's choices consist of carrying forward the existing COF policy; making appropriate amendments to it, such as those suggested, to enhance the likelihood of success; or abandoning the voucher-based experiment.

COF Evaluation Report

During the spring of 2004, the State of Colorado enacted legislation that fundamentally changed the mechanisms through which it financed its public higher education system, beginning with the 2005-06 academic year. Rather than appropriating funds directly to institutions, the legislation created the College Opportunity Fund (COF), the principal feature of which established a stipend available to all lawfully present Colorado residents to use to offset their in-state tuition costs at the public or eligible private higher education institution of their choice. In addition to funding the stipend, the legislation also included two other prominent features. Fee-for-service contracts would pay institutions to fulfill a set of specific state needs not covered by the stipend. And performance contracts negotiated between each institution and the Colorado Commission on Higher Education (CCHE) would ensure accountability while allowing for greater institutional autonomy and deregulation.

The legislation marked a significant departure from past practice in Colorado; it also represented the first and, to date, only attempt in the United States to experiment with a voucher-based system for financing higher education statewide. Recognizing the novelty of the approach, the Colorado legislature inserted a requirement that the COF policy be formally evaluated within five years of passage. The Colorado Department of Higher Education (CCHE), with support from the Donnell-Kay Foundation, contracted with the Western Interstate Commission for Higher Education (WICHE) to do this evaluation.

This report is the result of that evaluation project and will address each of the four components of that project in turn. (An appendix provides a more detailed review of the methodological approach.) The first section will address the background conditions in Colorado that contributed to the development of the COF policy and the original intent of the legislation. Next, the report will describe the findings from a quantitative analysis of participation both before and after implementation of the COF policy. This section addresses how COF influenced the demand for higher education. The third section will address the degree to which COF policy was to its intent. Finally, the report will present conclusions and offer policy options that Colorado might wish to pursue in light of the findings of this study.

Background and Intent

As a first step in the evaluation of the COF policy, WICHE began by researching the context under which the legislation was developed and debated. Additionally, understanding the degree to which the policy achieved its aims required a full appreciation of the original intent of the policy. WICHE consulted key documents and data that described the conditions affecting Colorado's higher education system that were present at the time the policy was adopted. With the help of the state's current academic and policy leadership, WICHE also identified those individuals who were instrumental in the development of the COF policy, many of whom served as the policy's champions in winning its passage. Interviews with those individuals were extremely revealing in regard to the complexities of motivations behind and aspirations for what became COF.

Background

At the turn of this century, Colorado was grappling with several challenges related to its provision of higher education and its efforts to ensure the presence of a citizenry qualified for work in a 21st century economy. First among them is what is known as the Colorado Paradox. This refers to the way in which Colorado's high per capita income level and educational attainment rates are fueled by its ability to attract highly educated individuals from other states rather than by its ability to effectively educate its own residents. Faced with this fact, and anticipating growth among populations with relatively low educational attainment rates, Colorado policymakers were (and remain) gravely concerned about the state's ability to continue to support an economy that is increasingly dependent on highly educated talent. Thus, the state was searching for ways to increase participation and success rates in college, particularly among groups it identified as underrepresented, namely low-income students, underrepresented minorities, and males.

A second key feature of the Colorado landscape, vital to understanding COF, is the existence of the Taxpayers Bill of Rights (TABOR). Enacted in 1992, TABOR is a constitutional amendment that restricts the state's general fund collections and expenditures, and it began severely restricting state resources during the recession early in the new century. The result is that funding levels for higher education in Colorado have ranked near the bottom among all states. Furthermore, because tuition revenue was considered to be subject to the state revenue limitation, Colorado's institutions were limited in making up for shortages in their direct appropriations by increasing tuition. What's more, TABOR's "ratchet effect," which readjusted the state's base budget downward when revenues declined, hampered institutions' ability to return to a current services level of funding following an economic downturn, as happened in the wake of the 2001 recession, when the overall state budget shrank (Figure 1). TABOR also meant that increases in tuition revenue caused either by raising tuition or through enrollment growth also put pressure on state expenditures in other, completely unrelated areas.



Against this backdrop then-Governor Bill Owens created the Blue Ribbon Panel on Higher Education to examine the state's mechanism for funding higher education and make recommendations to improve rates of participation. The panel issued a report in early 2003 that recommended the state adopt an alternative means of financing higher education, based on a concept of educational savings accounts, which the panel also referred to as stipends. The stipend amount envisioned by the panel was \$4,000 per year for a full-time undergraduate student, or \$133 per credit hour, and eligibility would be limited to 140 credit hours. The panel recommendations also included block grants to institutions for specific activities not covered by the stipends.¹

However, by the time the 2004 legislature took up debate on Senate Bill 04-189, which ultimately created COF, the 2003-04 recession had dramatically reduced the money available to be spent on higher education generally. The result was that the enacted policy included funding for stipends at a level of only \$80 per credit hour, or \$2,400 for the year for a full-time student. That amount was roughly equivalent to the level of state appropriations per FTE to Metro State College of Denver and the Colorado Community College System, the lowest-cost public institutions in the state. The legislation specified that the stipend payments made by the state on behalf of each student be indicated on each student's bursar statements; that the stipends were portable among Colorado's public institutions (and some private institutions, subject to additional eligibility restrictions) but that students were required to explicitly authorize their use; and that individuals' eligibility for the stipends were subject to a lifetime

limitation of 145 credit hours. The legislature assigned responsibility for administering the stipend to College Assist, Colorado's student loan guarantee agency, which is a self-funded nonprofit part of DHE. There were several reasons to turn to College Assist to fill this role, but its history and experience working with student accounts was surely decisive, as was its ability to build and maintain the infrastructure, including the data systems that would be needed to manage the stipend program. Serendipitously, the reserves available to College Assist from its student loan business made it possible for the state to implement this program and maintain it without a direct appropriation for administrative expenses.

The legislation also included a provision for fee-for-service contracts to fund several specific state needs, among which were graduate-level education, specialized educational services and professional degrees. These contracts were to be negotiated between individual higher education institutions and DHE. Finally, the legislation required performance contracts be negotiated and established for accountability purposes. Importantly, because the stipend amounts replaced direct state appropriations, most higher education institutions achieved enterprise status under TABOR, which exempted their revenues from the TABOR restrictions on revenue growth and spending.

Intent

The intent of the COF policy as expressed in the legislation itself is fairly straightforward. The combination of COF policies were expected to encourage access, especially among males, low-income residents, and those from underrepresented populations; to strengthen educational quality; and to allow for more institutional autonomy without sacrificing accountability. Other contemporaneous documents expressed a broader philosophical intent: by shifting taxpayer subsidies from an institutionally driven system to a consumer-driven system, the COF would improve access and drive institutional behaviors in ways that better fit students' needs.

Interviews with individuals who were keenly involved in the development of the policy and those who championed its passage revealed that their support for the policy encompassed a range of motivations, as well as inconsistencies in their understanding of the policy's intent. That this might be so should not be surprising, as the coalition that helped advance the legislation comprised an array of stakeholders, often with widely divergent ideological perspectives and representing sometimes competing interests. Interviewees offered the following motivations behind their acquiescence in, if not support for, the COF policy:

Exclusion from TABOR. The belief that Colorado needed a policy that would allow higher education institutions to become enterprises as defined under TABOR, and thus exempt from its strict revenue and spending limitations, was the most commonly shared intent of the COF legislation expressed by interviewees. Most sought this exclusion because they saw TABOR as a severe threat to the quality of and access to higher education in Colorado, and many believed that diminished quality was almost inevitable under TABOR. In fact, the rhetoric of crisis pervaded the debates over COF; without enterprise status, as Betsy Hoffman, then president of the University of Colorado, announced at a House Education Committee hearing in April 2004, "we are facing the downfall of public higher education in Colorado" by the end of the decade."²

In particular, interviewees cited institutions' inability to do anything to offset or prevent such impacts through tuition increases as problematic and argued that the freedom to set tuition levels is a vital tool in a market-oriented approach to funding higher education. Fewer of the interviewees discussed the offsetting impact that tuition has on all other state revenue and expenditure streams, but those that did felt strongly that other state functions and services should not be penalized due to growth in revenues through user fees from higher education.

Thus, gaining enterprise status for higher education institutions was perhaps the central goal of the policy's proponents, and it also served as the linchpin uniting the disparate coalition pushing the concept forward. As one interviewee described it, "People bent themselves into pretzels" so that universities could achieve enterprise status. Enterprise status would theoretically allow institutions to increase tuition levels to offset past shortfalls in legislative appropriations, as well as to position themselves to be better able to survive future economic downturns. Funding individuals rather than institutions provided the means through which higher education could effectively argue that its direct revenues from the state fell below the 10 percent threshold required for enterprise status under TABOR.

Increased freedom to operate in the higher education marketplace also held some appeal for the higher education representatives in the coalition. They felt that the restrictions on tuition levels had left a large, untapped market for the more prestigious institutions in the state and expected that achieving enterprise status would allow them to operate more freely in setting prices. Similarly, they expected the legislation would result in freedom from what they saw as overly burdensome regulations that governed everything from reporting requirements to procurement to building construction.

Imposition of market discipline on institutions. There were a number of proponents who felt that the voucher approach would institutionalize market-oriented incentives that would guide institutional behaviors toward greater entrepreneurship, particularly in terms of improved access and efficiency. By funding individuals rather than institutions directly, the COF legislation would force institutions to redouble their efforts at recruitment and even retention, to ensure that they were able to benefit from the stipend dollars that students carried with them. This goal was clearly expressed by Governor Owens at the signing ceremony for the COF legislation, when he argued that the COF "puts real economic power in the hands of students and will cause colleges to compete for those dollars."³ As a CCHE publication noted, "By replacing the outdated practice of direct appropriations from the legislature to the college, Colorado has introduced market forces into taxpayer subsidies for higher education. The new system encourages institutions to focus on enrolling, retaining, and graduating their students by providing a quality, relevant education. Under the direct funding model, few such incentives existed."⁴

There was some limited support for the notion that the stipend approach would be more equitable than traditional direct appropriations. In particular, the fact that the stipend amounts are equal no matter where a student chose to enroll appealed to those who believed that differential funding levels tended to disproportionately benefit the wealthy, who were more likely to attend high-cost institutions.

The introduction of market forces was not exclusive to the stipends; indeed, the fee-for-service contracts were also intended to encourage competition and promote transparency, at least as reflected in official documents. CCHE cited a hypothetical example in which the contracts would apply pressure to one institution to reduce cost levels for an academic program such as nursing, which at another institution might be offered at a much lower cost.⁵ Similarly, the performance contracts were intended to ensure transparency and accountability. Although they were separately negotiated with each individual institution, the performance contracts addressed a set of performance goals related to access, quality, and efficiency. Conceptually, this mechanism permitted the state to reduce its regulatory and oversight role while still ensuring that institutions prioritized activities that met state needs.

Interviewees suggested, however, that the real reason behind the fee-for-service contracts was much more pragmatic and unrelated to markets. Since the stipend alone could not address the real differences in role and mission among different institutions, particularly with respect to graduate education and other high-cost programs,⁶ a separate stream of revenue was needed for institutions with legitimately higher costs. This became the basis for the fee-for-service contracts concept, and it served two roles, both vital to preserving the coalition supporting the COF concept. First, it was initially set at a level to hold institutions harmless in terms of equating their total estimated revenue from the state via the stipend and fee-for-service with their existing direct appropriation from the state. Second, by linking payments to institutions from the state to the purchase of specific services, fee-for-service funding provided a rationale for treating an even greater share of institutional revenues as exempt from TABOR than the revenues from the voucher payments alone would. That brought a greater number of institutions into enterprise status and broadened the appeal of the COF approach within the higher education community.

The market orientation of the COF approach had one other important value. The state's political leadership at the time generally held to the fundamental belief that the market provides the most effective means of efficiently delivering state services. Thus, COF became a way for those who had been (largely unsuccessfully) trying to secure better and more stable funding for higher education to wrap that goal in a philosophy that was attractive to the political leadership.

Improved access. The public rhetoric surrounding the adoption of the COF policy prominently included the expected benefits it would bring for increased access among underrepresented populations. But of all the conceptualized intentions of the policy, interviewees were most divided on whether they truly expected improvements in access to occur.

Many of the policy's most vocal proponents were captured with the notion that the stipend would result in improved access, especially among the targeted populations of low-income students, underrepresented minorities, and men. A set of focus groups, conducted with low-income individuals and families under the auspices of the Blue Ribbon Panel, was instrumental in raising expectations for a voucher-based system's capacity to favorably influence college-going decisions. The focus group findings firmly convinced these champions that a voucher could work to improve access by making citizens aware of the size of the state's investment on their behalf and by helping them appreciate that paying for college expenses might not be the insurmountable challenge many were imagining. The idea that enrollment would increase if only the public knew about the state subsidy that all are entitled to as Colorado residents was especially appealing, and the COF legislation is clear that the stipend payments must be itemized on students' bursar bills. Also important was the expectation that the COF stipend would be a useful tool for high school counselors trying to help students understand how they might afford the costs of college. The resulting transparency, along with intensive marketing of the stipend, would help drive access.

However, many of the interviewees, particularly those most closely associated with the higher education institutions, were never convinced that the stipends would affect access whatsoever, particularly among the targeted populations. They pointed out that, under COF, in-state tuition charges would rise by an amount equal to the stipend level. Because out-of-pocket expenses facing a prospective student would remain the same, they were not expecting any increase in demand. They were also skeptical that the voucher approach provided greater transparency in meeting college expenses; rather, the skeptics expressed concern that the access agenda could be hurt by the addition of the requirement that students explicitly authorize the COF payment to the institution on their behalf. Skeptics among the interviewees said they were unconvinced by the focus group findings because they were based on a program that would have made community college available to them at no tuition costs after the voucher was applied.

Participation Before and After COF Implementation

To investigate how participation in Colorado's public colleges and universities⁷ was affected by the implementation of the COF legislation, WICHE obtained individual-level data from Colorado's Student Unit Record Data System (SURDS) on in-state students enrolled between fall 2003 and spring 2008. These data included variables on age, race/ethnicity, student level, gender, year of high school graduation, credit hours enrolled, and stipend hours used. For students who completed a Free Application for Federal Student Aid (FAFSA), the data also included information on income, dependency status, and grant aid received.⁸ Keeping in mind that the impact of the COF policy cannot be causally linked to changes in enrollment,⁹ the research questions we pursued included: What impact did COF have on enrollments and on enrollment rates? How did those impacts differ for different groups of students, especially traditionally underrepresented racial/ethnic minorities, those from low-income backgrounds, and men – all groups that had been explicitly targeted, in terms of access, by the COF legislation? How did the rate at which enrolled students authorized their stipend (hereafter, the "take-up rate") differ among these groups? Did different types of institutions see different changes in participation patterns?

Enrollment

Overall undergraduate enrollment in Colorado's COF-eligible public higher education institutions experienced a sharp decline as the stipend became effective in fall 2005 (Figure 2). Within the first two years of the stipend, total fall enrollments statewide fell by 4,567 students (2.9 percent). Community

colleges bore the brunt of this decline, dropping by 5,952 (9 percent) over that same time frame before recovering slightly in fall 2007. Meanwhile, four-year institutions experienced ongoing increases in their total enrollment, climbing by 1,385 students (1.5 percent) in the first two years of COF's implementation.



Figure 2.

As seen in Figure 3, Colorado's enrollment trends mimic national enrollment patterns in the U.S. during 2003-2004, but with COF's inception in 2005, Colorado undergraduate enrollment declined for two years. Meanwhile, U.S. undergraduate enrollment figures showed continuous increases from 2003 through 2007.



Figures 4 and 5 display the racial/ethnic composition of the undergraduate enrollment at Colorado's COF-eligible public institutions and how it changed throughout the period of analysis. The relative shares of the races/ethnicities remained relatively constant, with White non-Hispanics making up the large majority of students, followed by Hispanics. Other races/ethnicities composed less than 5 percent each of enrollments in all years, and consequently analyses for them are more volatile. Nevertheless, the data show slight declines in the share of White non-Hispanics being largely offset by gains in the share of students from Hispanic and, to a lesser extent, Asian/Pacific Islander backgrounds.









Looking closer at the change in the enrollment numbers shows us more detail. Enrollment growth in Colorado among White non-Hispanics, Hispanics, and American Indians/Alaska Natives was arrested or turned back when COF went into effect. Growth for these groups didn't resume until fall 2007. Meanwhile, enrollment among Hispanic students nationally continued to rise dramatically throughout the period of analysis, and the number of White non-Hispanic and American Indian/Alaska Native students remained fairly constant (Figure 6)



Because the COF legislation specified that increasing the enrollment of males was among its objectives, WICHE analyzed how enrollment at COF-eligible institutions changed by gender (Figure 7). It shows that the number of both men and women decreased for two years beginning in fall 2005, and the enrollment ratio of women to men remained basically unchanged throughout the period at 1.3.





WICHE also looked at the enrollment of students grouped by age, institution attended, and income, and examined how the COF legislation influenced Colorado's institutions' market penetration. The COF legislation appears to have had very different effects based on institutional sector. For instance, the rate at which high school graduates went on to a COF-eligible public institution remained basically unchanged in the stipend's first years, after having dipped slightly between 2003 and 2004 (Figure 8). Figure 9 provides more information on where those graduates chose to attend. While the size of Colorado's high school graduating cohort generally increased during the period of analysis (though the class of 2005 did show a brief dip, resulting in a slightly smaller pool of graduates in the same year COF became effective), institutions' fortunes with enrolling those individuals differed considerably, based on their sector. The number of students going directly from high school to Colorado's most selective fouryear institutions experienced continuing growth, and it seems COF had little effect. Less selective fouryear institutions, after a substantial increase in their enrollment of high school graduates in 2004 (prior to COF's implementation), experienced mixed fortunes in their ability to attract recent high school graduates over the next two years; but over the total period of time, they also showed virtually no change in participation, compared to the increase in high school graduates. The story was much different at two-year institutions, which experienced a dramatic drop in their enrollment of recent high school graduates during the first year of COF, although these numbers had largely recovered to pre-COF levels by the next year.

Figure 8.



Figure 9.



Breaking down the college-going rates of different races/ethnicities provided some striking information (Figure 10). Going directly from a Colorado public high school to an in-state public college occurs most frequently among American Indians/Alaska Natives (the bigger obstacle to educational attainment for this group in Colorado is completing high school) and Asian/Pacific Islanders, followed by White non-Hispanics, then Hispanics and Black non-Hispanics. Clearly, the downward trend in the college-going rate of Colorado's fastest-growing minority group, Hispanics, continued after the stipend went into effect. The college-going rate also dipped slightly for Black non-Hispanics and White non-Hispanics.



Figure 10.

Since high school graduates are only a portion of the demand for higher education, we also looked at market penetration for different age groups (Figure 11). The number of traditional-age undergraduates relative to the state's population of 17- to 24-year-olds continued to increase in the first two years under COF and appears to have leveled out since then. Meanwhile, the enrollment pattern for adult learners showed a consistent downward trend, both before and after COF's implementation. Looking a little more closely, it is apparent that the community colleges were the institutions shedding enrollments, which contributed to these overall declines in market penetration. Figure 12 displays how community college enrollments plummeted for every age range beginning in fall 2005, with more precipitous declines occurring as students got older. At the four-year institutions, enrollment of traditional age undergraduates showed continued growth in the first years after COF's implementation, though the rate of growth slowed; however, enrollment of adults from all age groups over 25 at four-

year institutions fell dramatically in the years after COF's implementation, with larger declines mostly occurring among older age groups.



Figure 11.









Figure 14 shows that adults aged 25 to 49 of all races/ethnicities saw declines in the rate at which they were enrolled, compared to their group's population within the state. The onset of COF coincided with continued decreases in each group's rate of participation and actually accelerated for American Indians/Alaska Natives in this age range.



Figure 14.

The COF legislation also included specific language about the intent of the stipend to increase access among low-income individuals. This, in particular, was where the policy's champions believed the voucher approach would increase the demand for higher education, based on the strong evidence of its workability they deduced from their focus groups with prospective students and their parents. Logically, any demand-side impact would also be influenced by changes in the tuition prices being charged by COF-eligible institutions, and the policy was explicitly aimed at allowing institutions some capacity to raise prices without triggering TABOR. The result was that institutions in both the four-year and twoyear sector bumped the net tuition levels up in the same year that COF became effective (Figure 14). Between 2004-05 and 2005-06, average published tuition for full-time students, after deducting the value of the COF stipend, rose \$507 (23.5 percent) at the Community Colleges of Colorado and \$545 (13.3 percent) at four-year institutions.





To estimate enrollment patterns for students with different financial means, WICHE used two different approaches to identify income levels. First, a look at Pell recipients enrolling at COF-eligible institutions shows a substantial decline occurring concurrently with the inception of COF in both the four-year and the two-year sectors (Figure 15). In the first two years under COF, enrollment of Pell recipients at four-year institutions fell by 1,157 and by 1,543 at two-year institutions. While that figure rebounded somewhat for the two-year sector in fall 2007, it continued to slump in the four-year sector, descending by another 3 percent, or 622 students.





Breaking these figures out by dependency status reveals that poor independent students experienced the greatest decrease in enrollment under COF, with their numbers at two-year institutions falling by 11 percent between 2004 and 2006 (Figure 16). Four-year institutions, which enroll a similar number of independent students, continued shedding these students into fall 2007, at which point they had lost 11.8 percent of their 2004 population. Meanwhile, enrollment of Pell-eligible dependent students recovered in both sectors after their numbers fell by more than 6 percent in both sectors during the first two years under COF.





Stipend Take-Up

The evaluation next turned to the degree to which those who did choose to enroll at a COF-eligible public institution authorized their stipends. This analysis examines how many students ended up paying more than necessary in college expenses and who they were. Figure 17 disaggregates undergraduate enrollments in fall 2005 and later into two groups, based on whether they authorized their COF stipends. It is apparent that the take-up rate among enrolled students drastically increased after the first year, climbing from 92.8 percent in fall 2005 to 97 percent by fall 2007. Figure 18 shows that the take-up rates among enrolled students increased for all races/ethnicities but that students from underrepresented backgrounds were more likely to incur additional college expenses from having failed to authorize their COF stipends in the initial year. Early in the implementation of COF, students at community colleges were much less likely to authorize their COF stipend than their counterparts at fouryear institutions (Figure 19). But the discrepancy vanished within two years, apparently as students and two-year institutions became more familiar with the program. Finally, take-up rates for men and women showed no differences in any of the first three years under COF. Clearly, the size of the group leaving state dollars on the table, either out of philosophical objections,¹⁰ ignorance, confusion, other sources of funding not requiring COF authorization (such as employer benefits), or some other reason, shrank as students and institutions grew more familiar with the stipend.













Summary

While our data analysis did not isolate the impact of the stipend from other factors that may have influenced enrollment, it is clear that the stipend has not fulfilled the intended objectives of increased access. COF's first years of implementation were notable for declines in overall undergraduate enrollment; college-going; and the enrollment of adult learners, underrepresented minorities, and the poor. Colorado's undergraduate enrollment patterns in the wake of COF's implementation stand in contrast to national enrollment trends over the same period. Nationally, U.S. enrollment rates continuously increased during this period. Colorado's enrollment declines occurred despite substantial efforts on the part of the Department of Higher Education, through a program known as College in Colorado and substantial marketing by the institutions, to inform prospective students about the availability of COF. The data show that downward-trending enrollment patterns among targeted populations did not reverse with the implementation of COF. In fact, the stipend's first years tended to be concurrent with more negative enrollment trends for those populations and for adult learners in particular. In other cases, such as with men, the stipend has had no real discernable impact to date. Most strikingly, while enrollments at the four-year institutions appear to have been generally unaffected by the change – in fact their enrollments continued to climb even after the stipend's inception – the same is not true for the state's community colleges. It was, in fact, the decline in two-year college enrollment that drove the state's overall enrollment declines in the first years under COF. This is not

surprising given that the community colleges serve larger concentrations of adult learners, minorities, and the poor, all of which showed declines in participation.

Policy Implementation and Supply-Side Effects

A third component of the evaluation project was to examine the degree to which the policy implementation was consistent with the legislature's and proponents' intent and also to explore how institutions have responded to the policy. While the data analysis suggests that COF has not led to better access, it is not clear whether the flaws lie in the voucher concept generally or if the implementation of the COF legislation compromised the framers' intent. Since the policy was designed in part to encourage higher education institutions to become more responsive to market forces, this section will address the extent to which institutions appeared to have behaved differently than they did prior to COF's implementation.

WICHE's analysis of the implementation and supply-side effects of the COF legislation relied primarily on two sources of information. First, interviews with the original framers of the policy also included a set of questions about how well they understood the policy to have met its objectives and how faithfully they felt the policy has been implemented. Second, WICHE conducted focus groups that engaged the leadership of the Colorado Department of Higher Education, the Colorado Community College System office, and College Assist. WICHE also conducted a series of focus groups with institutional representatives, including separate meeting with groups of chief academic officers and chief financial officers, as well as with individuals whose responsibilities require them to engage in COF-related matters on a daily basis. These individuals were recruited for the focus groups because they work in their institution's admissions, financial aid, or registrar offices.

The information provided by these focus groups and interviews pointed to an implementation that failed in many respects to preserve the intent of the COF legislation. But the policy has accomplished what is perhaps its most core objective: exemption from TABOR for the state's higher education institutions. While focus group participants and some of the interviewees saw no shortage of limitations of the policy and its impact on their ability to serve students, they recognized the importance of this outcome of the legislation to higher education and the state as a whole. One remarked that, "if there's a way to get out from under TABOR without the stipend, then that would be good. If getting out from under TABOR is not possible without it, then that makes the stipend worthwhile."

Nonetheless, our conversations identified numerous ways in which all three of the legislation's principal elements, as implemented have not led to other desired outcomes.

The Stipend

Several participants noted that the stipend amount that was originally considered during the Blue Ribbon Panel's deliberations was much richer than the amount that eventually was included in the policy. By the time the legislature enacted the policy, the state economic recession had led to a reduction in the stipend amount from the originally proposed \$4,000 annually for a full-time student to \$2,400. Several of the proponents argued that the reduction largely gutted the capacity of the stipend to influence the enrollment decisions of prospective students. Since the support base for the stipend was built in part upon the findings of the focus groups with students, which were especially influential among those who believed strongly in the "market forces" arguments, they viewed this reduction of the stipend's perceived buying power as a critical misstep in the implementation, one that gravely weakened the policy as a whole.

Many of the participants also felt the stipend itself had fundamental flaws that were not fully appreciated at the outset. In particular, the requirement that individuals explicitly authorize the stipend's payment on their behalf, central to the rationale underpinning the TABOR exemption, presented challenges upon implementation. Although institutional representatives were uniformly pleased with the professionalism and timely assistance they received from the College Assist staff, the stipend's verification process, which often requires a day or more (and is itself complicated by the lawful presence requirements of HB 06-1023), frustrated students, particularly those intending to attend community colleges, many of whom do not plan very far in advance of their decision to enroll. Many institutional administrators reported that they know of numerous students who did not authorize their COF payments for various reasons, including neglect, confusion, concern that they would expose family members (especially undocumented ones), and even an unwillingness to take "charity" from the state. Mismatched identification data, such as a student inputting a nickname on the web-based authorization form instead of his or her given name, frequently thwarted the validation process. While such issues are most often worked out, they present a stumbling block to access and affordability and divert institutional resources while adding to staff workload.

Institutional officials also were skeptical of the stipend's capacity to make a difference among the target population. Discounting the findings of the focus groups with target populations that so convinced the proponents of COF's potential to increase access, many of those who were left to implement the program argued that there was nothing inherent in the stipend that would especially appeal to students from low-income or minority backgrounds or to men. Instead, their experience has been that the savvier students who best understood higher education finance under the traditional direct appropriation model are the same students who struggle to grasp how they might afford college.

What's more, the communications effort, launched as the legislation neared its effective date, complicated the general public's awareness of how it would work. This tended to defeat proponents' hopes that a clearer understanding of how individuals and families could finance higher education would improve access. A lack of consistency in terminology and information in public pronouncements and in the numerous information sessions that state agencies, institutions, and individual schools conducted to educate parents, students, high school counselors, and others left many under the mistaken impression that the stipend would substantially reduce or eliminate students' out-of-pocket expenses. This confusion was fed by a misunderstanding about how COF would affect prices among state leaders themselves. The policy's most ardent proponents, as well as more cynical institutional representatives, remarked that confusion grew after high public officials in the state publicly asserted that the stipend would make college tuition effectively free for community college students.

Some of the confusion may have first arisen with the focus groups with prospective students and their parents conducted prior to implementation. The presumption in those groups was that the effect of the voucher would be to reduce the actual price that students faced. In fact, the focus group leaders actually suggested to students and their parents that, after receiving the voucher, college would be "free." That certainly was not the way it turned out. As implemented COF was intended to hold the "net price" of college about equal to what it had been before implementing the program. As a result the policy ultimately implemented differed substantially from the policy discussed with prospective students and their families in the focus groups. Instead of reducing students' out-of-pocket expenses, even possibly to the point of making college free, it actually cost students at least the same amount as before the stipend. In fact, because COF loosened slightly the restrictions in place due to TABOR on tuition increases, many students actually ended up facing higher prices. The only difference was that the state's subsidy would be awarded directly to the student, rather than having that amount provided directly to the institutions, as in the past. Yet students, who never actually take possession of the money but only direct the voucher's payment to institutions, likely perceive the authorization process (in the words of one participant) as "just another administrative box to check" in the process of getting registered.

Institutional representatives offered an array of anecdotes about students who did not appreciate that in-state tuition levels climbed when COF was implemented but rather expected their tuition to be fully covered by the stipend. They described the tense conversations that frequently resulted from having to correct misinformed students and parents. Thus, rather than promoting a better understanding of the size and scope of the state's investment on their behalf as the legislation was intended to do, COF created another pricing level, the "student share" of in-state tuition, for would-be consumers to understand.

Other features of the stipend added to students' confusion. For instance, many students mistakenly expected that their stipend would come to them in the form of a check or other direct payment. Students with their tuition fully paid through scholarships still were expected to authorize COF, and it was not obvious to them why they would be expected to submit any information at all to the state's loan guaranty agency, College Assist, which was charged with implementing the program. Nor did those who did not successfully authorize their stipend understand why they were billed for the stipend amount.

Importantly, the relative magnitude of the negative effects of the stipend approach has been much greater for two-year institutions than four-year institutions. Not only does the data analysis bear this out, so do comments from administrators. As open-admissions institutions, two-year colleges are the principal "access" institutions in Colorado, as in other states. Community college students are, on average, more likely than those at four-year institutions to be minority, first-generation, low-income, relatively underprepared, single parents, or a combination of these and other characteristics that make their decisions to enroll more precarious. Any obstacle, including confusion about financing their college expenses, is likely to have greater negative consequences on the typical community college student than on the average four-year student. Two-year institutions' representatives in our focus groups shared stories of students they had worked to get registered only to see them throw up their hands in frustration and depart without enrolling when they saw the bill and encountered confusion over COF.

While the state's four-year institutions are more likely to begin working with students seeking to enroll several months ahead of the start of a term's classes, community college students tend to enroll at the last minute – in many cases, the day that classes start. The Colorado Community College System puts the number of students registering during the three-week peak period prior to and during the first week of classes at between 2,000 and 3,000 per day.¹¹ These matriculation patterns afforded staff members little time to explain the COF stipend to students and required the institutions to adjust payment policies. Two-year institutions working with late registrants sought to avoid losing those students in the midst of the registration process as a result of unexpectedly high bills, which did not include the stipend due to the lag time required for verification. Their approach was to charge students an amount based on an estimated student share, which presumed the students would successfully authorize COF. However, this left the community colleges in the position of tracking down students whose COF authorizations failed. Despite the investment of significant staff time, many students continued to owe money because they did not successfully authorize their stipend payments. Early in the history of COF, many of these students' accounts ended up in collections, though that appears to be less of an issue now.

A feature of the stipend that came in for widespread criticism was the 145-credit-hour limitation on its use, as well as the associated provisions governing exceptions to that limitation: the 30-hour postbaccalaureate allowance and the availability of waivers. The credit hour limitation appeals to fiscal conservatives, since the stipend approach enables the state to constrain spending on individual students in a way that is not possible through the traditional direct appropriation funding model. It may also present students with incentives to complete their studies in a more timely way, though whether it actually does so cannot be determined without several more years of data. While those voicing these criticisms largely worked at institutions, their experiences portend possible problems looming as more students approach their limits. The first problem was with the creation of an "initiation file" and was perhaps somewhat unavoidable, since implementation of the stipend necessitated selecting a starting point for tracking students' participation levels. The COF legislation specified that students enrolled as continuing students in the term prior to implementation would be included in the initiation file that counted all credits accumulated to that point against their credit-hour ceiling. The decision not to include credits accumulated by other students who just happened to take that term off was perceived as arbitrary. Thus, one group of unsuspecting individuals received different treatment under COF than everyone else, based solely on when they happened to be enrolled. As a result they have less flexibility in completing degrees, retraining for new employment opportunities, or fulfilling professional development or licensure renewal mandates.

A second issue brought up by participants was that the 145 hour limit is a less realistic constraint for some academic programs than it is for others. Students in programs with more intensive degree requirements, such as engineering or science education, are more likely to be in danger of exceeding their credit hour limit. Likewise, students with an academic deficiency requiring remediation will use up credit hours meeting that expectation, rather than making progress toward their degree goal. The limitation also becomes problematic for individuals working in professions that require continuous professional development or training.

Institutions have worked with their faculty and academic advising staff to educate them on the limit and the available waivers and extensions associated with it. They report that awareness of the limit has faded over time, however. Community colleges, with their greater reliance on a revolving group of adjunct instructors, are particularly challenged to help students construct academic plans that take the limitation into consideration. They use reports to identify those students approaching the ceiling, but by the time students are identified, it is typically too late to help provide much useful advice. Students using a large portion of their eligible credit hours at community colleges are less likely to transfer to a four-year campus.

Participants also claimed that the credit hour limitation unfairly penalizes long-term Colorado residents. They argued that students who complete a share of their postsecondary coursework at an out-of-state institution earn greater leeway in finishing a degree as a newly-minted Colorado resident student, when compared with resident students who earn all of their credits in Colorado. The credit limit also discourages students from branching out to pursue academic interests not directly tied to degree requirements.

Finally, a consistent understanding of which students ought to receive waivers under the policy appears to be lacking: some institutions were granting all waivers until they were told to do otherwise, while others were more closely evaluating the merits of waiver applications. Indeed, institutions' treatments of other aspects of the stipend were not consistent across the state either. For instance, differences in how institutions reported the stipend payment on federal tax forms might mean that students with identical out-of-pocket expenses are eligible for unequal tax credits.

Fee-for-Service Funding

Although the stipend dominated discussion during the interviews and focus groups, neither the majority of the proponents nor the administrators who were responsible for implementing the policies spoke of the fee-for-service component of the COF legislation as integral to making institutions more beholden to market forces. Contrary to the clear intent of COF, most of the institutional representatives believed the fee-for-service contracts were solely to hold institutions harmless, particularly those that have graduate education as a substantial part of their mission, rather than an additional effort to compel changes in institutional behavior. In fact, institutional representatives in general failed to perceive that the legislation was intended to set up a relationship of any kind between fee-for-service funding and the market for higher education.

Moreover, WICHE's focus groups strongly suggest that the fee-for-service contracts not only failed to introduce more market discipline on their own but have actually served to undermine any likelihood that the stipend exposes institutions to more powerful market forces. Because both the perception and reality appear to be that the fee-for-service payments were simply a balancing tool to keep institutions whole with respect to the overall funding levels prior to the implementation of the COF legislation, it is not surprising that no change in institutional behavior resulted. Even when asked, few of the institutional focus group participants made the connection that fee-for-service was also intended partly to promote greater competition among institutions and to drive institutional priorities toward meeting articulated state needs. Those that did recall that aspect of the legislation's original intent argued that it

was basically hollow rhetoric and that fee-for-service was a much more pragmatic solution to the problem of securing institutional support for the concept.

Notwithstanding public rhetoric about how fee-for-service contracts would force institutions to compete to more efficiently deliver on a set of specific state needs, fee-for-service funding initially fulfilled two main goals necessary for holding together the coalition supporting the legislation: to hold institutions harmless and to help institutions become enterprises. While institutions must find a way to justify their fee-for-service funding within one of five legislatively specified educational services, ¹² the fee-for-service funding levels are not determined in terms of payments per unit of actual output. In fact, there appears to be little relationship between fee-for-service payments and the achievement of any outcomes; rather, the payments seem to be solely to assure pre-determined revenue streams. So in many respects, the fee-for-service component was never as clearly tied to a broader, market-oriented philosophy as the stipend was, and thus any connection between fee-for-service and the market was easier to sever under implementation.

This situation combined with the way the state funds the stipend and delivers fee-for-service funding to render impotent any presumed market-oriented incentives facing institutions. Because the legislation confirms that the stipend is not to be treated as an entitlement, the state does not fund the stipend program in a way that ensures that individual campuses are rewarded in real time for enrolling COFeligible students. Rather, the legislation requires DHE to provide estimated enrollment figures to the legislature upon which the COF stipend amount for the subsequent academic year is set. Although the institutions can request a supplemental appropriation when actual enrollments exceed projections, the legislature is under no obligation to commit additional money. Whenever the projections have underestimated the stipend's usage, the state has covered the shortfall by tapping into the institution's fee-for-service funding. The state money going to the institution is redistributed from the fee-for-service component to the stipend component, but the overall amount remains the same. Relying on fee-forservice as a balancing tool to level up institutions with their overall projected funding means that enrollment growth is not actually funded by the state. Not funding enrollment growth guts the stipend of any power it might have had to induce institutions to compete more strenuously for targeted students. In fact legislators provided the authority for institutions to transfer unexpended money originally set aside for stipends to fee-for-service spending.¹³ Institutions have no incentive to adapt if their total revenue from the state is unchanged. As one focus group participant observed, "Because feefor-service is primarily a balancing tool, we don't plan to change our array of services provided to attract more fee-for-service money. There is no incentive to change programs."

Additionally, institutional representatives expressed concern about the fate of the fee-for-service dollars in the current economic climate. They pointed out that, even though the stipend is not an entitlement, the politics of cutting funding for the stipend versus cutting funding for fee-for-service are different. Those institutions with considerable fee-for-service funding are uncertain whether the budget downturn has the potential to redistribute subsidy shares among institutions, and this worry has the potential to affect planning. Similarly, the Colorado Community College System and Metro State College are anxious about how they will manage if their relatively modest fee-for-service funding is stripped away from them or reduced to the point where it cannot be used to offset unfunded enrollment growth. All institutions largely share the concern that supporting increases in high-cost undergraduate programs may be difficult without adequate fee-for-service funding.

Performance Contracts

WICHE also asked proponents and focus group participants to address the impact on institutions of the third component of the COF legislation, performance contracts. As with the fee-for-service component, it was clear the performance contracts generated far less vocal commentary than the stipend did. On the positive side, there were indications that the process of negotiating the performance contracts necessitated strategic thinking within institutions that may not have occurred in the same way in their absence. This was more evident among the regional four-year campuses than others, in great part because the timeframe for preparing the performance contracts coincided with the breakup of the four-year state college system, so those individual campuses were just beginning to engage in strategic-planning efforts, and likely would have been doing so even in the absence of the COF legislation. It appears that the performance contracts may have served to influence those strategic-planning efforts to more actively account for the specific state goals and objectives.

Unfortunately, the performance contracts appear to have had virtually no influence on institutional behaviors otherwise. To begin with, most institutions believed that the goals outlined in their performance contracts differed in no meaningful way from what they viewed as central to their role and mission anyway. Furthermore, the five-year time horizon allowed for considerable turnover in institutional leadership, and new presidents can argue that their tenure should not be tied to contracts negotiated with their predecessors. Most importantly, however, there are no provisions within the performance contracts to either reward or punish institutions for their performance. As one focus group participant put it, "They have no teeth."

It was notable that focus group participants from lower levels of institutional hierarchies were largely unaware of the performance contract specifics. If the performance contracts were decisive in shaping institutional behaviors, then the individuals who work daily with students might be more accountable for helping the institution meet its performance targets. But this was not the case. One participant said she had only a "foggy" sense of what is in the performance contracts or what they were intended to accomplish. As another person put it, the performance contracts "are for the institutional researchers to use."

Finally, one of the expectations for the performance contracts was that their existence would allow a shift in the state's regulatory posture, relative to its institutions, freeing them from various burdensome reporting requirements and allowing them to perform certain activities with a reduced level of oversight. Yet the representatives from higher education institutions generally agreed that the expected loosening of the regulatory belt did not occur, with one important exception: the institutions with enterprise status could issue revenue bonds in their own names. This freedom has allowed those institutions to finance infrastructure improvements and address deferred maintenance backlogs.

But institutions were expecting to receive greater regulatory autonomy, especially with respect to control over tuition setting. Even some of the policy's more conservative backers believed that if a true

market-driven model was to be erected through COF, then institutions ought to be granted freedom to set their own prices. After allowing tuitions to climb in the first year under COF, however, the state reimposed its authority to slow the pace of tuition growth. Beyond tuition-setting, institutions also gained freedom from what they viewed as unnecessarily burdensome Quality Indicator System (QIS) reporting requirements. Institutional representatives claimed that their reporting obligations under the performance contracts were nearly as onerous. Performance contracts also reduced DHE's role in approving new academic programs, but this additional freedom is limited since DHE retained the authority to require institutions to discontinue programs.

A final point about the performance contracts is that they have also not served the goal of improved transparency in public policy. All of the regulatory freedom granted through the performance contracts has been done by layering waivers on top of existing statutes and regulatory rules, rather than supplanting those policies. Therefore, a full understanding of what each of the performance contract requires and allows necessitates an intimate understanding of those existing policies.

Institutional Responses Directly Affecting Students

With considerable attention paid to how the COF legislation would drive more market-oriented behavior within institutions, WICHE asked the legislation's proponents to comment on whether they thought institutions had changed their behavior. We also sought to understand from institutional officials how institutions have come to operate differently under COF than they did prior to implementation.

The answer is, in short, not much. The most significant changes to institutional practices have been purely procedural: including materials on applying for COF in mailings to prospective students, for instance, or explaining the stipend in interactions with them, or adding a step in the matriculation process to encourage and help students authorize their stipends. Otherwise, no institutions reported making substantive changes in their practices or policies related to recruitment and outreach or financial aid in order to position themselves more competitively in the marketplace. Even the marketing blitz that occurred in the early years of COF has trailed off. Not one institution reporting using the stipend as a tool to reach out to students earlier, or to connect with students with different characteristics than those they had been serving, or to start a conversation about preparing financially for college. As one participant put it, "There is nothing in the design of the stipend (or fee-for-service) that makes outreach or bridge efforts easier." Several reported that the financial aid presentations conducted in high schools around the state were routinely consumed by the need to address confusion over COF and its relation to financial aid.

COF has provoked institutions to encourage their academic advising corps to raise the credit hour limitation early in students' postsecondary careers but with varying degrees of success, as described earlier. That limitation seems to have had a modest influence on academic planning as well, as some institutions have tried to get curriculum-planning efforts to take it into account when adding requirements. Finally, institutions reported that the stipend discouraged students from auditing courses since audited courses are not COF-eligible; this has taken away one tool academic advisors had in helping students complete their degrees. Institutional representatives did largely agree that the existence of the stipend has led to improved collaboration among critical campus offices within the institutions. We hope that this has resulted in the delivery of more consistent student services through a less warren-like institutional bureaucracy, but under the scope of this evaluation it is not possible to discern whether or not that occurred.

Institutional Burden

Implementing the stipend required a considerable investment in updates to information-processing applications at all the institutions, in order to track the students' use of their stipends and to train staff. WICHE sought to understand the burden institutions face in the ongoing costs of administering the COF legislation. Unfortunately, direct and documented evidence of added costs directly attributable to COF has been hard to find, although the community college system estimated a total of \$756,255 of revenue diverted to COF purposes in FY2007.¹⁴ All institutions reported that the first year or two of implementation were especially difficult, and the community colleges in particular continue to devote considerable time to stipend-related activities.

At each of the institutional focus groups, we asked participants if they had added any additional staff members or if they could estimate what fraction of their respective office functions are devoted to COF processing, working with students on COF-related issues, and tracking down and communicating with eligible students who failed to authorize their stipend payment. Several institutions, particularly community colleges with larger enrollments, reported hiring a new staff member. Most estimates of the COF-related burden fell in the range of .5 to 1.0 FTE for the admissions and registrar offices. Nearly all institutions reported that they are absorbing the added burden related to COF under their existing activities, a practice that either displaces or delays other activities with which affected individuals had previously been engaged. The institutions argued that those displaced activities reduce their ability to provide timely and effective services to students.

COF also complicates the process of maintaining institutional data systems.¹⁵ For example, Colorado's four-year institutions rely on a statewide consortium to update Banner, for which Sungard (the vendor) has to develop a customized application, in order to account for the stipend. This consortium requires collaborative activity among the individual campuses' information technology personnel and separate testing, both of which are time consuming and would be unnecessary without COF.

Other Considerations

A few additional considerations emerged as a result of the conversations with proponents and focus group participants. First, many of the higher education leaders who got behind the COF policy, and even some of those who philosophically believed in freeing the market to operate, expected that it would allow them great flexibility in setting their tuition levels. Although tuition levels have gone up since the COF implementation, the state has continued to restrict the growth of tuition. Many participants expressed their belief that the failure to let markets clear has been an unfulfilled promise of the legislation that has impacted its overall effectiveness.

College Assist built the state-level administrative infrastructure required to implement and maintain the stipend at no cost to the state. But given changes in the lender subsidies and the Obama

administration's plan to convert all federal loans from the bank-based Federal Family Education Loan Program to the government-run Direct Lending alternative, the revenue source for state guaranty agencies like College Assist may be vulnerable in the future. How will Colorado pay the annual costs of administering the stipend, as well as any necessary software updates or upgrades, if College Assist cannot or will not continue to absorb the cost of administration?

Second, several participants argued that because the principal purpose behind the COF policy was to circumvent TABOR, it has resulted in less transparency in public policy, an outcome that they described as bad for government and bad for civic engagement. Rather than directly seeking relief from TABOR's strict spending limitations, the state legislature created an entirely new bureaucracy to protect and preserve its higher education enterprise. That bureaucracy has diverted institutional resources away from student services, has not had the hoped-for effects on college participation, and is not revenue-neutral to the state. The result is a financing policy that is radical in concept but, aside from earning higher education its much-needed exemption from TABOR, differs little in implementation from the state's previous and more traditional approach that relied on direct appropriations to higher education institutions. To the extent that people understand that the COF program entails a fundamental misrepresentation of fiscal realities, it may exacerbate public cynicism and mistrust of government.

Conclusion

Colorado deserves credit for recognizing that its historical habit of importing college-educated talent – rather than growing its own - is unsustainable and for seeking solutions that will reduce that dependency. Yet it has allowed its funding to higher education institutions to wither to the point where it is regularly cited for being among the states least supportive of higher education, and its population remains highly resistant to imposing new taxes that would help provide more resources. Colorado's TABOR amendment is perhaps the best expression of that resistance, and its strict spending limitations have boxed in state legislators and other leaders who sought to improve access and quality at public colleges and universities. Seeking a way out, Colorado adopted an unprecedented, three-pronged new approach to financing higher education: vouchers to increase student demand; fee-for-service funding to purchase those services of unique value to the state that would not be driven by the voucherenhanced demand; and performance contracts to assure that the goals of the voucher and fee-forservices systems were being achieved within a new accountability structure. It got none of this. The vouchers/stipends have not fully met the stated goals for improved access, while creating additional burdens for state institutions and making higher education finance policy more opaque. The fee-forservice funding has simply bought what the state was getting before, instead of refocusing the state on purchasing those services it most needs; and the performance contracts provide, at best, a pretext of accountability.

In at least one important sense, the COF legislation has been an unqualified success: Colorado's public higher education institutions have achieved enterprise status under TABOR and are not subject to its strict revenue and spending limitations. This has provided them, and the state as a whole, with considerable relief through the exclusion of tuition revenue from state revenues counted under TABOR.
This was perhaps the key element that united the disparate groups behind passage of the COF legislation.

Unfortunately, as important as that success has been to the viability of Colorado's higher education enterprise, it has come at a cost. The implementation of the stipends has been associated with decreases in the enrollment of underrepresented populations, students from low-income families, and adult learners (although it is not possible to establish a causal link between COF and those declines). This has primarily occurred at Colorado's community colleges. Those institutions do not have the luxury of working with prospective students over an extended period of time prior to their enrollment; and without that, it is difficult for them to ease students through the matriculation process and help them understand the stipend and their options for paying for college generally, as their four-year counterparts generally do. As a consequence, the community college representatives all expressed their frustration at watching prospective students walk out before completing their course registrations. While the COF legislation seems to be little more than a nuisance at the four-year campuses, it has real effects on the ability of community colleges to effectively serve their student populations, both in terms of erecting a barrier to enrollment and in staff time diverted to dealing with stipend-related matters.

The COF policy's intent has also gone awry with the implementation of fee-for-service contracts. Although there is good evidence to suggest that Colorado's higher education enterprise already operates at least as efficiently as that of any other state,¹⁶ the COF policy's most ardent proponents believed that subjecting the state's institutions to more powerful market forces would be certain to generate greater efficiencies. But because the state and its institutions have resorted to using fee-forservice funding as a balancing mechanism to keep institutions whole, the prospect of changing institutional behaviors to become more efficient was undermined. Additionally, whatever incentives to entice Colorado's colleges and universities to enroll more students, particularly access students, that might exist in a voucher approach were neutralized by the practice of using fee-for-service as a balancing tool.

Finally, the COF's performance contracts have had only a negligible effect on institutional decisions. While the process of preparing for and negotiating them with DHE may have influenced institutions' strategic-planning activities, the contracts' efficacy is hindered by the absence of any associated rewards or penalties. Thus, performance contracts have not compelled institutions to realign any previously existing priorities, and the lack of familiarity with them among institutional officials, from administrative leadership down to those who work with students daily, is evidence of their minimal impact. Furthermore, as these contracts were being negotiated, DHE failed to assure that the combination of separate institutional plans would combine to meet Colorado's aggregate needs. As a result the sum of the parts does not really comprise the whole.

Analysis of Options

As Colorado looks to the future and how it will respond to the anticipated and unanticipated results of the College Opportunity Fund and related policies, it can chose between three general policy options:

• Maintain the status quo.

- Abandon the 2003 initiatives and return to a more traditional block appropriations-based finance strategy.
- Sustain the 2003 initiatives but substantially amend them to enhance the likelihood of success.

This section analyses the advantages and disadvantages of each of these options.

Option 1: Maintain the Status Quo

In the current "change-oriented" public policy environment, maintaining the status quo is often dismissed as a plausible policy option. But it is presented here as a real option, for three reasons.

First, despite the popularity of the "change" agenda, true change is difficult to achieve, as demonstrated by the difficulties over the past few years in implementing COF and its related policies (fee-for-service and performance contracts). Even if real change is desired and attempted, therefore, it is quite possible that the natural forces against change will sustain the status quo, much as they did in the recent past. So it is important to understand the positive and negative consequences of sustaining the current approach.

Second, the 2003 reforms are themselves still a relatively recent change agenda and thus may deserve more time to mature, in order to discern whether the problems to date are evidence of a failed policy or simply the collateral damage associated with implementing a change agenda.

Third, it is important to understand current policy in order to understand whether a new change agenda is likely to improve or exacerbate performance in achieving the state's goals.

Advantages of maintaining the status quo. The most obvious, and perhaps most important, advantage of maintaining current policy is that it maintains the ability of the institutions of higher education in Colorado to qualify for enterprise status and thus be exempt from the constraints of the TABOR. This was, without doubt, one of the principal reasons for adopting the 2003 reforms, and it has been the principal achievement of the policy changes. Preserving the status quo would preserve this success.

The exemption from TABOR substantially benefits higher education because it allows the colleges and universities to rely more heavily on tuition revenue when the state is unable to sustain its level of financial support for the total enterprise. Some people, obviously, don't agree that allowing greater tuition flexibility is positive because it increases institutions' reliance on students, many of whom have limited means to pay the tuition. Whether optimal policy or not, however, the level of state funding for higher education in Colorado is so modest that absent the capacity to increase tuition revenue, the viability of the entire system would be at risk.

Furthermore, exempting higher education from the constraints of TABOR also assists the many other public services funded by the state because it eliminates tuition from the overall revenue constraints. Increases in tuition or increases in enrollment, which also increases tuition revenue, no longer count against the TABOR-imposed revenue constraints, thus providing more resources for the rest of state government.

A second advantage of maintaining the status quo is that it would avoid the upheaval associated with major change. While the 2003 reforms were clearly very disruptive and costly to implement, most institutions report that they are more or less over the hump. Both the institutions and College Assist have improved their practices with regard to these policies. While these efforts still require a substantial commitment of resources, the system is more or less functional today. Even with respect to the failures to achieve the intended expansion of enrollment, it appears that the worst may be over. However, the fastest-growing populations in Colorado are those whose access to higher education is the most limited and who also experienced the largest decreases in participation since enactment of the COF.

Disadvantages of maintaining the status quo. The principal disadvantage of maintaining existing policies is that they are simply are not achieving their intended purposes – assuming those purposes remain valid. There is no evidence the COF has engendered the market-oriented environment that was intended . In addition, students, particular poor and minority students, have not enrolled in greater numbers; in fact poor and minority students are less likely to enroll today than they were prior to the 2003 reforms. Some people believe this is because the marketing of the program through CollegeinColorado.org has been ineffective in getting students to use the stipend. Others believe that there was no reason to believe that there would be a "price effect" on students' decisions to attend or not, since the voucher was not accompanied by a decrease in the actual amount students paid. While differences of opinion exist about why students attend college, there is no doubt about the results. Not only did the policy not achieve its intended objective, it may have had the opposite effect of reducing participation of students from disadvantaged backgrounds.

Furthermore, the triad of policies – blending the COF with the fee-for-service funding and the performance contracts, to create greater demand for higher education, greater service to students and the state, and greater accountability in exchange for greater autonomy – resulted in virtually no change in behavior, except perhaps the reduction in participation of the most vulnerable students. The institutions learned quickly that they could not rely on COF to provide the funding that enrollment growth should have generated, so they became convinced that increases in enrollments would not be funded. Fee-for-service became used simply to bring institutions up to their previous share of funding, rather than to incentivize institutions to serve specific state needs. And the performance contracts were poorly designed to achieve the state's overall objectives and have proven to have no positive or negative consequences in achieving the expected goals.

In sum, the disadvantage of sustaining the current policy is that the state simply cannot achieve its intended goals with this set of policies, as they operate today.

Option 2: Abandon Current Policy and Return to the Good Old Days

A lot of folks with whom we talked suggested that Colorado should just get rid of COF and its related policies. These folks generally agreed that things were not that great before these policies were implemented, but that the policies made things worse.

Advantages of returning to the way things used to be. One advantage of abandoning COF and returning to "the way we used to do it" would be that it would be a more transparent and some would say more

honest policy approach. Rather than pretending that the students were receiving a voucher or that the institutions were receiving fees for services rendered in the interest of specific state needs, the state would simply provide the institutions with their fair share of the limited resources and expect them to do the best they can with these resources, "just as we used to do."

The advantage to the institutions would be that they would have greater predictability: they would know exactly what they were going to receive. Furthermore, they could negotiate this more directly with DHE, rather than having to jury-rig the fee-for-service payments to fill in the gaps created by varying amounts for stipend payments.

Students would also benefit because tuition would be tuition, not tuition minus the stipend equaling the student share. Colorado would look like every other state again, so students could compare apples with apples. There would no longer be any need for institutions to "estimate" student share, pending successful COF authorization, and tuition schedules could be simplified.

Disadvantages of returning to the way things used to be. The great disadvantage of returning to pre-COF policies would be that higher education likely would lose its exemption from TABOR, which would hurt not only the state's institutions but also every other part of state government. Some have argued that eliminating just COF and not fee-for-service would still make higher education eligible for the TABOR exemption because the fee-for-service payments could be deemed a contract for service from an "enterprise." No lawyer with whom we consulted, however, believed that such an interpretation would pass the enterprise test, particularly given the fact that the goal would be essentially to return to past practices that clearly fell within the TABOR restrictions.

Furthermore, it is important to remember that Colorado's finance policies prior to the 2003 reforms had not led to what were considered to be very effective results for the state. Colorado's support for its institutions was near the bottom nationally; tuition revenues were not sufficient to assure quality education; and while tuitions were low, financial aid was meager. As a result, participation was well below national averages and was particularly poor for the most at-risk populations. It was, indeed, this abysmal set of circumstances and performance that led to the 2003 reforms. Why would Colorado want to return to those circumstances?

Option 3: Amend Current Policies to Enhance Achievement of State Goals

Although the current array of policies has clearly failed to achieve most of the state's objectives, they did achieve the one major objective: allowing higher education institutions to acquire enterprise status, exempting them from the strictures of TABOR. Furthermore, it is not clear whether the failure to achieve other objectives resulted from a failure of concept or of practice. A reasonable option, therefore, would be to recast the set of policies to more faithfully reflect the original intent of the 2003 reforms.

How, then, might policies be changed so that they would be more likely achieve the desired outcomes of a market-sensitive system outside TABOR? Those outcomes would include:

• Attracting more students to attend college, particularly students from traditionally disadvantaged populations.

- Incentivizing institutions to recruit more disadvantaged students.
- Rewarding institutions for achieving explicitly identified state goals.
- Assuring all of this happens through a sound accountability structure.

Attracting more students to attend college. Three significant changes to policy would help provide a truer test of whether market demand can be increased through the use of a voucher mechanism. First, Colorado could essentially guarantee the stipend's dollar value over time by annually adjusting it for inflation. This would prevent both the loss of faith in the policy and the real loss of purchasing power that occurs if the stipend is not adjusted over time.

Second, and of particular importance to students from lower-income families, Colorado could increase the amount of state-based financial aid, so that it is more apparent to prospective students that the net cost of attending college is within their means. The state cannot make that assurance today. While many of the better-resourced institutions, like the University of Colorado and Colorado State University, make such assurances to their own students, three factors make institution-based financial aid an inadequate substitute for state-based aid. Only well-resourced institutions can actually afford to make such assurances; Colorado's community colleges, which serve the largest share of economically disadvantaged students, simply lack the resources to provide adequate institutional aid to ensure affordability to low-income students. In addition, institutional aid is simply not transparent. For good reason, colleges and universities marshal their financial aid funds closely, keeping their ultimate decisions about how to allocate these funds close to the vest until they know exactly how much they have to distribute. This is of little help in encouraging an 8th grade student who is entertaining the possibility of going to college and has not yet determined whether or where she or he will attend. And lastly, research demonstrates clearly that institutions, acting in their perceived best interest, often lavish grants and scholarships on less needy but meritorious students rather than on the students they admit with the most financial need.¹⁷ Therefore, Colorado's ability to attract low-income students into higher education will continue to suffer until the state has a more adequately funded need-based financial aid system.

Third, Colorado could improve its efforts to "market" COF. When COF was initially implemented, CollegeinColorado.org, working with DHE, the institutions, and high schools, made a valiant attempt to inform all high school students about COF's economic value for each individual and how to access the system. Over time, however, CollegeinColorado.org's marketing focus has shifted from the value of COF to the value of securing a higher education, while the institutions have assumed primary responsibility for marketing COF. While there is a great need to help young people understand the importance of continuing their education, there remains a need for them to know about how COF works and how they can apply, as well as the consequences of not doing so. Perhaps more importantly, though, there has to date been virtually no information campaign for non-traditional students, most of whom attend community colleges and many of whom have migrated from other states or countries and have no knowledge of COF. CollegeinColorado.org currently has a federally funded project underway to improve its web site for adult students, and DHE has a foundation-funded project underway to reach out to adults who attended but did not complete their college education. These projects will help address the need to better inform non-traditional students. In addition to these three significant policy changes, administrators with whom we met suggested that two current practices could be tweaked to make the delivery of educational services more student friendly.

The first suggestion was to simplify the process of authentication and authorization and streamline the **COF verification of citizenship status.** Currently, this process attempts to accomplish two objectives. First and foremost, it seeks to assure that the student, who is the recipient of the stipend, is authorizing that the stipend can be used by the institution to offset the total tuition cost. This was deemed critically important to the integrity of the program because the exemption from TABOR is predicated on the notion that the money is being provided not to the institution but to the student to buy down her or his tuition. Yet the way in which this has been implemented creates a rather silly artificiality that simply increases complexity for students, institutions, and College Assist. Rather than require the current "application process," it should suffice for the student to authorize the stipend automatically and simply by the act of enrolling. Part of the reason for having a separate process is the requirement that the student's citizenship or lawful presence also be verified. But the process for this is unreasonably complicated and could be radically simplified by having the students provide documentation upon registration, obviating the need for a time-consuming and confusing additional verification process. It is true that some ineligible students might slip through the net this way because their driver's license, visa, or affidavits might have become invalid, but does the modest potential error in validation justify the substantial hassle, delays in notification, and administrative cost incurred by the current process? Frankly, this is not a big deal for recent high school graduates who apply well in advance of attending college and receive a considerable amount of advanced assistance in meeting all the requirements of admission. For many of the non-traditional students attending community colleges, however, this can mean the difference between whether they complete their registration and attend or whether they walk away frustrated.

Second, we heard many concerns about the credit limitations and believe it may be in the state's interest to reconsider the 145 credit limitation. The goal of this policy is to encourage students not to linger in pursuing their college degree. And in fact we heard evidence that this rule has led to institutional interventions to promote more effective academic planning, though these (such as identifying and contacting students who are approaching their limit) may not be terribly effective. Yet a number of unintended negative consequences to this rule warrant its reconsideration. Many students are unintentionally hurt by this policy. Students who require significant remedial education to prepare for college-level work can find it difficult to earn a degree within the prescribed number of hours; yet these are precisely the students the policies were intended to encourage to pursue and complete a college education. Students in majors that require more than the traditional 120 hours for graduation and those taking a double major can find that they have little opportunity to explore learning outside the narrowly specified requirements for their degree. And students returning to education to upgrade their skills or pursue a second career can find that they have to pay non-resident rates. Interestingly, they would face this constraint only if they were long-time Colorado residents who had received their prior education in Colorado; more recent residents would not have this problem because they would have received their education elsewhere, thus having the full 145 hours available to them.

Incentivizing institutions to recruit more disadvantaged students. Both the fee-for-service and performance contracts could be substantially revamped to provide greater incentives to institutions to serve a larger share of Colorado's population.

It should not be surprising that the institutions did not increase their service to more disadvantaged students; they saw no advantage in doing so. The community colleges and Metropolitan State College did not enhance their efforts because serving these students is already central to their mission; they believe they were already doing everything they could. They were also leery that attracting more students would not result in more state resources to serve these students. They had good reason for this fear because the fee-for-service has been used to adjust down the average total allocation per student, in order to preserve the share of funding for institutions that were not experiencing enrollment growth. In other words, while one of the tenets of fee-for-service funding was to buy what the state needs – and expanding access to disadvantaged students is the most significantly identified unmet need in the state – it was actually used to effectively punish institutions for increasing their enrollment.

To remedy this, three steps could be taken. First, the value of the COF stipend could be guaranteed. For the same reasons that it is important to do this for students, it is important to do this for the institutions. While this would create a budgeting dilemma for the state, institutions must be assured that they will have resources adequate to serve the students they enroll. Providing these resources only in part and at a later date, as happens today, drives the institutions to conservative academic-planning practices that work against expanding access through enhanced enrolments.

Second, a substantial share of the fee-for-service funding could be tied to actually serving more disadvantaged students, not just trying to do so. Resources should reward successful completion of these students in courses and degrees. It is ironic that fee-for-service funding as currently provided includes no payment for achieving this expansion of service, given that this is the highest priority identified in the legislation. Presumably, this omission is because the COF is intended to address this policy concern; however, COF addresses only enrollment, not completion, so it may be advisable to include a "success" factor in the fee-for-service funding stream.

Third, the performance contracts could be substantially revised to include both interim and long-term goals for each institution to increase both the absolute number and the percentage of their graduates who come from disadvantaged backgrounds. DHE could negotiate these contracts so that every institution has aggressive but achievable goals and the accumulation of these goals meets the state's overall goal. In addition, institutions could be required to achieve these goals as a condition for receiving the substantial portion of the fee-for-service payments associated with serving disadvantaged students.

Rewarding institutions for meeting identified state goals. It is important periodically to revisit explicitly identified state goals to assure that they remain appropriate as times change. As suggested above the failure to include any component in fee-for-service for the success of disadvantaged students misses a significant opportunity to send the signal about how important this is to the state. It would also be advisable to consider whether specific state needs should be cast in expected outcomes rather than efforts. Institutions are currently compensated, to the extent they are compensated at all, with respect

to how much effort they put into an activity, not how successful they are in providing the desired service. For example, if fee-for-service payments for basic education were predicated on successful course completions in remedial education rather than simply enrollments in such courses, it could provide a strong incentive for improving performance.

It is also important to revise the distribution of fee-for-service funding to be true to its intent, which was to reward institutions for serving the state's needs, not simply to "make the institutions whole," compared to their previous funding levels. Unfortunately, it has become clear that fee-for-service today is simply a leveling-up exercise. The five target areas of need are used for the distribution, but the weights are simply adjusted until they achieve the objective of holding everyone nearly equal. If institutions are always held equal, there is obviously no incentive to change behavior to better meet the state's needs. Unless the fee-for-service policy is greatly changed, there is no chance that it can possibly work to achieve its intended purpose.

Assuring all this happens through a sound accountability structure. In addition to the fee-for-service funding concept, two other significant accountability components are embedded in current policy.

Most significant are the performance contracts. Two of the most important limitations of performance contracts have already been described: that the sum of the parts does not equal the desired whole; and that there are no consequences, positive or negative, for performance toward the desired goals embedded in the contracts. But there is another significant limitation imposed by statute. Too many of the suggested contract elements require reporting inputs or effort, rather than outcomes. A "performance" contract should focus on performance, not effort, yet the current statute asks for many process factors rather than outcome metrics. A cleaner, more parsimonious set of outcome performance measures could focus the performance contracts on what the state really needs and could make them more enforceable.

A less obvious area of accountability is the regular reporting and reconciling of enrollments by institutions to both College Assist, which manages the COF program, and DHE, which has responsibility for auditing compliance with the policies. From our perspective this dual reporting seems redundant, inefficient, and prone to increasing reporting error. Therefore, we would recommend that the state **consider consolidating the COF and SURDS databases.** Placing management of the COF with College Assist made sense when this program was being implemented, both because College Assist had sophisticated processes for working directly with large numbers of students, expertise the DHE did not have, and because College Assist could cover the costs of managing this program from revenues it earns from its student loan operations, thus alleviating the state from having to appropriate program administration funding. But there is also a downside to having the student loan agency manage this program: while being extremely complimentary toward the professionalism of College Assist's personnel, a number of administrators in the focus groups indicated that increased misunderstanding on the part of students is one byproduct of housing COF within College Assist. Some students, confusing the multiple roles of the agency, said that they "don't want to take out a student loan."

The state's second student unit record database (SURDS) is managed by the DHE to monitor enrollments and management within the institutions of higher education. Because the two student databases were not developed in sync, the institutions are required to deal with both, thus doubling their reporting requirements to the state. Furthermore, these two databases inevitably do not always agree regarding the number of students enrolled, and our analysis identified a number of discrepancies. Consolidating these two databases would reduce the administrative hassles facing institutions and improve the capacity to monitor the efficacy of the program and its administration. Whether the management or databases are merged or not, we believe it is also important to the long-term integrity and accountability of the program for DHE to **regularly audit enrollment data for this program.** Given the potential impact of the credit limitation on individual students, DHE should annually match and audit the COF and SURDS data and proactively seek explanations of any inconsistencies.

Related to these improvements in accountability, the state could also be true to the original intent of the enterprise legislation and provide the institutions with the greater autonomy they were originally promised. While institutions today benefit from modest reductions in reporting requirements, they do not benefit from the greater degree of autonomy that was envisioned and that would allow them to manage their enterprises better. Many of the institutions remain unable to set their own tuition, procure services or hire many personnel outside the state system, manage their own capital construction projects, etc. If the state establishes a disciplined accountability system that assures attention to its needs, it should feel more comfortable providing the promised autonomy in exchange for true accountability.

In sum there are a variety of substantial and more modest ways to alter this set of policies in order to increase the likelihood that a program that is currently failing, could in large part conceivably achieve its intended purposes.

Advantages of amending current policies. The advantages of amending current policies to enhance the likelihood of success are documented above. What is clear is that absent any change, the current policies will not achieve their intended purposes of enhancing access, particularly to disadvantaged individuals; encouraging institutions to better meet the state's critical needs; or assuring strong accountability toward achieving the state's goals.

Disadvantages of amending current policies. Amending current policies will not necessarily enhance the success of these programs. While it is clear that they have failed on all accounts other than allowing institutions to gain exclusion from TABOR, and it is clear that they were not implemented in faithful accordance with the intent of the reform principals, it is not clear whether they would work if implemented as imagined. There is reasonable economic research, for example, that questions whether the voucher concept, all else being equal, increases demand if net price remains the same.

Furthermore, as mentioned at the beginning of this section, change is hard. The history of frugal financial support for higher education in Colorado and the current dire fiscal climate together increase the likelihood that a new round of reform could meet the same clever deceptions of the recent past,

driving dollars to support the status quo rather than toward the intended changes in resource allocation.

The DHE, legislature, governor, and higher education community must come together, therefore, to determine whether they would rather live with the failed policies they know, recognizing that doing so will almost certainly lead to no changes in response to state needs, or whether they are prepared to accept a new change agenda, recognizing that achieving real change is mighty tough and carries the chance that it, too, may not succeed.

Appendix A. Detailed Methodology

This report is the product of a mixed methods research project to understand COF's impact on college enrollment and the effectiveness of COF implementation. This appendix will first outline the quantitative techniques and analyses before turning to the qualitative methods WICHE employed.

Quantitative Analyses

Data and Sources. The data analyzed within this study is comprised of several different data sources. The Colorado Department of Higher Education (DHE) provided WICHE with an extract from its Student Unit Record Data System (SURDS), which contains individual-level student data. The extract included all data on all students enrolled with a tuition classification identifying them as in-state students for the Fall 2003 through Fall 2008 academic terms and included identification numbers for each student that were randomly generated by DHE. DHE provided separate datasets covering enrollment and financial aid data. These datasets contained variables for demographic information, enrolled credits, institution of enrollment, and year of high school graduation. For students who completed the Free Application for Federal Student Aid (FAFSA), the dataset also included grant awards, dependency status, and adjusted gross income. Additionally, College Assist, a department within DHE, supplied data on the students who authorized their COF stipends. WICHE merged these datasets based on student identification number, academic term, and institution of enrollment by term. We removed data on students who had zero credit hours reported and graduate coursework. All data analyses represent students enrolled in resident instruction credit hours, as these data matched closest with DHE's official enrollment figures.

To provide context for the figures generated from our analyses, we also incorporated data from the U.S. Census Bureau 2007 Population Projections program and from WICHE's *Knocking at the College Door* publication which projects nationwide high school graduation rates.

Population. The population in this study was derived from all enrolled undergraduate students at Colorado's public postsecondary institutions and disaggregated into a subgroup with characteristics relevant to the COF analysis. Aims Community College and Colorado Mountain College do not participate in the COF program; therefore students attending these institutions were excluded from the study.

Derived Variables and Calculation of Enrollment Rates. Within the quantitative analysis of the demandside of COF implementation, we relied almost exclusively on descriptive statistics to demonstrate COF's impact on college enrollment in Colorado. WICHE constructed several variables to identify students as recent high school graduates, Pell grant recipients, full-time students, COF recipients, or group them into income categories, age categories. WICHE calculated students' ages based on their age as of the beginning of each academic term using their date of birth. Recent high school graduates were defined to be those whose recorded high school graduation year occurred within the previous twelve months of their postsecondary enrollment records. Those for whom the high school graduation year variable was missing were identified as recent high school graduates if the student level variable indicated that they were freshmen and they were between 16 and 19 years of age. All income data were adjusted for inflation using the Consumer Price Index prior to grouping students into income ranges. The analyses of enrollment by income relied on the financial aid data in our dataset. Because not all student complete FAFSAs, financial aid and income data were not available for all students. The share of undergraduate enrollments for which AGI data were available are shown in Table 1. As it is not safe to assume that those whose records did not include FAFSA data mirror the income profile of those whose data were available, the analyses of enrollment by income need to be examined with caution. Because changes in enrollment by income could also have been the result of the increased share of FAFSA filers, the enrollment figures for each income grouping were deflated by the share of FAFSA filers, with the Fall 2004 figure set equal to 100. (This is similar to making an adjustment for inflation.) Additionally, some students who were simultaneously enrolled at two or more institutions showed unequal adjusted gross incomes across those institutions. Based on DHE's advice, WICHE selected the income reported by the four-year institution. If the student was enrolled at two institutions in the same sector, WICHE selected the income reported by the institution at which the student was enrolled for the greater number of credits.

Table 1.

Fall 2004	Fall 2005	Fall 2006
48.2%	50.0%	50.2%

WICHE also calculated several enrollment rates to examine COF's impact. The calculation for enrollments per 1,000 Colorado residents were based on data from the U.S. Census Bureau Population Projections program. The calculations for college-going rate were based on WICHE's *Knocking at the College Door* projections of high school graduates. The incorporation of U.S. Census and WICHE data allowed us to appropriately contextualize the college enrollment and COF stipend authorization patterns.

Qualitative Analyses

The qualitative analysis had three components. First, WICHE reviewed key documents related to the development and implementation of COF. Among them were the Blue Ribbon Panel's final report, the COF legislation itself, selected institutional performance contracts, various marketing material, some newspaper coverage, and documents provided to us by participants.

Second, we conducted interviews with several individuals who were instrumental in shaping the COF legislation or who were champions of the policy. DHE and institutional presidents helped identify these individuals, many of whom were members of the Blue Ribbon Panel. These interviews were expressly aimed at helping WICHE understand the original intent of the COF legislation and its three components (the stipend, fee-for-service, and performance contracts), how it evolved, and the important features in the fiscal and political context that led to COF. Interviewees were also invited to comment on the degree to which the implementation was faithful to the intent and to speculate on the degree to which COF had succeeded in its goals.

Third, to evaluate COF's supply-side effects, WICHE identified groups of institutional representatives at multiple levels. We conducted focus groups with select groups of chief academic officers, chief financial

officers, staff at DHE, and staff at the Colorado Community College System. To understand COF's supplyside impact on key student services offices, we also conducted focus groups with representatives from the offices of admissions, financial aid, and the registrar. To select participants for the three focus groups we held, we obtained lists from DHE and did an internet search of administrators in those offices. With these lists, we purposefully invited individuals that would provide a representative sample of Colorado's public institutions and the targeted offices within those institutions. Few invited individuals declined to participate, and in fact the focus groups attracted institutional representatives in the comptroller, bursar, and information technology offices.

WICHE's president and its director of policy research together facilitated all focus groups and conducted all interviews. All interviews and focus groups relied on interview protocols to ensure consistency and thoroughness, but we routinely probed for more detailed information whenever appropriate, often rephrasing and repeating similar questions to ensure we obtained consistent responses. The protocols used for the interviews and focus groups follow.

Endnotes

¹ The panel also recommended a second stipend for master's level programs of \$8,000 per year, or \$267 per credit hour.

² As quoted in DHE, *The College Opportunity Fund: Background and History* (Denver: DHE, undated), 16.

³ DHE, *The College Opportunity Fund*, 14.

⁴ Colorado Commission on Higher Education, *Higher Education Reform in Colorado: Vouchers Are Only Half the* Story (Denver: DHE, summer 2005).

⁵ Ibid.

⁶ There was no agreement on how to include any graduate education in a voucher-based approach, despite the recommendation from the Blue Ribbon Panel to use vouchers for master's level education. But the Blue Ribbon Panel also provided the seeds of the fee-for-service approach in its recommendations for role and mission block grants.

Colorado Mountain College and Aims Community College are not COF-eligible institutions; they are not part of the Colorado Community College System and continue to receive a direct appropriation from the state. As a result, their enrollment and other figures have been excluded from all analyses.

⁸ More details concerning the methodology can be found in the appendix.

⁹ Changes in enrollment may be related to additional factors other than the existence of the voucher, such as economic conditions, student characteristics, pricing and the availability of financial aid, and so on. As data were limited to enrolled students eligible for the voucher, an analysis that could isolate the impact of COF on enrollment was not possible.

¹⁰ A commonly expressed frustration among both institutional representatives and the policy's champions was the number of students who refused to authorize the stipend because they did not see themselves as being in need of the state's financial support. One participant related the story of a student who angrily stated that he was not a "charity case." Such responses were philosophically based, but they also reflected confusion and ignorance.

¹¹ Letter from Nancy McCallin to David Skaggs, February 26, 2007, included in State Board for Community Colleges and Occupational Education Consent Agenda II, G.

¹² Originally, there were eight categories, but subsequent legislative sessions made basic skills courses,

postsecondary enrollment options courses, and high school fast-track courses eligible for the stipend. ¹³ Colorado Revised Statutes § 23-18-202 1(a) (c).

¹⁴ Colorado Community College System, *Report to the State Board for Community Colleges and Occupational Education on College Opportunity Fund Administrative Costs* (Denver: CCCS, April 11, 2007).

¹⁵ The evaluation revealed one additional concern: DHE is housing its enrollment data (in its SURDS system) separately from the COF data being kept by College Assist, even though DHE has oversight over College Assist. While DHE has been performing desk audits on the stipend program, this evaluation represents the first time the COF data have been merged with the SURDS data. WICHE examined the degree to which the data matched, and found numerous differences. A particular concern had to do with a number of cases where individuals with no enrollment record in SURDS nevertheless appear to have used up COF hours. Between fall 2005 and spring 2007, there appeared to be 11,823 such records. There were also some records that showed a greater number of COF credits charged against a student's balance than the number of credits for which the SURDS data show that student as being enrolled. As a share of all enrollments over the timeframe we considered, these discrepancies only affected a relatively small number of students. But given that eligibility for the stipend is cut off after 145 credits, any lack of matching data has potentially costly implications for students, if their COF balance is reduced for course credits that they never took (or which they dropped in a timely fashion).

WICHE queried institutional representatives and DHE and College Assist staff to understand why the discrepancy exists and if it really is a problem. They responded that the inconsistencies might be accounted for by the different timing of required submissions of the final COF reconciliation file and the final SURDS data file or by students' identification numbers not matching between the two systems. Though these and other answers are plausible, WICHE was unable to concretely identify the source of the discrepancies. This highlights a potential problem with the stipend program (or at least its implementation): it has required the development and maintenance of a parallel data system tracking student enrollments at the state level. Perhaps not surprisingly, those data systems are not 100 percent identical even when they should be.

¹⁶ Patrick J. Kelly, and Dennis P. Jones, A New Look at the Institutional Component of Higher Education Finance: A Guide for Evaluating Performance Relative to Financial Resources (Boulder, CO: NCHEMS, 2005).
¹⁷ David A. Longanecker, "A Tale of Two Pities," Change (January/February 2006), 24.

Colorado Opportunity Fund Evaluation Champions Interview Protocol

- 1. What were the most important financial and political factors that led to the development of the Colorado Opportunity Fund (COF) program and legislation?
- 2. What were the principal goals the COF was intended to accomplish?
- 3. How did you think COF would bring about increased access to higher education?
- 4. In what ways did you expect COF to influence institutional behavior?
- 5. How was the fee-for-service intended to influence institutional behavior?
- 6. In what ways did you expect COF to influence the policy-making by the governor and the legislature?
- 7. To what extent do you believe the COF has been effective in achieving the intended goals?
- 8. To what extent do you believe the COF was implemented faithfully according to the intent of the legislation's sponsors? If not, what have been the most important differences and what effects do you think they have had on COF's results and effectiveness?
- 9. How have the performance contracts affected institutional accountability?
- 10. What unintended consequences, if any, have resulted from the COF?
- 11. What questions haven't we asked that we should have?

College Opportunity Fund Evaluation Supply-Side Analysis Focus Group Questions

- 1. What is your understanding of how the stipend approach to funding higher education was intended to provoke changes in institutional behaviors and decision-making, if at all?
- 2. Please tell us how your institution adjusted to the stipend part of the College Opportunity Fund legislation. What were the most challenging aspects of implementation?
- 3. What did implementation of COF cost and for what were the expenses required (new technology? new personnel?)?
- 4. How is your institution reporting COF usage data to DHE/College in Colorado? How does this reporting differ from enrollment reporting?
- 5. Are you incurring ongoing costs specific to tracking stipend-based revenue? What do those ongoing expenses pay for that weren't also necessary prior to COF implementation? How many new FTE staff members were required to set up and administer institutional tracking of COF stipends?
- 6. Has the stipend portion of the COF legislation changed the delivery of instructional and support services to students? If so, how?
 - a. What changes have you made in your approach to recruiting students?
 - b. How has the messages/communications to prospective students from underrepresented backgrounds changed as a result of the COF stipend?
 - c. How are financial aid services or counseling different?
 - d. Has COF led to any changes in the way students are packaged?
 - e. If at all, how has COF impacted curriculum planning or delivery?
 - f. How has the delivery of support services, such as academic advising, changed in the wake of COF, if at all?
- 7. What is your understanding of the purpose of the fee-for-service aspect of the COF legislation?
- 8. Has the implementation of fee-for-service required any significant changes in accounting processes at your institution? If so, have those changes had any identifiable effect on students or on institutional activities?
- 9. Has your institution made any adjustments in how and what kind of educational services (i.e., programs) it provides in response to fee-for-service funding?

- a. Has your institution identified cost savings associated with particular educational programs of interest to the state as a result of the COF legislation?
- b. To what extent has the fee-for-service component steered institutional priorities differently than before, if at all? (i.e., underrepresented populations, retention vs. access, specific programs, etc.)
- 10. What is your understanding of the role of the performance contracts required by DHE from public institutions?
- 11. To what extent do the priorities reflected in your institution's performance contract guide or inform institutional decision-making?
- 12. How does your institution monitor itself with respect to the performance contracts?
- 13. Based on your understanding of the COF legislation, what unintended consequences have you observed?
- 14. What else should we know about how institutions have responded to the COF legislation?

Appendix B. List of Interviewees and Focus Groups

WICHE would like to thank all the individuals who took time out of busy schedules to participate in our interviews and focus groups.

Interviews

Norma Anderson, former Colorado State Senator, sponsor of COF legislation Ray Baker, former DHE commissioner Bruce Benson, President, University of Colorado Tim Foster, President, Mesa State College; former DHE executive director David Greenberg, former DHE commissioner Jim Jacobs, former DHE staff member Keith King, State Senator and former Colorado State Representative, sponsor of COF legislation Nancy McCallin, President, Colorado Community College System Kay Norton, President, University of Northern Colorado Joan Ringel, former DHE staff member David Skaggs, Executive Director of the Colorado Department of Higher Education Nancy Spence, Colorado State Senator Charlie Sweet, former legal counsel for the University of Colorado Jim Topping, former chief financial officer for the University of Colorado at Boulder

Institutions and State Agencies Represented in Focus Groups

College Assist Colorado Department of Higher Education Colorado Community College System Colorado School of Mines Colorado State University Colorado State University – Pueblo Community College of Aurora Community College of Denver Fort Lewis State College Front Range Community College Metro State College of Denver **Pikes Peak Community College** Pueblo Community College **Red Rocks Community College** University of Colorado at Boulder University of Colorado at Denver Western State College

Appendix C. Press Release Announcing COF Evaluation Project

STATE OF COLORADO

DEPARTMENT OF HIGHER EDUCATION Colorado Commission on Higher Education



Bill Ritter, Jr. Governor

David E. Skaggs Executive Director

For Immediate Release July 15, 2008

Contact: John Karakoulakis (303) 866-4742

Is the College Opportunity Fund working?

Review underway to study pros and cons of higher ed stipends

DENVER – The Department of Higher Education (DHE) today announced that it has contracted with the Western Interstate Commission for Higher Education to conduct a study of how well the College Opportunity Fund (COF) is working for Colorado students and the colleges and universities in the state.

The Colorado Legislature and then Gov. Bill Owens created the COF in 2004 as a way to tie a portion of state funding for higher education directly to students who enroll in any of Colorado's public colleges or universities (and in some private colleges). The legislation required that the Colorado Department of Higher Education evaluate the program and report back to the legislature by 2010. The study also comes after some criticism that the COF stipend is cumbersome for colleges and universities to administer and that many students are not aware the funding is available.

The review will examine how the COF has affected student participation in higher education as well as how the colleges and universities administer it. Researchers will also consider whether the original objectives of the program are being achieved.

"We're very pleased that the Western Interstate Commission for Higher Education can apply its expertise and objectivity to an evaluation of the COF," said David Skaggs, Executive Director of the Department of Higher Education.

"This method for funding higher education is unique to Colorado, and the legislature wisely directed an evaluation after the first few years. That's what this study is all about," Skaggs added. "We need to better understand both the positive and any problematic aspects of the current COF system in order to see if any changes are needed."

After a detailed analysis is completed, WICHE will report on its findings and present options for any policy changes that appear warranted. These findings will be provided to the legislature, meeting the requirement to report back by 2010.

"We've set out to do a comprehensive evaluation not only of the COF and how it is functioning, but also how it intersects with other components of public funding for higher education," said David Longanecker, President of WICHE. "Our research will be impartial and should provide meaningful direction for moving forward."

"We support improving public access to higher education," said Tony Lewis, Executive Director of the Donnell-Kay Foundation, which is providing financial support for the study. "WICHE can use their expertise to lay out ways to improve the COF, and make it easier for schools to administer the program and for students to go to college."

"We are fortunate and grateful that the Donnell-Kay Foundation is supporting this effort with a generous grant to the department," said Skaggs. The WICHE study will cost \$79,000, with DHE paying \$39,000 and the Donnell-Kay Foundation \$40,000.

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