



**The Costs of College Attendance:
Trends, Variation, and Accuracy in Institutional Living Cost Allowances***

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Abstract

The growing costs of college attendance are a central policy concern affecting educational opportunity in the United States. Living cost allowances for room, board and other miscellaneous expenses often account for more than half of the total cost of attending college, and the institutional cost of attendance caps student eligibility for federal financial aid. This paper examines trends over time in federally-reported living cost allowances developed by colleges and universities, examines variation in allowances across schools, and assesses the accuracy of allowances by comparing them to living cost estimates specific to institutional geographic region. We find that almost half of all postsecondary institutions receiving federal financial aid report nine-month living cost allowances for students living off-campus that differ from estimated living costs by at least \$3,000. There is extensive within-region variation in living cost allowances reported by institutions, and almost one-third of colleges and universities with sizable fractions of their students living off-campus provided allowances that are at least \$3,000 less than the estimated costs of living in that region. Between 2006 and 2013, the data indicate that some for-profit institutions have been steadily decreasing living cost allowances. The potential policy incentives driving these behaviors are discussed, along with implications for accountability systems and recommendations for creating greater standardization of living cost allowances throughout higher education.

Introduction

The cost of attending college is a significant concern for American families making decisions about whether, where, and when to engage in postsecondary education. Almost half of all entering first-year students in fall 2013 said that the cost of attendance was a very important factor in their decision-making, up from about 30 percent ten years earlier (Eagen et al. 2013). Adult students without degrees indicate that they worry “a lot” about paying for college, and that this affects their thinking about enrolling (Public Agenda 2013). Yet the public knows very little about process through which colleges and universities determine the stated costs of attendance, and in particular does not have information about the accuracy of those costs.

This paper examines the trends and variations in living cost allowances defined by colleges and universities. Living costs often comprise at least half of the stated costs of college attendance, particularly at public institutions. These costs are included in the federal definition of “costs of attendance” (COA), along with tuition, fees, books, and supplies, because in order to attend college full-time students must be able to cover their living expenses without working extensively. If they live on campus, students pay the institution for room and board to cover these expenses, but only 13 percent of undergraduates live on campus.¹ When they live off-campus the costs are accrued elsewhere and still must be covered. Fifty percent of undergraduates live off-campus separately from their family, while 37% live with family.² Critically, the institutional COA sets the limit for the amount of federal, state and institutional

¹ Authors’ calculations used the National Postsecondary Student Aid Study of 2011-2012.

² Ibid.

financial aid a student can receive.³ But there is no standardized system for determining the components of COA related to room, board, and other miscellaneous living costs, which together comprise the institution's living cost allowance.

The accuracy of the living cost allowance is important for many reasons. Students and families assess their ability to pay for college and plan for how to pay for it using the stated COA. If living costs (and therefore the COA) are overstated then some students may be deterred from considering that school, or may borrow more money than is actually required to finance their schooling. On the other hand, if living costs are understated then students are more likely to encounter financial struggles that hinder their academic performance. Inaccurate living cost allowances also complicate federal and private efforts to hold colleges and universities accountable for their costs of attendance and net price (the COA minus grant aid, which is the out-of-pocket amount that a student must pay or borrow). Moreover, the veracity of institutional promises to meet the "full need" of their enrolled students also depends on the accuracy of the living cost allowance. Clearly, while colleges and universities have incentives to help all students succeed, they also face an array of incentives that may lead them to incorrectly state the living costs a student faces while attending their school.

To explore the accuracy of institutional living cost allowances, this paper examines trends over time in stated allowances as reported in federal data, as well as institutional and inter-sector variation in those trends. Next, living cost allowances are compared among institutions

³ A student may only receive financial aid exceeding the institution's COA if a financial aid administrator raises the COA for that particular student using a process called professional judgment.

within the same region. Finally, institutional living cost allowances are compared to estimates of living costs in the region, using standardized metrics. There are substantial changes over time in living cost allowances, with the greatest changes apparent in the for-profit sector of higher education. There is also a great deal of intra-regional variation in living cost allowances in many parts of the country. Finally, public institutions tend to under-estimate the actual living costs for students in their regions, while the greatest variations (both over and under-estimates of living costs) seem to occur at for-profit colleges and universities. Implications for families, as well as for policy and practice are discussed.

Institutional Estimation of Living Cost Allowances

The U.S. Department of Education requires that every college and university receiving federal financial aid report a total cost of attendance measure that includes tuition and fees, room and board, books and supplies, and a category of other living expenses that includes clothing, cleaning supplies, and entertainment. The institution determines all components of the COA. This type of local control is a critical feature of today's higher education financing system. The responsibility most often resides with the financial aid administrator, who often reports to a director of enrollment management and/or a provost. According to the National Association of Financial Aid Administrators (NASFAA), "The frequency of the review and research, the methods used, and the final determination of component costs remain matters of local institutional control. COA research is a fundamental part of responsible administration of student financial aid and must be considered essential to the accountability of financial aid administrators as stewards of financial aid funds" (NASFAA 2013, p. 3).

Goals and Principles for Cost of Attendance Estimation

Therefore, federal rules provide for a great deal of flexibility in how financial aid administrators determine the COA. In a monograph titled “Developing the Cost of Attendance,” NASFAA describes the importance of providing students with “an accurate projection of reasonable costs” and therefore of budgeting for a “modest but adequate” standard of living for students. The monograph (hereafter referred to as “Guidance”) states that an aid administrator should be consistent across student populations and must document the process of developing a standard COA, along with documentation of any adjustments to COA made on a case-by-case basis (using professional judgment, see below). There is a clear attempt to ensure that the estimates apply to the average student:

“The COA should reflect typical expenses encountered by students in general, and research is usually conducted using a representative sample of the entire student body. As a general rule, COAs are developed separately for groups of students facing similar types of expenditures. This recognizes the diversity of the student population, reduces possible anomalies in COAs, and assists the financial aid administrator by reducing the number of students for whom exceptional expenses must be documented (p. 3).”

The aid administrator is also expected to consider regional variation in costs. Specifically, the Guidance states that: “For certain kinds of expenses, the local cost of living will influence the definition of reasonable allowance levels. Housing costs are especially prone to variance based on school location. The recognition of regional, state, and even city variations in prices is essential in order for the COA to accurately reflect expenses. Care should be taken to distinguish the differences attributable to local costs versus personal lifestyle choices” (p. 2).

As for the type of housing and food the living cost allowance should provide, the Guidance indicates that it should include “reasonable expenses for a single student’s housing” – which means that roommates are not assumed. In addition, the allowance for meals “should provide for reasonable costs essential to provide a nutritionally adequate diet for the single student” (p. 6). A definition of “nutritionally adequate” is not provided but administrators are advised to use professional judgment when it comes to medical, personal, or religious food preferences.

Methods and Analytic Approaches

The Federal Student Aid Handbook for 2014-2015, which is published by the Department of Education to guide financial aid administrators, simply states, “There are a variety of methods to arrive at average costs for your students: periodic surveys of your student population, assessing local housing costs or other pertinent data, or otherwise use reasonable methods you may devise which generate accurate average costs for various student cohorts” (p.3-35). Given this information, it is unsurprising that there is variation in the methods used to establish living cost allowances. While the aim is clearly for the aid administrator to utilize a representative sample of the student body, the technical and financial capacities of the financial aid office often dictate actual practice. The Guidance recommends the use of state or regional living cost surveys, data from the Bureau of Labor Statistics, and information from professional financial aid associations, but does not specify particular surveys or data sets.

In terms of methods used for analyzing the data, the Guidance says that the administrator “can decide whether the information is sufficient to construct reasonable costs of attendance or if the institution must conduct new research or a survey” (p. 3). If they choose to undertake a study

of their own, research ought to be “systematic” but specific strategies or methods are not described. However, the quality of the data that may be obtained from specific research subjects is depicted this way:

Students: “Student-reported information provides the only means of determining the specific kinds and amounts of expenses that students at the institution actually incur... Students may provide expense information by documenting actual or projected expenses. To obtain an accurate sample, all students (not just financial aid recipients) should be included among respondents to surveys of this type. Student expense surveys, including personal interviews, budget questionnaires, and expenditure diaries, can be used to collect retrospective or current information on actual student expenditures. Summary statistics can be used to establish allowable ranges of expenses from various categories of students. Survey respondents should be asked to refer to the most recent academic term when providing data on personal expenses” (p.3).

Other Informants: “Local sources can substantiate student-reported figures and can help to project future changes in costs.... The range of housing costs can be obtained from the housing office, fraternity and sorority advisors, or off-campus housing coordinator. Sources of cost information from the local community include off-campus bookstore managers, service representatives from the local utilities, realtors, automobile clubs, managers of local stores, community health and welfare agencies, day care centers, state licensing agencies, and food distributors” (pp. 3-4).

The reference list in the Guidance also includes information for two studies of student expense budgets published in the 1970s (Bowman 1975, 1976).

Thus, the Guidance prioritizes the reports of students who participate in surveys over standardized information. It further recommends the validation of student-reported information by unnamed local sources. It also conflates necessary expenditures with reported costs. If students are under-resourced and thus eliminating key expenses, for example by reducing food intake, surveys of expenditures will under-estimate actual costs. If they are living in unnecessarily luxurious circumstances, expenditures will be over-stated. While the collection of both accurate cost and accurate expenditure information is notoriously difficult and error-prone (Zhen, Taylor, Muth, & Leitbag, 2009), financial aid administrators are not required to possess any special training or engage consultants for this work that is added to their already demanding workloads.

Living cost allowances vary according to where students reside during school. More specifically, institutions report to the federal government the allowances for room and board based on whether a student lives on or off-campus, and may also report a separate allowance if the student resides with his or her parents. The potential range of costs incurred by students in seemingly similar living situations receives little attention. This may generate further inaccuracies, as the range of available housing options expands, particularly if driven by the privatization of the student housing market. The Guidance contains a series of assertions regarding living arrangements. Most importantly, it states that “for students without dependents living with their parent(s), the room and board allowance is determined by the institution, which takes into consideration that these students may have lower room and board costs than those not living at home” (p.6). Additionally, colleges are allowed to set a room and board allowance of zero dollars for students living with their families—and this allowance is not collected by the

U.S. Department of Education to be included in official cost of attendance (or net price) estimates.

The statement that living costs should be lower for students living with their families would appear to reflect an assumption that undergraduate children receive parental subsidies while in college; indeed, low-income students living at home sometimes pay room and board costs on behalf of their parents. Some research challenges this assumption. For example, at least one study suggests that a need or desire to help their families financially is a reason that students live at home (Kinsley, 2014). In a study from the early 1970s, an estimated 10% of students who took the ACT reported that they contributed money to their parents to help them pay bills or provide for siblings. This included 29.4% of Hispanics, 16.6% of African-Americans, and 7% of white students (Jepsen et al. 1973). Forty years later, research in Wisconsin identified very similar rates of support provided by children to parents among undergraduates from low-income families (Kinsley, 2014).

There is one clear source of standardized methods for computing living costs, provided by the College Board. That organization issues tables of “low and moderate-expense living budgets” updated on an annual basis for 24 metropolitan statistical areas (MSAs). These use data from the most recent Consumer Expenditure Survey (CES) and the Indexes of Comparative Costs, both produced by the U.S. Department of Labor's Bureau of Labor Statistics.⁴ The use of MSAs, however, is a key limitation of this approach. These geographic areas are too large to account appropriately for variation in costs. The Philadelphia-Camden-Wilmington, PA-NJ-DE-

⁴ <http://professionals.collegeboard.com/higher-ed/financial-aid/living-expense/2014/9-month>

MD MSA, for instance, spans eleven counties in four states, effectively attributing the same costs to Philadelphia as to Cecil County, Maryland. At the same time, these 24 MSAs leave out broad swaths of the country. The Philadelphia and Pittsburgh MSAs cover just twelve counties in Pennsylvania, leaving 55 counties with no estimates. While these 24 MSAs touch 26 states and Washington, DC, 24 states are omitted entirely. Thus while the generation of these estimates by MSA represents a valuable public service for institutions in certain portions of these regions, the approach is clearly insufficient to provide an equitable basis for determining living cost allowances for all institutions.

Of course, there can be drawbacks to standardizing the calculation of allowances if that standardization disallows exceptions. Fortunately, current policy anticipates that individual living costs may deviate from the average. Financial aid administrators may use what is called “professional judgment” to adjust living cost allowances on a case-by-case basis at the request of students. This is a subjective and often time-consuming process in which financial aid administrators may make independent decisions as long as they do not discriminate. According to financial aid expert Mark Kantrowitz, “A financial aid administrator may be completely arbitrary in reaching a decision to deny an adjustment. For example, it is acceptable for a financial aid administrator to deny an adjustment because he or she feels the parent was impolite or too aggressive, or because he or she believes that the family is being dishonest or attempting to game the system. However, to the extent that similar special circumstances would normally lead to a similar conclusion, an ethical approach would dictate reaching a similar decision, all else being equal. Financial aid administrators should strive for consistency in their professional

judgment decisions.”⁵ Decisions made using professional judgment are subject to audit by the U.S. Department of Education and use of this option may be declining.⁶

As this summary of current rules and regulations indicates, there are few mechanisms in place to encourage standardization across institutions in the ways that institutions develop the living cost allowances contained in their costs of attendance.

Debates and Research on Undergraduate Living Costs

The federal definition of COA has included living costs since the inception of federal support for higher education. Monthly subsistence payments for living costs were made to veterans in the original G.I Bill, and continue today, recognizing that it is difficult to make ends meet while spending time in class and studying. In fact, in the 1940s when veterans reported that the subsistence payments were inadequate, the government responded by increasing them (Mettler, 2005).

Yet for decades there has been disagreement about whether or not living costs should be included, with some arguing that they are not actually part of the marginal costs of college attendance, since students would have these costs even if not enrolled in school (Jackson and Pogue 1983; Dynarski, 2000). Some who take this stance urge policymakers to pursue policy changes such as dis-allowing support for living costs for independent students, focusing more

⁵ <http://www.finaid.org/educators/pj/principles.phtml>

⁶ A comparison of the number of Title IV applicants filing for professional judgment over time, as reported in the Federal Student Aid end-of-year reports indicates a rise between 2007 and 2010 to a peak of almost 226,000 in 2010-11 then a steady decline, with 194,000 cases in 2011-12 and just 159,000 in 2012-13. These numbers include professional judgments for reasons other than living cost allowances, such as adjustments to household income to better reflect current financial resources after a family member lost a job.

attention on aligning the academic “match” between students and colleges, or simply promoting broader completion of the FAFSA (College Board Advocacy & Policy Center, 2012; Executive Office of the President, 2014). While at least some living expenses would be incurred regardless of whether a student is enrolled in college, the key debate centers around whether students should have access to federal, state, and institutional grant or loan aid to help cover these living expenses while in college.

A central tension in this debate is reflected in the Guidance quoted earlier: to what extent are living costs reflective of actual local costs and to what extent are they due to “personal lifestyle choices”? What adjustments should be made for the specific circumstances of undergraduate life—for example, the need to devote as much time as possible to schooling rather than work or commuting? Is a “ramen diet” an acceptable part of student life, or should the healthy eating behaviors encouraged among younger students apply to undergraduates as well? Do students accrue marginal living costs by enrolling in college? What social benefit programs penalize those adults who enroll in college? Discussion of these conflicts are scattered throughout literature on college affordability, but not directly examined or discussed (Goldrick-Rab & Kendall, 2014).

What is clear from studies of student behavior is that unanticipated financial challenges can derail college plans, particularly for undergraduates from low- and moderate-income families (Goldrick-Rab, Harris, & Trostel, 2009; Broton, Frank, & Goldrick-Rab, 2014). When students run out of money from financial aid before the end of the academic term, they have to make difficult choices about whether they can continue their schooling. When a car breaks down or a child needs medicine, they have to choose whether to continue allocating their limited resources towards their college education. For this reason, emergency aid programs such as Dreamkeepers

have sprung up to distribute small grants, and sometimes loans, which appear to help students stay in school (Geckeler, 2008). There has also been growth in the number of campus-based food pantries (Resnikoff, 2014; West, 2014) and the creation of the College and University Food Bank Alliance. These efforts stand in contrast to the simultaneous push for high-end restaurateurs to open university-based locations and competitions to have the “best” campus food (Jacobs, 2013; Jacobs, McCall, & Stange, 2013). The adequacy of living cost allowances, therefore, would seem to matter most to students with fewer resources—who are also the most likely to be struggling to complete college.

While there have been many studies on trends in tuition and fees (e.g. Archibald & Feldman, 2011; Clotfelter & Rothschild, 1993; Reynolds, 2014) and how these vary across institutions and regions and several studies of the costs associated with textbooks (Cousteau, 2013; GAO, 2013), we are not aware of any scholarly work examining the accuracy of living cost allowances. The practitioner-led studies cited earlier are aimed at developing more accurate costs of attendance and tend to focus on a single institution, rather than analyzing accuracy across institutions.

An additional complication stems from how colleges report cost of attendance data to the federal government. While nearly all four-year institutions report cost of attendance components on an academic year basis (academic year reporters), most colleges offering shorter-term certificates and credentials report the costs for the entire length of the program (program reporters). We are aware of no scholarly research on living costs that attempts to equate living costs from program reporters to match the format of academic year reporters.

Therefore, this paper poses the following research questions:

- (1) What are the trends in living cost allowances by year, institutional sector, and reporting status (academic year versus individual program reporters)?
- (2) What variation exists in living cost allowances (room, board, and other living expenses) among colleges in the same region (e.g. the intra-regional variation)?
- (3) To what extent do living cost allowances reflect the estimated cost of living with a region? How much variation is there in the accuracy of allowances within regions?

Methodology

Sample

We examine living cost allowances for 6,705 colleges in the 2013-14 academic year (4,131 academic year reporters and 2,574 program reporters), since these are contained in the federal data source described below. We further restrict the analysis to institutions for which COA data is available for all years between 2006-07 and 2013-14 for trend analyses; the largest program at program reporting colleges must have the same two-digit Classification of Instructional Programs (CIP) code, reflecting the general field of study, in each year for the sake of consistency. This restricts the sample for trend analyses to 4,572 colleges (3,486 academic year reporters and 1,086 program reporters) (see Appendix Table 1).

Data

In order to measure the living cost allowance for each institution, we use data from the Integrated Postsecondary Education Data System (IPEDS) from the 2006-07 through 2013-14

academic years. We further differentiate institutions based on how they report COA data. Nearly all institutions offering four-year degrees and the majority of colleges offering associate's degrees report COA for all programs on an academic year basis, while most colleges where the highest degree is a certificate or short-term credential report on total cost for the largest program offered. In the latter case ("program reporters"), we normalized all costs to a nine-month basis.

There is variation in living cost allowances according to the student's living circumstances, with both room and board costs and "other" costs allowed to be somewhat higher for off-campus students living on their own compared to students living on campus. For example, at public colleges and universities the allowance for on-campus students is \$11,314 while the allowance for off-campus students living on their own is \$12,080. The allowances are slightly higher, but the range similar, for private institutions. Students living with family do not receive allowances for room and board at all institutions and these data are not collected in IPEDS; thus we do not report on them here. Appendix Table 2 describes these variations in living cost allowances.

In order to compare institutional living cost allowances to actual local living expenses, we use data and a methodology modeled on the MIT Living Wage Calculator (Glasmeier & Arete, 2014). However, in order to ensure comparability to the institutional data, we employ living expense data that would have been available for building the living cost allowance budget for the 2013-14 academic year.

Data on housing expenses are drawn from the U.S. Department of Housing and Urban Development 50th Percentile Rents calculated for all fair market areas for FY 2012. These data are collected and reported separately by county, and so regional adjustments are built into the

data set. Values for a zero bedroom (efficiency) apartment are used for college cost of living estimates, consistent with the NASFAA Guidance that does not require living with roommates. Costs for food are derived from the U. S. Department of Agriculture Food Plans: Cost of Food for June 2012. The low-cost plan for men ages 19-50 of \$234 per month is averaged with the low-cost plan for women ages 19-50 of \$203 a month to arrive at a cost of \$218 per month. The 2013 County Cost of Living Index (COLI) from the Council for Community and Economic Research is used to adjust this figure to account for regional differences. These two components added together represent the county-based estimate for room and board costs comparable to what institutions report in IPEDS.

Costs for transportation, health care, and miscellaneous expenses together comprise the estimate for expenses other than room and board. Costs for transportation are taken from the 2012 Bureau of Labor Statistics Consumer Expenditure Survey for individuals under 25 years old (Table 1300). Central tendencies in this survey render use of the average public transportation expense (\$291 per year or just under \$25 per month) unrealistic and so the cost of operation and maintenance costs of a car were used to estimate costs, but costs for capital outlay, and depreciation were not included. These amounts were \$1,931 per year (\$161 per month) for gasoline and motor oil and \$1,322 per year (\$110 per month) for other expenses such as financing, maintenance and repairs, license fees, etc. Health care costs are estimated based on average per person costs for health insurance premiums by state in 2010 as compiled by the Kaiser Family Foundation. For the states for which data were unavailable (Alaska, Kansas, Nevada, Ohio, Oklahoma, and Texas) the national average of \$215 was used but adjusted using the county-level COLI in those states only. Costs for actual out-of-pocket medical expenses were not included in estimates. State and federal health care exchanges may provide better sources for

regional data going forward, but these would not have been available when 2013-14 cost of attendance budgets were constructed by institutions and so were not integrated into estimates. Costs for miscellaneous items are also taken from the Consumer Expenditure Survey for 2012 for individuals under 25 years old. Included in this category were personal care products and services at \$372 per year (\$31 per month), \$249 per year (\$21 per month) for fees and admissions, and \$360 per year (\$30 per month) for miscellaneous expenses. These amounts totaled to \$981 annually or \$82 per month.

Analysis

To address the first research question, we examine trends in the total cost of attendance, room and board allowances, and allowances for other living expenses between the 2006-07 and 2013-14 academic years for institutions with available data in each year. We do not examine tuition and fees or books and supplies. Trends in tuition and fees have been extensively documented in prior research, while the meaning of trends in books and supplies is unclear due to the increased availability of electronic resources, secondary textbook markets, and student preferences in purchasing books.⁷

We estimate regional cost of living for institutions located within a particular county using the data sources described earlier. We model regional differences when they are not addressed in the primary data source by using the 2013 County Cost of Living Index (COLI) from the Council for Community and Economic Research. We then compare the estimated living

⁷ Data on trends in tuition and fees and books/supplies for institutions in the sample are available from the first author upon request.

costs to the living cost allowance (room and board and other expenses) reported by the institution.

Estimates are computed on a monthly basis and multiplied by nine to approximate costs for a typical academic year. This method aligns cost of living estimates with cost of attendance budgets of institutions that report costs by academic year. Institutions that report student charges and costs by program provide the monthly (4-week) cost for living expenses are then multiplied by the length of the program. Costs for institutions reporting costs by program are normalized to nine months. This approach provides some means to compare reported living costs among institutions, although it does not account for real world costs that cannot easily be subdivided into monthly units. For instance, while students may participate in their academic program in 9-month segments, landlords may require a 12-month lease or charge higher rates for a 9-month lease.

Limitations

There are several limitations to the data and approach we use to estimate local living expenses in each region. First, data are generally unavailable for Puerto Rico, U.S. Territories, and Outlying Areas and so estimates are not generated for these areas and these institutions are not included in our sample. Second, while use of counties as the principal geographic unit for estimating cost of living expenses is far superior to using MSAs, costs for living expenses are not really uniform across counties. In dense urban areas, for instance, rents and costs for gasoline can vary over the course of a few blocks. Conversely, in larger rural western counties where housing expenses may be more uniform, transportation costs could vary significantly based on the distance between students' places of residence and their institutions. Because individual variation

is potentially large in such areas, a COA budget that represents the median or average for a “typical” student might still be insufficient to account for personal circumstances.

Trends in Living Cost Allowances Over Time

Table 1 displays annual changes over time (2006-2013) in institutional allowances for room and board as well as other miscellaneous costs. The column for 2006 shows the initial allowances for living costs in that year, which for on-campus students ranged from \$8,642 (at public institutions) to \$9,302 (at private institutions), and for off-campus students ranged from \$9,940 (at public institutions) to \$11,809 (at for-profit institutions). The remaining columns show the growth or decline in those allowances over time.

During the observational period, living cost allowances for on-campus students grew slowly and steadily in both the public and private sector, with an average annual increase in room and board of \$351-417, and an average annual increase in other costs of \$152-197. About 80-85% of all institutions raised their allowances for on-campus room and board each year, with less than 10% in the public sector and less than 5% in the private sector ever reducing those allowances (the largest fraction reducing on-campus room and board costs was 8.6% of public institutions in 2013). In contrast, only about half of the institutions raised their allowances for other costs annually, while between 10-20% a year decreased those allowances.⁸

There is much more substantial variation in living cost allowances for off-campus students living alone. In the public sector, trends are similar to those for on-campus students,

⁸ Data are available in tables not shown but available from the first author upon request.

with growth in room and board year over year of \$351 and growth in other costs of \$244 (a larger increase in the allowance than on-campus students received). There was a clear change in the public sector in 2013, when 8.9% of all institutions reduced the allowance for other costs by at least 10%.

At private non-profit institutions, the allowance for room and board for off-campus students increased much more slowly than it did for on-campus students (\$325 a year on average, compared to \$417). But similar to the public sector, growth in room and board was steady until 2009 and then began to rapidly decline, along with the economy.

The for-profit sector of higher education exhibits a different pattern. Over time, the allowance for room and board tended to decline rather than grow, such that between 2006 and 2013 the living allowance for room and board dropped from \$8,152 to \$7,709. In contrast, there were uneven shifts in allowances for other costs—for example there was an average increase of \$561 between 2006 and 2007 (more than 4 times the size in other sectors) but an average decline of \$405 between 2010 and 2011 (a year in which other sectors made a small increase but 28% of for-profit institutions implemented reductions). These patterns are for institutions reporting living cost allowances for all programs; for those reporting only on their largest program the average increases for both room and board as well as other costs were substantial, notably larger than in the other sectors.

**Table 1: Annual Changes in Living Cost Allowances,
2006- 2013.**

Institutions where all programs are reported (academic year reporters).

Public institutions

Component	2006 cost (\$)	2007	2008	2009	2010	2011	2012	2013
<u>On-campus students</u>								
Total COA	14,354	731	830	851	792	766	624	461
Room and board	5,947	308	335	366	294	266	287	260
Other expenses	2,695	116	148	113	84	42	41	-28
<u>Off-campus, without family</u>								
Total COA	14,100	585	791	760	534	547	412	224
Room and board	6,730	251	358	316	168	161	187	75
Other expenses	3,210	133	209	155	62	61	47	-10

Private nonprofit institutions

Component	2006 cost (\$)	2007	2008	2009	2010	2011	2012	2013
<u>On-campus students</u>								
Total COA	29,534	1,771	1,733	1,433	1,461	1,451	1,401	1,290
Room and board	7,060	337	369	321	302	306	313	303
Other expenses	2,242	92	102	77	91	38	45	47
<u>Off-campus, without family</u>								
Total COA	26,588	1,583	1,581	1,266	1,317	1,179	1,066	870
Room and board	7,383	401	433	258	354	216	145	159
Other expenses	3,124	126	191	112	74	89	95	13

For-profit institutions

Component	2006 cost (\$)	2007	2008	2009	2010	2011	2012	2013
<u>Off-campus, without family</u>								
Total COA	25,633	1,198	1,262	1,066	-376	-699	280	88
Room and board	8,152	-53	220	336	-386	-543	-85	68
Other expenses	3,657	561	329	267	171	-405	135	6

Institutions where only the largest program is reported (equated to a 9-month basis)

For-profit institutions

Component	2006 cost (\$)	2007	2008	2009	2010	2011	2012	2013
<u>Off-campus, without family</u>								
Total COA	17,163	585	1,860	1,451	1,748	254	535	755
Room and board	5,433	58	434	501	660	471	133	220
Other expenses	2,762	74	341	427	408	-340	99	172
Change in CPI (%)		2.4	5.6	-2.1	1.2	3.6	1.4	2.1

Intra-Regional Variation in Living Cost Allowances

Given the wide range of areas in which institutions of higher education are located across the nation, we might expect some of the observed variation in living cost allowances discussed thus far to reflect meaningful geographic differences. Table 2 shows within-region institutional living cost allowances for off-campus students in 2013. The central tendencies indicate that the living cost allowances reported by institutions in the Midwest and the South are about \$2,000 to \$2,500 below allowances reported by institutions in the Northeast and the West, generally indicative of higher costs of living on the East and West coasts.

What is most striking is that there is extensive variation in living cost allowances reported by institutions within the same regions. The difference between the 25th percentile and the 75th percentile for reported total nine-month living costs for off-campus students not living with family is \$4,000-\$5,000 – an amount that exceeds the total published charges for most community colleges. In the top ten percent of institutions, allowances range from about \$16,000 to over \$31,000 in each region. Conversely, in the bottom ten percent of institutions, reported allowances range from under \$2,000 to around \$7,200 for the South, Midwest, and Northeast, and around \$9,500 for the West (see Table 4). While actual living costs within these geographies may well be variable, variation at this level, especially among institutions with lower allowances, illustrates how students may face very different resource constraints depending on how their institution computes the allowance.

Table 2. Living Cost Allowances (over 9 months) for Off-Campus Students Not Living with Family, by Region, 2013-14

	Region				All U.S.
	West	Midwest	South	Northeast	
Institutions (N)	1,362	1,555	2,305	1,222	6,444
Room & Board, Plus Other Expenses (\$)					
Min	1,715	1,150	950	1,661	950
10th pctile	9,495	7,200	7,132	7,212	7,426
25th pctile	11,689	9,496	9,750	10,436	10,191
50th pctile	13,824	11,458	11,878	12,760	12,165
75th pctile	15,435	13,974	14,202	15,340	14,814
90th pctile	16,443	16,074	16,092	18,180	16,674
Max	31,186	31,186	32,595	32,977	32,977
Mean	13,531	11,716	11,965	12,883	12,410
SD	3,241	3,722	3,764	4,301	3,826

Includes only institutions for which both room & board, not with family, and other expenses, not with family were reported for 2013-14. Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI, Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT, South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV, West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

Estimated Living Costs vs. Living Cost Allowances

We turn next to examining the accuracy in institutional living cost allowances by comparing them to estimated living costs. Table 3 summarizes the county-level living cost estimates computed over 9 months. Recall that institutional living cost allowances for off-campus students range from about \$6,000 (the bottom 10% of for-profits) to over \$19,000 (the 90th percentile for private non-profits). The range in estimated living costs at the county level runs from \$9,126 to \$24,426. This suggests that a sizable fraction of colleges and universities are likely under-stating the actual living costs faced by off-campus students living alone.

Variation in estimated nine-month cost of living at the county level is less than \$4,000 among the first three quartiles, ranging from \$9,126 for total living costs in the lowest cost county -- Randolph County, Arkansas, where Black River Technical College is located -- to just

under \$12,940 in Mohave County, Arizona, home of Mohave County Community College in Kingman. Just under half (48%) of all institutions, or 3,194 total, are located in these lower-cost counties. The other 3,511 institutions, comprising 52% of the institutions in the study are located in the top quartile of counties for cost of living, which ranged from \$12,940 for total costs in Merced County, California, home of Merced College, to over \$24,000 for institutions in the five boroughs of New York City. As expected, costs in large urban areas are high. Suffolk County, where Boston, Massachusetts is located, for instance, has an estimated nine-month cost of living of \$22,743; Los Angeles County’s estimated nine-month cost of living is \$18,144.

Table 3. Summary of County-Level Cost of Living Estimates, 9 Months, All U.S. Counties*

	Room & Board Costs			Other Costs				Total
	Housing	Food	Total	Transp.	Health Care	Misc.	Total	
Min	2,862	1,665	4,572	2,061	1,224	621	4,077	9,126
25th pctile	3,969	1,872	5,877	2,331	1,809	702	4,860	10,863
50th pctile	4,662	1,944	6,606	2,421	1,890	729	5,040	11,678
75th pctile	5,623	2,068	7,711	2,565	2,025	774	5,371	12,940
Max	12,051	3,690	15,489	4,590	3,933	1,386	9,189	24,426
Mean	5,040	2,003	7,039	2,490	1,990	753	5,233	12,272
SD	1,572	214	1,719	266	457	80	682	2,213

* Includes only counties that have at least one higher education institution in the study population, county N =1,448; in Virginia, some of these geographical units are cities but treated as counties here.

We turn next to assessing the accuracy of institutional living cost allowances. As Table 4 indicates, just over half (56.4%) of all colleges and universities report living cost allowances (for off-campus students, over 9 months) within \$3,000 of the county-level living cost estimate for their area. But in about one-third (32.8%) of cases, allowances are \$3,000 or more *below* the estimated living cost for the county, and in about one out of nine cases (10.8%), the allowances are \$3,000 or more *above* the estimated living cost for the county.

The magnitude of the difference between institutional allowance and living cost estimates varies by sector and control. Almost three-fourths (71.6%) of public 4-year institutional allowances are within \$3,000 of the county-level estimated cost of living, while just over half (55.4%) of private, not-for profit 4-year institutions and 60.6% of private, for-profit institutions report allowances within this range. In the 2-year sector, almost two-thirds (63.2%) of public 2-year institutions reported living cost allowances within \$3,000 of the county-level estimate, and over half (53.1% and 58.5%) of private, not-for profit and for-profit institutions in this sector are within this range. In the less-than 2-year sector, less than half (45.3%) of institutions report living cost allowances within \$3,000 of the county-based estimate. It is possible that the method used to estimate living costs produces estimates that are slightly high, but even if this is true and a more conservative correction adopted, the same proportions of institutions would still fall outside of the +/- \$3,000 range.

It is more common for institutional living cost allowances to fall *below* the estimated living costs for the county than it is for them to exceed those costs. At public community colleges and two-year for-profit institutions, where nearly all students live off-campus and there is little institutional grant aid available to help meet financial need, almost 30% of schools report living cost allowances more than \$3,000 below estimated living costs for the area. Rates of this apparent under-estimation of living costs are even higher at less-than-two-year institutions (irrespective of control), and at private non-profit 4-year schools (where a much smaller fraction of students tend to live off-campus). On the other hand, almost 16% of the 1,503 less-than-2-year for-profit colleges and universities are providing living cost allowances that *exceed* living cost estimates by more than \$3,000.

Table 4. Institutional Living Cost Allowances (over 9 months) for Off-Campus Students Compared to County-Level Living Cost Estimates, by Institutional Sector and Control

Sector	Institutions N	Institutional Living Cost Allowance		
		Above Estimate By \$3,000+	Within \$3,000 of Estimate	Below Estimate By \$3,000+
		Pct	Pct	Pct
4-year or above	2,538	8.3	60.9	30.8
Public	634	9.5	71.6	18.9
Private not-for-profit	1,200	7.8	55.4	36.8
Private for-profit	704	8.1	60.6	31.3
2-year	2,107	10.1	60.4	29.5
Public	1,019	7.7	63.2	29.1
Private not-for-profit	126	15.9	53.1	31.0
Private for-profit	962	11.9	58.5	29.6
Less-than 2-year	1,797	15.1	45.3	39.6
Public	228	14.0	40.8	45.2
Private not-for-profit	66	4.5	48.5	47.0
Private for-profit	1,503	15.8	45.8	38.4
Grand Total	6,442	10.8	56.4	32.8

To further illustrate the range in living cost allowances within a region and the variation in the accuracy of those allowances, we next provide specific examples from Milwaukee County, Wisconsin, Dane County, Wisconsin (home to Madison), Washington DC, and Salt Lake County in Utah.

Milwaukee County’s estimated 9-month living expense cost of \$12,753 places it in the bottom of the top quartile of counties for living expense costs, but like most counties in this quartile, a variety of institutions are located in it (see Table 5). Situated in the county are 25 institutions ranging from a research-intensive public doctoral institution to comprehensive private universities, to liberal arts colleges, to proprietary 4-year institutions as well as

cosmetology schools. Their reported living cost allowances vary substantially, with the for-profit college Bryant & Stratton allocating just \$5,180 for off-campus students to live for 9 months while both non-profit Marquette University and for-profit DeVry University calculate an allowance of over \$16,000. About half of the colleges and universities in Milwaukee report a living cost allowance within 20% of the estimated living cost for the county. This includes both public institutions, University of Wisconsin-Milwaukee and Milwaukee Area Technical College, though the former provides an allowance of about \$1,000 *more* than the estimated living costs while the latter provides an allowance of about \$1,500 *less* than the estimated living costs. Both for-profit and non-profit institutions in Milwaukee exhibit apparent errors in both directions.

Turning next to Dane County (Table 6), where the estimated living cost is a few hundred dollars lower than it is in Milwaukee County, we observe a similar wide range in living cost allowances for off-campus students, but the majority of institutions allow between \$11,500 and \$14,000 for 9 months. The administrations of the University of Wisconsin-Madison and the University of Wisconsin Colleges (thirteen two-year branch campuses located throughout the state) are co-located and they provide nearly identical allowances, both very close to the estimated living costs in Dane County. Madison Area Technical College allocates almost \$1,000 less than the estimated living cost, while two of the area's three beauty schools providing living cost allowances far above the estimated living cost for the area.

The more institutions in an area, the greater potential for a range of allowances and variation from the living cost estimate. However in Washington DC (Table 7), nearly all colleges and universities in the city report living cost allowances for off-campus students well below the estimated living costs for the area (just over \$20,000). Among the larger institutions, the University of the District of Columbia's living cost allowance is the most accurate but is still off

by almost \$1,500. Off-campus students attending expensive private universities such as George Washington University receive living cost allowances that would seem to leave them \$4,000 to 7,000 short of the living expenses in the area.⁹

The living cost allowances and colleges and universities in Salt Lake County, Utah (Table 8) slightly understate the estimated living cost of \$12,780 over nine months. Five of the 34 colleges have living allowances at least 30% below the estimated living cost, led by Sherman Kendall Academy's estimate of \$4,410 for nine months and Western Governors University¹⁰ at \$7,000. DeVry University-Utah has the highest living cost allowance, at \$17,812 for nine months. Salt Lake Community College's allowance of \$11,270 and the University of Utah's allowance of \$15,345 are fairly close to the estimated living costs in Salt Lake County.¹¹

⁹ Given the nature of commuting in the DC metropolitan area, it may be the case that these schools expect their students to live outside of the District, if not living on campus. However, the estimated living costs in nearby suburbs are not much lower than they are in the District (for example, Arlington County Virginia is \$19,611 and Montgomery County MD is \$18,684).

¹⁰ Western Governor's University, where enrolled students complete degrees online and over 90% live in states outside of Utah (2013 IPEDS Fall Enrollment Survey), illustrates the complexity of constructing a living cost allowance for all students given the regional variation in costs.

¹¹ The following Salt Lake City institutions are not shown in Table 8 due to space constraints. They are Sherman Kendall Academy-SLC, Skinworks School of Advanced Skincare, Skin Science Institute, Broadview University-West Jordan, Medspa Academies, and Cameo College of Essential Beauty.

Table 5. Comparison of Living Cost Allowances to Estimated Living Costs, Milwaukee County, Wisconsin

Institution Name	Allowance Reported By Institution			Estimated Living Cost	Reported - Estimated	
	Room & Board	Other	Total		Amount	Percent
Bryant & Stratton College-Bayshore	3,500	1,680	5,180	12,753	-7,573	-59%
Bryant & Stratton College-Wauwatosa	3,500	1,680	5,180	12,753	-7,573	-59%
Bryant & Stratton College-Milwaukee	3,500	1,680	5,180	12,753	-7,573	-59%
Milwaukee Institute of Art & Design	7,680	2,500	10,180	12,753	-2,573	-20%
Mount Mary University	6,972	3,476	10,448	12,753	-2,305	-18%
Milwaukee Area Technical College	7,500	3,725	11,225	12,753	-1,528	-12%
The Art Institute of Wisconsin	5,610	6,078	11,688	12,753	-1,065	-8%
ITT Technical Institute-Germantown	7,495	4,383	11,878	12,753	-875	-7%
ITT Technical Institute-Greenfield	7,495	4,383	11,878	12,753	-875	-7%
Wisconsin Lutheran College	5,740	6,220	11,960	12,753	-793	-6%
Cardinal Stritch University	5,780	6,262	12,042	12,753	-711	-6%
Alverno College	7,652	4,572	12,224	12,753	-529	-4%
Visions in Hair Design Institute of Cosmetology	8,055	4,473	12,528	12,753	-225	-2%
Milwaukee School of Engineering	8,271	4,431	12,702	12,753	-51	0%
Empire Beauty School-Milwaukee	6,174	6,687	12,861	12,753	108	1%
University of Phoenix-Milwaukee Campus	6,230	6,830	13,060	12,753	307	2%
University of Wisconsin-Milwaukee	9,136	4,634	13,770	12,753	1,017	8%
The Institute of Beauty and Wellness	7,578	6,660	14,238	12,753	1,485	12%
VICI Aveda Institute	9,549	5,265	14,814	12,753	2,061	16%
Advanced Institute of Hair Design-Glendale	9,549	5,265	14,814	12,753	2,061	16%
Milwaukee Career College	9,550	5,266	14,815	12,753	2,062	16%
Strayer University-Wisconsin	10,917	4,302	15,219	12,753	2,466	19%
Marquette University	11,476	4,640	16,116	12,753	3,363	26%
DeVry University-Wisconsin	10,312	6,340	16,652	12,753	3,899	31%
Regency Beauty Institute-Greenfield	13,374	7,902	21,276	12,753	8,523	67%

Table 6. Comparison of Reported Living Costs for Nine Months to Estimated Living Costs, Dane County, Wisconsin

Institution Name	Costs Reported By Institution			Estimated Total Cost	Reported - Estimated	
	Room & Board	Other	Total		Amount	Percent
Madison Media Institute	5,506	2,100	7,606	12,708	-5,102	-40.1%
Edgewood College	7,888	3,574	11,462	12,708	-1,246	-9.8%
Madison Area Technical College	8,040	3,726	11,766	12,708	-942	-7.4%
Globe University- Madison West	5,148	7,002	12,150	12,708	-558	-4.4%
Globe University-Madison East	5,148	7,002	12,150	12,708	-558	-4.4%
University of Wisconsin Colleges	7,790	4,590	12,380	12,708	-328	-2.6%
University of Wisconsin-Madison	9,180	3,215	12,395	12,708	-313	-2.5%
Empire Beauty School-Madison	6,174	6,687	12,861	12,708	153	1.2%
Herzing University-Madison	10,944	3,069	14,013	12,708	1,305	10.3%
Advanced Institute of Hair Design-Madison	9,549	5,265	14,814	12,708	2,106	16.6%
Regency Beauty Institute-Madison	13,374	7,902	21,276	12,708	8,568	67.4%

Table 7. Comparison of Reported Living Costs for Nine Months to Estimated Living Costs, District of Columbia

Institution Name	Costs Reported By Institution			Estimated Total Cost	Reported - Estimated	
	Room & Board	Other	Total		Amount	Percent
Bennett Career Institute	8,397	990	9,387	20,394	-11,007	-54.0%
University of the Potomac-Washington DC Campus	6,240	3,684	9,924	20,394	-10,470	-51.3%
Career Technical Institute	10,503	1,980	12,483	20,394	-7,911	-38.8%
Radians College	5,967	6,696	12,663	20,394	-7,731	-37.9%
George Washington University	11,378	1,450	12,828	20,394	-7,566	-37.1%
University of Phoenix-Washington DC Campus	6,230	6,830	13,060	20,394	-7,334	-36.0%
Corcoran College of Art and Design	9,800	4,200	14,000	20,394	-6,394	-31.4%
Strayer University-Global Region	10,917	4,302	15,219	20,394	-5,175	-25.4%
Strayer University-District of Columbia	10,917	4,302	15,219	20,394	-5,175	-25.4%
American University	14,180	1,179	15,359	20,394	-5,035	-24.7%
Trinity Washington University	9,513	6,192	15,705	20,394	-4,689	-23.0%
Gallaudet University	11,580	5,208	16,788	20,394	-3,606	-17.7%
Catholic University of America	14,326	2,550	16,876	20,394	-3,518	-17.3%
Technical Learning Centers Inc	11,790	5,634	17,424	20,394	-2,970	-14.6%
University of the District of Columbia	15,375	3,538	18,913	20,394	-1,481	-7.3%
National Conservatory of Dramatic Arts	13,029	7,313	20,342	20,394	-52	-0.3%
Howard University*	NR	NR	NR	20,394	--	--
Georgetown University*	NR	NR	NR	20,394	--	--

**These institutions do not report data because all first-year students are required to live on campus.*

Table 8. Comparison of Reported Living Costs for Nine Months to Estimated Living Costs, Salt Lake County, Utah

Institution Name	Costs Reported By Institution			Estimated Total Cost	Reported - Estimated	
	Room & Board	Other	Total		Amount	Percent
Sherman Kendall Academy-Midvale	3,060	1,350	4,410	12,780	-8,370	-65.5%
Western Governors University	6,000	1,000	7,000	12,780	-5,780	-45.2%
Neumont University	4,950	3,600	8,550	12,780	-4,230	-33.1%
Latter-day Saints Business College	7,650	1,215	8,865	12,780	-3,915	-30.6%
Healing Mountain Massage School	8,010	900	8,910	12,780	-3,870	-30.3%
Taylor Andrews Academy of Hair Design-W. Jordan	7,119	2,133	9,252	12,780	-3,528	-27.6%
Eagle Gate College-Salt Lake City	6,353	3,660	10,013	12,780	-2,767	-21.7%
Argosy University-Salt Lake City	4,992	5,408	10,400	12,780	-2,380	-18.6%
Eagle Gate College-Murray	6,353	4,268	10,621	12,780	-2,159	-16.9%
Francois D College of Hair Skin and Nails	7,119	3,510	10,629	12,780	-2,151	-16.8%
Myotherapy College of Utah	7,236	3,574	10,810	12,780	-1,970	-15.4%
Fortis College-Salt Lake City	9,495	1,391	10,886	12,780	-1,894	-14.8%
Salt Lake Community College	9,900	1,370	11,270	12,780	-1,510	-11.8%
Everest College-Salt Lake City	7,515	4,059	11,574	12,780	-1,206	-9.4%
The Art Institute of Salt Lake City	5,610	6,078	11,688	12,780	-1,092	-8.5%
ITT Technical Institute-Murray	7,495	4,383	11,878	12,780	-902	-7.1%
AmeriTech College-Draper	7,365	4,735	12,100	12,780	-680	-5.3%
Broadview Entertainment Arts University	5,148	7,002	12,150	12,780	-630	-4.9%
Independence University	8,350	4,600	12,950	12,780	170	1.3%
University of Phoenix-Utah Campus	6,230	6,830	13,060	12,780	280	2.2%
Utah College of Massage Therapy-Salt Lake City	10,800	2,385	13,185	12,780	405	3.2%
The Barber School	9,531	3,861	13,392	12,780	612	4.8%
Midwives College of Utah	9,513	4,032	13,545	12,780	765	6.0%
Strayer University-Utah	10,917	4,302	15,219	12,780	2,439	19.1%
Top Nails & Hair Beauty School	9,288	6,057	15,345	12,780	2,565	20.1%
University of Utah	9,216	6,264	15,480	12,780	2,700	21.1%
Paul Mitchell the School-Salt Lake City	10,359	5,733	16,092	12,780	3,312	25.9%
Stevens-Henager College-Murray	10,800	5,400	16,200	12,780	3,420	26.8%
DeVry University-Utah	11,472	6,340	17,812	12,780	5,032	39.4%

Discussion

Public attention to the costs of college attendance tends to focus on rising tuition and fees, but the costs of living while attending school must also be covered if students are to commit to full-time school work and complete their degrees in a timely manner. This paper provides evidence that living cost allowances computed by colleges and universities receiving federal student aid are far from uniform, with systematic variation evident according to sector and control.

When students do not have sufficient resources with which to cover their living costs, research shows they are more likely to take on additional work hours or make compromises that affect their school work—such as forgoing books and other supplies, or skipping meals (Broton, Frank, and Goldrick-Rab, 2014). The federal IPEDS data indicates that a sizable number of colleges and universities, particularly those in the less-than-2-year for-profit sector, are listing living cost allowances more than \$3,000 below the estimated living costs in their areas. This practice is less common, yet still pronounced, at community colleges and private 4-year non-profit colleges and universities. While it is possible that these apparent under-estimates are accidental, perhaps the result of under-resourced and over-worked financial aid offices, their widespread incidence suggests that they may represent institutional choices, which could be guided by specific policy incentives. For example, colleges and universities are under increasing pressure to lower their net price, thus appearing to offer the consumer a better deal. Limiting the institutional cost of attendance by constraining the living cost allowance is a direct yet discreet way to accomplish this goal. While the task of estimating living cost allowances resides with financial aid administrators, it is important to remember that decisions about the actual listed cost of attendance tend to reside with their superiors. One can easily imagine a financial aid

administrator recommending an increase in the living cost allowance, only to have it vetoed by a provost concerned with how that increase would look on College Navigator or other public display of institutional data sourced from IPEDS.

Colleges and universities that advertise the ability to meet the “full need” of low-income students also face incentives to constrain net price. If the living cost allowance rises, they must provide additional grant aid, likely from the institution’s resources. Public colleges and universities must also contend with the watchful eye of state legislators and local taxpayers, who tend to express concern when the COA rises.

At the same time, there are some for-profit institutions, particularly less-than-2-year schools, which are listing living cost allowances well above estimated living costs in their areas. Moreover, the trend data indicate that over time many for-profit schools have been reducing their living cost allowances. This may be an effort to bring those over-estimates into line, while also reducing the net price at those institutions. Such behavior would be consistent with policy incentives created by the federal ‘90/10 rule’, which requires for-profit institutions to generate at least ten percent of their revenue from sources other than federal grants, loans, or work-study funds (veterans’ benefits excluded). If a for-profit college can reduce its COA, students may be more able to pay at least 10% of total costs out-of-pocket without using federal funds.

Since the COA limits student eligibility for financial aid from federal, state, and other sources means there are significant financial implications for students resulting from inadequate living cost allowances. Individuals receiving outside scholarships that result in a financial package exceeding the institutional cost of attendance often must give up those scholarships or other financial aid in a process known as displacement, even though the student may need those

funds to cover their actual expenses. Students who borrow to finance their living costs cannot receive federal loans exceeding the institutional cost of attendance, and thus if they need additional funds must instead turn to private loans.

It may therefore serve multiple interests to ensure that actions are taken to make living cost allowances as consistent and accurate as possible. First, providing accurate information to students and families may aid in proper planning and budgeting to cover the real costs of college attendance. Second, the use of an accurate COA will reveal the true amount of unmet financial need students face—if this need is currently understated (as this paper suggests may often be the case) then it follows that the estimated impacts of that need on college completion may also be understated. Concealing the unmet financial need borne by students does not serve their interests. At the same time, institutions do not benefit if their students leave college because they are under-resourced. Under accountability regimes, the uneven playing field created by errors in the cost of attendance also put some schools at a disadvantage. This could also benefit financial aid administrators, who would no longer have to spend precious resources surveying students in order to develop their own living cost estimates. For these reasons, and others, we hope that this exploration into living cost allowances catalyzes additional research in this area.

Further Research

There are at least two areas of research ripe for future study. The first relates to the need for a better understanding of current institutional behavior. The NASFAA Guidance clearly emphasizes the “average” student in an institution as the focus of the COA estimation process. To what extent do the surveys fielded by financial aid administrators actually obtain samples that approximate their institution’s demographics? What do these surveys cost in terms of time and

money to field? These questions could be examined by collecting information directly from financial aid offices, which are required to retain information on their methods for calculating COA each year.

Second, analysts need to consider the merits of the estimation strategy used to calculate living costs in this paper, and compare it to other possible strategies. What is the ideal geographic unit of analysis? Do we have all proper elements included? Are the data sources used sufficiently reliable and easily accessible that they could be imported into cost of attendance calculations for colleges and universities nationwide?

Policy Implications and Recommendations

There are many ongoing efforts to enhance accountability for institutional behavior in American higher education. Because cost of living is a principal and in some cases the largest component of net price, and because these living costs are unevenly determined, caution must be exercised when utilizing and interpreting institutional net prices. Net price is already used as a metric to monitor affordability, as currently mandated under the Higher Education Opportunity Act (HEOA) and its use may possibly be extended in the Postsecondary Institution Rating System (PIRS) proposed by the Obama Administration. Given the wide and unexplained variation in cost of living expenses discussed here, it seems unwise to use net price as an accountability measure. Beyond the reliability and validity issues with the measure, it is likely subject to manipulation with little risk for exposure. Further, it seems unreasonable to hold colleges and universities accountable for increases in cost of living expenses that are outside their control, and in many instances dwarf the actual charges to students.

Instead, we recommend that the U.S. Department of Education convene a working group in order to develop a consistent method of determining living costs that accounts for regional and local variation but eliminates or at least minimizes differences between institutions in close proximity to one another. Lessons from the administration of other social programs should be utilized; for example the Department of Housing and Urban Development has experience establishing fair market rents and the Department of Defense has experience with the Basic Housing Allowance provided to service members (U.S. Dept. of Defense, 2014). In the meantime, Federal Student Aid could provide clearer and more definitive guidance to institutions in the FSA Handbook, so that institutions can make more uniform calculations.

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APPENDIX

Table 1: Number of colleges with cost of attendance data by sector.

Sector of college	Active in 2013-14				Data from 2006-07 to 2013-14			
	Academic year reporters		Program reporters		Academic year reporters		Program reporters	
	Number	Pct of total	Number	Pct of total	Number	Pct of total	Number	Pct of total
4-year public	557	13.5	0	0.0	547	15.7	0	0.0
2-year public	1,000	24.2	8	0.3	993	28.5	2	0.2
Less than 2-year public	42	1.0	317	12.3	24	0.7	20	1.8
4-year nonprofit	1,171	28.3	0	0.0	1,133	32.5	0	0.0
2-year nonprofit	128	3.1	9	0.3	117	3.4	3	0.3
Less than 2-year nonprofit	89	2.2	81	3.1	29	0.8	31	2.9
4-year for-profit	297	7.2	0	0.0	248	7.1	1	0.1
2-year for-profit	530	12.8	185	7.2	366	10.5	59	5.4
Less than 2-year for-profit	317	7.7	1974	76.7	29	0.8	970	89.3
Total	4,131	100.0	2,574	100.0	3,486	100.0	1,086	100.0

Source: IPEDS (2013-14 academic year).

Notes:

- (1) To be included in the right set of columns, colleges must have had COA data each year from 2006-07 to 2013-14.
- (2) Colleges reporting at the program level must have had the same two-digit CIP code be the largest program each year.

Table 2: Living cost allowance by reporting type and living arrangement.
Panel A: Institutions where all programs are reported (academic year reporters).

Public institutions								
Component	Mean	SD	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	N
<u>On-campus students</u>								
Total COA	19,266	5,197	12,147	15,601	19,181	22,600	25,614	773
Room and board	8,091	2,448	4,950	6,265	8,142	9,811	11,142	773
Other expenses	3,223	1,202	1,833	2,454	3,096	3,903	4,788	773
<u>Off-campus, without family</u>								
Total COA	18,405	3,640	13,000	15,264	17,936	21,200	24,659	1586
Room and board	8,273	2,516	5,400	6,546	8,243	9,960	11,274	1586
Other expenses	3,807	1,444	2,100	2,850	3,697	4,566	5,533	1586
Private nonprofit institutions								
Component	Mean	SD	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	N
<u>On-campus students</u>								
Total COA	39,567	12,610	20,891	31,400	39,675	48,435	57,832	1138
Room and board	9,283	2,805	5,870	7,370	9,106	11,378	13,068	1138
Other expenses	2,766	1,399	1,200	1,750	2,566	3,500	4,530	1138
<u>Off-campus, without family</u>								
Total COA	37,093	11,357	22,411	28,665	36,392	44,903	52,557	1300
Room and board	9,031	3,123	5,400	7,000	8,706	10,920	12,960	1300
Other expenses	3,510	1,919	1,400	2,024	3,200	4,545	6,083	1300
For-profit institutions								
Component	Mean	SD	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	N
<u>Off-campus, without family</u>								
Total COA	28,501	6,274	22,287	24,403	28,526	30,784	35,232	1144
Room and board	7,880	2,924	5,148	5,929	7,495	9,319	11,349	1144
Other expenses	4,645	1,859	2,000	3,704	4,386	6,078	6,830	1144

Table 2 Continued

Panel B: Institutions where only the largest program is reported (equated to a 9-month basis)

For-profit institutions

Component	Mean	SD	10th %ile	25th %ile	50th %ile	75th %ile	90th %ile	N
<u>Off-campus, without family</u>								
Total COA	25,981	7,015	17,161	21,529	26,396	30,222	34,291	2160
Room and board	8,361	2,804	4,698	6,300	8,550	10,125	11,538	2160
Other expenses	4,156	2,142	1,381	2,250	4,167	5,634	6,930	2160

Source: IPEDS, 2013-14.

Notes:

- (1) Institutions do not report estimated room and board figures for students who live with their families.
- (2) Conversions for program reporters were made by multiplying each COA component by 9 times the number of months of the program.
- (3) Less-than-two-year, two-year, and four-year colleges are combined within each sector.