

# The Real Price of College: Estimating and Supporting Students' Financial Needs

## WEB APPENDICES

October 19, 2021

<i>Appendix A. Negative EFC Data at Six Colleges in Texas.....</i>	<i>2</i>
<i>Appendix B. Survey Methodology: Project Leads and Financial Aid Staff Surveys.....</i>	<i>2</i>
<i>Appendix C. Student Demonstration.....</i>	<i>4</i>
<i>Appendix D. Detailed Tables on Data Referenced in the Full Report.....</i>	<i>7</i>

## Appendix A. Negative EFC Data at Six Colleges in Texas

Six colleges and universities in Texas participated in the Real Price of College project: Amarillo College, Dallas College, El Paso Community College, San Jacinto College, The University of Texas at El Paso, and West Texas A&M University. We worked with administrators at each of these six colleges to calculate the EFC (Expected Family Contribution) for their students using a formula that allows for negative values. Specifically, in October 2019, we requested de-identified student-level data from the 2018-2019 academic year FAFSA (Free Application for Federal Student Aid). This included the EFC value under the current formula as well as all the necessary information for re-calculating EFC for all currently enrolled financial aid applicants at each college. Our affiliate Robert Kelchen re-calculated EFCs for all students, allowing negative values to generate when the current formula would have truncated them at zero. See our [\*Guide to Calculating Negative EFC\*](#) for details.

Whether the methodology allows for negatives or not, EFC is calculated using distinct formulas for the following three groups of students: dependent students, independent students without dependents, and independent students with dependents. Students' classification into one of those groups depends on their age, marital and parenting status, and life history.<sup>1</sup> Since the EFC calculation is specific to each group, we generally present analyses of each group separately. In total, we analyzed data from 129,784 students attending the six participating colleges.

## Appendix B. Survey Methodology: Project Leads and Financial Aid Staff Surveys

### Project Leads Surveys

Each of the six institutions had at least two senior-level administrators from financial aid and other student affairs offices designated as "project leads." We surveyed project leads at the start of the project (August–September 2019), again after participating in the initial information sessions (October–November 2019), and lastly at the end of the project (December 2020–January 2021). This group shifted somewhat over the course of the project due to staffing transitions but remained mostly consistent. In these surveys, we sought to capture project leads' understanding of the accuracy of financial aid measures like EFC and COA, and how they may have shifted at key points in the project. In the final survey, we also asked about their planned uses for negative EFC data.

Surveys were programmed into Qualtrics and invitations were emailed to all project leads, including reminder messages. To facilitate matching responses between surveys, we collected respondents' email addresses.

Eleven project leads responded to survey 1, nine responded to survey 2, and eight to survey 3. While most project leads responded to at least two surveys, only two responded to all three (Table B-1). The first two surveys included responses from project leads at all six colleges. No project leads from San Jacinto Community College or Dallas College completed survey 3. Because survey responses were uneven, Figure 5 in the report utilizes data from all respondents who answered each survey, not only those who responded to all three surveys.

**TABLE B-1 | PARTICIPATION IN PROJECT LEADS SURVEYS**

	N
Three surveys	2
Two surveys	9
<i>Surveys 1 &amp; 2</i>	4
<i>Surveys 2 &amp; 3</i>	2
<i>Surveys 1 &amp; 3</i>	3
One survey	4
<i>Survey 1 only</i>	2
<i>Survey 2 only</i>	1
<i>Survey 3 only</i>	1

Source | Project Lead Surveys 1, 2, and 3

## Financial Aid Staff Surveys

Before (August–September 2019) and after (February–March 2020) offering webinars to financial aid staff at each of the six institutions, we asked project leads to send an electronic survey out to all financial aid staff at their institution. Some project leads made participation in the survey an activity during their staff meetings.

The survey included a list of supports outside of traditional financial aid and asked financial aid staff if their institution offered each of them. For each support that staff knew their institution offered, the survey asked a series of follow-up questions about how knowledgeable the staff person felt they were about the support, how comfortable they were referring students to that support, and other attitudes about that support, such as the extent to which they agreed that knowing about that support was part of their job.

In total, 89 financial aid staff responded to survey 1, while 121 financial aid staff responded to survey 2. Table B-2 shows participation in each survey by college. No identifying information was collected from these surveys. Thus, responses cannot be matched between them to determine whether respondents participated in more than one.

**TABLE B-2 | PARTICIPATION IN FINANCIAL AID STAFF SURVEYS, BY INSTITUTION**

	Survey 1		Survey 2	
	N	%	N	%
Amarillo College	11	12	14	12
Dallas College	7	8	31	26
El Paso Community College	36	40	38	31
San Jacinto Community College	22	25	19	16
University of Texas at El Paso	7	8	4	3
West Texas A&M University	6	7	15	12
<b>Total</b>	<b>89</b>	<b>100</b>	<b>121</b>	<b>100</b>

Source | Financial Aid Staff Surveys

## Appendix C. Student Demonstration

The student demonstration portion of the study was conducted over two weeks in February 2021 in two upper-level undergraduate classes at Temple University. The demonstration was conducted entirely over Zoom, as most Temple classes were offered remotely in spring 2021 due to the coronavirus pandemic. During week one, students completed an electronic pre-survey to assess their knowledge of financial aid concepts and collect demographic information. Immediately after completing the survey, they participated in a brief, two-part intervention. First, they viewed a short, animated video about the price of college, and then The Hope Center's Associate Director of Institutional Transformation, Eddy Conroy, expanded briefly on the topics explored in the video. Eddy, who is a former financial aid practitioner, specifically talked about the cost of attendance and financial support services at Temple.

After the video and presentation, each class was split into three focus groups of approximately ten students each, for a total of six groups. They were asked about the price of college, the video, and Eddy's presentation. To ensure the intervention did not extend into the focus group, focus group facilitators did not provide additional information, but instead sought to get students' input. Facilitators also refrained from answering student questions to keep the intervention consistent across classes.

Exactly one week after the pre-survey and treatment, we returned to the class and asked students to complete a post-survey. Using many of the same questions as the pre-survey, the post-survey assessed students' knowledge of financial aid concepts and attitudes about the price of college. Students were given unique survey links tied to their email addresses for both the pre- and post-surveys so we could compare their responses. Survey data was de-identified for analysis.

In total, 48 students completed the pre-survey, watched the video and listened to the presentation, and completed the post-survey. A few additional students only completed either the pre-survey or post-survey; these results are excluded from the analyses in this report so that only students who answered a given question in both surveys are compared. Table C-1 shows characteristics of all students who took either survey.

**TABLE C-1 | CHARACTERISTICS OF STUDENTS PARTICIPATING IN THE STUDENT DEMONSTRATION**

	N	%
<b>Gender</b>		
Female	41	71
Male	9	16
Other/Prefer not to answer	3	5
Missing	6	10
<b>Race/Ethnicity</b>		
White or Caucasian	29	50
African American or Black	17	29
Hispanic or Latinx	7	12
Other/Prefer not to answer	8	14
Missing	6	10
<b>Age</b>		
18-24	32	55
25 and older	18	31
Missing	8	14
<b>Parenting Student</b>		
Yes	13	22
No	39	67
Missing	6	10
<b>Marital Status</b>		
Single	42	72
Married	8	14
Other	1	2

Missing	7	12
<b>Residency</b>		
In-state	45	78
Out-of-state	7	12
Missing	6	10
<b>Housing</b>		
On-campus	0	0
Off-campus with friends or alone	27	47
Off-campus with family	25	43
Missing	6	10
<b>Pell Grant Recipient</b>		
Yes	33	57
No	19	33
Missing	6	10
<b>Experienced Challenges Paying for College</b>		
Yes	33	57
No	19	33
Missing	6	10
<b>Parent Graduated from College</b>		
Yes	33	57
No	19	33
Missing	6	10

Source | Student demonstration questionnaires

Notes | Demographic information was collected in the pre-survey. This table counts all respondents who responded to either survey; those who did not complete the pre-survey are counted as “missing.” Classifications of gender identity and racial and ethnic background are not mutually exclusive. Students could self-identify with multiple classifications. Percentages of mutually exclusive groups may not add up to 100 due to rounding error. In addition to being among upper classmen, the demonstration took place during the COVID-19 pandemic at a time when many activities were virtual only, so it is not surprising that zero students lived on campus. Information for “Pell Grant Recipient” comes from a question about current methods of paying for college. Information for “Experienced Challenges Paying for College” comes from a question that asked students to indicate any of the following challenges they had experienced so far that semester: not paying tuition on time; not buying all of the books and supplies they needed for class; having trouble paying for childcare; not having safe and reliable transportation to/from campus; not having enough food to eat, even for one day; and not having a safe place to sleep, even for one day.

## Appendix D. Detailed Tables on Data Referenced in the Full Report

**TABLE D-1 | MEAN EFCs AND NEGATIVE EFCs AT SIX TEXAS COLLEGES, BY DEPENDENCY STATUS (TABLE 1)**

EFC Calculation and Dependency Status	Mean	Standard Deviation	10 <sup>th</sup> Percentile	25 <sup>th</sup> Percentile	50 <sup>th</sup> Percentile	75 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile
<b>EFC, Not Allowing for Negatives</b>							
Dependent (\$)	4,975	38,903	0	0	0	3,839	12,965
Independent, no dependents (\$)	4,036	21,784	0	0	254	5,337	10,930
Independent, with dependents (\$)	1,717	45,271	0	0	0	0	2,541
<b>EFC, Allowing for Negatives</b>							
Dependent (\$)	-4,005	42,619	-19,841	-13,862	-4,559	1,194	9,969
Independent, no dependents (\$)	1,716	22,155	-5,390	-4,297	0	4,800	10,032
Independent, with dependents (\$)	-1,742	45,489	-7,202	-5,545	-3,092	-575	2,420

Source | FAFSA data provided by partner colleges

Notes | Results are among all currently enrolled financial aid applicants at the six participating colleges. Mean EFC, not allowing for negatives, is the average EFC of students at partner colleges using an EFC formula that does *not* allow for negatives. Mean EFC, allowing for negatives, is the average EFC of students at partner colleges using an EFC formula that allows for negative values. The 10<sup>th</sup> and 90<sup>th</sup> percentiles are shown rather than minimum and maximum values due to the presence of extreme values in the data set. See Appendix A for more information on data collection, EFC calculations, and dependency status.

**TABLE D-2 | CHANGES IN PROJECT LEAD UNDERSTANDING OF KEY FINANCIAL AID CONCEPTS (FIGURE 5)**

To what extent do you agree that the following current federal measures are accurate?	Survey 1		Survey 2		Survey 3	
	N	%	N	%	N	%
<b>Expected Family Contribution</b>						
Strongly disagree	2	18	5	56	1	13
Somewhat disagree	3	27	3	33	3	38
Neither agree nor disagree	2	18	1	11	3	38

Somewhat agree	4	36	0	0	1	13
Strongly agree	0	0	0	0	0	0
<b>Demonstrated Financial Need</b>						
Strongly disagree	2	18	1	11	1	13
Somewhat disagree	3	27	8	89	3	38
Neither agree nor disagree	1	9	0	0	3	38
Somewhat agree	4	36	0	0	1	13
Strongly agree	1	9	0	0	0	0

Source | Project Leads Surveys 1, 2, and 3

Notes | Eleven project leads responded to survey 1, nine responded to survey 2, and eight to survey 3. While most project leads responded to at least two surveys, only two responded to all three. No project leads from San Jacinto Community College or Dallas College completed survey 3. Cumulative percentages may not add up to 100 due to rounding. See Appendix B for details on data collection.

**TABLE D-3 | PLANNED USES OF NEGATIVE EFC DATA (PAGE 13)**

	N	%
<b>Project leads who were likely to...</b>		
...use negative EFC data to direct support to students	5	63
...use negative EFC data to inform students that their EFC underrepresents how much college will cost them	1	13
...share information about their students' negative EFC with frontline financial aid staff	5	63
<b>Other ways project leads plan to use negative EFC data:</b>		
To educate staff and faculty about student's financial challenges	6	75
To proactively provide support and advice to students with the greatest financial need	6	75
For fundraising	3	38
For advocacy at the state and/or federal level to inform financial aid policy	2	25
To inform or change financial aid appeal policies	3	38

Source | Project Leads Survey 3

Notes | Eight project leads completed this survey. The first section of the table denotes project leads who said they were “somewhat likely” or “very likely” to use negative EFC information in the ways listed (other answer choices were “somewhat unlikely” and “very unlikely”). The second section shows the number and percent of project leads who said “yes,” they will use negative EFC for the purpose listed (given the choices “yes” and “no”). See Appendix B for details on data collection.



**TABLE D-4 | FINANCIAL AID STAFFS' UNCERTAINTY REGARDING AVAILABILITY OF NON-TUITION SUPPORTS (FIGURE 6)**

Percentage who were unsure whether their institution offered...	Survey 1		Survey 2	
	N	%	N	%
Enrollment assistance for public benefits access	39	44	41	44
Grocery store gift cards	29	33	35	37
Free legal services	29	33	34	36
Free tax preparation	25	28	28	30
Emergency housing	24	27	36	38
Meal vouchers	24	27	33	35
Free public transit passes	24	27	27	29
Gas cards	20	22	30	32
Subsidized childcare	15	17	31	33
Emergency financial aid	6	7	5	5
Campus food pantry	5	6	8	9

Source | Financial Aid Staff Surveys

Notes | Data are from surveys of financial aid staff (N(Survey 1)= 89, N(Survey 2)= 121), which project leads distributed to all financial aid staff at participating institutions. The survey asked financial aid staff if each of these supports were offered at their institutions, and they could answer “yes,” “no,” or “not sure.” This table shows the percent who said, “not sure.” See Appendix B for details on data collection.

**TABLE D-5 | RELATIONSHIP BETWEEN FINANCIAL AID STAFFS' KNOWLEDGE AND COMFORT MAKING NON-TUITION SUPPORT REFERRALS (PUBLIC BENEFITS ENROLLMENT ASSISTANCE) (FIGURE 7)**

Knowledge about public benefits	N	%
<b>Not at all knowledgeable</b>		
Not comfortable making referrals	9	64
Might feel comfortable making referrals	2	14
Comfortable making referrals	3	21
<b>Slightly or moderately knowledgeable</b>		
Not comfortable making referrals	3	6
Might feel comfortable making referrals	11	22
Comfortable making referrals	37	73
<b>Very or extremely knowledgeable</b>		
Not comfortable making referrals	0	0
Might feel comfortable making referrals	0	0
Comfortable making referrals	7	100

Source | Financial Aid Staff Surveys

Notes | Data are from surveys of financial aid staff, which project leads distributed to all financial aid staff at participating institutions. Respondents only answered these questions if they knew their institution offered public benefits enrollment assistance; 72 responses from both surveys are included in this figure. Responses for the question about comfort making referrals were collapsed from a five-category scale: definitely not, probably not, might or might not, probably yes, definitely yes. “Definitely not” and “probably not” are coded as “not comfortable making referrals” (“no” in figure legend), “might or might not” is coded as “might feel comfortable making referrals” (“maybe” in the figure legend), and “probably yes” and “definitely yes” are coded as “comfortable making referrals” (“yes” in the figure legend). Cumulative percentages may not add up to 100 due to rounding. See Appendix B for details on data collection.

**TABLE D-6 | STUDENT ESTIMATES OF TEMPLE UNIVERSITY'S COST OF ATTENDANCE (COA) BEFORE AND AFTER INTERVENTION (FIGURES 8 & 9)**

Residency and housing	Institution estimate (\$)	Before			After		
		N	Mean (\$)	Standard Deviation (\$)	N	Mean (\$)	Standard Deviation (\$)
In-state, off-campus with friends or alone	\$36,814	19	\$28,756	\$18,298	19	\$31,655	\$17,573
In-state, off-campus with family	\$24,475	20	\$30,023	\$20,651	20	\$29,259	\$21,206

Source | Student demonstration questionnaires

Notes | Students were asked to estimate the total cost of attending Temple University full-time without financial aid, for “students like you.” Results are among students who answered this question in both surveys and reported the combination of residency and housing shown in the leftmost column. “Institution estimate” represents Temple’s official COA. Data are drawn from [Temple University’s Financial Aid Page](#). See Appendix C for more details on data collection.

**TABLE D-7 | STUDENT UNDERSTANDING OF COA ELEMENTS, BEFORE AND AFTER INTERVENTION (FIGURE 10)**

Are these items part of the cost of attending college?	Before		After	
	N	%	N	%
Tuition and fees*	44	94	45	96
Books and supplies*	38	81	39	83
Food*	22	47	29	62
Rent or mortgage payments for your own accommodations*	22	47	28	60
Transportation expenses*	16	34	25	53
Health insurance*	11	23	11	23
Utilities (e.g. electricity, Internet)*	11	23	18	38

Paying some or all of bills like gas, electric, phone at your parents' home	6	13	11	23
Paying for siblings' expenses such as clothing or food for younger siblings	4	9	3	6
Paying rent to parents	4	9	9	19
Childcare**	3	6	11	23

Source | Student demonstration questionnaires

Notes | \* = item is always included as part of COA. \*\* = item is included in COA if the student formally requests it. Results are among students who answered the question about elements of the COA in both surveys (N=47). See Appendix C for more details on data collection.

**TABLE D-8 | STUDENT UNDERSTANDING OF FINANCIAL AID APPEALS BEFORE AND AFTER PRESENTATION (FIGURE 11)**

Under what circumstances can you ask the financial aid office to change or adjust your cost of attendance?	Before		After	
	N	%	N	%
To cover expenses related to a disability you have	18	38	23	48
You need to buy a computer for college	15	31	19	40
For dependent care costs that are not childcare	14	29	15	31
For childcare expenses	13	27	21	44
You have unusually high medical expenses	12	25	18	38
You can't request an adjustment to your cost of attendance for any reason	18	38	9	19

Source | Student demonstration questionnaires

Notes | Results are among students who answered the question about reasons one could request a financial aid appeal in both surveys (N=48). See Appendix C for more details on data collection.

<sup>1</sup> See <https://studentaid.gov/sites/default/files/fafsa-dependency.pdf> for details.