

**Financial Needs and Characteristics of Students
Pursuing Postsecondary Education in Pennsylvania:
A Rural-Urban Analysis**

By:

*Esther Prins, Ph.D., and Kimeka Campbell, Pennsylvania State University
and Cathy Kassab, Ph.D.*

May 2014



This project was sponsored by a grant from the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly. Information contained in this report does not necessarily reflect the views of individual board members or the Center for Rural Pennsylvania. For more information, contact the Center for Rural Pennsylvania, 625 Forster St., Room 902, Harrisburg, PA 17120, telephone (717) 787-9555, email: info@rural.palegislature.us, www.rural.palegislature.us.

TABLE OF CONTENTS

Introduction	5
Goals and Objectives.....	9
Methodology.....	10
FAFSA data	10
Measures.....	12
Data analysis	14
Interviews with Financial Aid Administrators and Policy Experts.....	18
Results	21
Socio-demographic, Financial, and Family Profiles, with Rural-Urban and Beginning-Continuing Comparisons	21
Differences between rural beginning and continuing postsecondary applicants	22
Educational status.....	22
Socio-demographic characteristics.	25
Household structure and family characteristics.	26
Financial characteristics.	28
Differences between urban beginning and continuing postsecondary applicants	36
Educational status.....	36
Socio-demographic characteristics.	38
Household structure and family characteristics.	40
Financial characteristics.	41
Rural-urban differences	49
Educational status.....	49
Socio-demographic characteristics.	49
Household structure and family characteristics.	50
Financial characteristics.	51
Degree Type and Student Profiles	51
Differences among rural FAFSA applicants by degree type.....	54
Household structure and family characteristics.	58
Financial characteristics.	59
Differences among urban FAFSA applicants by degree type.....	61

Educational status.....	61
Socio-demographic characteristics.	62
Household structure and family characteristics.	64
Financial characteristics.....	65
Rural-urban differences by degree type	66
Educational status.....	67
Socio-demographic characteristics.	68
Household structure and family characteristics.	70
Financial characteristics.....	75
Differences between rural and urban counties: Prevalence of students pursuing bachelor’s degrees, associate degrees, and certificates/diplomas.....	78
County Influence on Educational Financial Need	83
Relationship between county educational financial need and county characteristics	84
Rural Counties.....	89
Comparison of rural and urban counties.....	93
Educational financial need for beginning and continuing postsecondary students.....	97
Profiles of GED Recipients and Adult Learners	101
GED FAFSA applicants	101
Statewide profiles of rural and urban GED applicants.....	103
Educational status.....	103
Socio-demographic characteristics.	106
Household structure and family characteristics.	108
Financial characteristics.....	109
Prevalence of GED postsecondary students in rural and urban counties, and relationship with county characteristics	111
Adult learner FAFSA applicants.....	114
Statewide profiles of rural and urban adult learner Applicants	116
Educational status.....	116
Socio-demographic characteristics.	118
Financial characteristics.....	121
Prevalence of adult learner postsecondary students in rural and urban counties, and relationship with county characteristics	122

Interview Findings.....	126
Students’ financial needs and characteristics: “There is no place to go”	126
Rural issues	130
Adult learners.....	132
FAFSA completion	135
Effect of state budget cuts	138
Institutional aid practices.....	139
Financial education and academic counseling.....	141
Conclusions	143
Rural-Urban and Beginning-Continuing Differences in FAFSA Applicants’ Characteristics	143
Differences in Student Characteristics by Degree Type.....	145
County Influence on Educational Financial Need	146
GED Recipients and Adult Learners	149
Interview Findings.....	151
Policy Considerations.....	153
Increase appropriations for public higher education institutions and state grants	154
Expanded funding for short-duration, part-time postsecondary study	155
State grants for distance learning.....	157
Targeted financial aid for adult learners.....	158
State grant reciprocity agreements with bordering states.....	160
State tax incentives for higher education	161
References	164

INTRODUCTION

Access to higher education, especially for low-income, minority, and rural students, is a persistent concern among policy makers, education professionals, and the general public. Prohibitive costs, limited knowledge of financial aid options, and the complexity of aid application procedures are among the many barriers to enrollment in and completion of postsecondary education.

This research used data from the Free Application for Federal Student Aid (FAFSA) to paint a comprehensive picture of rural and urban Pennsylvania postsecondary students' socio-demographic, family, and financial characteristics. This information can help policy makers, education administrators, academic counselors, and other professionals in opening pathways to higher education, particularly for low-income students and those in rural areas.

In fall 2010, nearly 756,000 Pennsylvanians were enrolled in college (Pennsylvania Department of Education, 2013). The *Measuring Up* report for Pennsylvania (National Center for Public Policy and Higher Education [NCPH], 2008b) shows that the majority of these students were enrolled in public 4-year institutions (37 percent), followed by private 4-year institutions (35 percent), and community colleges (22 percent). Thirty-eight percent of all 18- to 24-year-olds and about 4 percent of 25- to 49-year-old Pennsylvania residents were studying in college, compared to 44 percent and about 9 percent, respectively, in states with the highest postsecondary enrollment rates. However, since the early 1990s, 33 percent fewer 25- to 49-year olds are enrolled in college. These adults are an untapped student audience. Citing the most recent Census data, the President of the Lumina Foundation (Merisotis, 2013) reported that “nearly 18 percent of Pennsylvanians between ages 25 and 64 — almost 1.2 million people—have some college credit but have not yet earned a credential.”

In addition to adult learners, other groups are also less likely to enroll in higher education, namely racial/ethnic minorities, low-income individuals, and rural residents. Young adults from low-income Pennsylvania families, for example, are one-half as likely to enroll in college as those from higher-income households (NCPPE, 2006). Nationally, rural 18- to 29-year-olds are much less likely to pursue postsecondary education than their urban and suburban counterparts (Provasnik et al., 2007). These demographic differences in postsecondary enrollment rates illustrate the need to understand the distinctive characteristics of rural and urban Pennsylvania postsecondary students.

Since the 1980s, the cost of college has increased by 439 percent, nearly three times the growth in median family income (147 percent, NCPPE, 2008a). Students may seek financial aid from federal, state, and institutional sources. Federal need-based aid for low-income students is awarded through Pell grants, with more than \$34.5 billion distributed to more than 9 million students in 2011-12 (College Board, 2013).

Pennsylvania state aid is administered through the Pennsylvania Higher Education Assistance Agency (PHEAA). Compared to other states, Pennsylvania provides considerable need-based financial aid (NCPPE, 2008b). Nevertheless, paying for higher education still requires an exceptionally high percentage of Pennsylvania families' income—on average, 29 percent for community college (versus 24 percent nationally), 41 percent for public 4-year institutions (versus 28 percent nationally), and 87 percent for private 4-year institutions (NCPPE, 2008b, p. 7). These averages, though, mask stark disparities in the affordability of college for lower- and higher-income families, as shown in Table 1.

Table 1: Net Price^a of College as Percentage of Family Income

Family income quintile	Average % of family income needed to pay for college			
	Community college		Public 4-year	
	U.S.	PA	U.S.	PA
Bottom 20% (median PA income = \$11,068)	49%	65%	55%	87%
Middle 20% (median PA income = \$43,266)	20%	23%	25%	35%
Top 20% (median PA income = \$119,435)	7%	9%	9%	13%

^a Tuition, room, and board minus financial aid.

Sources: NCPPHE, 2008a, p. 8; NCPPHE, 2008b, p. 8

These data reveal that, compared to the national average, public higher education is much less affordable for low-income Pennsylvanians, particularly those wishing to attend a 4-year college.

Indeed, Pennsylvania ranks among the worst states in terms of the cost of public higher education for low-income students. According to a recent national state-by-state analysis of the net price of college at public and private institutions (Burd, 2013), six of the nation's 12 most expensive public colleges for low-income students are located in Pennsylvania: Penn State-University Park, four PSU branch campuses, and the University of Pittsburgh.¹ More than 24 public institutions in Pennsylvania charged the lowest-income students a net price of more than \$10,000, and 10 charged more than \$15,000. In sum, "the lowest-income students in 'high-tuition-high-aid' states, such as Pennsylvania, are paying an average net price that is more than double that being charged those attending public colleges in low-tuition states, such as North Carolina" (p. 22)—\$12,305 versus \$5,361 in 2010-11.

Despite the availability of aid, millions of students nationwide do not complete the FAFSA or apply late. In 1999-2000, approximately 8 million enrolled undergraduate students, including 1.7 million low- and moderate-income students, did not submit the FAFSA, and 55 percent of FAFSA

¹ "Average net price is the amount of money that first time, full-time students with family incomes of \$30,000 or less pay after all grant and scholarship aid is taken into account [in 2010-11]" (Burd, 2013, p. 25).

filers missed the deadline, decreasing their chances of receiving aid (King, 2004). Students who do not apply for aid or apply late are disproportionately likely to be community college students (Handel, 2008; King, 2006) and adult learners (Guidos and Dooris, 2007; Turner et al., 2007). For instance, nearly one third of adult undergraduate students in a 2007 national survey were not aware of available financial aid (Turner et al., 2007, p. 9). Among Penn State adult learners who completed the 1999 FAFSA, 92 percent of part-time and 79 percent of full-time students missed the deadline (Guidos and Dooris, 2007).

Researchers attribute low completion rates to the complexity of the FAFSA (Bettinger et al., 2009; Dynarski and Clayton, 2006), among other factors. Financial aid may be especially crucial for GED recipients who want to enroll in college, a topic of growing importance for policy makers (Bragg, 2011; Council for Adult and Experiential Learning, 2008; Office of Vocational and Adult Education, 2011; Patterson et al., 2009).

In sum, research shows that policies that increase knowledge about the cost of college, the availability of aid, application procedures, and related topics are paramount (Perna and Steele, 2011).

However, even when students do submit the FAFSA, their financial aid options may not favor their academic and family characteristics. Since the early 1990s many state and institutional aid programs have shifted resources from need-based to merit-based aid, making higher education even less accessible to low-income students and students of color (Doyle, 2010; Dynarski, 2004; Heller, 2002; Heller and Marin, 2004). Unlike many other states, Pennsylvania has not shifted to merit-based aid (NASSGAP, 2011). However, the steep higher education cuts passed by the General Assembly in 2011 and 2012 were not offset by increases for PHEAA (Governor's Budget Office, 2011), effectively shifting the economic burden of postsecondary education to PHEAA, higher

education institutions, and students and families. Together, these trends in state and institutional aid underscore the urgency of understanding the changing financial needs of college students in Pennsylvania, specifically those who have applied for federal, need-based aid.

Although useful, the current literature overlooks the experience of rural postsecondary students. A previous study of the Center for Rural Pennsylvania showed that, among rural residents, those who were male, low-income, and GED recipients (versus high school graduates) were less likely to enroll in college, and that financial aid significantly increased rural students' college persistence (Yan, 2002). Other studies have found that "rural community colleges serve more first-time, full-time students than suburban and urban community colleges, and their 3.2 million students have different patterns of student financial aid" than urban and suburban students, such as incurring more debt (Hardy and Katsinas, 2008, p. 40). Our changing state demographics (aging population, more immigrants), coupled with the 2008 Great Recession and its influence on postsecondary enrollment, application for student aid, and student debt, necessitates a more current, nuanced portrait of Pennsylvania's postsecondary students and their financial needs.

GOALS AND OBJECTIVES

The study goals were to understand the financial needs and characteristics of Pennsylvania postsecondary students, and how those needs and characteristics may be associated with certain characteristics of the students' home counties.

To do so, the researchers first developed socio-demographic, financial, and family profiles of rural and urban students² planning to begin³ their postsecondary education, and of rural and urban students continuing their postsecondary education.

² All individuals completing the FAFSA are hereafter referred to as "students," even though some may not be enrolled in high school or postsecondary school at the time they filed it (e.g., due to taking time off of school).

Second, the researchers developed profiles of rural and urban students pursuing a bachelor's degree, an associate degree, or a certificate/diploma to determine if there were any relationships between the prevalence of the types of degree being pursued by students in rural and urban counties and the characteristics of the counties.

The researchers then looked to determine the relationship between the aggregate measures of the educational financial need of postsecondary students living in the county and county factors, and how the level of educational financial need differs for students at varying levels of postsecondary education in rural and urban counties.

Fourth, the study aimed to develop statewide profiles of special populations, such as GED recipients and adult learners, to determine how the profiles of students from special populations differ from the profiles for all students.

Lastly, the researchers looked to provide program- and policy-relevant information regarding the socio-demographic characteristics and financial needs and status of Pennsylvania students, their families and communities.

METHODOLOGY

The study employed a mixed-methods approach using existing quantitative data and semi-structured interviews with selected financial aid administrators and key informants.

FAFSA data

The research used data from the Free Application for Federal Student Aid (FAFSA) applicants from June 1, 2010 to June 30, 2011 (2010-11 fiscal year) to paint a comprehensive portrait of rural

³ Students who have not yet begun their postsecondary education are hereafter referred to as beginning postsecondary students, while those who have already begun their postsecondary education are referred to as continuing postsecondary students.

and urban Pennsylvania postsecondary students' socio-demographic, family, and financial characteristics⁴. FAFSA data were provided by PHEAA.

FAFSA applicants who met all of the following criteria were included in analyses:

- U.S. citizen/U.S. national (question #14 on 2010-11 FAFSA form);
- Pennsylvania resident (question #18);
- Grade level when applicant begins the 2010-11 school year (question #28):
 - never attended college/1st year undergraduate, or
 - attended college before and 1st year undergraduate, or
 - 2nd year undergraduate/sophomore, or
 - 3rd year undergraduate/junior, or
 - 4th year undergraduate/senior or
 - 5th year/other undergraduate; and
- Degree or certificate will work on when applicant begins the 2010-11 school year (question #29):
 - 1st or 2nd bachelor's degree, or
 - Associate degree, or
 - Certificate or diploma, or
 - Teaching credential (non-degree program), or
 - Other/undecided.

Consequently, the following FAFSA applicants were excluded from all analyses: all non-citizens (question #14); all graduate/professional or beyond students (question #28); and anyone working on a graduate or professional degree (question #29).

FAFSA data on graduate and professional students were excluded from the analysis because: many graduate students do not complete the FAFSA since they rely on assistantships or fellowships; and policymakers and educational administrators are likely to have a greater interest in students pursuing a bachelor's or associate degree, certificate/diploma, or teaching credential.

Due to the confidentiality of FAFSA records, PHEAA could not release individual-level data. Instead, PHEAA conducted all data analyses on individual level data, as specified by the research

⁴ The 2010-11 FAFSA form is available here: http://federalstudentaid.ed.gov/static/gw/docs/2010-11_PDF_FAFSA_English.pdf

team, and delivered the results of the statistical analyses and descriptive statistics of groups of FAFSA applicants (i.e., beginning rural postsecondary students). In addition, PHEAA aggregated the data to the county level so that the research team could conduct further statistical analyses. Data fields with a small number of FAFSA records were collapsed with other data fields to protect the confidentiality of applicants.

Measures

To determine whether students resided in an urban or rural county, the researchers provided a list of urban and rural counties (based on the Center's population density-based definition) to a PHEAA administrator, who matched student ZIP codes in the FAFSA data with the corresponding counties.

Variables measuring the student's socio-demographic characteristics included: age; gender; marital status (single, other); high school completion status (high school diploma, GED certificate, or other); veteran status; length of time as legal resident of the state; and whether the applicant has ever been homeless, in legal guardianship, an emancipated minor, or, since turning 13, both parents were deceased or applicant was in foster care or a ward of the court.

Household structure and family variables included highest grade completed by each parent; household size; number in the household attending college during the 2010-11 school year (hereafter "2010-11"); and whether the applicant has dependent children or other dependents who will receive more than one-half of their support from the applicant through 2010-11.

Educational status variables focus on the schooling and educational characteristics of the student for the upcoming school year. These included degree or certificate student will work on during the school year (bachelor's degree, associate degree [occupational or technical program], associate degree [general education or transfer program], certificate or diploma program of less

than 2 years, certificate or diploma program of 2 or more years, and teaching credential [non-degree program] or other/undecided); grade level when entering postsecondary school (never attended college and 1st year undergraduate, attended college before and 1st year undergraduate, 2nd year undergraduate/sophomore, 3rd year undergraduate/junior, 4th year undergraduate/senior, or 5th year/other undergraduate); enrollment status (full-time, half-time, less than half-time); and whether the applicant would have a bachelor's degree prior to 2010-11. FAFSA applicants are also asked to indicate the colleges that were to receive their FAFSA report, so these data were grouped into the following categories: 4-year private, 4-year public, community college, or other type of institution. Applicants are also asked to indicate their housing plans for each college receiving their FAFSA report, with the categories being on-campus, with parents, or off-campus.

Financial variables include Expected Family Contribution (EFC), or the amount of money a family or student is expected to contribute to a student's postsecondary education for 1 year. EFC is an index developed by Federal Student Aid to indicate a student's eligibility for federal financial aid and to help postsecondary institutions determine how much financial aid to award. Typically, students with lower EFC have greater educational financial need. EFC is calculated from information such as family size, number of family members in college, family savings, and current earnings (Sallie Mae College Answer, 2011). Other financial information includes family adjusted gross income (AGI); the family's total earnings from work, assets, and various sources of other taxable and untaxed income during the prior year; and family poverty status based on total earnings (less than or equal to the poverty level for the family size; greater than poverty but less than or equal to 150 percent of poverty; or greater than 150 percent of poverty). Hereafter, "poverty" denotes household income at or below poverty level and "near-poverty" denotes income greater than poverty but less than or equal to 150 percent of the poverty, adjusted for family size. Unless

otherwise noted, all data on EFC, total AGI, total earning, and poverty status refer to the applicant's family.

Other financial variables include whether the student is financially independent (based on FAFSA criteria); whether either parent (if a dependent student) or the student or spouse (if an independent student) is a dislocated worker; and whether anyone in the household received benefits from various federal programs (Supplemental Security Income, Supplemental Nutrition Assistance Program, Free or Reduced Price Lunch, Temporary Assistance for Needy Families, or Women, Infants, and Children).

Special student populations include students with a GED certificate and adult learners. Adult learners are defined by the U.S. Department of Education as applicants who are 24 years of age or older: for this study, born before January 1, 1987.

Data analysis

The researchers worked with a PHEAA administrator to determine which measures of educational financial need could be calculated from FAFSA data. Univariate statistics (i.e., frequency distributions when appropriate, mean) were computed for all variables for the entire sample and for each of the student groups (i.e., rural and urban beginning postsecondary, rural and urban continuing postsecondary). Beginning students are FAFSA applicants who indicated in the grade level field, "never attended college and 1st year undergraduate." Continuing students are applicants who checked any of the other options (attended college before and 1st year undergraduate, 2nd year undergraduate/sophomore, 3rd year undergraduate/junior, 4th year undergraduate/senior, or 5th year undergraduate/other).

Contingency table analysis and analysis of variance (AOV) using Statistical Analysis System (SAS) and/or PASW Statistics (SPSS) were used to determine which characteristics differed

significantly across student groups. To determine specific areas of difference (i.e., whether rural beginning students have significantly more or less of a characteristic than urban beginning students), the researchers used cell chi-square (SAS) and adjusted standardized residuals (SPSS) for contingency table analysis and post hoc multiple comparison tests for AOV (Agresti, 1984; Neter, 1985; Ott, 1984).

The same statistical procedures were used to compute the statistics for each group of students (i.e., rural bachelor's degree students, rural associate degree students, rural certificate/diploma students, urban baccalaureate degree students, urban associate degree students, and urban certificate/diploma students). FAFSA applicants who indicated that they plan to work on either their 1st or 2nd bachelor's degree were categorized as bachelor's degree students. All applicants indicating that they plan to work on an associate degree were grouped as associate degree students (i.e., occupational or technical program associate degree students are combined with general education or transfer program associate degree students). Similarly, all certificate/diploma applicants were grouped, regardless of the length of time of the program. Applicants who planned to work on a teaching credential from a non-degree program or were other/undecided were excluded from this analysis.

PHEAA provided a county-level database containing the number of FAFSA applicants; number of beginning and continuing applicants; mean level of educational financial need for the families of FAFSA applicants (reverse indicators are EFC, total earnings, and total AGI) for each of these groups of students; the number of FAFSA applicants in families in poverty, between poverty and 150 percent of poverty, and greater than 150 percent of poverty for each of these groups; and the number of GED and adult learner applicants. County-level data from the American Community Survey (ACS), collected by the U.S. Census Bureau, were used to provide measures of the socio-

economic characteristics of Pennsylvania counties. For counties with a population of 20,000 or more, the 2009-2011, 3-year estimates were used (<http://factfinder2.census.gov>). The 2007-2011, 5-year estimates were used to provide socio-economic data on counties with populations under 20,000. These are the most current county-level data available through the ACS. The April 1, 2010 U.S. Census count of the county population was used as the measure of population size; these data were also available through the ACS. Also, 2009-10/2010-11 school year data from the National Center for Education Statistics (NCES) were used to provide the student-to-teacher ratio in each school district in Pennsylvania. The mean student-to-teacher ratio was then calculated across school districts in the county, as identified by NCES.

Analysis of covariance (ANCOVA) was used to determine whether the percentage of students pursuing bachelor's degrees, associate degrees, or certificates/diplomas differed for rural and urban counties in Pennsylvania. The ANCOVA analyses provided the statistical tests used to assess whether rural and urban counties differed significantly in these percentages, adjusting for the number of FAFSA applications from each county. SPSS was the statistical software used for these analyses.

To determine whether there was a statistically significant relationship between the prevalence of the types of degrees and socio-economic characteristics of the county, partial correlation coefficients were calculated using SPSS. These coefficients indicated how the prevalence of the types of degrees being pursued and socio-economic characteristics of the county are related, while accounting for the number of FAFSA applicants from the county and whether the county is rural or urban.

To examine the relationship between county-level measures of educational financial need of postsecondary students living in rural and urban counties and the extent to which students had

progressed through postsecondary education, the researcher used multiple procedures. Statistical procedures that examined the difference between rural and urban counties without adjusting for factors that may influence these results were conducted, as well as procedures that took into account factors that may influence differences between rural and urban counties. Statistical procedures used that do not take into account (i.e., control for) other factors were independent t-tests and bivariate correlational analysis; the former was used to assess the difference in means between two groups, and the latter was used to assess the relationship between two factors. Statistical procedures that took into account additional factors that may influence the relationships of interest were ANCOVA and partial correlational analysis; SPSS was used to conduct the statistical analyses to determine the relationship between students' educational financial need and home county characteristics. The county-level database provided by PHEAA also contained the mean EFC, total earnings, and total AGI for families of FAFSA applicants starting their postsecondary education, and each year after that, as well as the number of beginning and continuing FAFSA applicants whose families were in poverty, between poverty and 150 percent of poverty, and greater than 150 percent of poverty. Independent t-tests and ANCOVA were used to determine the relationship between the county's level of educational financial need and progress through postsecondary school, and whether the relationship differs for students living in rural and urban counties, and other characteristics of the county (Objectives 3.1, 3.2) (Neter, Wasserman, and Kutner, 1985).

Finally, statistical tests using SAS and SPSS compared rural and urban special populations (i.e., GED recipients, adult learners) with other rural and urban students (Ott, 1984). The county-level database prepared by PHEAA, and supplemented with ACS and NCES data, was used to determine the relationship between the prevalence of these two special populations and characteristics of the county; partial correlational analysis was used to assess these relationships.

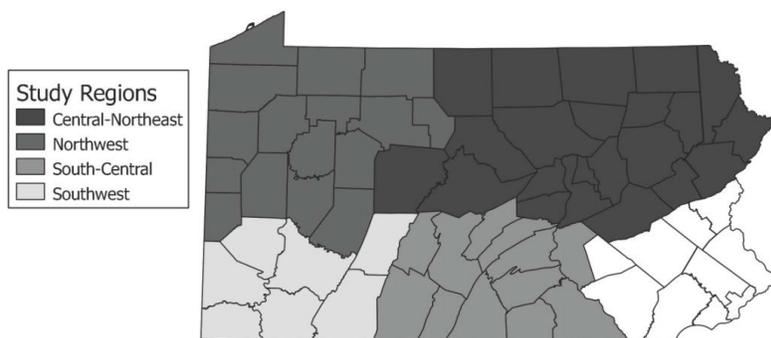
Interviews with Financial Aid Administrators and Policy Experts

Before selecting higher education institutions, the researchers compiled a comprehensive list of all such institutions in rural Pennsylvania counties. These were categorized as follows:

- *Institutional type*: community college, business/technical school, 4-year private non-religious (hereafter, “private college”), 4-year private religious (hereafter, “religious college”), 4-year public;
- *Number of students*: median enrollment for each institutional type was used to create two categories: small (smaller than median) and large (larger than median); and
- *Geographic location*: Central-Northeast, Northwest, South-Central, and Southwest (see Figure 1). The Southeast and Philadelphia were excluded because they include only urban counties.

If an institution’s main campus was located in an urban county and it had branch campuses in rural counties, the researchers included the rural branch campuses.

Figure 1: Pennsylvania Study Regions



After selecting the sample for maximum variation by institutional type, size, and location, the researchers invited the financial aid director or assistant financial aid director (hereafter, “financial aid administrator,” or FAA) to participate in an interview. The final sample included a small public university (enrollment <6,500), a large public university (>6,500), a small religious college (<1,800), a large private (non-religious) college (>1,800), a small business/technical school (<2,000), and a large community college (>2,000). The institutions were distributed across the central-northeast, northwest, southwest, and south-central regions.

The community college, business/technical school, and small public university primarily serve students living in nearby rural areas. Although located in rural counties, Penn State and the two private colleges include a mix of students from rural and urban communities. Table 2 presents descriptive data on each institution.

Policy experts included Mark Lafer, Senior Policy Research Analyst at PHEAA, and Ron Cowell, president of The Education Policy and Leadership Center (EPLC)⁵. They were selected because of their highly regarded expertise in higher education finance policy in Pennsylvania.

⁵ <http://www.eplc.org/about/board-of-directors/ronald-r-cowell/>

Table 2: Institutional Profiles (2011-12)

Institutional Characteristics	Public 4-year University		Private 4-year College		2-year Colleges	
	Large Public (Penn State)	Small Public (Mansfield)	Non-Religious	Religious	Community College (Harrisburg Area CC—Gettysburg)	Business/Technical School (Penn Commercial)
Undergraduate enrollment (2011-12)	38,954	2,876	>1,800	<1,800	~2,325	392
Mean net price: <i>all</i> students and <i>low-income</i> students ^a	\$22,560 \$18,115	\$14,824 \$12,531	\$25,000 \$15,000	\$20,000 \$17,000	\$10,202 \$8,927	\$24,200 \$25,521
% low-income ^b	17%	n/a	n/a	n/a	n/a	71%
% first-generation ^b	30%	n/a	n/a	n/a	43%	68%
% adults (25 years or older) ^b	16% ^c	13%	<5%	<5%	34%	19%
% receive Pell grant ^d	19%	46%	25-30%	45-50%	40% ^h	60%
% receive federal grant ^b	34%	80% ^f	25-30%	40-45%	39%	84%
% receive state grant ^b	37% ^e	45% ^f	25-30%	40-45%	26%	36%
% receive private scholarship ^b	9%	n/a	15-20%	10-15%	1%	3%
% receive institutional scholarship ^b	23%	36% ^f	80-85%	80-85%	3%	9%
% take out loans ^b	65%	80% ^g	65-70%	80-85%	63%	93%

^a National Center for Educational Statistics (NCES) data are for *full-time beginning* undergraduate students in 2011-12 who paid *in-state tuition* and were awarded *grant or scholarship aid from federal, state, or local governments, or the institution*. Low-income is defined as a family income of \$30,000 or less. Average net price is the total cost of attendance minus the average amount of federal, state/local government, or institutional grant or scholarship aid. Total cost of attendance is the sum of published tuition and required fees (lower of in-district or in-state), books and supplies, and the weighted average for room and board and other expenses.

^b Data reported by financial aid administrators (FAAs).

^c Figure reported by FAA includes only the percentage of students receiving aid who are adult learners.

^d NCES data—all undergraduate students.

^e Figure reported by FAA includes only the percentage of students who are Pennsylvania residents that receive a state grant.

^f Figure reported by FAA includes beginning students only.

^g Figure reported by FAA includes federal loans only.

^h NCES Pell grant data are not available for the Gettysburg campus; data reported are for the main (Harrisburg) HACC campus.

Sources: [National Center for Education Statistics \(NCES\) College Navigator](#) and self-report data from the six institutions that participated in interviews for the study

Interview questions for the financial aid administrators focused on students' financial needs and characteristics, financial aid trends and practices, FAFSA completion, and policy recommendations. Questions for policy experts focused on state and national trends in higher education financial aid policy, financial needs and characteristics of Pennsylvania postsecondary students, and policy analysis and recommendations.

Interviews took place between August and December 2012. The interviews were coded for analysis (Patton, 1990) in NVivo to identify findings pertaining to the research goals and objectives. To investigate the viability of policy recommendations made by financial aid administrators, researchers contacted the policy experts, the Penn State financial aid administrator, and a PSU professor with expertise in higher education finance. They were asked to provide information about the implementation and effectiveness of the policy recommendations in other states (e.g., state grant reciprocity agreements, state tax incentives for college tuition expenses).

RESULTS

Socio-demographic, Financial, and Family Profiles, with Rural-Urban and Beginning-Continuing Comparisons

Table 3 shows that about 20 percent of the 2010-11 FAFSA applicants were from rural counties and about 80 percent were from urban counties. In contrast, rural residents comprised approximately 27 percent of Pennsylvania's population in 2010 (CRP, 2013a). This is a rough benchmark since it includes people who are not eligible to attend college (children, those without high school diplomas). Rural residents comprised about 31 percent of the state population aged 20 or older with at least a high school diploma (CRP, 2013b).

Table 3: Frequency and Percentage of Rural and Urban Pennsylvanian FAFSA Applicants Beginning and Continuing their Postsecondary Education

Number of FAFSA Applicants:	Number	Percent
Rural Applicants	123,890	20%
Urban Applicants	487,035	80%
Total	610,925	100.0%

Students from rural counties were slightly more likely to be starting, rather than continuing, their postsecondary education than urban FAFSA applicants (30 percent versus 29 percent, respectively). Table 4 presents the socio-demographic, household structure/family, and financial profiles of rural applicants, broken down by whether the student was beginning their postsecondary education or continuing it. Table 5 presents these results for urban FAFSA applicants. Due to the extremely large number of data on both rural and urban applicants, only differences that have a p-value less than 0.0001 ($p < 0.0001$) are considered statistically significant. (Hereafter, “significant” refers to statistical significance.)

Differences between rural beginning and continuing postsecondary applicants

Educational status. Overall, 30 percent of rural applicants were beginning students. Among continuing rural students, about 23 percent attended college before and were still in their 1st year as an undergraduate; 33 percent were in their 2nd year/sophomore; about 24 percent were in their 3rd year/junior; and 21 percent were in their 4th year/senior or 5th year. (Conclusions about differences in college drop-out rates cannot be drawn from these data; a longitudinal database that tracked rural and urban students by the length of their degree/certificate program would be needed.)

Rural FAFSA applicants were planning to pursue the following degree types in 2010-11: bachelor’s degree (60 percent), associate degree (28 percent), and certificate, diploma, teaching credential, or other degree of less than two years (12 percent).

Beginning and continuing rural applicants differed significantly in their educational plans. Beginning rural FAFSA students were less likely to plan on pursuing a bachelor's degree than continuing rural applicants (48 percent versus 65 percent, respectively). In contrast, beginning rural students were more likely to plan on working on a certificate or diploma in a program taking less than 2 years (9 percent) or participate in some other program (8 percent), such as a teaching credential in a non-degree program⁶, compared to continuing rural students (4 percent planned on working on a certificate or diploma of less than 2 years and 3 percent planned to participate in some other program). Beginning rural students were also more likely to pursue an associate degree than continuing students (33 percent versus 26 percent, respectively). Two percent of both beginning and continuing rural students planned on working on a certificate or diploma taking 2 or more years.

Overall, 55 percent of rural students sent their FAFSA report to 4-year colleges (public and private); 13 percent were sent to community colleges; 10 percent were sent to technical schools; and 22 percent were sent to some other type of postsecondary school. However, rural beginning and continuing students differed significantly on the type of postsecondary schools receiving their 2010-11 FAFSA report. The largest percentage of continuing rural students submitted their FAFSA report to 4-year public institutions (42 percent), compared to only 32 percent of beginning rural students. On the other hand, beginning rural students were more likely to submit their application to technical schools (14 percent), compared to 8 percent of continuing rural students. Differences between beginning and continuing rural FAFSA applicants were minor in terms of the percentage of reports submitted to 4-year private schools (16 percent), community colleges (13 percent), and some other type of postsecondary school (22 percent). Since this analysis is based on data from a

⁶ Students in such programs earn an elementary or secondary teaching credential, not a degree.

single year, it is difficult to assess whether these differences are due to beginning students in technical programs and other types of programs completing their studies, transferring to another type of institution (i.e., four-year public school), or dropping out. Longitudinal data are needed to answer this question.

The majority of rural postsecondary students planned on full-time enrollment for the 2010-11 school year (91 percent), with 8 percent planning on half-time enrollment, and only 1 percent planning on less than half-time. At the same time, rural beginning and continuing applicants differed significantly on their planned enrollment status for the upcoming school year, with beginning students more likely to plan on attending full-time than continuing students (94 percent compared to 90 percent, respectively). Conversely, continuing rural students were more likely to plan on enrolling half-time (9 percent) than beginning rural students (5 percent).

Overall, 52 percent of rural students planned to live off campus for at least one of the colleges receiving their FAFSA report, 26 percent planned to live on campus, and 22 percent planned to live with their parents. However, differences were apparent between beginning and continuing rural students. Beginning rural students were equally likely to choose on-campus or off-campus housing (37 percent each), with a smaller percentage choosing to live with their parents (27 percent). The majority of continuing students, on the other hand, chose to live off-campus (58 percent). Twenty-one percent of continuing rural students planned to live on campus or with parents, respectively.

Two percent of rural applicants had a bachelor's degree before the start of 2010-11, with this more likely to be the case for continuing students (3 percent) than beginning students (0 percent). This result indicates that a small percentage of rural students continued their undergraduate work after receiving a bachelor's degree.

Socio-demographic characteristics. Overall, the majority of rural students had/would have a high school diploma for the 2010-11 school year (92 percent), with 7 percent having a GED certificate, and 1 percent being homeschooled or not having a diploma or certificate. However, beginning rural applicants were more likely to have a GED certificate than continuing rural students (10 percent and 6 percent, respectively). On the other hand, continuing students were more likely to have a high school diploma than rural students (93 percent compared to 89 percent).

The majority of rural applicants were female (59 percent). The percentage of male applicants decreases significantly over time – 43 percent of beginning rural FAFSA students were male, compared to 40 percent of continuing rural students.

Overall, 80 percent of rural applicants were single. Continuing rural applicants were less likely to be single than beginning students (79 percent and 84 percent, respectively). The difference between beginning and continuing rural students was statistically significant.

Two percent of rural applicants were military veterans. Continuing rural students were more likely to be a military veteran (2 percent) compared to beginning rural students (1 percent). The difference between beginning and continuing rural students was statistically significant.

Overall, 32 percent of all rural applicants were adult learners (age 24 or older), although differences between beginning and continuing rural students were statistically significant. The mean age of beginning rural students was 22½ years compared to 24½ for continuing rural students. Eighty-six percent of beginning rural students were age 30 or under: 59 percent were 18 or younger and 27 percent were 19 to 30 years old. Among continuing rural students, 82 percent were 30 or under. About 8 percent and 11 percent of beginning and continuing rural applicants were between 31 and 40 years, respectively. The percentage of beginning and continuing applicants age 41 or older was very similar – 6 percent and 7 percent, respectively. Consistent with these

results, continuing rural students were more likely to be adult learners (24 years or older) than beginning students (35 percent and 25 percent, respectively).

A very small percentage of rural applicants had ever been in legal guardianship, or since the applicant turned 13 been in foster care, a dependent or ward of the court, or both parents became deceased. However, beginning rural students were more likely to have one or more of these statuses than continuing students: 1 percent of beginning rural students had been in legal guardianship compared to 0.4 percent of continuing students, and 2 percent of rural applicants had, since turning 13, been in foster care, a dependent or ward of the court, or both parents had become deceased, compared to 1 percent of continuing applicants. Also, beginning rural applicants had more likely been homeless since the prior year than continuing rural students, although the percentages were extremely small (0.2 percent and 0 percent, respectively). The percentage of rural students who had been an emancipated minor did not differ between beginning and continuing rural students; this percentage was also extremely small (0.1 percent, overall).

Beginning and continuing rural students did not differ significantly in terms of when they became a legal resident of Pennsylvania: overall, 4 percent of the 2010-11 rural applicants were *not* legal residents prior to January 1, 2005⁷. Among those who became legal residents after this date, 36 percent were legal residents for less than 12 months, 21 percent were legal residents for 12 to 23 months, another 20 percent were legal residents for 24 to 35 months, and 23 percent were legal residents for 36 or more months.

Household structure and family characteristics. Overall, most rural applicants reported that the highest level of education completed by their fathers and mothers was high school (57 percent

⁷ To determine whether a student is a legal resident of a state for purposes of receiving state financial aid, the FAFSA form asks students to indicate their residency status 5 years prior (i.e., for the 2010-2011 form, the date was 1/1/05). Residing in a state for more than 4 years meets the residency requirements of all states; for more information, refer to: <http://studentaid.ed.gov/sites/default/files/2013-14-completing-fafsa.pdf>

and 53 percent, respectively). Twenty-eight percent of rural applicants had fathers who completed college or beyond, compared to 36 percent for mothers. Less than 10 percent of rural students indicated that their fathers and mothers had only completed junior high (7 percent and 5 percent, respectively). Also, less than 10 percent of rural applicants indicated a parental educational status of “other/unknown” (8 percent for fathers and 6 percent for mothers).

At the same time, there were significant differences in the educational status of beginning and continuing rural students’ parents, particularly the percentage completing college or beyond. Fathers of continuing rural FAFSA students were more likely to have completed college or beyond than the fathers of beginning students (30 percent versus 24 percent, respectively). Similarly, mothers of continuing rural FAFSA students were more likely to have completed college or beyond than beginning students (37 percent versus 33 percent, respectively).

Overall, 13 percent of rural applicants were the only person in their household, and 17 percent were in two-person households. Continuing rural applicants were more likely to have only one person in their household than beginning rural applicants (14 percent and 10 percent, respectively), although this difference could be due to continuing applicants being more likely to be financially independent of their parents.

About 77 percent of rural applicants indicated that they were the only person in the household planning to attend college during the upcoming school year. Another 21 percent indicated that two people in the household planned to attend college, and 3 percent indicated that 3 or 4 people planned to attend college. At the same time, beginning rural FAFSA applicants were more likely to be the only person in the household attending college during the upcoming school year than continuing rural applicants (79 percent and 76 percent, respectively). Conversely,

continuing rural students were more likely to have others in the household attending college during the upcoming school year.

Financial characteristics. The mean EFC for rural applicant was \$8,140; mean total AGI was \$53,678 and mean total earnings was \$51,371. The mean EFC of continuing rural students was significantly greater than that of beginning rural students; on average, the EFC for beginning rural students was \$7,658 in 2010-11, compared to \$8,329 for continuing students (a mean difference of \$671). Consistent with this, the mean total AGI and mean total earnings of continuing rural students (\$54,481 and \$52,202, respectively) were significantly greater than that of beginning rural (\$51,741 and \$49,367, respectively) applicants. So the income of continuing rural students was almost \$3,000 more than beginning rural FAFSA applicants, on average. On average, the mean EFC was about 15 percent of the mean total AGI for beginning and continuing rural students.

Beginning and continuing rural applicants also differed in terms of their family poverty status (based on total earnings, adjusted for family size). Overall, 40 percent of rural applicants were living below or near (up to 150 percent) poverty. Beginning rural students were more likely to be in poverty households than continuing students (31 percent versus 27 percent, respectively). About 12 percent of beginning and continuing rural applicants were in near-poverty. On the other hand, continuing rural applicants were more likely to have total earnings that were greater than 150 percent of poverty (62 percent) than beginning rural applicants (57 percent).

In addition, beginning rural applicants, their parents or their spouse (if married) were more likely to be a dislocated worker than continuing students at the time they completed the FAFSA form. Overall, 13 percent of rural applicants were in families with a dislocated worker, although 15 percent of beginning applicants reported a dislocated worker in the family compared to about 13 percent of continuing students.

Results are not reported for whether anyone in the rural FAFSA applicant's household received Supplemental Security Income (SSI), Supplemental Nutrition Assistance Program (SNAP), Free or Reduced Price Lunch, Temporary Assistance for Needy Families (TANF), or Special Supplemental Nutrition Program for Women, Infants and Children (WIC) benefits due to the low response rate for these questions. Between 94 percent and 99 percent of rural applicants did not respond to these questions.

Overall, about 36 percent of rural applicants were financially independent on their parents, based on FAFSA criteria; 20 percent were independent and had a child dependent(s) and another 15 percent were independent but did not have a child dependent. Beginning rural applicants were less likely to be financially independent than continuing applicants (29 percent versus 38 percent, respectively).

However, among financially independent rural applicants, beginning students were more likely to have a child dependent(s) than continuing applicants. Sixty percent of financially independent beginning applicants had one or more dependent children compared to 56 percent of continuing rural applicants (results not shown).

Table 4: Statewide Profiles: Socio-demographic, Household Structure/Family, and Financial Characteristics of Beginning and Continuing Rural Postsecondary FAFSA Applicants

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Postsecondary Educational Plans							
Year in Postsecondary School – Total	121,484		36,300		85,184		Yes ($\chi^2=121484$; df=5; $p<0.0001$)
Never Attended College and 1 st Year Undergraduate	36,300	29.9%	36,300	100.0%	0	0.0%	
Attended College Before and 1 st Year Undergraduate	19,150	15.8%			19,150	22.5%	
2 nd Year Undergraduate/sophomore	27,888	22.9%	0		27,888	32.7%	
3 rd Year Undergraduate/junior	20,006	16.5%	0		20,006	23.5%	
4 th Year Undergraduate/senior	13,625	11.2%	0		13,625	16.0%	
5 th Year Undergraduate	4,515	3.7%	0		4,515	5.3%	
Degree or Certificate Being Pursued in 2010-11 School Year – Total	121,490		36,300		85,190		Yes ($\chi^2=4,817.3713$; df=5; $p<0.0001$)
Bachelor’s Degree	73,036	60.1%	17,304	47.7%	55,732	65.4%	
Associate Degree (Occupational or Technical Program)	25,031	20.6%	8,872	24.4%	16,159	19.0%	
Associate Degree (General Ed or Transfer Program)	9,360	7.7%	3,086	8.5%	6,274	7.4%	
Certificate or Diploma (Program of <2 Years)	6,712	5.5%	3,320	9.2%	3,392	4.0%	
Certificate or Diploma (Program of 2+ Years)	2,100	1.7%	736	2.0%	1,364	1.6%	
Teaching Credential (Non-degree Program) or Other	5,251	4.3%	2,982	8.2%	2,269	2.7%	
Type of Postsecondary School Receiving FAFSA Report for 2010-11 – Total	123,890		36,300		87,590		Yes ($\chi^2=2054.1402$; df=4; $p<0.0001$)
4-Year Private	19,862	16.0%	5,190	14.3%	14,672	16.8%	
4-Year Public	47,998	38.7%	11,550	31.8%	36,448	41.6%	
Community College	16,116	13.0%	5,294	14.6%	10,822	12.4%	
Other	27,804	22.4%	9,076	25.0%	18,728	21.4%	
Technical School	12,110	9.8%	5,190	14.3%	6,920	7.9%	

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Enrollment Status in 2010-11 School Year – Total	123,345		36,264		87,081		Yes ($\chi^2=699.409$; $df=2$; $p<0.0001$)
Full-time	112,280	91.0%	34,219	94.4%	78,061	89.6%	
Half-time	10,076	8.2%	1,847	5.1%	8,229	9.4%	
Less than Half-Time	989	0.8%	198	0.5%	791	0.9%	
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11 ^b							
On Campus – Total	123,890		36,300		87,590		Yes ($\chi^2=3208.3545$; $df=1$; $p<0.0001$)
Yes	31,734	25.6%	13,259	36.5%	18,475	21.1%	
No	92,156	74.4%	23,041	63.5%	69,115	78.9%	
With Parents – Total	123,890		36,300		87,590		Yes ($\chi^2=519.8560$; $df=1$; $p<0.0001$)
Yes	27,652	22.3%	9,623	26.5%	18,029	20.6%	
No	96,238	77.7%	26,677	73.5%	69,561	79.4%	
Off Campus – Total	123,890		36,300		87,590		Yes ($\chi^2=4611.3821$; $df=1$; $p<0.0001$)
Yes	64,190	51.8%	13,372	36.8%	50,818	58.0%	
No	59,700	48.2%	22,928	63.2%	36,772	42.0%	
Socio-demographic Characteristics							
High School Completion Status by 2010-11 School Year	121,479		36,294		85,185		Yes ($\chi^2=678.0359$; $df=2$; $p<0.0001$)
High School Diploma	111,781	92.0%	32,447	89.4%	79,334	93.1%	
GED Certificate	8,085	6.7%	3,442	9.5%	4,643	5.5%	
Other	1,613	1.3%	405	1.1%	1,208	1.4%	
Gender – Total	121,033		34,670		86,363		Yes ($\chi^2=115.6417$; $df=1$; $p<0.0001$)
Female	71,754	59.3%	19,723	56.9%	52,031	60.2%	
Male	49,279	40.7%	14,947	43.1%	34,332	39.8%	
Applicant's Marital Status – Total	123,890		36,300		87,590		Yes ($\chi^2=441.2856$; $df=1$; $p<0.0001$)
Single	99,699	80.5%	30,546	84.2%	69,153	79.0%	

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Other	24191	19.5%	5,754	15.8%	18,437	21.0%	
Veteran Status – Total	123,890		36,300		87,590		Yes ($\chi^2=207.3437$; $df=1$; $p<0.0001$)
Yes	2,280	1.8%	358	1.0%	1,922	2.2%	
No	121,610	98.2%	35,942	99.0%	85,668	97.8%	
Age (mean)	123,890	24.0	36,300	22.5	87,590	24.6	Yes ($p<0.0001$)
Age – Total	123,890		36,300		87,590		Yes ($\chi^2=37018.5018$; $df=13$; $p<0.0001$)
18 or Younger	29,418	23.7%	21,388	58.9%	8,030	9.2%	
19	18,656	15.1%	2,434	6.7%	16,222	18.5%	
20	16,123	13.0%	1,305	3.6%	14,818	16.9%	
21	11,648	9.4%	948	2.6%	10,700	12.2%	
22	6,351	5.1%	795	2.2%	5,556	6.3%	
23 – 25	10,121	8.2%	2,029	5.6%	8,092	9.2%	
26 – 30	10,477	8.5%	2,273	6.3%	8,204	9.4%	
31 – 35	6,874	5.6%	1,613	4.4%	5,261	6.0%	
36 – 40	5,412	4.4%	1,207	3.3%	4,205	4.8%	
41 – 45	3,990	3.2%	976	2.7%	3,014	3.4%	
46 – 50	2,624	2.1%	714	2.0%	1,910	2.2%	
51 – 55	1,496	1.2%	414	1.1%	1,082	1.2%	
56 – 60	534	0.4%	153	0.4%	381	0.4%	
61 or Older	166	0.1%	51	0.1%	115	0.1%	
Born Before January 1, 1987 (Adult Learner)	121,490		36,300		85,190		Yes ($\chi^2=1288.131$; $df=1$; $p<0.0001$)
Yes	39,130	32.2%	9,016	24.8%	30,114	35.3%	
No	82,360	67.8%	27,284	75.2%	55,076	64.7%	
Since Applicant Turned 13, Were Both Parents Deceased, in Foster Care, or Dependent or Ward of Court – Total	82,193		26,982		55,211		Yes ($\chi^2=169.2244$; $df=1$; $p<0.0001$)
Yes	831	1.0%	448	1.7%	383	0.7%	
No	81,362	99.0%	26,534	98.3%	54,828	99.3%	
Ever Been in Legal Guardianship – Total	81,406		26,596		54,810		Yes ($\chi^2=131.5982$; $df=1$; $p<0.0001$)

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Yes	457	0.6%	264	1.0%	193	0.4%	
No	80,949	99.4%	26,332	99.0%	54,617	99.6%	
Ever Been an Emancipated Minor – Total	81,532		26,640		54,892		No ($\chi^2=10.1380$; df=1; $p=0.0015$)
Yes	106	0.1%	50	0.2%	56	0.1%	
No	81,426	99.9%	26,590	98.8%	54,836	99.9%	
Ever Been Homeless, since July 1, 2009 – Total	123,890		36,300		87,590		Yes ($\chi^2=58.6813$; df=1; $p<0.0001$)
Yes	87	0.1%	58	0.2%	29	0.0%	
No	123,803	99.9%	36,242	99.8%	87,561	100.0%	
Legal Resident of PA Prior to January 1, 2005 – Total	121,288		36,306		85,082		No ($\chi^2=0.2752$; df=1; $p=0.5999$)
Yes	116,436	96.0%	34,774	96.0%	81,662	96.0%	
No	4,852	4.0%	1,432	4.0%	3,420	4.0%	
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Length of Time Legal Resident of PA	4,852		1,432		3,420		No ($\chi^2=9.7083$; df=4; $p=0.0456$)
Less than 12 months	1,744	35.9%	546	38.1%	1,198	35.0%	
12 – 23 months	1,022	21.1%	267	18.6%	755	22.1%	
24 – 35 months	957	19.7%	273	19.1%	684	20.0%	
36 – 47 months	805	16.6%	250	17.5%	555	16.2%	
48 or more months	324	6.7%	96	6.7%	228	6.7%	
Household Structure and Family Characteristics							
Highest School Completed by Father – Total	120,119		35,551		84,568		Yes ($\chi^2=552.761$; df=3; $p<0.0001$)
Middle School/Junior High	8,320	6.9%	2,726	7.7%	5,594	6.6%	
High School	67,948	56.6%	20,438	57.5%	47,510	56.2%	
College or Beyond	33,705	28.1%	8,650	24.3%	25,055	29.6%	
Other/Unknown	10,146	8.4%	3,737	10.5%	6,409	7.6%	
Highest School Completed by Mother – Total	120,327		35,669		84,658		Yes ($\chi^2=302.120$; df=3; $p<0.0001$)

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Middle School/Junior High	5,989	5.0%	2,068	5.8%	3,921	4.6%	
High School	63,690	52.9%	19,056	53.4%	44,634	52.7%	
College or Beyond	43,206	35.9%	11,880	33.3%	31,326	37.0%	
Other/Unknown	7,442	6.2%	2,665	7.5%	4,777	5.6%	
Parent's Marital Status – Total	123,890		36,300		87,590		Yes ($\chi^2=91.5450$; $df=1$; $p<0.0001$)
Single	59,083	47.7%	18,077	49.8%	41,006	46.8%	
Other	64,807	52.3%	18,223	50.2%	46,584	53.2%	
Household Size – Total	123,890		36,300		87,590		Yes ($\chi^2=457.9306$; $df=8$; $p<0.0001$)
1	15,712	12.7%	3,644	10.0%	12,068	13.8%	
2	21,518	17.4%	6,647	18.3%	14,871	17.0%	
3	30,002	24.2%	8,404	23.2%	21,598	24.7%	
4	33,844	27.3%	10,291	28.4%	23,553	26.9%	
5	15,679	12.7%	4,931	13.6%	10,748	12.3%	
6 – 9	7,135	5.7%	2,383	6.5%	4,752	5.4%	
Number in Household Attending College During 2010-11 School Year – Total	121,806		35,372		86,434		Yes ($\chi^2=154.8232$; $df=3$; $p<0.0001$)
1	93,414	76.7%	27,959	79.0%	65,455	75.7%	
2	25,168	20.7%	6,584	18.6%	18,584	21.5%	
3 – 4	3,224	2.6%	829	2.3%	2,395	2.8%	
Financial Characteristics							
EFC (mean)	110,875	\$8,140.23	31,256	\$7,658.49	79,619	8329.35	Yes ($p<0.0001$)
Total AGI (mean)	123,890	\$53,678.00	36,300	\$51,740.91	87,590	\$54,480.82	Yes ($p<0.0001$)
Total Earnings (mean)	123,890	\$51,371.50	36,300	\$49,366.62	87,590	\$52,202.32	Yes ($p<0.0001$)
Poverty Level Based on Total Earnings – Total (adjusted for family size)	123,890		36,300		87,590		Yes ($\chi^2=221.8441$; $df=2$; $p<0.0001$)
<= (less than/equal to) Poverty Level	34,778	28.1%	11,116	30.6%	23,662	27.0%	
> (greater than) Poverty Level But <= 150% of Poverty Level	14,543	11.7%	4,487	12.4%	10,056	11.5%	
> 150% of Poverty Level	74,569	60.2%	20,697	57.0%	53,872	61.5%	

	Total Rural Applicants		Beginning Rural Applicants		Continuing Rural Applicants		Difference Between Beginning and Continuing Rural Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Parents/Applicant/Spouse is a Dislocated Worker	113,757		33,428		80,329		Yes ($\chi^2=92.819$; $df=1$; $p<0.0001$)
Yes	14,972	13.2%	4,900	14.7%	10,072	12.5%	
No	98,785	86.8%	28,528	85.3%	70,257	87.5%	
Applicant is Financially Independent of Parents	121,450		35,962		85,488		Yes ($\chi^2=1162.553$; $df=2$; $p<0.0001$)
Yes, With Child Dependents	24,614	20.3%	6,166	17.1%	18,448	21.6%	
Yes, Without Child Dependents	18,483	15.2%	4,055	11.3%	14,428	16.9%	
No	78,353	64.5%	25,741	71.6%	52,612	61.5%	
^a For categorical characteristics, such as gender and ethnicity, the Pearson Chi-Square statistic is used to test the difference between beginning and continuing rural applicants. For characteristics that have a numerical value, such as age and income, analysis of variance was used. ^b Applicants indicated whether they planned to live on campus, with parents, or off campus for each postsecondary institution receiving the FAFSA.							

Differences between urban beginning and continuing postsecondary applicants

Educational status. With only a few exceptions, differences between beginning and continuing urban FAFSA applicants were fairly similar to the differences for rural applicants.

Overall, 29 percent of urban applicants had never attended college before and were entering their 1st year as an undergraduate. Among continuing urban students, about 26 percent attended college before and were still in their 1st year as an undergraduate; 30 percent were in their 2nd year/sophomore as an undergraduate; 23 percent were in their 3rd year/junior; and 21 percent were in their 4th year/senior or 5th year as an undergraduate.

About 60 percent of urban applicants planned to pursue a bachelor's degree, with another 27 percent planned to pursue an associate degree, 10 percent a certificate/diploma, and 4 percent a non-degree teaching credential or some other program. However, beginning and continuing urban FAFSA applicants differed significantly in their educational plans for 2010-11. Similar to the results for rural applicants, beginning urban FAFSA students were less likely to plan on pursuing a bachelor's degree than continuing urban applicants (49 percent versus 64 percent, respectively). In contrast, beginning urban students were more likely to pursue a certificate or diploma in a program taking less than 2 years (13 percent) compared to continuing urban students (6 percent). To a lesser degree, beginning urban students were more likely to seek an associate degree in an occupational or technical program than continuing students (18 percent and 15 percent, respectively) or participate in some other program (8 percent and 3 percent, respectively). About the same percentage of beginning and continuing urban students planned on working on an associate degree in a general education or transfer program (about 11 percent) or a certificate or diploma taking 2 or more years (2 percent).

Forty-six percent of urban students sent their FAFSA report to 4-year colleges (public and private); 24 percent sent the report to community colleges; 11 percent sent the report to technical schools; and about 20 percent sent the report to some other type of postsecondary school. However, urban beginning and continuing students differed significantly on the type of postsecondary schools receiving their 2010-11 FAFSA report. The largest percentage of continuing urban students submitted their FAFSA report to 4-year public colleges (28 percent), followed by community colleges (23 percent), and 4-year private schools (21 percent). Another 19 percent submitted their FAFSA report to some other type of college, but only 9 percent submitted it to technical schools. Beginning urban students were fairly evenly split across all types of institutions: the largest percentage submitted their FAFSA report to community colleges (26 percent), followed by 4-year public (21 percent), 4-year private (16 percent), some other types of college (21 percent), and technical schools (16 percent). One of the largest discrepancies between beginning and continuing urban students is that beginning applicants were nearly twice as likely to submit their FAFSA report to technical schools.

Urban beginning and continuing FAFSA applicants differed significantly on their planned enrollment status for 2010-11. Although the majority of urban students planned on enrolling full-time, beginning urban students were more likely to plan on attending full-time than continuing students (93 percent compared to 86 percent, respectively). Conversely, continuing urban students were more likely to plan on enrolling half-time than beginning urban students (13 percent versus 6 percent, respectively). About 1 percent of beginning and continuing urban students planned on enrolling less than half-time.

Overall, 54 percent of urban students planned to live off campus for at least one of the colleges receiving their FAFSA report; 24 percent planned to live on campus, and 22 percent

planned to live with their parents. Differences were apparent between beginning and continuing urban students. Sixty percent of continuing urban students planned on living off-campus for at least one of the colleges receiving their FAFSA report. Nineteen percent of continuing urban students planned on living on campus and 20 percent planned on living with parents. Beginning urban students were significantly less likely to live off campus (39 percent), but more likely to live on campus (36 percent) or with parents (25 percent) than continuing urban students.

Two percent of urban applicants had a bachelor's degree before the start of 2010-11, with this more likely to be the case for continuing students (3 percent) than beginning students (0 percent). This result indicates that a small percentage of urban students continued their undergraduate work after receiving a bachelor's degree.

Socio-demographic characteristics. Beginning and continuing urban FAFSA applicants differed significantly in terms of their high school completion status. The majority of urban students had/would have a high school diploma for the 2010-11 school year (overall, 90 percent), although continuing urban students were more likely to have a diploma than beginning students (92 percent versus 87 percent, respectively). Beginning urban students were more likely to have a GED certificate than continuing urban students (11 percent and 6.5 percent, respectively). About 2 percent of urban applicants were homeschooled or would not have a diploma or certificate.

The majority of urban applicants were female (59 percent). The percentage of male applicants decreases significantly over time as 44 percent of beginning urban FAFSA students were male and 40 percent of continuing urban students were male.

Eighty-five percent of urban applicants were single: continuing urban applicants were less likely to be single than beginning students (83 percent and 90 percent, respectively).

Overall, 1 percent of urban applicants were military veterans, with continuing urban students more likely to be a military veteran (close to 2 percent) than beginning urban students (1 percent).

Urban applicants were about 24½ years of age, on average, with 36 percent being adult learners (24 years or older). The mean ages of beginning and continuing urban students were 22½ and 25 years, respectively. Fifty-five percent of beginning urban students were 18 or younger, and another 31 percent were between the ages of 19 and 30, for a total of 87 percent being 30 or under. Among continuing urban students, 80 percent were 30 or under. About 8 percent and 12 percent of beginning and continuing urban applicants were between 31 and 40 years, respectively. The percentage of beginning and continuing applicants aged 41 or older were very similar (6 percent and 8 percent, respectively). Consistent with these results, continuing urban students were more likely to be adult learners than beginning students (40 percent and 26 percent, respectively).

A very small percentage of urban applicants, since turning 13, had both parents deceased, or were in foster care, or a dependent or ward of the court, although beginning urban applicants were more likely to have experienced this than continuing applicants (2 percent and 1 percent, respectively). About 1 percent of urban students had ever been in legal guardianship, although beginning students were more likely to have experienced this than continuing students (1.3 percent and 0.6 percent, respectively). Also, beginning urban applicants were more likely to have been homeless since the prior year than continuing urban students, although the percentages are extremely small (0.2 percent of beginning and 0.1 percent of continuing students). The percentage of urban students who had been an emancipated minor did not differ between beginning and continuing urban students (0.2 percent, overall).

Beginning and continuing urban students differed significantly in terms of when they became a legal resident of Pennsylvania, although the difference was not substantial: overall, 4 percent of the 2010-11 urban applicants were not legal residents prior to January 1, 2005, with about 4 percent of beginning students and 4 percent of continuing students being new state residents. Among those who became legal residents after this date, 41 percent of beginning urban students and 34 percent of continuing urban students were legal residents for less than 12 months.

Household structure and family characteristics. Beginning and continuing urban applicants differed significantly with respect to their father's highest level of education. About 47 percent of urban applicants indicated that the highest level of schooling achieved by their father was high school, with minor differences between beginning and continuing urban applicants. However, the fathers of continuing urban students were more likely to have completed college or beyond than those of beginning students (35 percent versus 29 percent, respectively). Overall, 33 percent of urban applicants indicated that their father completed at least college. Less than 10 percent of FAFSA students reported that their father's highest level of schooling was middle school/junior high (7 percent, overall).

In addition, beginning and continuing urban applicants differed significantly with respect to their mother's highest level of education. Similar to applicants' fathers, the highest level of education completed by about 47 percent, overall, of urban FAFSA applicant's mothers was high school. A larger percentage of FAFSA applicants' mothers completed college or beyond (39 percent, overall) compared to their fathers. Again, the mothers of continuing urban students were more likely to have completed college or beyond than beginning students (40 percent versus 36 percent, respectively). Overall, 6 percent of urban FAFSA students reported that their mother's highest level of schooling was junior high.

Overall, 17 percent of urban applicants indicated that they had a household size of one person. Continuing urban FAFSA students were more likely than beginning students to have a household size of one (19 percent versus 13 percent, respectively). However, this difference could be due to continuing applicants' greater likelihood of being financially independent.

Overall, 77 percent of urban applicants indicated they were the only person in the household attending college in the upcoming school year. At the same time, beginning urban applicants were more likely than their urban counterparts to be the only person in the household attending college in 2010-11 (78 percent versus 76 percent, respectively). Conversely, continuing urban students were more likely than beginning students to have two household members attending college during the upcoming school year (21 percent versus 19 percent, respectively). About 3 percent of urban applicants had three or four household members attending college in 2010-11, with minimal differences between beginning and continuing urban students.

Financial characteristics. The mean EFC of continuing urban students was significantly greater than that of beginning urban students. However, the difference (about \$241) was not substantial. On average, the EFC for beginning urban students was \$9,146 in 2010-11, compared to \$9,387 for continuing urban students. There were also minimal differences in the mean total AGI and mean total earnings of beginning and continuing urban students' families. Overall, the mean total AGI and mean total earnings for urban applicants were \$54,570 and \$52,800, respectively.

Overall, 34 percent of urban applicants were in families whose total earnings were below poverty. Beginning and continuing urban applicants differed in terms of their poverty status, with beginning students more likely to be in poverty than continuing urban applicants (38 percent versus 33 percent, respectively). About 11 percent of beginning and continuing urban applicants were in near-poverty households. On the other hand, continuing urban applicants were more likely to have

total earnings that were greater than 150 percent of poverty (56 percent) than beginning urban applicants (51 percent).

In addition, beginning urban applicants, their parents or their spouse (if married) were more likely to be a dislocated worker than continuing students. Overall, 13 percent of urban applicants were in families with a dislocated worker (14 percent of beginning applicants and 13 percent of continuing applicants).

Results are not reported for whether anyone in the urban FAFSA applicant's household received SSI, SNAP, Free or Reduced Price Lunch, TANF, or WIC benefits due to the low response rate for these questions. Between 93 percent and 98 percent of urban applicants did not respond to these questions.

Overall, 41 percent of urban applicants were financially independent of their parents; 22 percent were independent and had one or more child dependents; and another 19 percent were independent but did not have a child dependent. Beginning urban applicants were less likely to be financially independent than continuing urban applicants (32 percent versus 44 percent, respectively).

However, among financially independent urban applicants, beginning students were more likely to have one or more child dependents than continuing applicants (58 percent compared to 52 percent, respectively)(results not shown).

Table 5: Statewide Profiles: Socio-demographic, Household Structure/Family, and Financial Characteristics of Beginning and Continuing Urban Postsecondary FAFSA Applicants

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Postsecondary Educational Plans							
Year in Postsecondary School – Total	463,962		132,959		331,003		Yes ($\chi^2=463962$; df=5; p<0.0001)
Never Attended College and 1 st Year Undergraduate	132,959	28.7%	132,959	100.0%	0	0.0%	
Attended College Before and 1 st Year Undergraduate	85,480	18.4%			85,480	25.8%	
2 nd Year Undergraduate/sophomore	100,385	21.6%	0		100,385	30.3%	
3 rd Year Undergraduate/junior	76,264	16.4%	0		76,264	23.0%	
4 th Year Undergraduate/senior	50,676	10.9%	0		50,676	15.3%	
5 th Year Undergraduate	18,198	3.9%	0		18,198	5.5%	
Degree or Certificate Being Pursued in 2010-11 School Year – Total	463,979		132,959		331,020		Yes ($\chi^2=15510.0923$; df=5; p<0.0001)
Bachelor’s Degree	276,110	59.5%	64,647	48.6%	211,463	63.9%	
Associate Degree (Occupational or Technical Program)	75,293	16.2%	24,304	18.3%	50,989	15.4%	
Associate Degree (General Ed or Transfer Program)	48,956	10.6%	14,440	10.9%	34,516	10.4%	
Certificate or Diploma (Program of <2 Years)	36,517	7.9%	16,990	12.8%	19,527	5.9%	
Certificate or Diploma (Program of 2+ Years)	8,481	1.8%	2,637	2.0%	5,844	1.8%	
Teaching Credential (Non-degree Program) or Other	18,622	4.0%	9,941	7.5%	8,681	2.6%	
Type of Postsecondary School Receiving FAFSA Report for 2010-11 School Year – Total	487,035		132,959		354,076		Yes ($\chi^2=8418.4289$; df=4; p<0.0001)
4-Year Private	96,395	19.8%	20,787	15.6%	75,608	21.3%	
4-Year Public	127,845	26.3%	28,485	21.4%	99,360	28.1%	
Community College	115,878	23.8%	35,055	26.4%	80,823	22.8%	

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Other	95,155	19.5%	27,674	20.8%	67,481	19.1%	
Technical School	51,762	10.6%	20,958	15.8%	30,804	8.7%	
Enrollment Status in 2010-11 School Year – Total	484,218		132,777		351,441		Yes ($\chi^2=4360.643$; df=2; p<0.0001)
Full-time	423,950	87.6%	122,961	92.6%	300,989	85.6%	
Half-time	54,074	11.2%	8,522	6.4%	45,552	13.0%	
Less than Half-Time	6,194	1.3%	1,294	1.0%	4,900	1.4%	
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11 ^b							
On Campus – Total	487,035		132,959		354,076		Yes ($\chi^2=15225.8579$; df=1; p<0.0001)
Yes	116,018	23.8%	48,015	36.1%	68,003	19.2%	
No	371,017	76.2%	84,944	63.9%	286,073	80.8%	
With Parents – Total	487,035		132,959		354,076		Yes ($\chi^2=1296.0096$; df=1; p<0.0001)
Yes	105,833	21.7%	33,508	25.2%	72,325	20.4%	
No	381,202	78.3%	99,451	74.8%	281,751	79.6%	
Off Campus – Total	487,035		132,959		354,076		Yes ($\chi^2=18051.2489$; df=1; p<0.0001)
Yes	264,309	54.3%	51,346	38.6%	212,963	60.2%	
No	222,726	45.7%	81,613	61.4%	141,113	39.8%	
Socio-demographic Characteristics							
High School Completion Status by 2010-11 School Year	463,941		132,948		330,993		Yes ($\chi^2=2996.6949$; df=2; p<0.0001)
High School Diploma	419,605	90.4%	115,552	86.9%	304,053	91.9%	
GED Certificate	36,363	7.8%	14,914	11.2%	21,449	6.5%	
Other	7,973	1.7%	2,482	1.9%	5,491	1.7%	
Gender – Total	474,204		126,228		347,976		Yes ($\chi^2=588.1793$; df=1; p<0.0001)
Female	281,136	59.3%	71,209	56.4%	209,927	60.3%	
Male	193,068	40.7%	55,019	43.6%	138,049	39.7%	
Applicant's Marital Status – Total	487,035		132,959		354,076		Yes ($\chi^2=3461.4242$; df=1; p<0.0001)

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant? p<0.0001)
Single	414,494	85.1%	119,668	90.0%	294,826	83.3%	
Other	72,541	14.9%	13,291	10.0%	59,250	16.7%	
Veteran Status – Total	487,035		132,959		354,076		Yes ($\chi^2=615.1071$; df=1; p<0.0001)
Yes	6,526	1.3%	895	0.7%	5,631	1.6%	
No	480,509	98.7%	132,064	99.3%	348,445	98.4%	
Age (mean)	487,035	24.4	132,959	22.4	354,076	25.2	Yes (p<0.0001)
Age – Total	487,035		132,959		354,076		Yes ($\chi^2=132718$; df=13; p<0.0001)
18 or Younger	102,897	21.1%	73,706	55.4%	29,191	8.2%	
19	66,483	13.6%	9,604	7.2%	56,879	16.1%	
20	60,307	12.4%	5,580	4.2%	54,727	15.5%	
21	44,918	9.2%	4,352	3.3%	40,566	11.5%	
22	26,557	5.4%	3,638	2.7%	22,919	6.5%	
23 – 25	47,986	9.8%	8,908	6.7%	39,078	11.0%	
26 – 30	50,268	10.3%	9,457	7.1%	40,811	11.5%	
31 – 35	30,711	6.3%	5,975	4.5%	24,736	7.0%	
36 – 40	21,265	4.4%	4,303	3.2%	16,962	4.8%	
41 – 45	15,189	3.1%	3,122	2.4%	12,067	3.4%	
46 – 50	10,904	2.2%	2,332	1.8%	8,572	2.4%	
51 – 55	6,292	1.3%	1,292	1.0%	5,000	1.4%	
56 – 60	2,443	0.5%	521	0.4%	1,922	0.5%	
61 or Older	815	0.2%	169	0.1%	646	0.2%	
Born Before Jan. 1, 1987 (Adult Learner)	463,978		132,958		331,020		Yes ($\chi^2=8443.261$; df=1; p<0.0001)
Yes	166,713	35.9%	34,195	25.7%	132,518	40.0%	
No	297,265	64.1%	98,763	74.3%	198,502	60.0%	
Since Applicant Turned 13, Were Both Parents Deceased, in Foster Care, or Dependent or Ward of Court – Total	297,571		96,966		200,605		Yes ($\chi^2=477.7807$; df=1; p<0.0001)
Yes	4,529	1.5%	2,160	2.2%	2,369	1.2%	
No	293,042	98.5%	94,806	97.8%	198,236	98.8%	

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Ever Been in Legal Guardianship – Total	293,436		95,078		198,358		Yes ($\chi^2=460.3050$; df=1; p<0.0001)
Yes	2,427	0.8%	1,279	1.3%	1,148	0.6%	
No	291,009	99.2%	93,799	98.7%	197,210	99.4%	
Ever Been an Emancipated Minor – Total	293,914		95,228		198,686		No ($\chi^2=28.7276$; df=1; p=0.0015)
Yes	492	0.2%	215	0.2%	277	0.1%	
No	293,422	99.8%	95,013	99.8%	198,409	99.9%	
Ever Been Homeless, since July 1, 2009 – Total	487,035		132,959		354,076		Yes ($\chi^2=204.7261$; df=1; p<0.0001)
Yes	534	0.1%	293	0.2%	241	0.1%	
No	486,501	99.9%	132,666	99.8%	353,835	99.9%	
Legal Resident of PA Prior to January 1, 2005 – Total	462,911		132,503		330,408		No ($\chi^2=39.0735$; df=1; p<0.0001)
Yes	443,673	95.8%	127,380	96.1%	316,293	95.7%	
No	19,238	4.2%	5,123	3.9%	14,115	4.3%	
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Length of Time Legal Resident of PA	19,238		5,123		14,115		Yes ($\chi^2=104.8980$; df=4; p<0.0001)
Less than 12 months	6,879	35.8%	2,097	40.9%	4,782	33.9%	
12 – 23 months	4,162	21.6%	936	18.3%	3,226	22.9%	
24 – 35 months	3,738	19.4%	888	17.3%	2,850	20.2%	
36 – 47 months	3,074	16.0%	831	16.2%	2,243	15.9%	
48 or more months	1,385	7.2%	371	7.2%	1,014	7.2%	
Household Structure and Family Characteristics							
Highest School Completed by Father – Total	458,248		130,347		327,901		Yes ($\chi^2=2203.546$; df=3; p<0.0001)
Middle School/Junior High	29,626	6.5%	9,151	7.0%	20,475	6.2%	
High School	213,062	46.5%	61,351	47.1%	151,711	46.3%	
College or Beyond	151,674	33.1%	37,773	29.0%	113,901	34.7%	

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
Other/Unknown	63,886	13.9%	22,072	16.9%	41,814	12.8%	
	459,575		130,976		328,599		Yes ($\chi^2=1377.510$; df=3; p<0.0001)
Middle School/Junior High	25,735	5.6%	8,435	6.4%	17,300	5.3%	
High School	218,007	47.4%	62,109	47.4%	155,898	47.4%	
College or Beyond	177,078	38.5%	46,887	35.8%	130,191	39.6%	
Other/Unknown	38,755	8.4%	13,545	10.3%	25,210	7.7%	
Parent's Marital Status – Total	487,035		132,959		354,076		Yes ($\chi^2=247.5140$; df=1; p<0.0001)
Single	185,779	38.1%	53,093	39.9%	132,686	37.5%	
Other	301,256	61.9%	79,866	60.1%	221,390	62.5%	
Household Size – Total	487,035		132,959		354,076		Yes ($\chi^2=2803.0450$; df=8; p<0.0001)
1	82,868	17.0%	17,103	12.9%	65,765	18.6%	
2	98,251	20.2%	28,136	21.2%	70,115	19.8%	
3	108,069	22.2%	28,837	21.7%	79,232	22.4%	
4	114,305	23.5%	32,775	24.6%	81,530	23.0%	
5	56,407	11.6%	17,183	12.9%	39,224	11.1%	
6 – 9	27,135	5.6%	8,925	6.7%	18,210	5.1%	
Number in Household Attending College During 2010-11 School Year – Total	477,101		128,777		348,324		Yes ($\chi^2=246.2105$; df=3; p<0.0001)
1	365,380	76.6%	100,659	78.2%	264,721	76.0%	
2	97,287	20.4%	24,488	19.0%	72,799	20.9%	
3 – 4	14,434	3.0%	3,630	2.8%	10,804	3.1%	
Financial Characteristics							
EFC (mean)	418,383	\$9,324.78	108,316	\$9,145.93	310,067	\$9,387.25	Yes (p<0.0001)
Total AGI (mean)	487,035	\$54,569.90	132,959	\$54,585.71	354,076	\$54,564.01	No (p=1.0000)
Total Earnings (mean)	487,035	\$52,800.50	132,959	\$52,862.19	354,076	\$52,777.33	No (p=1.0000)
Poverty Level Based on Total Earnings – Total (adjusted for family size)	487,035		132,959		354,076		Yes ($\chi^2=1118.9317$; df=2; p<0.0001)
<= (less than/equal to) Poverty Level	167,002	34.3%	50,151	37.7%	116,851	33.0%	

	Total Urban Applicants		Beginning Urban Applicants		Continuing Urban Applicants		Difference Between Beginning and Continuing Urban Applicants ^a
	Number	% or Mean	Number	% or Mean	Number	% or Mean	Statistically Significant?
> (greater than) Poverty Level But <= 150% of Poverty Level	53,018	10.9%	14,919	11.2%	38,099	10.8%	
> 150% of Poverty Level	267,015	54.8%	67,889	51.1%	199,126	56.2%	
Parents/Applicant/Spouse is a Dislocated Worker	427,444		119,617		307,827		Yes ($\chi^2=248.721$; $df=1$; $p<0.0001$)
Yes	55,503	13.0%	17,088	14.3%	38,415	12.5%	
No	371,941	87.0%	102,529	85.7%	269,412	87.5%	
Applicant Financially Independent of Parents	470,881		131,382		339,499		Yes ($\chi^2=8030.930$; $df=2$; $p<0.0001$)
Yes, With Child Dependents	103,426	22.0%	23,830	18.1%	79,596	23.4%	
Yes, Without Child Dependents	89,422	19.0%	16,786	12.8%	72,636	21.4%	
No	278,033	59.0%	90,766	69.1%	187,267	55.2%	
^a For categorical characteristics, such as gender and ethnicity, the Pearson Chi-Square statistic is used to test the difference between beginning and continuing rural applicants. For characteristics that have a numerical value, such as age and income, analysis of variance was used. ^b Applicants indicated whether they planned to live on campus, with parents, or off campus for each postsecondary institution receiving the FAFSA.							

Rural-urban differences

Due to the large number of cases, the differences between rural and urban applicants are statistically significant on most of the variables presented in Tables 4 and 5. Consequently, only those variables that differ substantially (i.e., by at least 3 percentage points) are discussed below.

Educational status. Rural students were more likely to plan to enroll in occupational or technical associate degree programs (21 percent versus 16 percent for urban students), whereas urban students were more likely to plan to enroll in general education or transfer associate degree programs (11 percent versus 8 percent for rural applicants). Also, 8 percent of urban students planned to enroll in a certificate or diploma program of less than two years compared to 5.5 percent of rural students. About the same percentage (60 percent) of rural and urban students planned to enroll in a bachelor's degree program.

Another difference was that 39 percent of rural students planned to enroll in a 4-year public school for 2010-11, compared to 26 percent of urban students. Instead, urban students were more likely to plan to enroll in a 4-year private school (20 percent compared to 16 percent for rural students) or a community college (24 percent compared to 13 percent for rural students).

Rural applicants were also more likely to plan to enroll full-time in 2010-11 (91 percent of rural students compared to 88 percent of urban students). On the other hand, urban applicants were more likely to plan to enroll half-time (11 percent of urban students compared to 8 percent of rural students). About the same percentage of rural and urban students planned to enroll less than half-time (1 percent).

Socio-demographic characteristics. Urban applicants were more likely to be single than rural applicants (85 percent versus 80.5 percent, respectively). Although the mean age of rural and urban applicants was similar (24 years), differences in their age distributions were apparent. A

larger percentage of rural applicants were 18 years or younger (24 percent of rural students compared to 21 percent of urban students). This, in part, is related to the finding that rural applicants were more likely to be beginning students rather than continuing students. In addition, rural students were less likely to be adult learners than urban students (32 percent of rural applicants were adult learners compared to 36 percent of urban applicants). And, a smaller percentage of rural students were in the 23 to 30 year age range than urban students (17 percent compared to 20 percent). Other differences in the age distributions for rural and urban students were minimal.

In summary, rural applicants were more likely to be younger than urban applicants, less likely to be adult learners, and less likely to be single.

Household structure and family characteristics. Rural and urban FAFSA applicants differed in terms of the highest level of education completed by their father and mother. Rural students were more likely than urban students to have parents whose highest level of education was high school. More than one-half of rural students indicated that the highest level of education completed by their parents was high school (57 percent and 53 percent, respectively, for fathers and mothers). These percentages were 47 percent and 47 percent for the fathers and mothers of urban students, respectively. In contrast, urban students were more likely to indicate that their father and mother completed at least college: 33 percent and 39 percent of urban students' fathers and mothers, respectively, compared to 28 percent and 36 percent for rural students.

The parents of rural students were also more likely to be single than urban students (48 percent compared to 38 percent). At the same time, the household size of rural students tended to be larger than that of urban students. About 30 percent of rural students lived in households of one or two people (hereafter "small households"), compared to 37 percent of urban students. On the

other hand, rural students were more likely to live in households of three to five people (64 percent) than urban students (57 percent). Only 6 percent of rural and urban students lived in households of six to nine people.

Financial characteristics. The EFC for rural students (\$8,140) was, on average, less than that of urban students (\$9,325). At the same time, the mean AGI and mean total earnings for families of rural students (\$53,678 and \$51,371, respectively) were also lower than for those of urban students (\$54,570 and \$52,800, respectively).

Despite rural students' lower mean income, their families were less likely to have total earnings below or near poverty than urban students (40 percent versus 45 percent, respectively); that is the total earnings of these families were 150 percent or less of the poverty level. On the other hand, rural students were more likely than urban students to be in families whose total earnings were greater than 150 percent of poverty (60 percent and 55 percent, respectively).

Rural students were also more likely than urban students to be financially dependent on their parents (65 percent versus 59 percent, respectively). At the same time, urban students were more likely to be financially independent (with no child dependents) than rural students (19 percent versus 15 percent, respectively).

Degree Type and Student Profiles

Table 6 provides a snapshot of the socio-demographic, household structure/family, and financial profiles characterizing rural bachelor's degree, associate degree, and certificate/diploma applicants. Table 7 presents these results for urban applicants. Students who planned to pursue a non-degree teaching credential or participate in some other program were excluded from these analyses. Again, due to the extremely large number of data on both rural and urban applicants, only differences that have a p-value less than 0.0001 ($p < 0.0001$) are considered statistically significant.

Table 6: Summary of Profiles for Rural Bachelor’s degree, Associate Degree, and Diploma/Certificate FAFSA Applicants

	BA/BS	Associate	Certificate/ Diploma
Postsecondary Educational Plans			
Type of Postsecondary School Receiving FAFSA Report for 2010-11			
4-Year Private	23%	5%	3%
4-Year Public	54%	14%	7%
Community College	4%	30%	14%
Other	18%	31%	27%
Technical School	0%	20%	49.5%
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11			
On Campus	37%	7%	5%
With Parents	18%	30%	25%
Off Campus	45%	62%	69%
Already Has a Bachelor’s degree	1%	2%	4%
Socio-demographic Characteristics			
High School Completion Status by 2010-11			
High School Diploma	96%	86%	85%
GED Certificate	3%	12%	13%
Other	1%	1%	2%
Gender – Male	44%	37%	33%
Applicant’s Marital Status – Single	88%	68%	64%
Military Veteran	2%	2%	2%
Age (mean)	22.2 yrs.	26.9 yrs.	28.1 yrs.
Born Before January 1, 1987 (Adult Learner)	21%	51%	55%
Since Applicant Turned 13, Both Parents Deceased, in Foster Care, or Dependent or Ward of Court	1%	2%	2%
Ever Been in Legal Guardianship	0%	1%	1%
Ever Been an Emancipated Minor	0%	0%	0%
Ever Been Homeless, since July 1, 2009	0%	0%	0%
Legal Resident of PA Prior to January 1, 2005	97%	95%	95%
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Legal Resident of PA for Less than 12 Months	32%	38%	45%
Household Structure and Family Characteristics			
Highest School Completed by Father			
Middle School/Junior High	5%	11%	11%
High School	54%	60%	60%
College or Beyond	35%	17%	16%
Other/Unknown	6%	12%	13%
Highest School Completed by Mother			
Middle School/Junior High	3%	8%	8%
High School	49%	59%	60%
College or Beyond	43%	26%	23.5%
Other/Unknown	5%	8%	9%
Household Size – 1 or 2 Members	23%	40%	43%
Number in Household Attending College During 2010-11 – More than 1	28%	16%	14%

	BA/BS	Associate	Certificate/ Diploma
Financial Characteristics			
EFC (mean)	\$10,061	\$4,925	\$5,088
Total AGI (mean)	\$65,391	\$38,314	\$37,447
Total Earnings (mean)	\$62,931	\$36,352	\$34,569
Poverty Level Based on Total Earnings (adjusted for family size)			
<= (less than/equal to) Poverty Level	20%	37%	38.5%
> (greater than) Poverty Level But <= 150% of Poverty Level	10%	15%	14%
> 150% of Poverty Level	70%	48%	47%
Parents/Applicant/Spouse is Dislocated Worker	9%	19%	24%
Applicant is Financially Independent of Parents			
Yes, With Child Dependents	12%	34%	37%
Yes, Without Child Dependents	11.5%	21%	23%
No	77%	44.5%	39.5%

Table 7: Summary of Profiles for Urban Bachelor’s degree, Associate Degree, and Diploma/Certificate FAFSA Applicants

	BA/BS	Associate	Certificate/ Diploma
Postsecondary Educational Plans			
Type of Postsecondary School Receiving FAFSA Report for 2010-11			
4-Year Private	29%	6%	3%
4-Year Public	41%	4%	2%
Community College	9%	54%	17%
Other	21%	19%	22%
Technical School	0%	17%	5%
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11			
On Campus	37%	5%	3%
With Parents	18%	28%	24%
Off Campus	45%	68%	73%
Already Has a Bachelor’s degree	2%	2%	4%
Socio-demographic Characteristics			
High School Completion Status by 2010-11 School Year			
High School Diploma	95.5%	84%	80%
GED Certificate	3%	15%	16%
Other	1%	2%	4%
Gender – Male	44%	37%	32%
Applicant’s Marital Status – Single	90.5%	78%	77%
Military Veteran	1%	2%	1%
Age (mean)	22.5 yrs.	27.3 yrs.	28.0 yrs.
Born Before January 1, 1987 (Adult Learner)	24%	55%	59%
Since Applicant Turned 13, Both Parents Deceased, in Foster Care, or Dependent or Ward of Court	1%	3%	3%
Ever Been in Legal Guardianship	0%	2%	2%
Ever Been an Emancipated Minor	0%	0%	0%

	BA/BS	Associate	Certificate/ Diploma
Ever Been Homeless, since July 1, 2009	0%	0%	0%
Legal Resident of PA Prior to January 1, 2005	97%	94%	95%
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Legal Resident of PA for Less than 12 Months	30%	39%	47%
Household Structure and Family Characteristics			
Highest School Completed by Father			
Middle School/Junior High	4.5%	10%	9.5%
High School	43%	52%	51%
College or Beyond	43%	19%	16%
Other/Unknown	9.5%	20%	23.5%
Highest School Completed by Mother			
Middle School/Junior High	3.5%	9%	9%
High School	43%	53%	54%
College or Beyond	47%	27%	23%
Other/Unknown	6%	11.5%	14%
Household Size – 1 or 2 Members	28%	49%	54%
Number in Household Attending College During 2010-11 – More than 1	30%	15%	10%
Financial Characteristics			
EFC (mean)	\$12,825	\$4,214	\$3,481
Total AGI (mean)	\$74,553	\$32,943	\$26,300
Total Earnings (mean)	\$72,439	\$31,444	\$24,784
Poverty Level Based on Total Earnings (adjusted for family size)			
<= (less than/equal to) Poverty Level	20%	45%	55%
> (greater than) Poverty Level But <= 150% of Poverty Level	10%	15%	13%
> 150% of Poverty Level	70%	41%	32%
Parents/Applicant/Spouse is Dislocated Worker	10%	17%	22%
Applicant is Financially Independent of Parents			
Yes, With Child Dependents	12%	36%	41%
Yes, Without Child Dependents	14%	26%	27%
No	74%	38.5%	31.5%

Differences among rural FAFSA applicants by degree type

As indicated in Table 4, the majority of rural applicants indicated pursuing a bachelor's degree (60 percent), followed by an associate degree (28 percent) and a certificate/diploma (7 percent).

Educational status. About one-quarter (24 percent) of rural bachelor's degree students were beginning college students. In contrast, 35 percent of rural associate degree students and 46 percent of rural certificate/diploma were beginning postsecondary students.

A substantial percentage of rural associate and certificate/diploma students had attended college before and were first-year undergraduates (28 percent and 35 percent, respectively). However, only about 8 percent of rural bachelor's degree students were in this category. Students who had attended college prior to the 2010-11 school year and were first-year undergraduates are considered continuing students. Twenty-two percent of rural bachelor's degree students and 28 percent of associate degree students indicated that they would be second year undergraduates/sophomores in 2010-11. However, only 13 percent of certificate/diploma students indicated this to be the case, in part due to the majority (76 percent) of certificate/diploma students attending programs no more than 2 years in length. Close to one-quarter of the rural bachelor's degree students were third year undergraduates/juniors, and 4th year undergraduate/senior or 5th year/other undergraduate (24 percent and 23 percent, respectively). Less than one-tenth of rural associate and certificate/diploma students were entering their 4th year undergraduate/senior or 5th year/other undergraduate (9 percent and 6 percent, respectively), again most likely because many of these programs are less than 4 years long.

Only 1 percent of rural bachelor's degree students and 2 percent of rural associate degree students already had a bachelor's degree at the time the 2010-11 FAFSA was completed. However, 4 percent of rural certificate/diploma applicants already had a bachelor's degree.

Rural bachelor's degree, associate degree, and certificate/diploma students also differed significantly on the type of postsecondary schools receiving their 2010-11 FAFSA. More than three-fourths of rural bachelor's degree students submitted their FAFSA report to a 4-year private (23 percent) or 4-year public (54 percent) colleges. In contrast, 19 percent of rural associate degree and 10 percent of rural certificate/diploma students submitted their FAFSA report to 4-year private or public postsecondary institutions. ACD students were more likely to submit their FAFSA

reports to community colleges (30 percent of associate degree students and 14 percent of certificate/diploma students), technical schools (20 percent of associate degree students and about 50 percent of certificate/diploma students), or some other type of postsecondary institution (31 percent of associate degree students and 27 percent of certificate/diploma students). Only 22 percent of bachelor's degree students submitted their FAFSA report to these latter type of postsecondary schools.

Rural bachelor's degree, associate degree, and certificate/diploma FAFSA applicants differed significantly on their housing plans for 2010-11, although the largest percentage of rural students across all degree types planned on living off-campus. Associate degree and certificate/diploma applicants were more likely to plan on off-campus housing than bachelor's degree students (62 percent, 69 percent, and 45 percent, respectively). Also, rural associate degree (30 percent) and certificate/diploma (25 percent) students were more likely to plan to live with their parents than bachelor's degree students (18 percent). On the other hand, rural bachelor's degree students were more likely to plan on living on-campus than associate degree or certificate/diploma students (37 percent compared to 7 and 5 percent, respectively). Data on enrollment status for 2010-11 disaggregated by degree type were not available.

Socio-demographic characteristics. Rural bachelor's degree, associate degree, and certificate/diploma applicants differed significantly in terms of their high school completion status. Nearly all (96 percent) rural bachelor's degree students had or would have a high school diploma by the 2010-11 school year. Although the vast majority of rural associate degree and certificate/diploma students (hereafter, "ACD") also had/would have a high school diploma, the percentage was significantly less than for bachelor's degree students – 86 percent of associate degree and 85 of certificate/diploma students, respectively, had/would have a high school diploma

for 2010-11. In contrast, rural ACD students were about four times more likely to have a GED certificate than bachelor's degree students: 3 percent of bachelor's degree students indicated that they would have a GED compared to 12 percent of associate degree and 13 percent of certificate/diploma students.

The majority of rural bachelor's degree, associate degree, and certificate/diploma students were female. However, a larger percentage of male students pursued a bachelor's degree (44 percent) than an associate degree (37 percent) or a certificate/diploma (33 percent).

Rural bachelor's degree students were more likely to be single than associate degree or certificate/diploma students. Most (88 percent) of the rural bachelor's degree students were single, while 69 percent of associate degree student were single and 64 percent of certificate/diploma students were single.

Although statistically significant, military veteran status did not vary substantively by the degree or certificate program the student was entering. About 2 percent of rural bachelor's degree, associate degree, and certificate/diploma students were military veterans, respectively.

The mean age of rural bachelor's degree students was 22 years, compared to 27 and 28 years for associate degree and certificate/diploma students, respectively. Twenty-seven percent of rural bachelor's degree students were 18 or younger, and another 45 percent were 19 to 21, for a total of 72 percent age 21 or under. Among rural associate degree and certificate students, 43 percent and 38 percent were 21 or under, respectively.

Among rural associate degree and certificate students, 43 percent and 38 percent, respectively, were 21 or under. Between 28 percent and 30 percent of associate degree and certificate/diploma students, respectively, were 22 to 30 years, compared to 17 percent of bachelor's degree students. Thirty-two percent of certificate/diploma students and about 28

percent of associate degree students were over 30 years, versus only 10 percent of bachelor's degree students.

Over one-half of ACD applicants were adult learners (24 years or older). Rural certificate/diploma students were the most likely to be adult learners (55 percent), followed by associate degree students (51 percent). Twenty-one percent of rural bachelor's degree students were adult learners.

As indicated previously, only a very small percentage (0 to 2 percent) of rural applicants had ever been homeless or in legal guardianship, foster care, or a dependent or ward of the court. Differences among rural students by type of degree or certificate they were pursuing did not differ substantively, although all were statistically significant with one exception (being homeless).

The vast majority of rural students were legal residents of Pennsylvania prior to January 1, 2005 (i.e., 5 years prior to completing the FAFSA), with a higher percentage among bachelor's degree students (97 percent versus 95 percent of both associate degree and certificate/diploma students). Among those students who had been a legal resident for less than 5 years, certificate/diploma students were the most likely to have been a legal resident for less than 12 months (45 percent compared to 38 percent for associate degree students and 32 percent for bachelor's degree students).

Household structure and family characteristics. Rural bachelor's degree students differed significantly from ACD students with respect to their *father's* highest level of education: 60 percent of associate degree and certificate/diploma students, respectively, indicated that high school was their father's highest level of education, compared to 54 percent for bachelor's degree students. Also, 11 percent of ACD students had fathers with a junior high education, compared to 5 percent of bachelor's degree students. In contrast, the fathers of rural bachelor's degree students were

about twice as likely to have completed college or beyond than the fathers of associate degree or certificate/diploma students (35 percent versus 17 and 16 percent, respectively).

The results for *mother's* highest level of education were similar. For the majority of rural associate degree and certificate/diploma students, mothers' educational attainment was high school (59 percent and 60 percent, respectively), compared to 49 percent for bachelor's degree students. Again, the mothers of rural bachelor's degree students were more likely to have completed college or beyond (43 percent) than associate degree (26 percent) or certificate/diploma (23.5 percent) students. Less than one-tenth of rural applicants had a mother with a junior high education (3 percent of bachelor's degree students and 8 percent of ACD students).

The families of rural ACD students were smaller than rural bachelor's degree applicants, although this could reflect associate degree and certificate/diploma applicants' greater likelihood of financial independence from their parents (see "Financial Characteristics," below). About two-fifths of rural associate degree students (40 percent) and certificate/diploma students (43 percent) had a household size of 1 or 2, compared to 23 percent for bachelor's degree students.

Most of the rural applicants were the only person in the household planning to attend college the next school year. However, this percentage was much less for bachelor's degree students (72 percent) than for associate degree (84 percent) and certificate/diploma students (86 percent).

Financial characteristics. The mean EFC of rural associate degree and rural certificate/diploma students was similar (about \$5,000), but was significantly less than that of rural bachelor's degree students (about \$10,000). Consistent with this, the mean total AGI and mean total earnings of families of rural associate degree (AGI=\$38,314; total earnings=\$36,352) and certificate/diploma (AGI=\$37,447; total earnings=\$34,569) applicants were significantly less than

that of rural bachelor's degree applicants (AGI=\$65,391; total earnings=\$62,931). These results indicate that, on average, the mean family income of rural bachelor's degree students was about \$27,000 greater than that of ACD students.

Rural ACD applicants were significantly more likely to experience financial hardship than rural bachelor's degree students, based on total earnings relative to the poverty level. Thirty-seven percent of rural associate degree and about 39 percent of rural certificate/diploma students were in families below the poverty level, compared to 20 percent of rural bachelor's degree students. Fifteen percent of rural associate degree students and 14 percent of rural certificate/diploma students were in near-poverty, compared to 10 percent for rural bachelor's degree students. The latter group was more likely to have total earnings greater than 150 percent of the poverty level (70 percent) than rural associate degree or rural certificate/diploma applicants (48 percent and 47 percent, respectively).

Rural certificate/diploma rural FAFSA applicants were the most likely to be in a household in which they, their parents, or their spouse (if married) were a dislocated worker (24 percent), followed by 19 of associate degree students and 9 percent of bachelor's degree students.

Rural bachelor's degree applicants were the most likely to be financially dependent on their parents (77 percent), followed by associate degree students (about 45 percent) and certificate/diploma students (about 40 percent). Certificate/diploma students were the most likely to be financially independent with a child dependent(s) (37 percent), compared to 34 percent of associate degree and 12 percent of bachelor's degree students. About the same percentage of rural bachelor's degree students were financially independent with no child dependents (about 12 percent); 21 percent of rural associate degree and 23 percent of rural certificate/diploma students were in this category.

Differences among urban FAFSA applicants by degree type

As indicated in Table 5, most urban applicants were pursuing a bachelor's degree (about 60 percent), followed by associate degree (27 percent) and certificate/diploma (10 percent).

Educational status. Twenty-three percent of urban bachelor's degree students were beginning college students, compared to 31 percent of associate degree and 44 percent of certificate/diploma students. A substantial percentage of urban associate and certificate/diploma students had attended college before and were first-year undergraduates (33 percent and 41 percent, respectively). However, only 8 percent of urban bachelor's degree students were in this category (continuing students). Twenty-two percent of urban bachelor's degree students and 27 percent of associate degree students indicated that they would be second-year undergraduates/sophomores in 2010-11. However, only 10 percent of certificate/diploma students indicated this to be the case, mainly because most (81 percent) were attending programs less than 2 years in length. Twenty-four percent of urban bachelor's degree students were third year undergraduates/juniors and 23 percent were fourth year undergraduates/seniors or fifth year/other undergraduates. Less than one-tenth of urban associate and certificate/diploma students were entering their third year/junior, fourth year undergraduate/senior, or fifth year/other undergraduate (9 percent and 5 percent, respectively), again most likely due short duration of their program of study.

Only 2 percent of urban bachelor's degree students and associate degree students, respectively, had a bachelor's degree upon completing the 2010-11 FAFSA application. However, 4 percent of urban certificate/diploma applicants already had a bachelor's degree.

Urban students also differed significantly on the type of postsecondary schools receiving their FAFSA report. Most urban bachelor's degree students submitted it to 4-year private (29

percent) or 4-year public (41 percent) colleges, compared to 10 percent of urban associate degree and 5 percent of urban certificate/diploma students. Urban associate degree students were more likely to submit their FAFSA to community colleges (54 percent), while urban certificate/diploma students were more likely to send it to technical schools (56 percent).

Housing plans for the 2010-11 school year also differed significantly by degree type. Urban associate degree and certificate/diploma students were more likely to plan on off-campus housing than bachelor's degree students (68 percent and 73 percent versus 45 percent, respectively). Also, urban associate degree and certificate/diploma students were more likely to plan to live with their parents than bachelor's degree students (28 percent and 24 percent versus 18 percent, respectively). Urban bachelor's degree students were more likely to plan on living on-campus (37 percent) than associate degree (5 percent) or certificate/diploma (3 percent) students. Data on enrollment status broken down by postsecondary program was not available.

Socio-demographic characteristics. Urban bachelor's degree, associate degree, and certificate/diploma FAFSA applicants differed significantly in terms of their high school completion status. About 96 percent urban bachelor's degree students had or would have a high school diploma by the 2010-11 school year. Although the vast majority of urban associate degree and certificate/diploma students also had or would have a high school diploma, the percentage was significantly less – 84 percent and 80 percent, respectively. In contrast, urban associate degree and certificate/diploma students were at least five times more likely to have a GED certificate than bachelor's degree students (15 percent, 16 percent, and 3 percent, respectively).

Although most urban bachelor's degree, associate degree, and certificate/diploma students were female, bachelor's degree students were more likely to be male. Specifically, 44 percent of

urban bachelor's degree students were male, compared to 37 percent of associate degree and 32 percent of certificate/diploma students.

Urban bachelor's degree students were more likely to be single than associate degree or certificate/diploma students (90.5 percent compared to 78 percent and 77 percent, respectively).

Although statistically significant, military veteran status did not vary substantively by degree type. Between 1 and 2 percent of urban bachelor's degree, associate degree, and certificate/diploma students were military veterans.

The mean age of urban bachelor's degree students was 22.5 years, compared to 27 and 28 years for associate degree and certificate/diploma students, respectively. About one-quarter (27 percent) of urban bachelor's degree students were 18 or younger, and another 44 percent were 19 to 21, for a total of about 71 percent age 21 or under. Among urban associate degree and certificate students, 37 percent and 33 percent were 21 or under, respectively.

Over one-third of associate degree and certificate/diploma students were between 22 and 30 years old (34 percent and 37 percent, respectively), compared to 19 percent of bachelor's degree students. Over one-quarter (29 percent) of ACD students, respectively, were over 30 years, versus only 11 percent of bachelor's degree students.

Over one-half of urban ACD FAFSA applicants were adult learners (24 years or older). Urban certificate/diploma students were the most likely to be adult learners (59 percent), followed by associate degree students (55 percent) and bachelor's degree students (24 percent).

As indicated under Goal 1, a very small percentage (between 0 and 3 percent) of urban applicants had ever been homeless, in legal guardianship, foster care, or a dependent or ward of the court since the applicant turned 13, or had been an emancipated minor. ACD students were

somewhat more likely to have been in legal guardianship or foster care, or a dependent or ward of the court.

The vast majority of urban students were legal residents of Pennsylvania prior to January 1, 2005, with a higher percentage among bachelor's degree students (97 percent compared to 94 percent of associate students and 95 percent of certificate/diploma students, respectively). Among those students who had been a legal resident for less than 5 years, certificate/diploma students were the most likely to have been a legal resident for *less* than 12 months (47 percent compared to 39 percent for associate and 30 percent for bachelor's degree students).

Household structure and family characteristics. Urban bachelor's degree students differed significantly from ACD students concerning their *father's* highest level of education. Urban ACD students were more likely to have a father with a high school education (52 percent of associate degree and 51 percent of certificate/diploma students versus 43 percent for bachelor's degree students). Also, 4.5 percent of bachelor's degree students indicated that their father's highest level of education was junior high, compared to approximately 10 percent of ACD students. In contrast, the fathers of urban bachelor's degree students were more than twice as likely to have completed college or beyond (43 percent) than the fathers of associate degree (19 percent) or certificate/diploma (16 percent) students. A substantial percentage of urban associate degree and certificate/diploma students indicated that their father's educational status was "other/unknown" (20 percent and 23.5 percent, respectively), compared to 9.5 percent of bachelor's degree students.

Similarly, *mothers'* educational attainment differed significantly between urban bachelor's degree and ACD students. For most associate degree and certificate/diploma students, mothers' highest level of education was high school (53 percent and 54 percent, respectively), compared to 43 percent for bachelor's degree students. Again, the mothers of urban bachelor's degree students

were more likely to have completed college or beyond (47 percent) than associate degree (27 percent) or certificate/diploma students (23 percent). Less than one-tenth of urban students had a mother with a junior high education (3.5 percent of bachelor's degree and 9 percent of ACD students). Considerably fewer urban students did not know their mother's educational status compared to their father's: 6 percent of urban bachelor's degree, 11.5 percent of associate degree, and 14 percent of certificate/diploma students.

The families of urban ACD applicants were smaller than bachelor's degree applicants, although this difference likely reflects ACD applicants' greater likelihood of financial independence from their parents (see "Financial Characteristics," below). About one-half of urban associate degree students (49 percent) and urban certificate/diploma students (54 percent) reported having only 1 or 2 members in the household, compared to 28 percent for bachelor's degree students.

Most of the urban associate degree and certificate/diploma students (85 percent and 90 percent, respectively) were the only person in the household planning to attend college during the upcoming school year, compared to 70 percent of bachelor's degree students.

Financial characteristics. The mean EFC of urban bachelor's degree students (\$12,825) was about three times higher than that for associate degree students (\$4,214), and nearly four times higher than urban certificate/diploma students (\$3,481). Similarly, the mean total AGI and mean total earnings of families of urban bachelor's degree students (\$74,553 and \$72,439, respectively) were considerably higher than that for associate degree students (\$32,943 and \$31,444, respectively) and certificate/diploma students (\$26,300 and \$24,784, respectively), a difference of approximately \$41,000 to \$48,000 between bachelor and ACD students.

Among urban certificate/diploma students, over one-half (55 percent) had total family earnings below the poverty level, compared to 45 percent of associate degree and 20 percent of

bachelor's degree students. Another 15 percent of urban associate degree, 13 percent of urban certificate/diploma, and 10 percent of bachelor's degree students were in near-poverty. On the other hand, urban bachelor's degree applicants were more likely to have total earnings more than 150 percent of the poverty level (70 percent) than urban associate degree or urban certificate/diploma applicants (41 percent and 32 percent, respectively).

Urban certificate/diploma FAFSA applicants were the most likely to be in a household in which they, their parents, or their spouse (if married) were a dislocated worker (22 percent), compared to 17 percent of associate degree students and 10 percent of bachelor's degree students.

Urban bachelor's degree applicants were the most likely to be financially dependent on their parents (74 percent), followed by associate degree (39 percent) and certificate/diploma students (32 percent). Urban certificate/diploma students were the most likely to be financially independent with a child dependent(s) (41 percent), compared to associate degree (36 percent) and bachelor's degree students (12 percent). 14 percent of urban bachelor's degree students were financially independent with no child dependents, versus 26 percent and 27 percent of associate degree and certificate/diploma students, respectively.

Rural-urban differences by degree type

This section presents differences based on the individual-level data presented in the prior two sections between rural and urban FAFSA applicants by the degree type they planned to enter pursue in 2010-11. Due to the large number of cases, rural and urban applicants differ significantly on most of the variables presented in Tables 6 and 7. Consequently, only those variables that differ substantially between rural and urban students or deviate from established patterns are discussed in this section.

Educational status. Rural bachelor's degree students were more likely to plan to attend a 4-year public institution (54 percent) than urban bachelor's degree students (41 percent). Conversely, urban bachelor's degree students were more likely to plan to attend a 4-year private college (29 percent) or a community college (9 percent) than rural bachelor's degree students (23 percent and 4 percent, respectively).

Among associate degree students, about the same percentage of rural and urban students planned to attend a 4-year private college (5 – 6 percent). Urban associate degree students were most likely to attend a community college (54 percent), compared to 30 percent of rural associate degree students. Rural associate degree students were more likely to attend a technical school (20 percent), a 4-year public university (14 percent), or some other type of school (31 percent) than urban students. About one-sixth (17 percent) of urban associate degree students planned to attend technical school, 4 percent planned to attend a 4-year private college, and 19 percent indicated some other type of postsecondary institution.

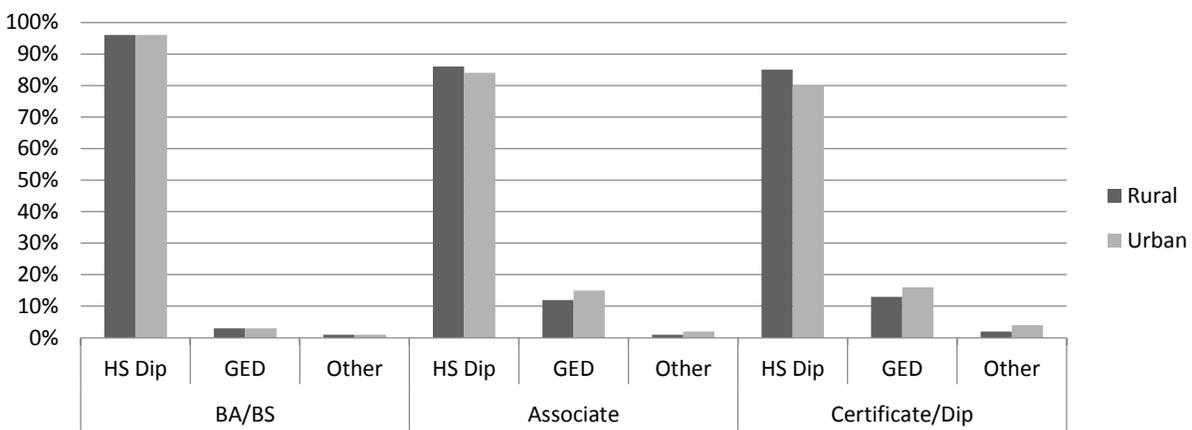
Rural and urban certificate/diploma students were the most likely to attend a technical school, although urban students were more likely to do so than rural students (56 percent and 49.5 percent, respectively). Urban certificate/diploma students were more likely to plan to attend a community college (17 percent) than rural certificate/diploma students (14 percent). On the other hand, rural certificate/diploma students were more likely to plan to attend 4-year public institution (7 percent) or some other type of college (27 percent) than urban certificate/diploma students (2 percent and 22 percent, respectively). About 3 percent of rural and urban certificate/diploma students planned to attend a 4-year private college, respectively.

Although rural and urban associate degree and certificate/diploma students differed in their housing plans for 2010-11, rural and urban bachelor's degree students were similar in their plans.

The majority of rural and urban ACD students planned to live off-campus (at least 62 percent), although rural students were less likely to do so than urban students. Rural ACD students were more likely to live with their parents or on-campus than urban students.

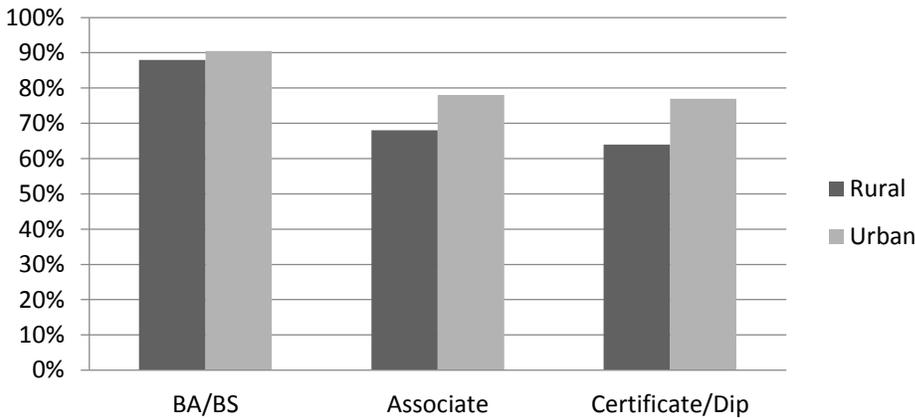
Socio-demographic characteristics. Rural ACD students were less likely to have a GED diploma, and more likely to have a high school diploma, by 2010-11 than comparable urban students (see Figure 2). Twelve to 13 percent of rural ACD students had or would have a GED diploma, compared to 15 to 16 percent of their urban counterparts. The percentage of rural and urban bachelor’s degree students did not differ substantively in this respect (about 3 percent).

Figure 2: High School Completion Status of Rural and Urban Students by Postsecondary Plans



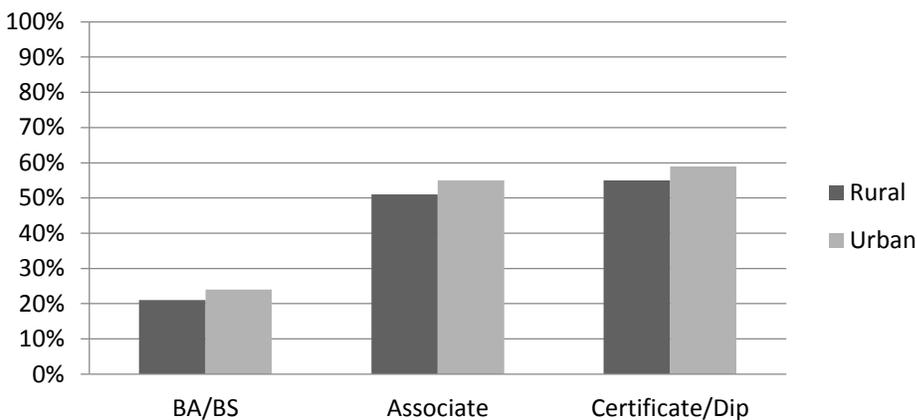
Urban ACD applicants were more likely to be single than their rural counterparts (see Figure 3). Among associate degree students, 78 percent of urban students were single compared to 68 percent of rural applicants; among certificate/diploma students, these figures were 77 percent for urban and 64 percent for rural students. The difference between rural and urban bachelor’s degree students was much smaller (88 percent and 91 percent, respectively).

Figure 3 Percentage of Rural and Urban Students Who Were Single by Postsecondary Plans



The primary difference in the age distributions of rural and urban ACD students was that urban students were more likely to be in the 22 to 30 age range, whereas rural students had a greater percentage in the 21 and under age group. Specifically, 34 percent and 37 percent of urban associate degree and certificate/diploma students, respectively, were age 22 to 30 years, compared to 28 percent and 30 percent of rural associate degree and certificate/diploma students, respectively. Consequently, a larger percentage of urban ACD students were adult learners than rural ACD students: 55 percent and 59 percent of urban associate degree and certificate/diploma students, respectively, were adult learners compared to 51 percent and 55 percent of comparable rural students. These differences were also apparent in the age distributions for rural and urban bachelor's degree students, although the differences were not as great (see Figure 4). Consistent with this, urban bachelor's degree students were more likely to be adult learners than rural bachelor's degree students (24 percent and 21 percent, respectively), although the difference was somewhat smaller than the differences between rural and urban ACD students.

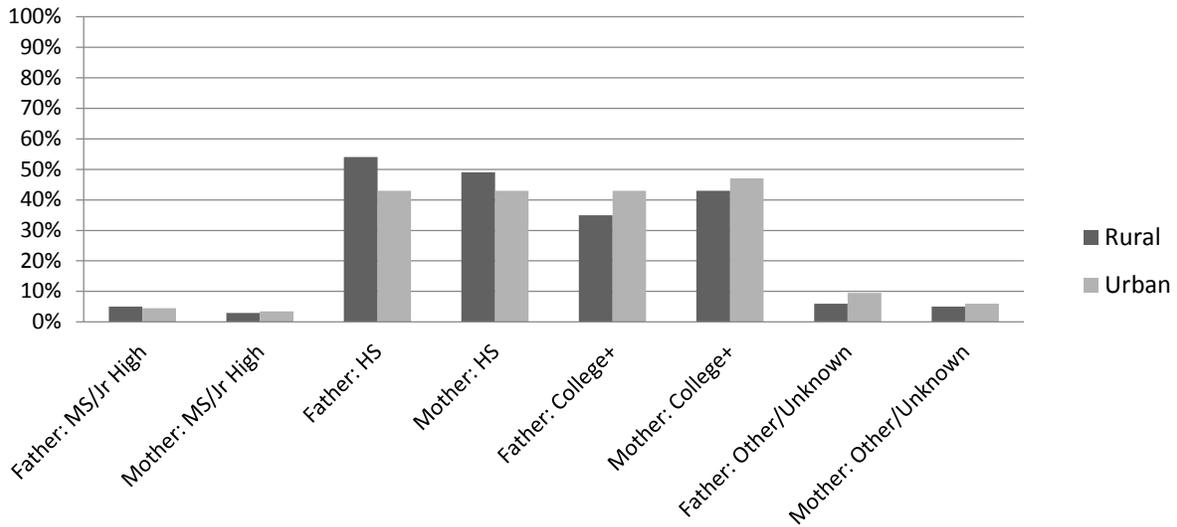
Figure 4: Percentage of Rural and Urban Students Who Were Adult Learners by Postsecondary Plans



Household structure and family characteristics. Rural and urban bachelor’s degree, associate degree, and certificate/diploma students differed in terms of their parents’ educational attainment (see Figure 5). Among bachelor’s degree students, rural students were more likely than urban students to have parents whose highest level of education was high school, and less likely to be college or beyond. Specifically, 54 percent of rural and 43 percent of urban bachelor’s degree students had a father with a high school education. In contrast, 35 percent of rural and 43 percent of urban bachelor’s degree students had a father who completed college or beyond. There was also a difference in the percentage of rural and urban bachelor’s degree students who did not know their father’s educational status (6 percent and 9.5 percent, respectively).

Differences in mother’s educational attainment for rural and urban bachelor’s degree students were not as great as the differences for fathers, although still evident. Specifically, 49 percent of rural bachelor’s degree students had a high school-educated mother, compared to 43 percent of their urban counterparts. Over two-fifths (43 percent) of rural bachelor’s degree students indicated that their mother completed college or beyond compared to 47 percent for urban bachelor’s degree students.

Figure 5: Rural/Urban Comparison of Parents' Educational Attainment: BA/BS Students



Similar to the above results, rural associate degree and certificate/diploma students were more likely than comparable urban students to have a father who completed high school (see Figures 6 and 7). Specifically, 60 percent of rural associate degree and certificate/diploma students, respectively, had a high school-educated father, compared to 52 percent and 51 percent for urban associate degree and certificate/diploma students, respectively. However, the percentages of rural ACD students who indicated that their father completed college or beyond were not substantively different from the percentages for comparable urban students. Specifically, 17 percent of rural associate degree students indicated that their father completed college or beyond compared to 19 percent for urban associate degree students. About one-sixth (16 percent) of rural and urban certificate/diploma students, respectively, indicated that their father completed college or beyond. On the other hand, urban ACD students were more likely not to know their father's educational attainment (12 to 13 percent for rural students versus 20 to 24 percent for urban students).

Similar to results reported above, rural ACD students were more likely than comparable urban students to report that their mother's educational attainment was high school. Specifically,

59 percent and 60 percent of rural associate degree and certificate/diploma students, respectively, indicated this educational level, compared to 53 percent and 54 percent for urban associate degree and certificate/diploma students. Differences were not as great between rural and urban associate degree and certificate/diploma students with a mother who completed college or beyond: 26 percent and 27 percent for rural and urban associate degree students, respectively, and about 23 percent for rural and urban certificate/diploma students. Urban ACD students were more likely to report an unknown educational status for their mother, although the differences between rural and urban students were not as great as for their fathers. Specifically, about 12 percent and 14 percent of urban associate degree and certificate/diploma students, respectively, did not know their mother’s educational status, compared to 8 percent and 9 percent of their rural counterparts.

Figure 6: Rural/Urban Comparison of Parents’ Educational Attainment: Associate Degree Students

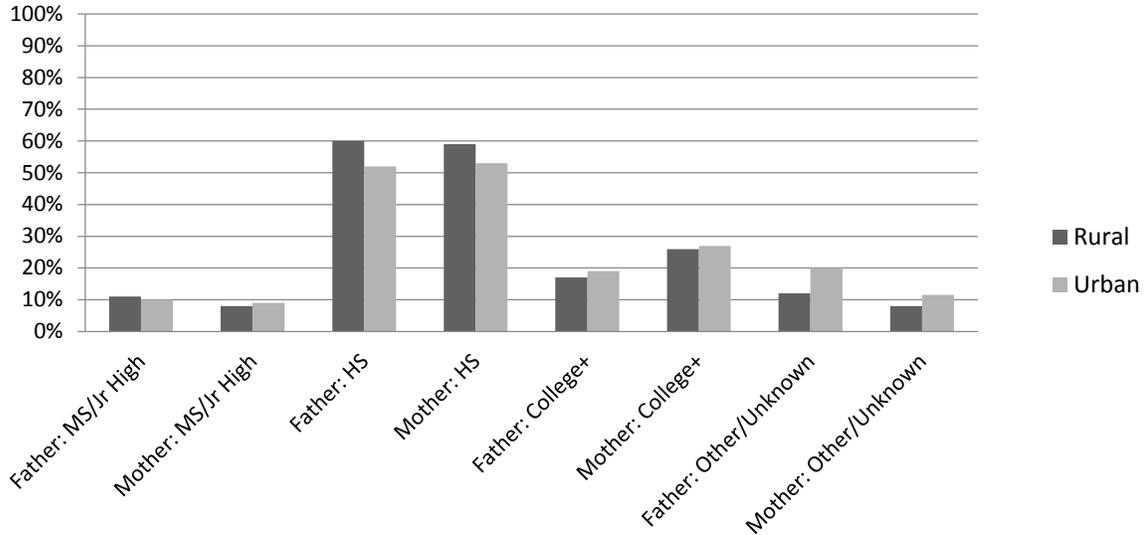
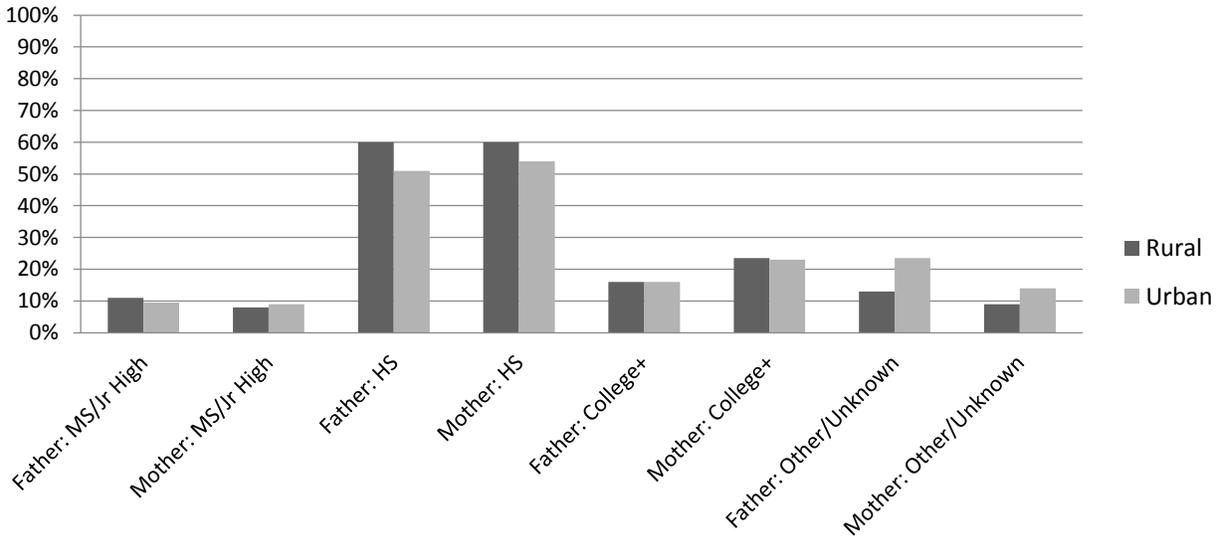
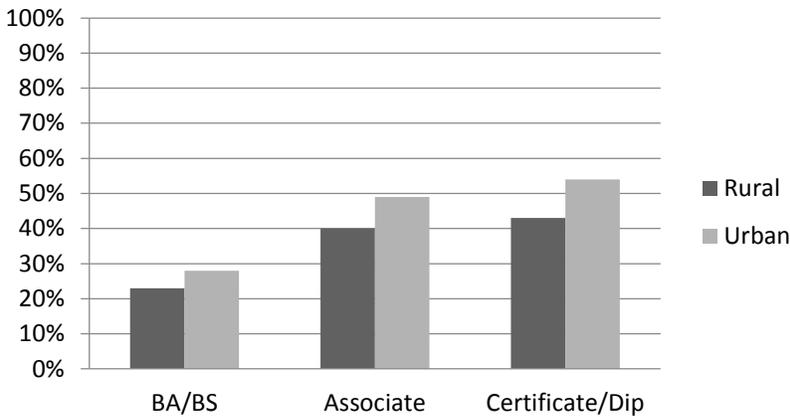


Figure 7: Rural/Urban Comparison of Parents' Educational Attainment: Certificate/Diploma Students



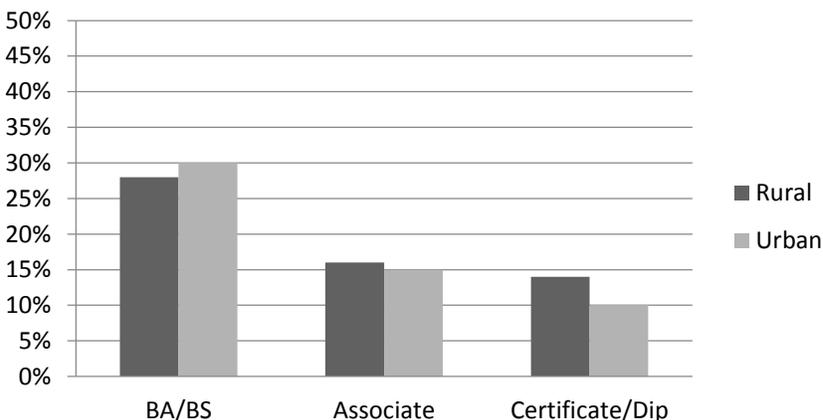
Rural students tended to have a larger household size than urban students, with differences for certificate/diploma and associate degree students being the greatest (see Figure 8). Among certificate/diploma students, 43 percent of rural students lived in households with 1 or 2 people (i.e., small households) compared to 54 percent for comparable urban students (an 11 percentage point difference). Among associate degree students, the percentage point difference was 9, with 40 percent of rural students and 49 percent of urban students living in small households. About one-quarter (23 percent) of rural bachelor’s degree students lived in small households, compared to 28 percent of urban bachelor’s degree students (5 percentage point difference). Rural students were more likely to live in households of 3 to 5 people than urban students. The percentage of students living in households of 6 to 9 people did not differ substantively across rural and urban bachelor’s degree, associate degree, and certificate/diploma students.

Figure 8: Percentage of Rural and Urban Students with 1 or 2 People in Household by Postsecondary Plans



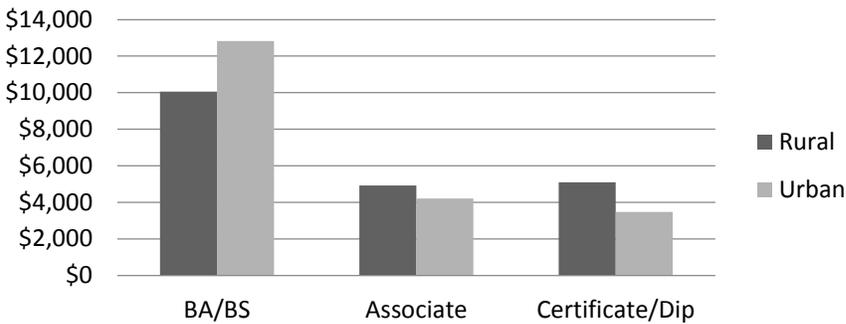
Rural certificate/diploma students were more likely to have another household member attending college in 2010-11 than their urban counterparts (14 percent and 10 percent, respectively; see Figure 9). Conversely, urban certificate/diploma students were more likely than comparable rural students to be the only household member planning to attend college for any type of degree (90 percent and 86 percent, respectively). Differences between rural and urban bachelor’s degree and associate degree students, while statistically significant, were relatively minor.

Figure 9: Percentage of Rural and Urban Students with 2 or More Household Members Attending College in Upcoming School Year by Postsecondary Plans



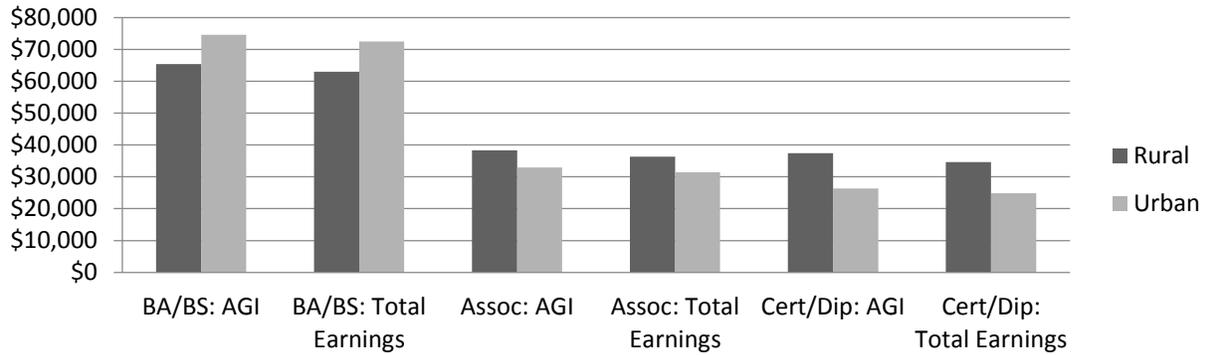
Financial characteristics. The EFC for rural bachelor’s degree students was, on average, less than that of urban counterparts (\$10,061 and \$12,825, respectively; see Figure 10). The opposite pattern was evident for ACD students: the mean EFC for rural ACD students was about \$5,000, compared to \$4,214 for urban associate degree and \$3,481 for urban certificate/diploma students.

Figure 10: Mean EFC for Rural and Urban Students by Postsecondary Plans



At the same time, the mean AGI and mean total earnings for rural bachelor’s degree students (\$65,391 and \$62,931, respectively) were lower than that for urban bachelor’s degree students (\$74,553 and \$72,439, respectively; see Figure 11). Again, the opposite pattern applied to ACD students, with rural associate degree students having a higher mean AGI and mean total earnings (\$38,314 and \$36,352, respectively) than comparable urban students (\$32,943 and \$31,444, respectively). For rural certificate/diploma students, the mean AGI and mean total earnings were \$37,447 and \$34,569, compared to \$26,300 and \$24,784 for urban associate degree students.

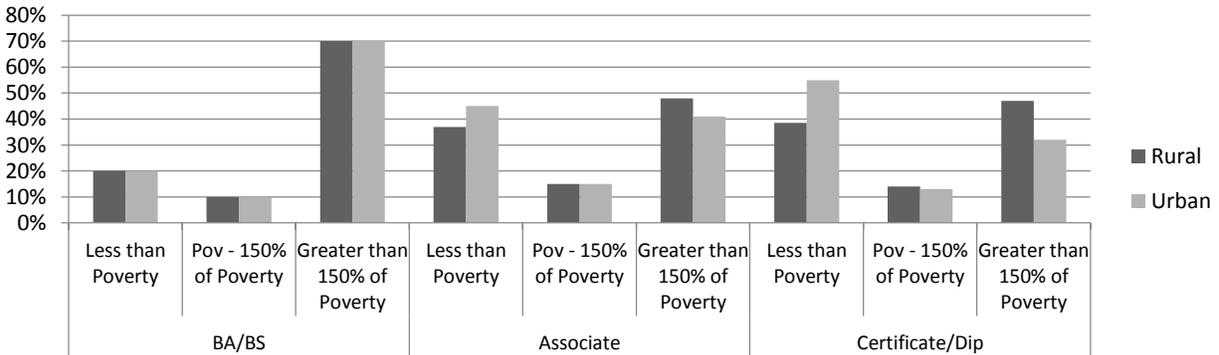
Figure 11: Mean Total AGI and Total Earnings for Rural and Urban Students by Postsecondary Plans



Despite the lower mean income levels of rural versus urban bachelor’s degree students, the percentage of students in families below the poverty level, in near-poverty, and greater than 150 percent of the poverty level did not differ substantively. For both rural and urban bachelor’s degree students, 30 percent were in or near poverty, and 70 percent had total earnings for the family that exceeded 150 percent of the poverty level.

On the other hand, rural ACD students were less likely than urban students to be in poor households (see Figure 12). Close to two-fifths of rural associate and certificate/diploma students (37 percent and 39 percent, respectively) were in this category, compared to 44 percent and 55 percent of urban associate degree and certificate/diploma students, respectively. On the other hand, rural ACD students were more likely than comparable urban students to have household income above 150 percent of the poverty level. Between 47 and 48 percent of rural associate degree and certificate/diploma students were in families whose total earnings were greater than 150 percent of the poverty level, compared to 41 and 32 percent of urban associate degree and certificate/diploma students, respectively.

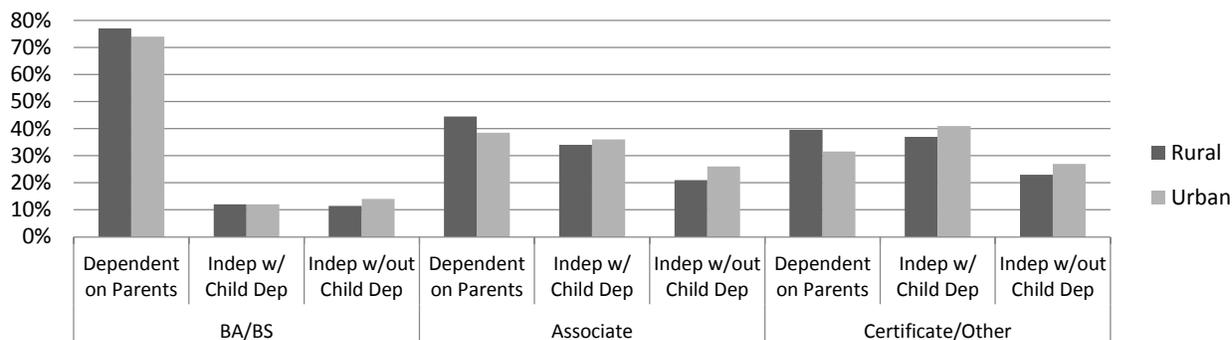
Figure 12: Poverty Status of Rural and Urban Students by Postsecondary Plans



Rural bachelor’s degree, associate degree, and certificate/diploma students were more likely than comparable urban students to be financially dependent on their parents (see Figure 13). The percentages are as follows: 77 percent of rural and 74 percent of urban bachelor’s degree students; about 45 percent of rural and 39 percent of urban associate degree students; and 40 percent of rural and 32 percent of urban certificate/diploma students. At the same time, urban students were more likely to be financially independent (with no child dependents) than rural students.

Among certificate/diploma students, urban students were more likely to be independent with at least one child dependent than their rural counterparts (41 percent and 37 percent, respectively). The difference for associate degree students was small: 36 percent of urban students compared to 34 percent for rural students. About the same percentage of rural and urban bachelor’s degree students were independent with at least one dependent (12 percent).

Figure 13: Dependency Status of Rural and Urban Students by Postsecondary Plans



Differences between rural and urban counties: Prevalence of students pursuing bachelor’s degrees, associate degrees, and certificates/diplomas

On average, about 2,900 Pennsylvania FAFSA applications for 2010-11 were from rural county applicants, compared to an average of about 25,000 from urban county applicants. The median values were somewhat lower than the mean values, indicating that some counties had a large number of applications relative to the other rural and urban counties. The average rural county only had four FAFSA applicants for every 100 persons in the county, whereas the average urban county had five FAFSA applicants for every 100 persons. The rural-urban county difference in the number of FAFSA applicants per capita (0.0379 versus 0.0495) is statistically significant ($p < 0.05$). Table 8 provides descriptive statistics on the number of 2010-11 applications from rural and urban counties.

Table 8: Number of 2010-11 FAFSA Applications from Rural and Urban Counties

	Rural Counties (n=48)	Urban Counties (n=19)
<i>Total for County</i>		
Mean	2,879.6	24,879.2
Median	2,143.5	17,743.0
Standard Deviation	2,206.27	21,186.41
Minimum	76	5,253
Maximum	8,857	94,049
<i>Per Capita, Mean</i>	0.0379	0.0495

The percentage of students planning to enroll in bachelor’s degree, associate degree, and certificate/diploma in each county was calculated; students who planned to pursue a non-degree teaching credential or participate in some other program were excluded. On average, 2,698 bachelor’s degree, associate degree, and certificate/diploma applicants came from rural counties and 22,740 came from urban counties.

On average, among rural counties, 63 percent of FAFSA applicants were from bachelor’s degree students, 29 percent were from associate degree students, and 8 percent were from certificate/diploma students, accounting for differences across counties in the number of bachelor’s degree, associate degree, and certificate/diploma applicants (these are referred to as “adjusted means”). The results for urban counties were similar and did not differ significantly from those for rural counties ($p>0.05$). Results are presented in Table 9.

Table 9: Prevalence of Bachelor’s degree, Associate Degree, and Certificate/Diploma Students in Rural and Urban Counties, Adjusting for Number of Applications from the County

	Rural Counties (n=48)	Urban Counties (n=19)
	Adjusted Mean ^a	Adjusted Mean ^a
Percent of Bachelor’s degree Students	62.8%	62.3%
Percent of Associate Degree Students	29.4%	30.0%
Percent of Certificate/Diploma Students	7.7%	7.6%
^a Adjusted for differences across counties in the number of bachelor’s degree, associate degree, and certificate/diploma applicants.		

Counties with a higher percentage of bachelor’s degree FAFSA applicants had significantly lower percentages of associate degree and certificate/diploma applicants, accounting for differences across counties in the number of bachelor’s degree, associate degree, and certificate/diploma applicants, and whether the county is rural or urban. On the other hand, counties with a higher percentage of associate degree applicants also had a higher percentage of certificate/diploma applicants.

Table 10 provides a pictorial summary of results from statistical analyses used to determine whether there was a statistically significant relationship between the prevalence of bachelor's degree, associate degree, and certificate/diploma students in the county and socio-economic and educational characteristics of the county, including county-level aggregate measures of FAFSA applicants and 2009-10/2010-11 school year data from the National Center for Education Statistics (NCES).⁸ Results that are statistically significant ($p < .05$) or that tend towards significance ($p < .10$) are presented in Table 10.

Consistent with the results discussed previously, a higher percentage of bachelor's degree applicants in the county was significantly related to a higher percentage of FAFSA applicants in families with total earnings greater than 150 percent of the poverty level, and a lower percentage of applicants whose families were in poverty or near-poverty. On the other hand, a higher percentage of associate degree FAFSA applicants in the county was significantly related to a lower percentage of applicants in families with total earnings greater than 150 percent of the poverty level, and a higher percentage of applicants whose families were 150 percent or less of the poverty level.

The percentage of certificate/diploma applicants in the county was not significantly related to the percentage of applicants in poverty. However, there was a weak tendency for counties with a higher percentage of certificate/diploma applicants to follow the same pattern as counties with a higher percentage of associate degree applicants ($p < 0.11$).

Similarly, counties with a higher percentage of applicants pursuing a bachelor's degree had smaller percentages of applicants with a GED diploma or who were adult learners. Counties with a

⁸ Partial correlation coefficients were calculated. These correlations accounted for differences across counties in the number of FAFSA applicants and whether the county is rural or urban.

higher percentage of applicants pursuing an associate degree or a certificate/diploma had significantly higher percentages of applicants who were GED recipients or adult learners.

Counties with a higher percentage of applicants pursuing a bachelor's degree had more educated populations, whereas the population of counties with higher percentages of associate degree or a certificate/diploma applicants had less formal education. Specifically, the percentage of bachelor's degree applicants was significantly related to a higher percentage of the population 25 and older with at least a high school degree or at least a bachelor's degree, and enrolled in college or graduate school. These findings were the in the opposite direction for counties with higher percentages of applicants pursuing an associate degree or a certificate/diploma. That is, counties with a higher percentage of applicants pursuing an associate degree or certificate/diploma had a lower percentage of the population 25 and older with at least a high school degree or at least a bachelor's degree, and enrolled in college or graduate school.

Counties with a higher percentage of unemployed people in the labor force were more likely to have a higher percentage of associate degree FAFSA applicants and a lower percentage of bachelor's degree applicants. However, unemployment rates were unrelated to the county percentage of certificate/diploma applicants. The percentages of applicants in bachelor, associate, and certificate/diploma programs were unrelated to the percentages in the county who worked full-time, either in terms of working 50 to 52 weeks, or who worked 35 or more hours per week.

A higher prevalence of FAFSA applicants pursuing a bachelor's degree was significantly associated with counties having a higher median family income. Also, there was a tendency for counties with a greater prevalence of bachelor's degree applicants to have a lower percentage of the population with incomes less than 150 percent of the poverty level. In contrast, counties with higher percentages of applicants pursuing an associate degree or a certificate/diploma had

significantly lower median family incomes. The percentage of applicants pursuing an associate degree or a certificate/diploma was unrelated to the percentage of the population with an income less than 150 percent of the poverty level. Also, the percentages of bachelor's degree, associate degree, and certificate/diploma applicants were unrelated to the county poverty level.

The average student-teacher ratio for school systems in the county was calculated. Counties with higher percentages of certificate/diploma applicants had higher mean student-teacher ratios in the county districts. On the other hand, there was a tendency for counties with higher percentages of bachelor's degree applicants to have lower mean student-teacher ratios. The ratio was unrelated to the percentage of associate degree applicants. To determine if the association between the average student-teacher ratio and the prevalence of bachelor's degree and certificate/diploma students was due to the county's wealth or educational level, statistical analyses were conducted that accounted for differences between counties in median family income and the percentage with a bachelor's degree or higher. In fact, accounting for differences across counties in either income or college education erased the association between average student-teacher ratio and the prevalence of bachelor's degree FAFSA students, indicating that that association illustrated in Table 10 may stem from the county's wealth or educational level.

Accounting for differences across counties in median family income had minimum impact on the association between the percentage of certificate/diploma FAFSA applicants and the county's average student-teacher ratio. Also, accounting for differences across counties in the percentage of the county population with at least a bachelor's degree had a bigger impact on the association, although there was still a tendency for counties with higher percentages of certificate/diploma applicants to have higher mean student-teacher ratios in county school districts.

Table 10: Statistically Significant Relationships between Prevalence of Degree Type Being Pursued in the County and County Characteristics, Accounting for Whether County is Rural or Urban, and Number of FAFSA Applicants in County (n=67)^a

County Characteristics	Percent of Students Pursuing ...		
	Bachelor's Degree	Associate Degree	Certificate/Diploma
	Direction of Relationship between County Characteristic and % of FAFSA Applicants ^a		
Characteristics of FAFSA Applicants from County			
% in Families with Total Earnings Below Poverty Level	↓**	↑**	–
% in Families with Total Earnings Between Poverty and 150% of Poverty Level	↓**	↑*	↑ ⁺
% in Families with Total Earnings above 150% of Poverty Level	↑***	↓**	↓ ⁺
% with GED Diploma	↓***	↑***	↑**
% of Adult Learners	↓***	↑***	↑***
Socio-economic Characteristics of County			
% with High School Degree or Higher (population 25 yrs. and older)	↑***	↓***	↓***
% with Bachelor's Degree or Higher (population 25 yrs. and older)	↑***	↓***	↓***
% of County Population Enrolled in College or Graduate School	↑***	↓***	↓*
% Unemployed in the Labor Force	↓*	↑*	–
Median Family Income	↑***	↓***	↓*
% in County Below 150% of Poverty Level (for whom poverty status was determined)	↓ ⁺	–	–
Characteristics of County School System			
Student-Teacher Ratio in County School Districts (mean across districts)	↓ ^{+b}	–	↑*
<p>^a An up-arrow (↑) is shown when the percentage of FAFSA applicants increases as the county characteristic increases. A down-arrow (↓) is shown when the percentage of FAFSA applicants decreases as the county characteristic increases (or vice versa). When the association between the percentage of FAFSA applicants and the county characteristic is not statistically significant, a horizontal line is shown (–).</p> <p>^b Statistically adjusting for differences across counties in median family income or the percentage of the population 25 years and older with at least a bachelor's degree, as well as the number of FAFSA applicants and whether the county is rural or urban, resulted in this association becoming non-statistically significant.</p> <p>+ p<0.10 * p<0.05 ** p<0.01 *** p<0.001</p>			

County Influence on Educational Financial Need

Two sets of measures were used to measure educational financial need in counties. The first set of variables includes mean EFC, mean total AGI, and mean total earnings for the county; the

mean was calculated from FAFSA applicants residing in that county, and refers to the EFC, total AGI and total earnings for the FAFSA applicant's family. The second set of variables is the percentage of FAFSA applicants from the county in families below poverty, in near-poverty, and greater than 150 percent of the poverty level. Lower values of mean EFC, total AGI, and total earnings indicate more educational financial need in the county. Larger percentages of FAFSA applicants from the county in poverty or near-poverty indicate more educational financial need at the county level. Conversely, a higher percentage of FAFSA applicants in families with incomes above 150 percent of the poverty level reflects less educational financial need at the county level.

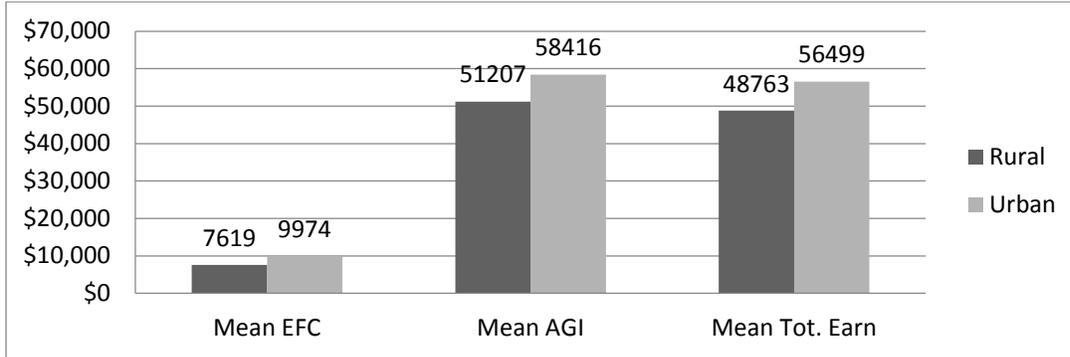
Differences between results from the individual-level analyses and the county-level analyses reflect different units of analysis. For the county-level analyses, individual results are aggregated to the county level, which can obscure individual differences. The value of the county-level analyses is that the results reveal trends among groups of individuals who are in geographical proximity to one another, that is, they form a type of community.

Relationship between county educational financial need and county characteristics

Independent t-tests were used to determine whether mean EFC, total AGI, and total earnings from FAFSA applicants differed for rural counties (n=48) and urban counties (n=19). Statistical tests with p-values of 0.05 or less ($p < 0.05$) are considered statistically significant.

Mean EFC, total AGI, and total earnings for rural counties were significantly less than that for urban counties. Results are illustrated in Figure 14.

Figure 14: Measures of Educational Financial Need for Rural and Urban Pennsylvania Counties



Differences between rural and urban counties in the percentage of FAFSA applicants in families with total earnings below the poverty level, in near-poverty, and greater than 150 percent of the poverty level were examined using analysis of covariance (see Table 11). The total number of FAFSA applicants in the county for whom poverty data were available was accounted for in the calculations.

On average, rural counties had a significantly higher percentage of FAFSA applicants below the poverty level than urban counties (35 percent and 30 percent, respectively). Rural counties also had a significantly higher percentage of applicants in near-poverty, on average, than urban counties (12 percent and 10 percent, respectively). On the other hand, urban counties had, on average, a significantly greater percentage of applicants in families with total earnings more than 150 percent of the poverty level (59 percent versus 53 percent).

Table 11: Mean Percentage of FAFSA Applicants by Poverty Level for Rural and Urban Pennsylvanian Counties, Adjusting for Number of FAFSA Applicants with Poverty Data in County

	Rural (n=48)	Urban (n=19)		
Percentage of FAFSA Applicants from County with Total Earnings ...	Mean Percent		F (df=1,64)	p-value
<= (less than/equal to) Poverty Level	35.4	30.4	7.841	0.007
> (greater than) Poverty Level But <= 150% of Poverty Level	11.8	10.3	10.237	0.002
> 150% of Poverty Level	52.8	59.3	10.772	0.002

These results indicate that Pennsylvania's rural counties exhibit greater educational financial need, on average, than urban counties. However, different groups of FAFSA students may be experiencing differing levels of educational financial need. For instance rural bachelor's degree students were in families with lower incomes and lower EFC (i.e., greater educational financial need), on average, than urban students, although the percentage in poverty did not differ. On the other hand, rural ACD students experienced less educational financial need than comparable urban students. In the subsequent analyses, the county measures of educational financial were broken down by educational financial need of its FAFSA applicants planning to pursue a bachelor's degree, an associate degree, and a certificate/diploma.

Table 12 presents the mean EFC, total AGI, and total earnings of FAFSA applicants from rural and urban counties. The results from independent t-tests indicate that differences between rural and urban counties were primarily driven by differences between FAFSA applicants pursuing a bachelor's degree. Rural counties' mean EFC, total AGI, and total earnings from bachelor's degree students were significantly lower than that of urban counties. Conversely, rural counties' mean total AGI from certificate/diploma students was significantly higher than that of urban counties. However, differences between rural and urban counties in the mean EFC, total AGI, and total earnings from associate degree students, and the mean EFC and total earnings from certificate/diploma students did not differ significantly.

Table 12: Mean EFC, Mean Total AGI, and Mean Total Earnings of Bachelor’s degree, Associate Degree, and Certificate/Diploma Students for Rural and Urban Pennsylvania Counties

	Rural (n=48)	Urban (n=19)		
Educational Financial Need of FAFSA Applicants from County ...	Mean (in \$)		t; df	p-value
Bachelor’s degree Applicants				
Mean EFC	9,441.6	13,154.2	4.454; 22.7 ^a	<0.001
Mean Total AGI	62,506.3	76,700.4	5.028; 65	<0.001
Mean Total Earnings	59,979.9	74,431.5	5.161; 65	<0.001
Associate Degree Applicants				
Mean EFC	4,507.0	4,817.2	1.099; 65	0.276
Mean Total AGI	36,140.9	36,346.8	0.150; 65	0.881
Mean Total Earnings	33,851.7	34,897.5	0.744; 65	0.460
Certificate/Diploma Applicants				
Mean EFC	4,790.6	4,528.1	-0.593; 65	0.556
Mean Total AGI	35,327.6	32,065.6	-2.126; 65	0.037
Mean Total Earnings	32,086.1	30,122.3	-1.207; 24.8 ^a	0.239
^a Levene's test for equality of variances was rejected and the separate-variances t tests was used to test for equality of means.				

Table 13 reports the differences between rural and urban counties in the percentage of FAFSA applicants in families with total earnings below the poverty level, between the poverty level and 150 percent of the poverty level, and greater than 150 percent of the poverty level (separately for bachelor’s degree students, associate degree students, and certificate/diploma students), using analysis of covariance. The total number of bachelor’s degree, associate degree, or certificate/diploma FAFSA applicants in the county for whom poverty data were available was statistically adjusted for (i.e., controlled), respectively, in the associated analyses.

Table 13: Mean Percentage of Bachelor’s degree, Associate Degree, and Certificate/Diploma Students by Poverty Level for Rural and Urban Pennsylvanian Counties, Adjusting for Number of Students with Poverty Data in County

	Rural (n=48)	Urban (n=19)		
	Mean Percent, Adjusted for Number of Applicants with Data		F (df=1,64)	p-value
Percentage of <i>Bachelor’s</i> Degree Students from County with Total Earnings ...				
<= (less than/equal to) Poverty Level	25.6	18.4	15.810	<0.001
> (greater than) Poverty Level But <= 150% of Poverty Level	11.1	8.9	11.915	0.001
> 150% of Poverty Level	63.4	72.7	18.200	<0.001
Percentage of <i>Associate</i> Degree Students from County with Total Earnings ...				
<= (less than/equal to) Poverty Level	46.4	42.0	3.954	0.051
> (greater than) Poverty Level But <= 150% of Poverty Level	13.9	13.6	0.341	0.561
> 150% of Poverty Level	40.0	44.5	5.569	0.021
Percentage of <i>Certificate/Diploma</i> Students from County with Total Earnings ...				
<= (less than/equal to) Poverty Level	47.8	48.2	0.036	0.850
> (greater than) Poverty Level But <= 150% of Poverty Level	13.6	12.9	0.263	0.610
> 150% of Poverty Level	39.4	38.9	0.043	0.835

These results indicate that, again, the difference between rural and urban counties in the percentage of FAFSA applicants in poverty (based on their family’s income) was primarily driven by the percentage of bachelor’s degree students in poverty. Compared to urban counties, rural counties had a significantly higher percentage of bachelor’s degree students in families with total earnings below the poverty level and a significantly higher percentage of bachelor’s degree students in families between the poverty level and 150 percent of the poverty level, on average. Conversely, rural counties had a significantly lower percentage of bachelor’s degree students in families with incomes above 150 percent of the poverty level. In sum, urban counties had fewer bachelor’s degree students in poverty or near-poverty.

The same pattern distinguished rural and urban counties in terms of the poverty level of associate degree students, although the differences were not as marked as the differences among

bachelor's degree students. However, rural and urban counties did not differ significantly in terms of the poverty level associated with certificate/diploma students.

Due to the differences between rural and urban counties in aggregate measures of educational financial need, separate analyses examining the relationship between the county's educational financial need (as measured from FAFSA data), and socio-economic and educational characteristics of the county are reported separately for rural and urban counties. The results for rural and urban counties that were statistically significant ($p < .05$) or that tended toward significance ($p < 0.10$) are presented in Tables 14 and 15, respectively.

Rural Counties. There was a weak tendency for mean EFC, total AGI, and total earnings among rural counties to be positively related to the county population ($p < 0.11$). In addition, rural counties with larger populations had a significantly smaller percentage of FAFSA applicants with incomes below the poverty level. Also, more populated rural counties tended to have a larger percentage of FAFSA applicants with incomes above 150 percent of the poverty level ($p < 0.06$). These results indicate that educational financial need was inversely related to rural county size.

Also, rural counties with a less educated population were significantly more likely to have greater educational financial need, whereas those with higher levels of educational attainment had less educational financial need. Specifically, rural counties with a smaller percentage of the population with at least a high school degree had significantly lower values for mean EFC, total AGI, and total earnings. Moreover, the percentage of the population with a bachelor's degree or higher was significantly related not only to mean EFC, total AGI, and total earnings for the county, but also to the percentage of FAFSA applicants in poverty. Specifically, rural counties with a lower percentage of the population with at least a bachelor's degree had a larger percentage of FAFSA applicants with incomes below poverty, and a smaller percentage with incomes above 150 percent

of the poverty level. In addition, rural counties with a smaller percentage of the population enrolled in college or graduate school had lower values for mean EFC, total AGI, and total earnings. There was no relationship between the percentage of the population enrolled in grades 9 through 12 and the county's educational financial need.

The percentage of the county's population who were unemployed was significantly related to educational financial need. A higher percentage of unemployed in the population was related to a significantly lower mean EFC, total AGI, and total earnings for the county. Also, a higher percentage unemployed in the county was related to a higher percentage of FAFSA applicants below the poverty level, and a lower percentage with incomes greater than 150 percent of the poverty level.

In addition, lower percentages of the population (16 to 64) who worked full-time (50 to 52 weeks or who usually worked at least 35 weekly hours) were related to greater educational financial need. Specifically, rural counties with fewer residents working full-time had significantly lower values for mean EFC, total AGI, and total earnings. A smaller percentage of full-time workers in the county was also related to a larger percentage of FAFSA applicants below the poverty level and a smaller percentage with incomes above 150 percent of poverty.

FAFSA applicants from rural counties with lower median family incomes and higher percentages in poverty had significantly greater educational financial need. Specifically, mean EFC, total AGI, and total earnings were lower in rural counties with lower median family incomes, and higher percentages of the county population in poverty or near-poverty. Also, a greater percentage of the county's FAFSA applicants were below the poverty level, and a smaller percentage were in families with incomes exceeding 150 percent of the poverty level in rural counties with lower

median family incomes and greater percentages of the population below the poverty level and 150 percent of the poverty level.

Rural counties with lower median family incomes also had a greater percentage of FAFSA applicants in families with incomes between the poverty level and 150 percent of the poverty level. There was a tendency for rural counties with a greater percentage of the population below 150 percent of the poverty level to also have a greater percentage of FAFSA applicants in this category ($p < 0.10$). However the percentage of the county population in poverty was unrelated to the percentage of FAFSA applicants in families with incomes between the poverty level and 150 percent of the poverty level.

Within rural counties, the mean student-teacher ratio across school districts was unrelated to all measures of educational financial need.

Table 14: Statistically Significant Relationships Between Measures of County’s Educational Financial Need from FAFSA Data and County Characteristics: Rural Counties (n=48)^a

	Mean EFC	Mean Total AGI	Mean Total Earnings	Mean %: <= Poverty Level	Mean %: > Poverty and <= 150% of Poverty Level	Mean %: > 150% of Poverty Level
	Direction of Relationship Between County Characteristic and Mean Educational Need ^a			Direction of Relationship Between County Characteristic and % of FAFSA Applicants ^a		
County Population, as of 4/1/10 (U.S. Census)	↑ ⁺	–	↑ ⁺	↓ [*]	–	↑ ⁺
County Socio-economic Characteristics						
% with a High School Degree or Higher (population 25 yrs. and older)	↑ ^{**}	↑ ^{**}	↑ ^{**}	–	–	–
% with a Bachelor’s Degree or Higher (population 25 yrs. and older)	↑ ^{***}	↑ ^{***}	↑ ^{***}	↓ ^{**}	–	↑ ^{***}
% of County Population Enrolled in College or Graduate School	↑ [*]	↑ ⁺	↑ [*]	–	–	–
% Unemployed in the Labor Force	↓ [*]	↓ [*]	↓ [*]	↑ ^{**}	–	↓ ^{**}
% Who Worked 50-52 Weeks (population 16-64 yrs.)	↑ ^{**}	↑ ^{**}	↑ [*]	↓ ^{**}	–	↑ [*]
% Who Usually Worked 35 or More Hours Per Week (population 16-64 yrs.)	↑ [*]	↑ [*]	↑ [*]	↓ ^{**}	–	↑ [*]
Median Family Income	↑ ^{***}	↑ ^{***}	↑ ^{***}	↓ ^{***}	↓ [*]	↑ ^{***}
% in County Below Poverty Level (for whom poverty status was determined)	↓ ^{**}	↓ ^{**}	↓ ^{**}	↑ ^{**}	–	↓ ^{**}
% in County Below 150 Percent of the Poverty Level (for whom poverty status was determined)	↓ ^{***}	↓ ^{***}	↓ ^{***}	↑ ^{***}	↑ ⁺	↓ ^{***}

^a An up-arrow (↑) is shown when the percentage of FAFSA applicants increases as the county characteristic increases. A down-arrow (↓) is shown when the percentage of FAFSA applicants decreases as the county characteristic increases (or visa versa). When the association between the percentage of FAFSA applicants and the county characteristic is not statistically significant, a horizontal line is shown (–).

+ p<0.10
 * p<0.05
 ** p<0.01
 *** p<0.001

Comparison of rural and urban counties. The results from the statistical analyses measuring the relationship between county-level educational financial need and socio-economic and educational characteristics are reported for urban counties in Table 15. These results mostly mirror those of rural counties, with the following exceptions⁹. In contrast to rural counties, the population size of urban counties was unrelated to mean EFC, total AGI, and total earnings of FAFSA applicants from that county. However, the percentages of FAFSA applicants in families in poverty, near-poverty, or greater than 150 percent of the poverty level were strongly associated with population size. Similar to rural counties, urban counties with smaller populations had a larger percentage of applicants in poverty or near-poverty and a smaller percentage with incomes more than 150 percent of the poverty level.

Despite the similarities between rural and urban counties in the relationship between county-level educational attainment and educational financial need among FAFSA applicants, there were several marked differences. First, in urban counties the percentage of residents (aged 25 and over) with at least a high school diploma and the percentage with at least a bachelor's degree appear to be more strongly related to the poverty level of the county's FAFSA applicants. Urban counties with a smaller percentage of residents with at least a high school diploma and at least a bachelor's degree had larger percentages of their FAFSA applicants in poverty or near-poverty (than urban counties with larger percentages having at least a high school diploma or at least a bachelor's degree). These counties also had smaller percentages of their FAFSA applicants in families with incomes exceeding 150 percent of the poverty level. A second difference is that the relationship between these two measures of educational attainment and the percentage of the FAFSA

⁹ Analyses were repeated after excluding Philadelphia County to assess its impact on results reported here. Results were consistent, although many of the coefficients did not have as strong of a p-value.

applicants in families with incomes between poverty and 150 percent of the poverty level was statistically significant for urban counties but not rural counties.

A third difference between rural and urban counties is that the percentage of the county population enrolled in college or graduate school was unrelated to all measures of educational financial need in urban counties. In contrast, among rural counties, this measure was (positively) related to mean EFC, total AGI, and total earnings for the county. Finally, among urban counties the percentage of the county population in grades 9 through 12 was negatively related to the percentage of FAFSA applicants between poverty and 150 percent of the poverty level, meaning counties with smaller percentages of the population in high school had a larger percentage of FAFSA applicants between poverty and 150 percent of poverty.

Among the county-level employment variables, the primary rural-urban difference was that labor force participation was negatively related to the percentage of FAFSA applicants between poverty and 150 percent of the poverty level in urban counties but not in rural counties. This means that urban counties with higher unemployment and a smaller percentage of full-time workers (i.e., less labor force participation) had a larger percentage of FAFSA applicants in families with incomes between poverty and 150 percent of the poverty level.

Similarly, the primary rural-urban difference in economic well-being (median family income and the two measures of poverty in the county) was that these variables were also related to the percentage of FAFSA applicants between poverty and 150 percent of the poverty level. Counties with lower economic well-being had a larger percentage of FAFSA applicants in near-poverty. Rural counties did not show a consistent pattern between measures of economic well-being and this measure of educational financial need.

In urban counties, the mean student-teacher ratio across county school districts tended to be negatively related to mean EFC ($p < 0.10$). This means that counties with higher mean student-teacher ratios had a lower mean EFC among FAFSA applicants (i.e., greater educational financial need). The correlations between the other measures of educational financial need and mean student-teacher ratio were consistent with the conclusion that counties with higher mean student-teacher ratios had greater educational financial need, although the p-values were not statistically significant ($p < 0.15$). In contrast, in rural counties, mean student-teacher ratios were unrelated to all measures of educational financial need among FAFSA applicants.

Table 15: Statistically Significant Relationships between Measures of County’s Educational Financial Need and County Characteristics: Urban Counties (n=19)^a

	Mean EFC	Mean Total AGI	Mean Total Earnings	Mean %: <= Poverty Level	Mean %: > Poverty and <= 150% of Poverty Level	Mean %: > 150% of Poverty Level
	Direction of Relationship Between County Characteristic and Mean Educational Need ^a			Direction of Relationship Between County Characteristic and % of FAFSA Applicants ^a		
County Population, as of 4/1/10 (U.S. Census)	-	-	-	↓***	↓**	↑***
County Socio-economic Characteristics						
% with a High School Degree or Higher (population 25 yrs. and older)	↑**	↑***	↑***	↓**	↓*	↑**
% with a Bachelor’s Degree or Higher (population 25 yrs. and older)	↑***	↑***	↑***	↓***	↓***	↑***
% of County Population Enrolled in Grades 9-12	-	-	-	-	↓*	-
% Unemployed in the Labor Force	↓**	↓**	↓**	↑***	↑*	↓***
% Who Worked 50-52 Weeks (population 16-64 yrs.)	↑**	↑**	↑**	↓***	↓**	↑***
% Who Usually Worked 35 or More Hours Per Week (population 16-64 yrs.)	↑***	↑***	↑***	↓***	↓***	↑***
Median Family Income	↑***	↑***	↑***	↓***	↓***	↑***
% in County Below Poverty Level (for whom poverty status was determined)	↓***	↓***	↓***	↑***	↑***	↓***
% in County Below 150% of the Poverty Level (for whom poverty status was determined)	↓***	↓***	↓***	↑***	↑***	↓***
Characteristics of County School System						
Student-Teacher Ratio in County School Districts (mean across districts)	↓ ⁺	-	-	-	-	-

^a An up-arrow (↑) is shown when the percentage of FAFSA applicants increases as the county characteristic increases. A down-arrow (↓) is shown when the percentage of FAFSA applicants decreases as the county characteristic increases (or visa versa). When the association between the percentage of FAFSA applicants and the county characteristic is not statistically significant, a horizontal line is shown (-).

+ p<0.10
 * p<0.05
 ** p<0.01
 *** p<0.001

Educational financial need for beginning and continuing postsecondary students

On average, 30 percent of the FAFSA applicants in rural counties were beginning postsecondary students, compared to 29 percent in urban counties. This includes students at all types of postsecondary institutions. On average, 16 percent and 17 percent of postsecondary students in rural and urban counties, respectively, had attended college before but were still in their first year as an undergraduate (i.e., 1st year/continuing students). On average, about one-fifth of postsecondary students were 2nd year/sophomore students in rural and urban counties (each about 23 percent). The mean percentage of 3rd year/junior students was 16 percent for rural and 17 percent for urban counties. The mean percentage of 4th year/senior and 5th year undergraduates was 15 percent in both rural and urban counties.

Independent t-tests and analysis of covariance were used to test whether the educational financial need characterizing the county's beginning postsecondary students differed from that of the county's continuing students. Separate analyses were conducted for rural and urban counties. Figures 15, 16, and 17 illustrate the mean EFC, total AGI, and total earnings, respectively, of beginning and continuing postsecondary students for rural and urban counties. Continuing students were disaggregated by their year of postsecondary study.

The results for mean EFC, total AGI, and total earnings were consistent. Mean EFC, total AGI, and total earnings of both rural and urban counties associated with beginning postsecondary students were significantly higher than that associated with 1st year/continuing students. On the other hand, the county's mean EFC, total AGI, and total earnings associated with rural and urban beginning postsecondary students were significantly lower than that associated with all other continuing students. This means that the county's educational financial need associated with its beginning postsecondary students was significantly higher than the educational financial need of its

continuing postsecondary students, except for that associated with 1st year/continuing students. The county’s educational financial need associated with its 1st year/continuing students was significantly higher than the need associated with beginning postsecondary students. These results are consistent, for the most part, with the individual-level results for beginning and continuing students reported earlier. Differences may be due to the fact that the analyses reported earlier grouped all continuing postsecondary students. However, the county-level results suggest that the educational financial need of 1st year/continuing students may be lower than that for all other undergraduate students (beginning and continuing).

Figure 15: Mean EFC of Rural and Urban Counties: Beginning and Continuing Students

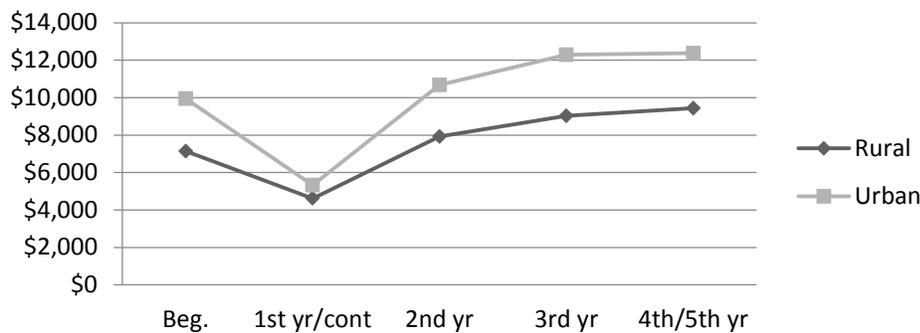


Figure 16: Mean Total AGI of Rural and Urban Counties: Beginning and Continuing Students

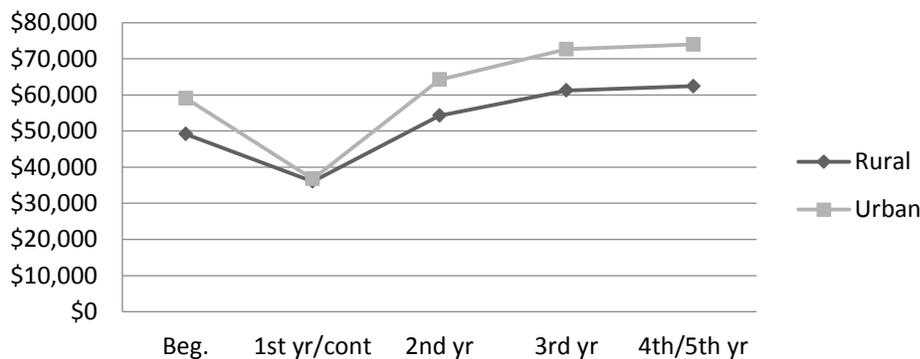
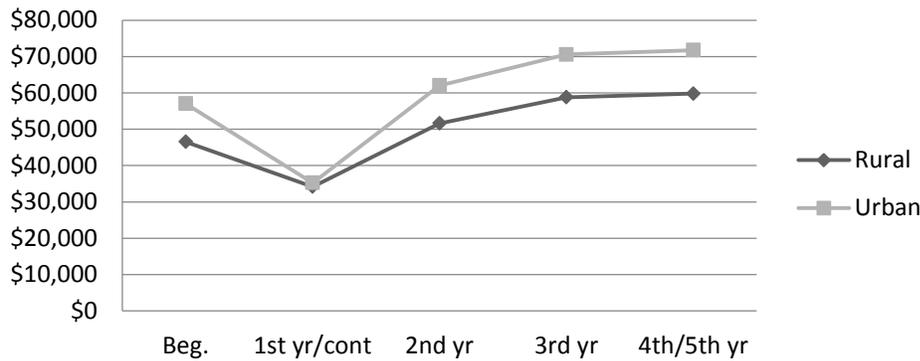


Figure 17: Mean Total Earnings of Rural and Urban Counties: Beginning and Continuing Students



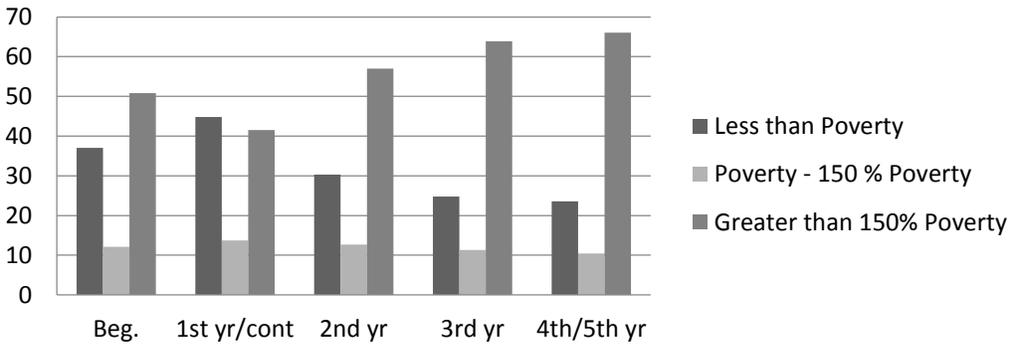
Results from independent t-tests indicate that rural counties' mean EFC, total AGI, and total earnings associated with beginning and all continuing students, except 1st year/continuing students, were significantly lower than that for urban counties. For 1st year/continuing students, the mean EFC tended to be lower in rural counties, but rural and urban counties did not differ on the mean total AGI or earnings for this group.

Figure 18 presents, for rural counties, the mean percentage of beginning and continuing FAFSA applicants in families with total earnings that were less than the poverty level, between poverty and 150 percent of poverty, and greater than 150 percent of the poverty level. On average, rural counties had a significantly larger percentage of beginning postsecondary students below poverty than continuing students, with the exception of 1st year/continuing students. On average in rural counties, the percentage of 1st year/continuing students below the poverty level was greater than the percentage for beginning students.

The mean percentage of beginning students in rural counties in near-poverty was significantly greater than the mean percentage for fourth and fifth year students, and tended to be greater than the mean percentage for third year students ($p < 0.08$). Again, the mean percentage of 1st year/continuing students in near-poverty was greater than that for beginning students.

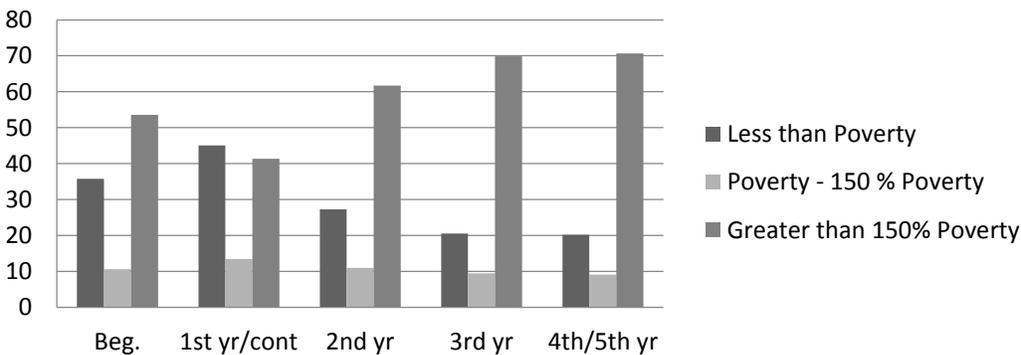
On the other hand, the mean percentage of second year and higher continuing students in families with incomes above 150 percent of the poverty level was significantly greater than the percentage for beginning students. The mean percentage of beginning students in families with incomes above 150 percent of the poverty level was greater than for 1st year/continuing students.

Figure 18: Mean Percentage of Beginning and Continuing Students below Poverty: Rural Counties



For the most part, the results for urban counties are similar to those for rural counties (see Figure 19). Rural counties had significantly larger percentages of postsecondary students below the poverty level and in near-poverty for all postsecondary grade levels, except 1st year/continuing. Conversely, urban counties had significantly larger percentages, on average, of students in families with incomes greater than 150 percent of the poverty level than rural counties.

Figure 19: Mean Percentage of Beginning and Continuing Students below Poverty: Urban Counties



The results reported in this section indicate that the county’s educational financial need associated with beginning students was greater than the need associated with 2nd year and higher postsecondary students. However, the county’s need associated with 1st year/continuing students was greater than that for beginning students. Also, rural counties had greater levels of educational financial need than urban counties for students at all undergraduate grade levels, except 1st year/continuing students. On average, about 16 percent of postsecondary students in rural and urban Pennsylvania counties were 1st year/continuing students.

Profiles of GED Recipients and Adult Learners

GED FAFSA applicants

Table 16 provides a snapshot of the socio-demographic, household structure and family, and financial characteristics of rural and urban applicants with a GED diploma. In all, 44,448 GED recipients submitted a FAFSA for 2010-11. As reported in Tables 4 and 5, GED recipients comprise about 7 percent of rural applicants, compared with about 8 percent of urban students. The percentages of non-GED students are presented in the table to aid comparisons between GED and non-GED applicants. Due to the large number of data records for both rural and urban FAFSA applicants, only differences with a p-value less than 0.0001 ($p < 0.0001$) are considered statistically significant.

Table 16: Summary of Profiles for Rural and Urban GED and Non-GED FAFSA Applicants

	GED Rural FAFSA Applicants ^a	Non-GED Rural FAFSA Applicants ^b	GED Urban FAFSA Applicants ^c	Non-GED Urban FAFSA Applicants ^d
Postsecondary Educational Plans				
Year in Postsecondary School – Total				
Never Attended College and 1 st Year Undergraduate	43%	29%	41%	28%
Attended College Before and 1 st Year Undergraduate	30%	15%	32%	17%

	GED Rural FAFSA Applicants ^a	Non-GED Rural FAFSA Applicants ^b	GED Urban FAFSA Applicants ^c	Non-GED Urban FAFSA Applicants ^d
2 nd Year Undergraduate/sophomore	17%	23%	16%	22%
3 rd Year Undergraduate/junior	7%	17%	7%	17%
4 th Year Undergraduate/senior	3%	12%	3%	12%
5 th Year Undergraduate	1%	4%	1%	4%
Degree or Certificate Being Pursued in 2010-11 School Year – Total				
Bachelor’s degree	26.5%	62.5%	24%	62.5%
Associate Degree (Occupational or Technical Program)	40%	19%	33%	15%
Associate Degree (General Ed or Transfer Program)	13.5%	7%	18%	10%
Certificate or Diploma (Program of <2 Years)	12%	5%	17%	7%
Certificate or Diploma (Program of 2+ Years)	3%	2%	3%	2%
Teaching Credential (Non-degree Program) or Other	6%	4%	5.5%	4%
Type of Postsecondary School Receiving FAFSA Report for 2010-11 School Year				
4-Year Private	7%	17%	10%	21%
4-Year Public	14%	40.5%	5%	28%
Community College	20%	12.5%	38%	23%
Other	38.5%	21%	23%	19%
Technical School	21%	9%	24%	10%
Enrollment Status in 2010-11 – Total				
Full-time	86%	91%	81%	88%
Half-time	13.5%	8%	17%	11%
Less than Half-Time	1%	1%	2%	1%
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11				
On Campus	3%	27%	3%	25.5%
With Parents	11%	23%	11%	23%
Off Campus	85%	49.5%	86%	52%
Already Has a Bachelor’s degree	0.5%	2%	0.6%	2%
Socio-demographic Characteristics				
Gender – Male	36%	41%	39%	41%
Applicant’s Marital Status – Single	54%	82%	71%	86%
Military Veteran	2%	2%	2%	1%
Age (mean)	31 yrs.	23.5 yrs.	31 yrs.	24 yrs.
Born Before January 1, 1987 (Adult Learner)	78%	29%	77%	32%
Since Applicant Turned 13, Both Parents Deceased, in Foster Care, or Dependent or Ward of Court	6%	1%	7%	1%
Ever Been in Legal Guardianship	2%	0.5%	2.5%	1%
Ever Been an Emancipated Minor	1%	0%	1%	0%
Ever Been Homeless, since July 1, 2009	0%	0%	0%	0%
Legal Resident of PA Prior to January 1, 2005	91%	96%	93%	96%
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Legal Resident of PA for Less than 12 Months	44%	34.5%	43%	35%

	GED Rural FAFSA Applicants ^a	Non-GED Rural FAFSA Applicants ^b	GED Urban FAFSA Applicants ^c	Non-GED Urban FAFSA Applicants ^d
Household Structure and Family Characteristics				
Highest School Completed by Father				
Middle School/Junior High	14.5%	6%	12%	6%
High School	50%	57%	44%	47%
College or Beyond	14%	29%	15%	35%
Other/Unknown	22%	7.5%	29%	13%
Highest School Completed by Mother				
Middle School/Junior High	13%	4%	12%	5%
High School	52%	53%	48%	47%
College or Beyond	22%	37%	23%	40%
Other/Unknown	13%	6%	17%	8%
Household Size – 1 or 2 Members	49%	29%	55.5%	36%
Applicant was Only Household Attending College in 2010-11	88%	76%	89%	76%
Financial Characteristics				
EFC (mean)	\$2,565	\$8,517	\$2,201	\$9,880
Total AGI (mean)	\$23,388	\$55,793	\$19,817	\$57,374
Total Earnings (mean)	\$22,033	\$53,420	\$18,695	\$55,552
Poverty Level Based on Total Earnings (adjusted for family size)				
<= (less than/equal to) Poverty Level	59%	26%	63%	32%
> (greater than) Poverty Level But <= 150% of Poverty Level	14%	12%	13%	11%
> 150% of Poverty Level	27%	62.5%	23%	57%
Parents/Applicant/Spouse is Dislocated Worker	22%	12.5%	20%	12%
Applicant is Financially Independent of Parents				
Yes, With Child Dependents	55%	18%	51%	9%
Yes, Without Child Dependents	28%	14%	33%	19%
No	16%	68%	16%	71%
^a n ranged from 1,953 to 8,085, except for the number who were not legal residents of PA prior to 1/1/05 (n=754). ^b n ranged from 79,453 to 115,805, except for the number who were not legal residents of PA prior to 1/1/05 (n=4,098). ^c n ranged from 9,089 to 36,363, except for the number who were not legal residents of PA prior to 1/1/05 (n=2,597). ^d n ranged from 284,347 to 450,672, except for the number who were not legal residents of PA prior to 1/1/05 (n=16,641).				

Statewide profiles of rural and urban GED applicants

Educational status. GED and non-GED FAFSA applicants differed significantly in their educational plans for 2010-11. Rural and urban GED recipients were less likely to plan on pursuing a bachelor's degree than non-GED FAFSA applicants – about 27 percent and 24 percent of rural and urban GED FAFSA applicants, respectively, compared to about 63 percent of non-GED applicants. In

contrast, GED recipients were more likely to plan on pursuing an associate degree or a certificate or diploma in a program of less than 2 years. In particular, GED recipients were about twice as likely to pursue an associate degree in an occupational or technical program as non-GED students: 40 percent of rural GED recipients and 33 percent of urban GED recipients planned on this option, compared to 19 percent of rural and 15 percent of urban non-GED students, respectively.

Differences between rural and urban GED recipients were minor with respect to the year (first, second, etc.) they would be in postsecondary school in 2010-11. About two-fifths (43 percent and 41 percent) of rural and urban GED recipients, respectively, were beginning students. This is considerably more than the percentage among non-GED students (between 28 and 29 percent). Among rural and urban GED recipients, about 30 percent had attended college before, but were still in their first year. A much smaller percentage of non-GED students had attended college before, but were still in their first year (15 to 17 percent).

On the other hand, non-GED students were more likely than GED recipients to be in their second, third, fourth or fifth year as an undergraduate. Over one-half (55 to 56 percent) of non-GED students would be in their second year of postsecondary school or higher during the 2010-11 school year, compared to 28 percent of rural and 27 percent of urban GED recipients.

Rural and urban GED recipients were significantly less likely than non-GED students to submit their FAFSA report to 4-year schools: 21 percent and 16 percent of rural and urban GED students, respectively, compared to 57 percent and 48 percent for rural and urban non-GED students. Also, GED recipients were also more likely to submit their FAFSA report to technical schools: 21 and 24 percent of rural and urban GED recipients, respectively, compared to approximately 10 percent of non-GED students.

One-fifth (20 percent) of rural GED recipients submitted the FAFSA to community colleges, compared to about 13 percent of non-GED rural students. Urban students were more likely to submit their FAFSA reports to community colleges (38 percent of urban GED recipients and 23 percent of urban non-GED students).

Rural GED recipients were the nearly twice as likely to submit their FAFSA report to some other type of postsecondary institution (39 percent) than other FAFSA applicants. About one-fifth of urban GED recipients (23 percent), and rural and urban non-GED students (21 and 19 percent, respectively) sent their FAFSA report to some other type of institution.

Although the majority of FAFSA applicants planned on being full-time students during the upcoming school year, GED recipients were less likely to do so than non-GED students. Moreover, urban students were less likely to plan on being full-time (81 percent) than rural students (86 percent), regardless of whether the student had or would have a GED diploma. On the other hand, 91 percent of rural and 88 percent of urban non-GED students planned on being full-time. Conversely, GED recipients were more likely to plan on enrolling half-time (rural 14 percent and urban 17 percent) than non-GED students (between 8 and 11 percent).

The majority (85 to 86 percent) of rural and urban GED recipients planned on living off campus for at least one of the colleges receiving their FAFSA report, compared to 50 to 52 percent of non-GED students. About 11 percent of rural and urban GED recipients planned to live with their parents, compared to 23 percent of non-GED students. Only 3 percent of GED recipients planned to live on campus, compared to 25 to 27 percent of non-GED students.

About 0.5 percent of rural and urban GED recipients already had a bachelor's degree at the time they completed the 2010-11 FAFSA, compared to 2 percent of non-GED FAFSA applicants.

Socio-demographic characteristics. The majority of GED and non-GED students were female (61 and 59 percent, respectively). Among rural students, GED recipients were more likely to be female than non-GED students (64 percent and 60 percent, respectively). Differences between urban GED and non-GED students were minor (61 and 59 percent, respectively, were female), but rural GED recipients were significantly more likely to be female than their urban counterparts.

Rural GED recipients were less likely to be single (54 percent) than rural non-GED students (82 percent). The difference among urban students was smaller, with 71 percent of GED recipients being single compared to 86 percent of non-GED students. However, rural GED recipients were significantly less likely to be single than urban GED students.

Between 1 and 2 percent of FASA applicants were military veterans, with slightly more veterans among GED applicants than non-GED students. However, the difference was small.

The age distributions for rural and urban GED recipients were fairly similar. The mean age of rural and urban GED recipients was about 31 years, compared to 23 years for non-GED students. About 16 percent of rural and urban GED recipients were 21 or younger, with another 4 percent at 22 years. In contrast, between 59 and 64 percent of non-GED students were 21 years or under, and 5 to 6 percent at 22 years. On the other hand, GED recipients were considerably more likely to be 23 or older. About 36 to 37 percent of rural and urban GED recipients were between 26 and 35, compared to 12 to 15 percent of non-GED students. Another 24 to 25 percent of GED recipients were between 36 and 50 years, compared to 9 percent of non-GED students.

Consistent with these results, the majority of GED recipients were adult learners (78 and 77 percent of rural and urban GED applicants, respectively). On the other hand, only 29 percent of rural non-GED students and 32 percent of urban non-GED students were adult learners.

GED applicants were significantly more likely than non-GED students to have indicated that since they had turned 13, both parents were deceased, or the applicant had been in foster care, or a dependent or ward of the court. Between 6 and 7 percent of rural and urban GED recipients indicated that they had been in at least one of these situations, compared to about 1 percent of non-GED students. Differences between rural and urban GED students were minimal.

Also, a very small percentage of GED recipients had ever been in legal guardianship or an emancipated minor (between 1 and 3 percent). However, these percentages were statistically different and higher than the percentages of non-GED students in these situations (between 0.1 and 0.8 percent). Again, differences between rural and urban GED students were minimal.

The percentage of rural GED and non-GED recipients who had been an emancipated minor did not differ significantly, and was also extremely small (less than 0.05 percent). Although the percentage of urban GED and non-GED students differed significantly in a statistical sense, the percentages were also extremely small (0.2 and 0.1 percent, respectively). Differences between rural and urban GED students were minimal.

Although the majority of FAFSA applicants had been residents of Pennsylvania for at least 5 years at the time the FAFSA form was submitted, GED applicants were less likely to have been a resident for that long than non-GED students. Among rural and urban GED recipients, 9 percent and 7 percent, respectively, had been legal residents for less than 5 years, compared to about 4 percent of non-GED students. Among those who became residents after January 1, 2005, GED applicants were more likely to have been a resident for less than 12 months than non-GED students. About 43 percent of rural and urban GED recipients became legal residents less than 12 months after that date compared to about 35 percent of non-GED students.

Household structure and family characteristics. GED and non-GED rural and urban students differed significantly in their father's educational attainment. About 15 percent of rural GED recipients reported that their father had completed junior high, compared to 12 percent of urban GED recipients and 6 percent of non-GED students.

Non-GED students were more likely than GED recipients to indicate that high school, or college or beyond, was their father's highest level of education. Among rural students, 50 percent of GED recipients indicated this level of schooling, compared to 57 percent of non-GED students. College or beyond was the highest level of education completed by the fathers of 14 percent of rural GED applicants and 29 percent of rural non-GED students. For urban students, 44 percent of GED recipients had fathers with a high school education, compared to 47 percent for non-GED students; 15 and 35 percent of urban GED and non-GED students, respectively, had fathers who completed college or beyond. Consistent with results reported for other subgroups, rural GED and non-GED students were more likely than urban students to have high school-educated fathers, whereas urban students were more likely to report that their fathers completed at least college. GED recipients were more likely than non-GED students to indicate that their father's educational attainment was unknown. Between one-fifth and one-quarter of rural and urban GED recipients (22 percent and 29 percent, respectively) reported this, compared to about 8 percent and 13 percent of rural and urban non-GED students, respectively.

Similar to the above results, 13 percent and 12 percent of rural and urban GED recipients, respectively, indicated that their mother's educational attainment was junior high. This compares to 4 to 5 percent of non-GED students. The percentages of rural GED and non-GED students with a high school-educated mother were similar (52 and 53 percent, respectively). Similar percentages of urban GED and non-GED students fell in this category (48 and 47 percent, respectively). However, a

higher percentage of rural than urban students indicated that high school was the highest grade completed by their mother, regardless of whether the applicant was a GED or non-GED student.

About one-fifth of rural and urban GED recipients (22 and 23 percent, respectively) had a mother who completed college or beyond. In contrast, between 37 and 39 percent of non-GED students reported this. On the other hand, GED recipients were more likely than non-GED students to indicate that they did not know their mother's educational attainment.

GED applicants had smaller families than did non-GED students, although this difference could stem from GED recipients' older age and greater likelihood of financial independence from parents. Forty-nine percent of rural and 56 percent of urban GED recipients had one or two members in the household; urban GED recipients were more likely to have fewer household members than rural GED students. In contrast, 29 percent of rural and 36 percent of urban non-GED students had one or two people in the household.

At the same time, GED applicants were more likely than non-GED students to be the only person in the household planning to attend college in 2010-11. Nearly 90 percent of rural and urban GED recipients (88 and 89 percent, respectively) fell into this category, compared to 76 percent of non-GED students.

Financial characteristics. The mean EFC of GED recipients was considerably less than that of non-GED students. On average, the families of rural GED students were expected to contribute \$2,565 in 2010-11, and urban GED applicants were expected to contribute \$2,201. The difference between rural and urban GED recipients was not statistically significant. In contrast, the mean EFC for rural non-GED and urban non-GED students was \$8,517 and \$9,880, respectively.

Similarly, rural GED students had significantly lower mean total AGI and mean total earnings than rural non-GED students. On average, mean income of non-GED students was more

than twice that of GED students. Specifically, mean total AGI and earnings for rural GED applicants were \$23,388 and \$22,033, respectively, compared to \$55,793 and \$53,420 for rural non-GED students. The mean total AGI for urban GED students was significantly less than that for rural GED students (\$19,817 and \$18,695, respectively). For urban non-GED students these figures were \$57,374 and \$55,552, respectively.

Over one-half of GED recipients (59 percent of rural and 63 percent of urban GED applicants) were below the poverty level. In contrast, 26 percent of rural non-GED and 32 percent of urban non-GED recipients were in poverty. Among rural students, 14 percent of GED recipients were in families with total earnings between the poverty level and 150 percent of the poverty level (near-poverty), compared to 12 percent of rural non-GED students. Similarly, 13 percent of urban GED applicants and 11 percent of urban non-GED students were in near-poverty. Non-GED students were more likely to have total earnings greater than 150 percent of the poverty level (62.5 and 57 percent for rural and urban non-GED students, respectively). Only 27 percent of rural and 23 percent of urban GED recipients had total earnings above 150 percent of the poverty level.

In addition, GED applicants, their parents, or their spouse (if married) were more likely to be a dislocated worker than non-GED students at the time they completed the FAFSA. About one-fifth of rural and urban GED recipients were in this group (22 and 20 percent, respectively), compared to 12 percent of non-GED students.

Only 16 percent of GED applicants were financially dependent on their parents, compared to 68 percent and 63 percent of rural and urban non-GED students, respectively. Rural GED recipients were more likely to be financially independent with at least one child dependent than urban GED applicants (55 percent and 51 percent, respectively). On the other hand, urban GED

recipients were more likely than their rural counterparts to be financially independent with no child dependent (33 percent and 28 percent, respectively).

Prevalence of GED postsecondary students in rural and urban counties, and relationship with county characteristics

The prevalence of FAFSA applicants in rural and urban counties who had or would have a GED diploma at the start of the 2010-11 school year was similar (about 7 percent). Table 17 presents a summary of the statistical analyses measuring the relationships between the prevalence of GED FAFSA applicants in the county and the county's socio-economic and educational characteristics, including county-level aggregate measures of FAFSA applicants and 2009-10/2010-11 school year data from NCES. Only results that were statistically significant ($p < .05$) or tended towards statistical significance ($p < 0.10$) are presented in Table 17.

Urban counties with smaller populations had a significantly higher percentage of GED FAFSA applicants. However, county population was unrelated to the percentage of GED applicants in rural counties.

In both rural and urban counties, a higher percentage of GED recipients in the county was significantly related to a higher percentage of FAFSA applicants in families with total earnings below poverty, and a significantly lower percentage in families with incomes above 150 percent of the poverty level. For urban counties, a larger percentage of GED recipients was also related to a higher percentage of FAFSA applicants in near-poverty.

A higher percentage of GED recipients was significantly related to a higher percentage of adult learners among FAFSA applicants for both rural and urban counties. In both rural and urban counties a greater prevalence of GED postsecondary students in the county was associated with a lower percentage of students planning to pursue a bachelor's degree, and a higher percentage

planning to pursue an associate degree. Only in urban counties was the percentage of GED applicants related to the percentage of FAFSA applicants planning to pursue a certificate/diploma; in this case, a greater percentage of GED applicants was associated with a larger percentage of certificate/diploma students.

Rural and urban counties with a higher percentage of GED students had less educated populations (i.e., lower percentage of the population 25 and older with at least a high school degree or at least a bachelor's degree). In rural counties (but not urban counties), there was a tendency for counties with a higher percentage of GED postsecondary students to have a smaller percentage of the population enrolled in college or graduate school. The percentage of the county population enrolled in high school was unrelated to the percentage of GED postsecondary students in both rural and urban counties.

Rural and urban counties with a higher percentage of unemployed in the labor force were more likely to have a higher percentage of GED FAFSA applicants. However, the percentages of GED recipients in the county was unrelated to the percentages in the county who worked full-time, either in terms of working 50 to 52 weeks, or working 35 or more hours per week.

In both rural and urban counties, a higher prevalence of GED applicants was significantly associated with counties having a lower median family income. In urban counties, the percentage of GED applicants was positively related to the percentage of the county population in poverty or near-poverty, meaning that urban counties with a higher prevalence of GED postsecondary students also had a higher percentage of the population facing economic hardship. However, the relationship between the prevalence of GED postsecondary students and the percentage of the population in or near poverty was not statistically significant in rural counties ($p > 0.16$).

The average student-teacher ratio for school systems in the county was unrelated to the percentage of GED FAFSA applicants in both rural and urban counties.

Table 17: Statistically Significant Relationships Between Prevalence of GED Students in the County and Characteristics of the County: Rural and Urban Counties^a

County Characteristics	% of GED Students in County	
	Rural Counties (n=48)	Urban Counties (n=19)
	Direction of Relationship Between County Characteristic and % of FAFSA Applicants ^a	
County Population, as of 4/1/10 (U.S. Census)	–	↓*
Characteristics of FAFSA Applicants from County		
% in Families Whose Total Earnings were Below Poverty Level	↑*	↑***
% in Families Whose Total Earnings were Between Poverty Level and 150% of Poverty	–	↑***
% in Families Whose Total Earnings were Above 150% of Poverty Level	↓**	↓***
% of Adult Learners	↑***	↑***
% Planning to Pursue Bachelor’s Degree	↓***	↓***
% Planning to Pursue Associate Degree	↑***	↑***
% Planning to Pursue Certificate/Diploma	–	↑*
Socio-economic Characteristics of County		
% with a High School Degree or Higher (population 25 yrs. and older)	↓**	↓**
% with a Bachelor’s Degree or Higher (population 25 yrs. and older)	↓***	↓***
% of County Population Enrolled in College or Graduate School	↓ ⁺	–
% Unemployed in the Labor Force	↑*	↑*
% Who Usually Worked 35 or More Hours Per Week (population 16-64 yrs.)	–	↓*
Median Family Income	↓**	↓***
% in County Below Poverty Level (for whom poverty status was determined)	–	↑***
% in County Below 150% of the Poverty Level (for whom poverty status was determined)	–	↑***
^a An up-arrow (↑) is shown when the percentage of FAFSA applicants increases as the county characteristic increases. A down-arrow (↓) is shown when the percentage of FAFSA applicants decreases as the county characteristic increases (or visa versa). When the association between the percentage of FAFSA applicants and the county characteristic is not statistically significant, a horizontal line is shown (–). + p<0.10 * p<0.05 ** p<0.01 *** p<0.001		

Adult learner FAFSA applicants

Table 18 provides a snapshot of the socio-demographic, household structure/family, and financial profiles characterizing rural and urban adult learner FAFSA applicants, defined as those aged 24 or older. The percentages of non-adult learner FAFSA students are presented in the table to show comparisons between adult learner and non-adult learners.

As reported in Tables 4 and 5, rural adult learners comprise 32 percent of rural FAFSA applicants, and urban adult learners are 36 percent of urban FAFSA applicants. Due to the large number of data records for both rural and urban FAFSA applicants, only differences that have a p-value less than 0.0001 ($p < 0.0001$) are considered statistically significant.

Table 18: Summary of Profiles for Rural and Urban Adult Learner (AL) and Non-Adult Learner FAFSA Applicants

	Rural AL Applicants ^a	Rural Non-AL Applicants ^b	Urban AL Applicants ^c	Urban Non-AL Applicants ^d
Postsecondary Educational Plans				
Year in Postsecondary School – Total				
Never Attended College and 1 st Year Undergraduate	23%	33%	20.5%	33%
Attended College Before and 1 st Year Undergraduate	29%	10%	32%	11%
2 nd Year Undergraduate/sophomore	21%	24%	20%	22%
3 rd Year Undergraduate/junior	14%	18%	14%	18%
4 th Year Undergraduate/senior	8%	13%	8%	13%
5 th Year Undergraduate	5%	3%	5%	3%
Degree or Certificate Being Pursued in 2010-11 School Year – Total				
Bachelor’s degree	39%	70%	39%	71%
Associate Degree (Occupational or Technical Program)	34%	14%	27%	10%
Associate Degree (General Ed or Transfer Program)	11%	6%	14.5%	8%
Certificate or Diploma (Program of < 2 Years)	10%	3.5%	13%	5%
Certificate or Diploma (Program of 2 or More Years)	2.5%	1%	3%	1%
Teaching Credential (Non-degree Program) or Other	4%	4.5%	4%	4%
Type of Postsecondary School Receiving FAFSA				

	Rural AL Applicants ^a	Rural Non-AL Applicants ^b	Urban AL Applicants ^c	Urban Non-AL Applicants ^d
Report for 2010-11 School Year				
4-Year Private	10%	19%	17%	21%
4-Year Public	23%	46%	11%	35%
Community College	18%	11%	32%	18%
Other	33%	17%	23.5%	18%
Technical School	16%	7%	16%	7%
Enrollment Status in 2010-11 – Total				
Full-time	79%	97%	74%	95%
Half-time	19%	3%	23%	4%
Less than Half-Time	2%	0%	2.5%	1%
Housing Plans for Postsecondary Schools Receiving FAFSA for 2010-11				
On Campus	2%	37%	2%	37%
With Parents	7%	30%	7%	30%
Off Campus	91%	33%	90%	34%
Already Has a Bachelor's degree	4%	1%	5%	1%
Socio-demographic Characteristics				
High School Completion Status by 2010-11 School Year				
High School Diploma	82%	97%	81%	96%
GED Certificate	16%	2%	17%	3%
Other	2%	1%	2.5%	1%
Gender – Male	34%	44%	34.5%	44%
Applicant's Marital Status – Single	43.5%	98%	62%	99%
Military Veteran	5%	0%	4%	0%
Age (mean)	33.5 yrs.	19.4 yrs.	33.0 yrs.	19.5 yrs.
Since Applicant Turned 13, Both Parents Deceased, in Foster Care, or a Dependent or Ward of the Court	2%	1%	2%	1.5%
Ever Been in Legal Guardianship	1%	0.5%	2%	1%
Ever Been an Emancipated Minor	0.5%	0%	1%	0%
Ever Been Homeless, since July 1, 2009	0%	0%	0%	0%
Legal Resident of PA Prior to January 1, 2005	93%	97.5%	93.5%	97%
For Applicants Who Were Not Legal Residents of PA Prior to 1/1/05: Legal Resident of PA for Less than 12 Months	39%	32%	38%	33%
Household Structure and Family Characteristics				
Highest School Completed by Father				
Middle School/Junior High	12%	4.5%	10%	4.5%
High School	56%	57%	49%	45%
College or Beyond	18%	33%	21.5%	40%
Other/Unknown	13%	6%	20%	11%
Highest School Completed by Mother				
Middle School/Junior High	10%	3%	9%	4%
High School	58%	50.5%	53%	44.5%
College or Beyond	23%	42%	26%	45.5%
Other/Unknown	9%	5%	12%	6%

	Rural AL Applicants ^a	Rural Non-AL Applicants ^b	Urban AL Applicants ^c	Urban Non-AL Applicants ^d
Household Size – 1 Member	33%	3%	41%	3.5%
Applicant was Only Household Attending College During 2010-11 School Year	88%	71%	89%	69%
Financial Characteristics				
EFC (mean)	\$3,635	\$10,264	\$3,607	\$12,852
Total AGI (mean)	\$29,995	\$66,494	\$27,564	\$73,948
Total Earnings (mean)	\$28,211	\$63,872	\$26,446	\$71,676
Poverty Level Based on Total Earnings (adjusted for family size)				
<= (less than/equal to) Poverty Level	43%	19%	45%	23%
> (greater than) Poverty Level But <= 150% of Poverty Level	16%	10%	15%	9%
> 150% of Poverty Level	41.5%	71%	40%	67.5%
Parents/Applicant/Spouse is Dislocated Worker	23%	9%	19%	9.5%
Applicant Has Children Who Would Receive More than ½ their Support from the Applicant during the 2010-11 School Year	58%	4%	53%	6%
^a n ranged from 3,992 to 39,130, except for the number who were not legal residents of PA prior to 1/1/05 (n=2,789). ^b n ranged from 74,155 to 82,360, except for the number who were not legal residents of PA prior to 1/1/05 (n=2,063). ^c n ranged from 18,437 to 166,713, except for the number who were not legal residents of PA prior to 1/1/05 (n=10,799). ^d n ranged from 256,121 to 297,265, except for the number who were not legal residents of PA prior to 1/1/05 (n=8,439).				

Statewide profiles of rural and urban adult learner Applicants

Educational status. Adult learner and non-adult learner FAFSA applicants differed significantly in their educational plans for the 2010-11 school year. Rural and urban adult learners were less likely to plan on pursuing a bachelor’s degree than non-adult learner FAFSA applicants (39 percent and 70 percent, respectively). In contrast, adult learners were more likely to plan on pursuing an associate degree or a certificate or diploma in a program of less than 2 years than non-adult learners. In particular, adult learners were more than twice as likely as non-adult learners to pursue an associate degree in an occupational or technical program (34 percent of rural and 27 percent of urban adult learners, compared to 14 percent of rural and 10 percent of urban non-adult learners).

Rural and urban adult learners differed significantly with respect to their year in postsecondary school in 2010-11, although differences were not large. About one-fifth (23 percent and 21 percent) of rural and urban adult learners, respectively, were beginning students. This is less than the percentage among non-adult learners (33 percent). Twenty-nine percent of rural and 32 percent of urban adult learners had attended college before, but were still in their first year. A considerably smaller percentage of non-adult learners had attended college before, but were still in their first year (10 to 11 percent).

On the other hand, non-adult learners were more likely than adult learners to be in their second, third, fourth or fifth year as an undergraduate—over one-half (56 to 57 percent) of non-adult learners, compared to 48 percent of rural and urban adult learners, respectively.

Rural and urban adult learners were significantly less likely than non-adult learners to submit their FAFSA report to 4-year schools: 33 percent and 29 percent of rural and urban adult learners, respectively, compared to 65 percent and 56 percent for rural and urban non-adult learners, respectively. Also, adult learners were also more likely to submit their FAFSA report to technical schools (16 percent versus 7 percent of non-adult learners).

About 18 percent of rural adult learners submitted their FAFSA report to community colleges, compared to 11 percent among traditional-age rural students. Urban students were more likely to submit the FAFSA to community colleges, with 32 percent of urban adult learners and 18 percent of urban non-adult learners doing so. Rural adult learners were the nearly twice as likely to submit the FAFSA to some other type of postsecondary institution (33 percent) than rural non-adult learners (17 percent). About 24 percent of urban adult learners and 18 percent of urban non-adult learners sent the FASA to some other type of institution.

Although the majority of FAFSA applicants planned on being full-time students during the upcoming school year, adult learners were considerably less likely to do so than non-adult learners. Specifically, 79 percent of rural adult learners and 74 percent of urban adult learners planned on being full-time. On the other hand, 97 percent of rural and 95 percent of urban non-adult learners planned on being full-time. Conversely, adult learners were more likely to plan on enrolling half-time (rural: 19 percent; urban: 23 percent) than non-adult learners (between 3 and 4 percent). Also, about 2 percent of rural and 2 percent of urban adult learners planned on attending less than half-time. Less than 1 percent of non-adult learners planned on this enrollment option.

Most rural and urban adult learners (91 and 90 percent, respectively) planned to live off campus for at least one of the colleges receiving their FAFSA report, compared to 33 to 34 percent of non-adult learners. Seven percent of rural and urban adult learners planned to live with their parents, compared to 30 percent of non-adult learners. Only a fraction (2 percent) of adult learners planned to live on campus, compared to 37 percent of non-adult learners.

Between 4 and 5 percent of rural and urban adult learners had a bachelor's degree at the time the 2010-11 FAFSA application was completed. However, less than 1 percent of non-adult learner FAFSA applicants already had a bachelor's degree.

Socio-demographic characteristics. Although the majority of all FAFSA applicants were female, adult learners were more likely to be female than non-adult learners (about 66 percent of adult learners and 56 percent of non-adult learners, respectively). Differences between rural and urban students were minor.

Rural adult learners were considerably less likely to be single (44 percent) than rural non-adult learners (98 percent). Urban adult learners were also less likely to be single than urban non-adult learners, although the difference was not as great as that for rural students (62 percent for

urban adult learners compared to 99 percent for urban non-adult learners). Rural adult learners were significantly less likely to be single than urban adult learners.

Adult learners were more likely to be military veterans than non-adult learners; also, rural adult learners were more likely to be veterans than urban adult learners. Five percent of rural adult learners were military veterans, compared to 4 percent of urban adult learners; 0 percent of non-adult learners were veterans. The mean age of rural and urban adult learners was about 33 years while the mean age of non-adult learners was about 19½ years.

Adult learners were significantly more likely than non-adult learners to have indicated that since they had turned 13, both parents were deceased, or the applicant had been in foster care, or a dependent or ward of the court. However, the percentages were very small (2 percent of rural and urban adult learners compared to about 1 to 2 percent of non-adult learners). Differences between rural and urban adult learners were minimal. Although rural and urban adult learners were significantly more likely than non-adult learners to have indicated that they had ever been in legal guardianship or an emancipated minor, the percentages were extremely small (between 0.1 and 1 percent). Non-adult learners were more likely than adult learners to have even been homeless, although the percentages were very small (0.1 percent).

The vast majority of FAFSA applicants had been residents of Pennsylvania for at least 5 years at the time the FAFSA form was submitted (i.e., since January 1, 2005), but adult learners were less likely to have been residents for at least 5 years than non-adult learners. Among rural and urban adult learners, 7 percent each, had been legal residents for less than 5 years, compared to about 3 percent of non-adult learners. Among those who became residents after January 1, 2005, adult learners were more likely to have been a resident for less than 12 months than non-adult learners.

Close to 40 percent of rural and urban adult learners became legal residents less than 12 months after that date compared to 32 to 33 percent of non-adult learners.

Household structure and family characteristics. Adult learner and traditional-age rural and urban applicants differed significantly in their father's educational attainment. About one-tenth of rural and urban adult learners (12 and 10 percent, respectively) indicated that their father had a junior high education, compared to 4.5 percent of non-adult learners.

Between 56 and 57 percent of rural adult and non-adult learners indicated that high school was their father's highest level of education. Among urban applicants, adult learners were more likely to report this than traditional-age students (49 percent and 45 percent, respectively). College or beyond was the highest level of education completed by the fathers of 18 percent of rural adult learners and 33 percent of rural non-adult learners. For urban students, about 22 percent of adult learners reported this, compared to 40 percent for urban non-adult learners.

Adult learners were more likely than non-adult learners to indicate that the highest level of education completed by their father was "other/unknown" (13 and 20 percent of rural and urban adult learners, respectively, compared to 6 and 11 percent of rural and urban non-adult learners).

About one-tenth of rural and urban adult learners indicated that their mother had a junior high education (10 and 9 percent, respectively). In contrast, 3 to 4 percent of non-adult learners indicated that the highest level of education completed by their mother was junior high.

Rural adult learners were more likely than urban adult learners to indicate that their mother had completed high school (58 and 53 percent, respectively). The percentage of rural and urban non-adult learners indicating this was considerably less (51 percent and 45 percent, respectively).

The mothers of adult learners were significantly less likely to complete college or beyond than non-adult learners (23 and 26 percent of rural and urban adult learners, respectively,

compared to 42 and 46 percent of rural and urban non-adult learners, respectively). Adult learners were more likely than non-adult learners to indicate that their mother's educational attainment was "other/unknown" (9 and 12 percent of rural and urban adult learners, respectively, compared to 5 to 6 percent of non-adult learners).

Rural and urban adult learners (33 and 41 percent, respectively) were far more likely to be the only person in their household. In contrast, about 3 percent of non-adult learners indicated that their household size was one. On the other hand, 46 percent of rural adult learners and 38 percent of urban adult learners were in households with 3 or more people, while 81 and 77 percent of rural and urban non-adult learners, respectively, had 3 or more people in their household.

At the same time, adult learners (88 to 89 percent) were more likely to be the only person in the household planning to attend college in 2010-11 than non-adult learners (69 to 71 percent).

Financial characteristics. The mean EFC of adult learners (\$3,635) was considerably less than that of non-adult learners (\$3,607); the rural-urban difference was not statistically significant. The mean EFC for rural and urban non-adult learners was \$10,264 and \$12,852, respectively.

Consistent with this, the mean total AGI and total earnings of rural and urban adult learners were significantly less than those for non-adult learners, with the mean income of non-adult learners being more than twice that of adult learners. Specifically, mean total AGI and total earnings for rural adult learners were \$29,995 and \$28,211, respectively, compared to \$66,494 and \$63,872, respectively, for rural traditional-age students. For urban adult learners, the mean total AGI and total earnings were \$27,564 and \$26,446; mean total AGI and total earnings for urban adult learners were significantly less than that for rural adult learners. These two income figures for urban non-adult learners were \$73,948 and \$71,676, respectively.

Over two-fifths of adult learners (43 percent of rural and 45 percent of urban adult learners) were below the poverty level. On the other hand, an approximately equal percentage of rural and urban adult learners were in families with total earnings above 150 percent of the poverty level (42 and 40 percent, respectively). In contrast, 19 percent of rural and 23 percent of urban non-adult learners were in poverty, and 71 percent and 68 percent exceeded 150 percent of the poverty level. Between 15 and 16 percent of adult learners were in families with total earnings in near-poverty, compared to approximately 10 percent of non-adult learners.

In addition, adult learners, their parents or their spouse (if married) were more likely to be a dislocated worker than non-adult learners at the time they completed the FAFSA. About one-fifth of rural and urban adult learners were in such families (23 and 19 percent, respectively), compared to about 9 percent of non-adult learners.

Over one-half of adult learners had a child (children) who would receive more than one-half his/her support from the applicant during the 2010-11 school year, with rural adult learners more likely than urban adult learners to report this (58 percent and 53 percent, respectively). This compares to only 4 and 6 percent of rural and urban non-adult learners.

Prevalence of adult learner postsecondary students in rural and urban counties, and relationship with county characteristics

The percentage of FAFSA applicants in rural and urban Pennsylvania counties who were adult learners was similar, 29 percent and 28 percent, respectively. Table 19 presents a summary of the statistical analyses measuring the relationships between the prevalence of adult learner FAFSA applicants in the county and the county's socio-economic and educational characteristics, including county-level aggregate measures of FAFSA applicants and 2009-10/2010-11 school year data from

NCES. Only results that were statistically significant ($p < .05$) or tended towards statistical significance ($p < 0.10$) are presented in Table 19.

Urban counties with smaller populations had a significantly higher percentage of adult learner FAFSA applicants. However, county population was unrelated to the percentage of adult learner applicants in rural counties.

In both rural and urban counties, a higher percentage of adult learner students in the county was significantly related to a higher percentage of FAFSA applicants in families with total earnings less than the poverty level, and a significantly lower percentage in families with incomes above 150 percent of the poverty level. For urban counties, a larger percentage of adult learners was also related to a larger percentage of FAFSA applicants in near-poverty.

In both urban and rural counties, a higher percentage of adult postsecondary students was significantly related to a higher percentage of adult learner FAFSA applicants, as well as a lower percentage of students planning to pursue a bachelor's degree and a higher percentage pursuing an associate degree. Only in urban counties was the percentage of adult learner FAFSA applicants related to the percentage of FAFSA applicants planning to pursue a certificate/diploma; in this case, a greater percentage of adult learners was associated with a larger percentage of certificate/diploma students.

Rural and urban counties with a higher percentage of adult postsecondary students had less educated populations (percentage of the population 25 and older with at least a high school or a bachelor's degree). The percentage of the county population enrolled in high school and the percentage enrolled in college or graduate school were unrelated to the percentage of adult learner postsecondary students in both rural and urban counties.

In urban counties, a higher percentage of unemployed in the labor force was positively associated with the percentage of adult learner postsecondary students, meaning urban counties with higher percentages unemployed had higher percentages of adult learners. This relationship was not apparent in rural counties. In urban counties, there was also a tendency ($p < 0.11$) for counties with a smaller percentage of the population working full-time (usually working 35 or more hours per week) to have a higher percentage of adult learner postsecondary students. This relationship was also not apparent in rural counties. In both rural and urban counties, the percentage of adult learner postsecondary students was unrelated to the percentage in the county who worked full-time (working 50 to 52 weeks).

In urban counties, a higher prevalence of adult learners was significantly associated with counties having a lower median family income; there was a tendency for this to occur in rural counties ($p < 0.07$). In urban counties, the percentage of adult postsecondary students was positively related to the percentage of the county population in poverty or below 150 percent of the poverty level, that is, the higher the prevalence of adult learners, the higher percentage of the population facing economic hardship. However, the relationship between the prevalence of adult learner postsecondary students and the percentage of the population in or near-poverty was not statistically significant in rural counties.

The average student -teacher ratio for school systems in the county was unrelated to the percentage of adult learner FAFSA applicants in both rural and urban counties.

Table 19: Statistically Significant Relationships between Prevalence of Adult Learner Postsecondary Students in the County and Characteristics of the County: Rural and Urban Counties^a

County Characteristics	% of Adult Learner Postsecondary Students in County	
	Rural (n=48)	Urban (n=19)
	Direction of Relationship Between County Characteristic and % of FAFSA Applicants ^a)	
County Population, as of 4/1/10 (U.S. Census)	-	↓**
Characteristics of FAFSA Applicants from County		
% in Families Whose Total Earnings were Below Poverty Level	↑**	↑***
% in Families Whose Total Earnings were Between Poverty Level and 150% of Poverty	-	↑**
% in Families Whose Total Earnings were Above 150% of Poverty Level	↓**	↓***
% of adult learner Postsecondary Students	↑***	↑***
% Planning to Pursue Bachelor's degree	↓***	↓***
% Planning to Pursue Associate Degree	↑**	↑***
% Planning to Pursue Certificate/Diploma	-	↑**
Socio-economic Characteristics of County		
% with a High School Degree or Higher (population 25 yrs. and older)	↓**	↓*
% with a Bachelor's Degree or Higher (population 25 yrs. and older)	↓*	↓***
% Unemployed in the Labor Force	-	↑*
Median Family Income	↓ ⁺	↓***
% in County Below Poverty Level (for whom poverty status was determined)	-	↑**
% in County Below 150 Percent of the Poverty Level (for whom poverty status was determined)	-	↑**
<p>^a An up-arrow (↑) is shown when the percentage of FAFSA applicants increases as the county characteristic increases. A down-arrow (↓) is shown when the percentage of FAFSA applicants decreases as the county characteristic increases (or visa versa). When the association between the percentage of FAFSA applicants and the county characteristic is not statistically significant, a horizontal line is shown (-).</p> <p>+ p<0.10 * p<0.05 ** p<0.01 *** p<0.001</p>		

Interview Findings

Students' financial needs and characteristics: "There is no place to go"

A 2006 Penn State (Senate Committee on Admissions, 2006) report on access and affordability in higher education observed five trends: (a) loss of purchasing power for federal and state grants, (b) growth in student and parent loans, (c) increase in student loan debt, (d) growth in scholarship support, and (e) excessive student employment and limited aid. In 2012, financial aid administrators (FAAs) in the present study largely echoed these trends at their institutions, and identified several others, such as students' and families' precarious economic situation following the Great Recession.

Respondents observed that, in many cases, students' financial needs at rural institutions and statewide have increased for several reasons: "One, because the cost has gone up. Two, in many instances, family income has declined. And in the face of that, we have not had a big increase, or any increase, in state funding for the grant program." Increasing costs include not only tuition, but also transportation, gas, car maintenance, books, and other living expenses.

Currently, the state grant covers about 20 percent of the tuition and fee charges, not total cost of education. When the program was designed, it was targeted to be at least 50 percent, at least for students with the highest level of need.

In addition to decreased state funding, federal funding has not kept pace with rising costs, as Penn State's FAA observed:

Overall, you can look at federal dollars and trends, and they have grown. However, the cost of education is just rising faster than those dollars. And not just at Penn State; it's kind of true across higher education. So that creates a gap. So the unmet need of students simply goes up every year. So, yes, there's definitely been an increase in unmet need.

Similarly, the private college FAA remarked, “we’re seeing some students who receive very nice award packages from our college, and there’s still a gap, and they can’t pay that difference.”

The 2-year college FAAs observed little or no increase in students’ unmet financial needs. The community college, for instance, already has relatively low tuition. Consequently, “unless a student is out-of-state or is taking a very high credit load, quite often they’re able to borrow enough through the student loan to cover their costs here.”

Other trends noted by FAAs (with the exception of the business/technical school) included more parents taking out loans for dependents’ education, parents being denied federal loans due to bad credit, students borrowing the maximum amount, more families unable to pay for college, and more students working:

To fill that gap [tuition versus state and Pell grants], students and parents are taking out more loan debt, even though the college itself has increased the amount of aid awarded to students. (private college)

The other trend has been for families to turn to the parent loan program that the federal government sponsors. That is a credit-worthy based program. A family has to have good credit to qualify. And we are seeing a growing number of families who are turned down for the loan. (large public university)

We just do have a substantial amount of low-income students...who really need to use that loan money when they come to school for living expenses. So they borrow to the maximum, which, you know, is an investment for them to get their education and to get it completed and to get into the workforce, but it’s also a large loan debt when they leave. (community college)

What I have seen in the last 5 years is that families that could pay, have the means to pay, are really struggling, having a difficult time. Because maybe they had investments and, you know, they lost a huge portion of those, that they had set aside for college. And those are gone. Or maybe...they’re not getting bonuses or increases like they were getting for a while. The loan industry has cut back so drastically that...the students can’t borrow. Parents have maxed out on their borrowing, on their credit, so they’re being turned down. The private loan programs have just all but pretty much dried up. There are a handful available....One of the things that is most prevalent that I see, are families don’t have the cash to just pay the bill....The parents apply for the Parent PLUS loan. A high percentage of our families are denied. So the students can get the additional ‘unsub’ [unsubsidized loan], but it’s not enough. For the additional \$4,000 or \$5,000, it’s not enough to cover what they need....If

the parents have been denied the Parent Plus, they're not going to be approved as a co-signor on the private loans. They have no options. There is no place to go. (religious college)

This economic insecurity, the religious college FAA observed, has led to more families having a “fear of commitment”:

Maybe their places of employment are...not real stable. Not knowing if they're going to have a job next year. Not wanting to commit to a big loan payment or monthly tuition payment, because...hours could be cut back, or they could be laid off, or any of those things happening.

This may help explain the community college FAA's observation that some students are “so averse to borrowing and having any debt that actually they might say, ‘Well, you know, I can't come back.’”

These observations echo prior research on loan aversion among low-income families (Heller, 2008).

At Penn State, unemployment caused more families to appeal their financial aid award because their income had changed since filing the FAFSA:

We did see an increase in the number of families appealing, based on loss of family income, loss of jobs, loss of investments, and you know, we tried to do what we could to address those. But the number of families appealing to us with legitimate loss of income situations are a direct result of the recession.

Because the Office of Student Aid received additional institutional funds for these cases, Penn State was “able to able to keep a lot of students [approximately 500 to 1,000] in school that may have left.” Despite these important efforts, the growing gap between unmet financial need and financial aid has contributed to a decline in enrollment of low-income students and an increase in average family income among enrolled students. In particular, out-of-state students at Penn State tend to have higher incomes than in-state students, which is not surprising given the higher cost of tuition.

Two FAAs commented on middle-class families' ability to pay for college and financial aid available for this group:

I believe the state has done an okay job of trying to make the most of what they have, of their resources. I think they've included the middle class more, recently, than they have in

the past, and that's been beneficial....We've seen families with EFCs that are well over Pell-eligible, of course still receiving the maximum state grant award. (private college)

I have, for a number of years, felt like the middle-class families have lost choice. They don't have enough money to pay out-of-pocket if they want to go to a higher-cost institution, and they're not needy enough to get outside support....State funds have been reduced, so they have to scale down who they can help, and it's being scaled down to the highest need students. So the high-need students, the very high-need students get federal grants and state grants, and then with institutional help, they can maybe afford to go to a higher cost institution. The very high-income families can afford to pay, but those middle, those working-class folks...they're working hard and they're getting by....But their costs, their electric bill, and their oil bill, and their telephone bill, and all of their costs are increasing. Their income isn't necessarily increasing at the same rate, and they don't have the excess, they haven't been able to save, so they don't have the extra money to pay for a private education. And they don't qualify to get the grants to cover the difference, and maybe can't even afford to borrow....And then...when...they were throwing credit at people, everybody borrowed, and everybody maxed out and everybody refinanced. And now, no one has any credit. (religious college)

These observations mirror Houle's (2012) recent research on the "middle-income squeeze," which showed that young adults from middle-income families increasingly rely on loans to finance college education. Specifically, Houle found that middle-income students borrowed over \$6,000 more than their lower-income counterparts and \$12,000 more than higher-income peers (Simmons, 2012).

FAAs and policy experts also saw a strong link between students' ability to pay and degree completion. As one FAA put it, "I think there's a direct correlation." Students who could not meet financial obligations were hindered from taking classes or completing their program:

Students that have rather large out-of-pocket payments, who are able to meet their payments, can't actually be cleared through the Financial Aid Department—or even through our Business Office—to continue their education until they can basically get their accounts paid for. As a small school, we don't have that many resources to actually help our students to make or to meet their out-of-pocket payments. So it's kind of a double-sided ax there. You have to pay, but we can't help you to pay. And if you don't pay, then you can't continue your education. So it does affect them. (business/technical school)

The ability to pay for students from low-income [groups] results in a much lower persistence than that same student from a high-income family. Same ability academically, but greater ability to pay, versus less ability to pay. There's a gap. And the gap here actually mimics the gap nationally, 'cause I'm seeing that same data on a national [level]. (large public university)

As the costs of education continue to increase and the grant programs continue to decrease, or at least not keep pace, and the loan maximums have not increased for the students, we see more students not going to school, because they can't afford to. (religious college)

These statements are supported by a Penn State study (n=5,049) showing that "high income students graduate at rates about 10 to 25 percentage points higher than do low income students of similar academic ability" (Dooris, Guidos, and Stine, 2007, p. 8).

Although the community college FAA asserted that few students are unable to complete their degree due to cost, financial aid still influences degree attainment if students cannot access aid, if it is suspended, or if they do not qualify for enough aid. In addition, students can lose their institutional aid "because they're taking too long to complete a degree":

In those cases there is an appeal process they can go through, but if that appeal is not approved, then they may or may not be able to complete their degree if they can't afford to pay out-of-pocket....The other group that we might see would be people...who have reached their aggregate loan limits and can no longer borrow, and they're not finished. And, you know, they may have done prior college work and taken out maximum loans and have not paid them back....They've just borrowed too much, and maybe they have another semester to go, and we say, "Well, you know what? You know, all you have left is your Pell Grant and...we can't loan you any more money."

Thus, even at low-cost institutions, financial constraints and supports still shape academic progress and degree or program completion.

Rural issues

FAAs and policy experts observed that compared to their urban counterparts, rural students have less access to postsecondary institutions, higher transportation and/or relocation costs, and more limited email access, and are more likely to be first-generation students and to perceive college as "out of reach." First, as a policy expert argued, postsecondary institutions are not evenly distributed across Pennsylvania:

To complicate matters, Pennsylvania's distribution of institutions is not flat. You have your private institutions that have money concentrated in your urban areas. You have your four state-related institutions located...except for Temple and Pitt, where very few rural students would have access. So they're [rural students] denied that. The PASSHE [Pennsylvania System of State Higher Education] schools tend to be located more in rural areas, but unless you can actually get to those somewhat isolated communities, your access issues are less affordability than geographic. Community colleges are located on the periphery of the state, and therefore the low-cost option really doesn't exist. The best example is right here in Centre County. The entire Centre region, it kind of looks like an hourglass that starts off on the northern tier counties, comes together at University Park, and then spreads out on the southern-tiered counties. There's almost no access to a community college.

The policy expert then went on to describe how geographic location shapes housing plans, hypothesizing that rural students have higher costs for commuting or relocation:

Where a rural student, unless they happen to live in a community with immediate access, [is] going to have either substantial travel costs, or they're going to have to temporarily relocate [and] bear the burden of relocation costs, which most people do not take into account....So, on the whole, they probably would be economically disadvantaged compared to urban students, on that basis.

The burden of transportation was echoed by the community college and small public university FAAs. The community college FAA remarked that:

transportation can affect rural students' financial aid in many ways. They have a longer drive to get here. They don't have access to public transportation. If the student is receiving financial aid, and they're driving a long way to class and their car breaks down, and they miss class for a while, they could end up withdrawing or failing from the class, and lose their financial aid, because they haven't maintained satisfactory academic progress. I've personally seen that in appeals, where transportation quite frequently can be a problem....We're a totally commuter school here, and more students who may miss class because of bad weather, because they have a long drive to get here.

In addition, students may miss class because they have to "take a family member to therapy or to the doctor," trips that in rural areas involve considerable time and expense. Similarly, "Just having gas money [and] having reliable transportation to get here" are challenges:

We have students who come in who just can't get out of the parking lot, because they don't have money for gas. And that usually is a problem for us, because we don't always have emergency funds that students can tap into.

Thus, transportation is a hidden cost of attending college for rural students.

Students at this rural community college also have limited computer access because they don't have broadband out in a lot of areas. If they do have broadband access, they may not be able to afford it. And more and more of the processes at college—whether it be the things you need to do for class, or just registering, or communicating—more and more of that is online now. And although we say to students, “Well, you can come in and use our computer labs,” sometimes if they live quite a distance away and have the whole transportation issue, sometimes that makes it more difficult for them. So computer access, even just having the computer skills in the rural areas where they haven't had access, those things I think come into play as well.

Computer access is crucial not only for registration and communication, but also for submitting the FAFSA electronically.

In line with the quantitative findings on lower educational attainment among parents of rural FAFSA applicants, two FAAs described rural students' access to postsecondary education and knowledge of financial aid procedures. The small public university FAA observed that for rural students

it's not odd for the parents not to have finished junior high school....College is not available to most of the people in the area, even though the institution is right here. They could walk [to campus] if they wanted to. They just feel like it's out of reach....So I think more education...for the community [is needed], because that would...get folks to understand that higher education is something that's accessible for them and their family. [They don't think it's accessible because] they have put themselves in categories that it's above them, or beyond them. It's not even a matter of being affordable or not affordable: it's just out of their reach.

Since their parents, on average, have less schooling, many rural students are also first-generation students. Thus, the community college FAA noted that they are “unfamiliar” with financial aid and “find it rather daunting to just get through that process.” These comments reinforce the need for education on financial and academic planning for college, as discussed below.

Adult learners

Directors at four institutions (business/technical school, community college, small and large public universities) noted an increase in the number of non-traditional (adult) students, including

those who enroll in courses due to job loss or expired unemployment benefits. Conversely, neither of the 4-year liberal arts colleges reported more adult learners, signaling the types of institutions that adults tend to select for postsecondary study. The growth of adult learners is demonstrated by data from Penn State (Tracey McCloskey, personal communication, July 16, 2013). From 2009-10 to 2012-13, the number of face-to-face (not online) adult undergraduate students at the University Park campus increased from 2,758 (6 percent of enrollment) to 3,030 (7 percent), compared to 7,999 (21 percent) and 8,893 (25 percent), respectively, at the branch campuses. Online adult learner enrollment increased more rapidly, from 3,596 (82 percent of enrollment) to 5,944 (87 percent), a point to which we return in the policy implications. In 2012-13, adult learners comprised 21 percent of PSU's total World Campus enrollment (17,483 students).

According to FAAs and policy experts, adult learners have different financial situations, and thus require different types of financial aid and have different patterns of degree completion, than traditional-age students. Specifically, they are not dependents and do not rely on parents' income; they are raising families; they may take classes sporadically as their financial situation, employment status, and personal responsibilities allow; and they do not necessarily intend to complete a 4-year or even 2-year degree, opting instead to seek certification (e.g., Police Academy), specialized training, or professional development. In addition, "A lot of them are in employment circumstances where there's not the certainty of work six months from now, or even six weeks from now." As such, FAAs observed that many of the adult learners who returned to school due to job loss or unemployment benefits wanted to pursue retraining or enter the trades.

The recession has affected traditional and adult learners in different ways:

More traditional students are coming out of high school, and they're not necessarily losing a job and deciding to come back to school. Probably what we see there with the economy is that their parents might be impacted, so more of them might be coming in with parents who have lost jobs, and we're processing more professional judgments for that group

[requesting additional paperwork to see if they qualify for more grants and other financial aid], but it's not so much that those young students have been affected. Perhaps some of them are deciding to come because of the job market—to come to community college rather than trying to find a job. (community college)

Many of the adults who have enrolled in postsecondary education during and after the recession are ineligible for state grants, as a policy expert explained:

Unless they enroll in an eligible program, which means it has to be at least 2 years' duration, and they enroll for at least six qualifying credit hours, they're not going to get an award. And many of these students do not do that. Again, your people in the workforce are often just looking to improve their skills, so they take a course here or a course there. The students who are opting not to go from high school to full-time secondary ed are possibly again looking for job preparation training, where again it may not be a program of 2 years' duration....Actually, the commonwealth has recognized this. They had asked us to initiate a new grant program this year called PA TIP [Pennsylvania Targeted Industry Program¹⁰], which focuses exclusively on programs of study of less than 2 years, although we still maintain the enrollment intensity requirement [of at least half-time enrollment at non-profit and full-time enrollment at for-profit institutions].

Initiatives like PA TIP, which targets students in the energy, advanced materials and diversified manufacturing, and agriculture and food production sectors, recognize that adult learners need financial aid to enroll in short-duration programs. This point was reiterated by the community college FAA: "Because we're a community college, a lot of our...certificate and diploma programs are not long enough to be eligible for the PHEAA grant," with the exception of PA TIP programs.

In addition to the recession, the expansion of Marcellus Shale natural gas drilling affected student composition at the business/technical school:

We are drastically affected by the growth of the gas and oil industry. And we do presentations in a lot of the high schools, and some of the businesses in our county, and so do some of the gas and oil companies. Sometimes they'll even come in behind us, do their presentation, and theirs seems to be a little bit more optimistic, a little more lucrative than ours, talking about going to school for maybe 2 years, when...these gas and oil companies can offer \$50,000, \$60,000 right off the bat, without a college education.... I can just say within the past year, our non-traditional students have increased maybe by 30 percent. I always bring it back to the gas and oil industry coming into the area. It is a blessing in most aspects that they can provide employment to a lot of students, but they're also...taking

¹⁰ <http://www.pheaa.org/funding-opportunities/pa-tip/index.shtml>

some of our businesses under, so a lot of people have been losing their jobs and trying to go back to school to further themselves. So, yeah...I've seen a lot of adults come in.

Regardless of the reasons adults have lost their jobs, Pennsylvania's higher education institutions are seeing a collective increase in the adult learner population.

Adult learners' financial situation also influences their degree completion, as noted by the small public university FAA:

I find that the adult learners have more difficulty with...the ability to complete their degree, because of their...financial responsibilities outside of school. So if they come to school and they are full-time...they're studying and...their academic performance is not affected, but their financial responsibilities for the home are not being able to be covered. They can't meet their financial responsibilities outside of school, so it...deters them from completing in a timely fashion....They'll stop and start. They'll stop and start.

He went on to describe a woman who took nearly 20 years to complete her degree: "And it's because she has three children...She has to work a regular job, and she stops and she starts, and she stops and she starts, and she stops and she starts." Although this may be an extreme case, it highlights the stop-start pattern that is more prevalent among adult learners.

Finally, unlike traditional-age students, adult learners do not necessarily have parents to help guide their financial aid decisions:

In the adult population, we either see those who are very savvy about it, or those who really haven't picked up on that sufficiently yet, nor do they have parents to turn to, to kind of guide them and get their questions answered.

This makes support from college/university personnel all the more crucial.

FAFSA completion

Financial aid administrators reported very little variation in FAFSA completion, since most students submit it as a mandatory part of their financial aid application. Typically, students who do not qualify for need-based aid their first year and who do not take out loans do not complete the FAFSA in later years. One administrator noted that if a student files the FAFSA late in their first year,

they are more likely to file late in subsequent years. Late filers are most likely to miss deadlines for institutional scholarships and aid.

Most FAAs estimated that a high percentage of eligible students complete the FAFSA, in part because “we’ve seen the FAFSA get easier over the last few years” and because it is the only financial aid form that some institutions use. The business/technical school has a 100 percent FAFSA completion rate because the admissions process “includes a financial aid appointment, where we actually walk our student through the FAFSA, so we guarantee that it is completed.”

Despite the reportedly high levels of FAFSA completion, students face deterrents to submitting it. A policy expert described two kinds of limitations:

Students who live in families that have very low levels of financial literacy are going to be very intimidated. There is a smaller second group of students whose families refuse to provide that information, in the belief that somehow or other it will come back to bite them.

In addition, students under age 24 who are financially independent are required to submit numerous forms of documentation:

People who are trying to claim independence...have to jump through too many hoops with the state and submit documents over and over. And sometimes they actually just submit documents to the point where they know that the students are just not going to do it anymore. And it just ends, and they [the state] have that money in their budget. (small public university)

This experience underscores the importance of simplifying the FAFSA form (Bettinger et al., 2009).

Electronic FAFSA submission (now mandatory) has both simplified and complicated matters.

Although families have become more computer literate and more familiar with electronic filing,

there are still a lot of people out there that don’t have computers, don’t know how to use them, are scared to death of using them. Don’t want to put their information on them. And so they tend not to do anything. They just won’t apply, so they don’t go to school. (religious college)

Moreover, applicants may no longer submit a paper copy of their federal tax return to verify income. The new system, the electronic IRS Data Retrieval tool,¹¹ has reportedly created many problems. “For some families,” connecting the FAFSA to the federal tax return is “terrifying”:

“They’re going to compare what I put down on this piece of paper to the tax return.” In addition,

It’s difficult because there’s a timing issue with the IRS. They have to wait at least two weeks after their taxes have been submitted [to use the data retrieval tool].¹² Sometimes they forget. Sometimes they’ll try to do it right away, and they’re not able to, so they’ll just get frustrated and stop. If they don’t want to use it, then they have to order their tax transcript, and that’s a process all in itself. (private college)

For a lot of our families, when it’s a first-time experience, they just throw their hands up and walk away....They almost scare people to death—that you have to use this tax retrieval tool. And so they go in and try to use it, and then it tells them, “Oh you’re not eligible, so you can’t use it.” So it will kick you out....I do this every day and I’m confused half the time. I can see what these poor people are going through. So, like I said, they’re [federal government] not simplifying. (religious college)

Despite high levels of FAFSA completion at participating institutions, four FAAs described efforts to aid students’ completion, and a fifth planned to begin offering workshops. (With nearly 100 percent FAFSA completion, the business/technical school did not need to increase completion.) Strategies included one-on-one assistance (private college, religious college, community college); on-campus financial aid or FAFSA completion nights for high school students and current students (community college, religious college); off-campus FAFSA completion workshops at high schools (large public university, religious college); email and other reminders for current students (community college, large public university); and making public computers available (community college). The community college was especially attentive to the needs of rural students:

Here...with our first-time students and our rural students and people who are really not familiar with the process, we do all we can to make sure that their FAFSAs get filed. You

¹¹ <http://www.irs.gov/uac/Automated-IRS-System-Helps-College-Bound-Students-with-Financial-Aid-Application-Process>

¹² Two weeks if filing electronically, six to eight weeks if filing a paper return.
http://www.hesc.ny.gov/content.nsf/SFC/FAFSA_Offers_IRS_Data_Retrieval

know, like we said, they don't always have Internet at home. They don't always have fast-speed Internet. It can be pretty cumbersome, so we always offer our computers and our assistance, whether they just sit down, and we say, "Oh, you know, we're going to be here at our desks. You come grab us if you have a problem."If they're really uncomfortable, which happens a lot, we'll just sit next to them.

This type of assistance is crucial for helping families "figure out the process":

We don't file FAFSAs for students at our college, but we will sit down next to the student and their parents, and as they go through the [process], you know, get them started, get them to the website, and just sit there. And when they're looking at a question and they don't understand it, you know, we'll assist them in figuring it out, or, you know, we'll grab the phone and call the FAFSA office, if something is confusing, to get clarified....With our staff here, we will really make ourselves available for when they can come in to sit down, and we do all we can, as far as self-serve, to give them the information they need to do it on their own.

Effect of state budget cuts

Financial aid officials described the effects that the \$900 million state cuts to education in 2011-12 had on their students and institutions. Comments here focus on consequences for higher education, although policy experts also described detrimental effects on P-12 education such as the reduction of advanced placement classes needed for college readiness.

The biggest problem with, I think, with states pulling back their funding is that it forces tuition up. And the best form of financial aid is really to have...low tuition. (large public university)

I think that the cuts in the state funding hits two levels: the state funding for PHEAA grants being cut, and then funding that goes to the institution being cut. So we get hit two ways. So that if the institution was to have more funds to award needy students, our population [low-income, first-generation, and adult students] would be supported....Not just financial aid on their award letters, but...other types of support on the campus. (small public university)

I would say, probably it [state budget cut] has most affected our highest-need students. Because you know...it's reducing what they're being able to receive from the outside and they just sometimes can't afford it. I think from a private educational viewpoint, I think we have lost some of our higher academic students that we used to be able to attract, when they were getting some of the academic-based, state-funded grants. They don't get those now. I think some of those students are choosing to go to less expensive institutions. (private college)

Study participants strongly advocated for increased higher education funding, a point that is discussed in the policy implications.

Institutional aid practices

The variety and amount of institutional aid ranged from hundreds of scholarships at Penn State and the community college (across all its rural and urban campuses) to nine scholarships at the business/technical school that reduce tuition by 30 percent to 50 percent. In response to flat higher education funding and students' growing financial need, FAAs at three institutions (Penn State, small public university, religious college) reported awarding more institutional aid in recent years, albeit in some cases quite limited:

Probably the biggest change that I've seen in the last 5 years has been an increase in our institutional discount rate. We are having to increase the amount of institutional assistance we provide to students to enable them to attend, because they're not getting outside support like they used to. (religious college)

"In an effort to try to put more gift type money into the hands of students with the highest need," Penn State started a scholarship program approximately 9 years ago for students who are Pell-grant eligible.¹³ The FAA observed, though, that institutional "scholarships are increasing every year in terms of dollars, but they're not necessarily keeping up with tuition increases." And given Penn State's size, the amount of institutional aid is proportionately small.

Having already "taken a hit to the college budget" to award aid to the highest need students, the private college concentrated on helping students apply for non-institutional aid:

We've kind of reached our peak for helping as much as we can, so what we're doing is we're trying to make sure that students are aware of all sources and try to get them applying earlier for scholarships from other sources and applying for different programs through the state and what not. (private college)

¹³ Trustee Matching Scholarships are funded by donors and PSU matching funds. For more information, see <http://giveto.psu.edu/s/1218/index.aspx?sid=1218&gid=1&pgid=382> and <http://studentaid.psu.edu/types-of-aid/scholarships/university-wide#trustee--scholarship>.

The small public university also planned to hold scholarship workshops because their student population (first-generation, low-income, adult learners) tends to apply late for financial aid, meaning that “they haven’t gotten scholarships that they would have had to research.”

Overall, institutions did not offer different financial aid packages for traditional versus adult learners or new versus continuing students. A few FAAs reported offering limited institutional aid for specific groups:

We do have one scholarship for first-year students. It’s not huge, but there may be students who would see that the first year and not see it the second year. (community college)

Some of our scholarships are only for recent high school graduates. Some are only for students in diploma programs, or health-related programs, or students seeking an associate degree, but any student is welcome to apply for them. We don’t put any restrictions on that. (business/technical school)

Only juniors and seniors are eligible for some Penn State scholarships because the donor has stipulated that students in a specific major are eligible. Since students typically declare a major in their junior or senior year, beginning students are not eligible.

Three FAAs (community college, religious college, small public university) described a highly personalized approach to financial aid counseling, one that helped students complete the FAFSA, apply for aid, and understand loan options. At such institutions, students are strongly supported in navigating the financial aid system. For instance, the small religious college offers intensive counseling and assistance with all aspects of financial aid. Admissions counselors work closely with new students, and can submit a form to consider “extreme” or “unusual” financial situations such as “a parent with a terminal illness,” siblings “with special medical needs,” or families who lost their home during the housing market crash. The institution’s small size allows personnel to consider financial need indicators besides the FAFSA and tailor financial aid to students’ situations. In brief,

“we spend a lot of our time trying to educate and help them know the process and learn the process, so that if something has changed [in their financial situation], they’re not afraid.”

In addition, the religious college carefully considers each student’s academic and financial prognosis for being able to persist in college, and works “with each student individually to make it possible for them to attend.” The FAA offered the following example:

If we have a student coming in who’s not been a strong academic student in high school, and they’re very high need, and they have a single parent with not a lot of income, so they can’t afford to make big payments toward education, [then] we look at the costs for the whole year, what the aid’s going to be for the whole year. And they still need \$8,000 to pay their bill for the whole year. And there’s nowhere for them to get that. Parents aren’t going to be able to borrow. The student can’t borrow, doesn’t have a co-signer. If they worked, they might be able to earn \$1,500, but that’s still going to leave a big balance at the end. What happens, I think at most institutions, is if you haven’t paid your bill for the year, you can’t continue. You can’t be registered for the next semester, or year. So then those students get into a situation where they can’t continue at...their first institution, because they have an outstanding bill. They also have taken out loans, so...those are hanging over them. They can’t transfer to another school, because they can’t get a transcript from their first school, because their bill isn’t paid. It’s just a losing situation all the way around. So in that kind of a situation, we would say to those students, “Maybe, this year, why don’t you start locally? Maybe consider a lower cost institution for now. Get a year’s worth of credits, maybe strengthen...your academic profile. That may make you eligible for additional grant money, and then think about coming back next year. Maybe you could work part-time, save up some money.” If we see that...there is no way for a student to pay their bill, we don’t encourage them to come....It doesn’t help anyone.

This example shows the constellation of factors (e.g., academic preparation, parents’ financial situation, indebtedness) that shape students’ financial needs and their ability to complete a degree.

Financial education and academic counseling

One FAA emphasized the need for more financial education and public awareness of ways to pay for college, both for students and families. This institution is trying to highlight crucial consumer information that students need to know. For instance, students may have less fear of borrowing if they understand “that repayment obligations on the back end [after graduation] will

be tied to their income, and they won't be asked to repay more than their income can bear," especially if they work in a public service occupation that qualifies for loan forgiveness.

Similarly, the FAA perceived a "growing lack" of planning for college savings among middle- and upper-income families who are (hypothetically at least) better positioned to save:

There's a little bit of a misunderstanding that, "Well, there's plenty of aid out there. It'll be fine once we get there." And so, you know, trying to convey to families early on that it really is a partnership. They have to do as much as they can with their resources, in addition to any financial aid that they might receive, to be able to afford to come to college....If you go back, even before the recession period, in general there's been a trend over the decades, I would say, of families not thinking ahead enough, really not, I would think, being able to grab hold of an understanding about, you know, we want college for our kids. It's going to cost. Let's go find the information. There are just a lot of families across the population who don't know to think that way, or they haven't had that experience. Or we see some who should be able to afford and haven't planned. And now they're wondering, well what are we going to do?

This "lack of understanding about what it really takes to be ready for college, from an economic point of view" underscores the need for wide-scale financial education and awareness, as well as inequities across race, parents' education level, and family socio-economic status (Perna, 2004). As another FAA put it, "I think there should be...more education about savings plans for college. Because I don't think there's enough information out there when people have babies. They should be at the hospital with 529 plans" explaining how to save for college.¹⁴

Similarly, a policy expert observed that financial and academic planning go hand in hand:

There are some issues around the availability of counseling services in school districts, beginning with at least junior high school kids, and on through high school. [T]his planning is not only a financial planning...but it is an academic planning as well. If you're not taking the

¹⁴ 529 plans "may be used to fund qualified college expenses, such as tuition, room and board, mandatory fees, and books. The beneficiary of a 529 plan may be an adult or a child, and the funds in a 529 plan may be transferred to a new beneficiary who is a family member of the previous beneficiary. Individuals may open a 529 plan in any state, and funds may be used for expenses in other states" (Huang et al., 2011, p. 2). States can offer both types of 529 plans—prepaid tuition and savings—whereas qualified educational institutions can only offer prepaid tuition plans (Internal Revenue Service, 2013). For an analysis of a Maine initiative that offered incentives to enroll newborns in 529 plans, see Huang et al. (2013).

right math courses as a 6th, 7th, 8th grader, you're probably not going to be ready to take the right ones in 10th, 11th, and 12th grade, as well, to get you ready for college. And so I think that one of the services that needs to be beefed up—and again one of the casualties when there is insufficient financial resources available in a school district—is the counseling service for students and, you know, I'll include the parents in that, as well, about having postsecondary education on your radar scope, even though your son or daughter is 11 or 12 years old, and beginning to think about what it's going to take academically and financially to be ready to move on to some level of postsecondary education.

This suggests that preparing students for college requires expanding families' knowledge not only of savings and financial aid, but also academic pathways to college (Perna and Steele, 2011).

CONCLUSIONS

FAFSA applicants' financial needs and socio-demographic and family characteristics were very different according to the type of degree they were pursuing (bachelor's degree students versus associate degree and certificate/diploma [ACD] students), whether they were starting or continuing college study, and whether they had earned a GED diploma or were adult learners.

Overall, rural-urban differences were less pronounced. In sum, ACD, beginning, GED, and adult students, especially those in urban areas, had the greatest financial need. However, rural BA/BS students had less income and were less likely to attend private 4-year colleges and community colleges than urban BA/BS students. Instead, they were disproportionately concentrated in public 4-year institutions.

Rural-Urban and Beginning-Continuing Differences in FAFSA Applicants'

Characteristics

Twenty percent of FAFSA applicants were from rural counties and 80 percent were from urban counties. Fifty-nine percent were women, and the average age was 24. More than 40 percent of applicants were in poverty or near-poverty based on family size, indicating a high level of financial need. Overall, rural applicants had lower household income and EFC than urban students

(rural total AGI and EFC: \$53,678 and \$8,140; urban total AGI and EFC: \$54,570 and \$9,325).

However, rural students were less likely to be in poverty than their urban counterparts (28 percent and 34 percent, respectively).

Rural and urban students pursued similar degrees: about 60 percent planned to study for a BA/BS degree, followed by associate degree (27 to 28 percent) and certificate, diploma, teaching credential, or other degree of less than 2 years (12 to 14 percent). Rural students, though, were more likely to enroll in *occupational or technical* (versus general education or transfer) associate degree programs, indicating a more vocational focus among rural associate degree students. Urban students were more likely to enroll in certificate/diploma programs of less than 2 years. With few exceptions, students enrolled in such short-duration programs are ineligible for state grants (see “Policy Considerations,” below).

In addition, rural applicants were more likely to enroll in public 4-year institutions instead of private 4-year or community colleges, to enroll full-time, to be starting college, to be younger, and to be financially dependent on parents. Rural students were less likely to be single and to be adult learners, and their parents had less schooling. Given the importance of parental educational attainment in shaping students’ college aspirations and understanding of application and financial aid procedures, the latter finding indicates a lower degree of cultural capital among rural students.

Overall, beginning rural and urban students had greater financial need than continuing students, and were also more academically marginalized, as indicated by the types of degrees they pursued, the types of institutions in which they enrolled, and their personal and family educational background. Compared to continuing rural students, beginning rural students were significantly less likely to pursue a BA/BS and more likely to pursue an associate degree or certificate/diploma of less than 2 years; more likely to attend a technical school and less likely to attend a public 4-year

institution; more likely to enroll full-time, to have a GED diploma, to be the only household member in college, to be male, and to be single; and less likely to be an adult learner, to support a child dependent, and to have a college-educated parent. Beginning rural students had nearly \$3,000 less income, on average, and a lower mean EFC (\$671 less) than continuing rural students; they were less likely to be financially independent and more likely to be poor and to have a dislocated worker in the household. Differences between beginning and continuing *urban* students were similar, but with a much smaller gap in income and EFC.

Differences in Student Characteristics by Degree Type

Stark differences emerged between BA/BS and ACD students, with the latter being significantly more disadvantaged on all measures. ACD students, regardless of geographic location, were more likely to be adult learners, to hold a GED diploma, to have less educated parents, to live in a dislocated worker household, to support child dependents, to be female, and to live in poverty or near-poverty. For example, among rural applicants, ACD students were three times more likely than BA/BS students to provide support for dependents, four times more likely to have a GED certificate, about 2.5 times more likely to be adult learners, and more than twice as likely to live in a dislocated worker household. Their average income was about \$27,000 less than that of rural BA/BS students, and about 52 percent were in poverty or near-poverty, compared to 30 percent of BA/BS students.

Rural BA/BS students were more likely than urban BA/BS students to attend public 4-year institutions. This echoes a policy expert's observation that private 4-year colleges and community colleges are geographically inaccessible to rural Pennsylvanians. These students' reliance on public universities, coupled with their lower income relative to urban students (see below), indicate that

state support for PASSHE and state-related universities is crucial for increasing college access and affordability for rural students, especially those pursuing a BA/BS.

Rural BA/BS applicants also had lower incomes and EFC, on average, than their urban counterparts (rural total AGI and EFC: \$65,391 and \$10,061; urban total AGI and EFC: \$74,553 and \$12,825). However, income inequality (as measured by mean total AGI) between BA/BS and ACD students was less for rural students. The mean income gap between urban BA/BS and ACD students was more than \$41,000, compared to about \$27,000 for rural students. In sum, of all FAFSA applicants, urban BA/BS students had the highest income, on average, and were the most likely to attend private 4-year colleges, whereas urban ACD students had the greatest financial need, with at least 60 percent in poverty or near-poverty.

County-level analyses of FAFSA applicants' likelihood of pursuing different degree types showed that counties with more BA/BS students had a more educated populace, higher median family income, lower unemployment, and a significantly smaller proportion of applicants who were GED recipients or adult learners. These counties also had a higher percentage of FAFSA applicants who were not in poverty or near-poverty. With few exceptions, counties with more ACD applicants had the opposite characteristics. For example, having more associate degree applicants was related to higher county unemployment, but not to lower levels of full-time employment. This suggests that where unemployment is high, students tend to pursue 2-year rather than 4-year degrees.

County Influence on Educational Financial Need

Overall, rural counties showed greater aggregate educational financial need than urban counties, with a significantly lower mean total AGI, total earnings, and EFC, and higher percentage of FAFSA applicants in poverty or near-poverty. However, county-level differences in EFC, income, and poverty level were mainly driven by disparities between wealthier urban BA/BS students; their

rural counterparts were significantly more likely to live in poverty or near-poverty, and to have lower average incomes.

In rural counties, FAFSA applicants' aggregate educational financial need was related to several county-level characteristics. Financial need tended to be greater in counties with a smaller population, and in counties with lower educational attainment (a smaller proportion of residents with at least a BA/BS degree), a smaller proportion of the population enrolled in college or graduate school, a higher percentage of unemployed workers, a lower percentage of full-time workers, lower median family income, and higher rates of poverty and near-poverty. The mean student-teacher ratio in county schools and the proportion of population enrolled in grades 9 to 12 were not related to county-level measures of educational financial need.

Results for urban counties were similar, with several exceptions. Specifically, urban county population was not related to mean EFC, total AGI, or total earnings of applicants; however, smaller counties were significantly more likely to have higher rates of poverty or near-poverty among applicants. Second, the percentage of adults with at least a high school degree was significantly related to the percentage of the county's applicants in or near poverty, but only in urban counties. Third, the percentage of residents in college or graduate school was not related to any of the measures of educational financial need in urban counties; conversely, it was positively related to mean EFC, total AGI, and total earnings among rural counties. Fourth, urban counties with a smaller percentage of residents enrolled in high school had a larger proportion of applicants in near-poverty; these two variables were unrelated in rural counties. Similarly, higher levels of near-poverty among applicants in urban counties (but not rural ones) were related to lower county labor force participation (higher unemployment and fewer full-time workers). Finally, urban counties with higher student-teacher ratios had lower EFCs among FAFSA applicants.

These results may reflect, in part, different access to and the quality of jobs in rural and urban counties, and consequently, the impact on educational financial need. Urban counties with a larger percentage of the population having at least a high school diploma also have lower percentages of FAFSA applicants' families in or near poverty, and larger percentages above 150 percent of the poverty level. This may indicate employment opportunities for county residents with at least a high school education. For rural counties, on the other hand, the absence of a significant relationship between the percentage of the population with at least a high school diploma and the percentage of FAFSA applicants' families in or near poverty may reflect the difficulties residents with at least a high school degree face in obtaining better-paying jobs. In both rural and urban counties, a higher percentage of the population with a bachelor's degree was associated with a lower percentage of applicants in poverty. This may suggest that at least a bachelor's degree is needed in rural counties to improve access to better-paying jobs. In sum, increasing the percentage of rural residents with bachelor's degrees is crucial, not only because a college degree is associated with greater household- and county-level economic well-being, but also because college-educated adults share vital cultural capital with family and social network members.

Moreover, in urban counties, the negative relationships between the percentage of applicants in near poverty and the percentage in the county with at least a bachelor's degree, and the county's labor force participation suggest that a more highly educated population and a greater prevalence of full-time employment reduces the likelihood of near-poverty for applicants. In rural counties, the percentage of applicants in near-poverty was not associated as tightly with these county indicators of economic well-being.

County-level educational financial need was greatest for 1st year/continuing students, with a mean AGI approximately \$13,000 (rural) to \$22,000 (urban) less than that of beginning students. As

students progressed beyond the first year of postsecondary education, their economic well-being increased. This suggests a strong relationship between ability to pay and college persistence, as noted by financial aid administrators. Rural counties had greater educational financial need than urban counties for all but 1st year/continuing students. These students had taken at least one college course before submitting the FAFSA, but had not advanced to 2nd year/sophomore status. Given their limited economic resources, this “some college” group likely includes students who are only able to take classes sporadically, as finances and life circumstances permit.

GED Recipients and Adult Learners

GED recipients and adult learners were more disadvantaged than non-GED students and traditional-age students, respectively, on all measures. Compared to adult learners as a whole, GED recipients had greater financial need and lower socio-economic status (GED recipients comprised about 16 percent of the sample of adult learners). GED recipients comprised about 7 percent of rural and 8 percent of urban applicants, respectively. Typically, GED applicants were low-income, pursuing an associate degree or certificate/diploma, 31 years of age, and had at least one child dependent. Only about one-quarter were studying for a BA/BS. Despite their older age, GED recipients were significantly more likely than non-GED students to be starting postsecondary study, but less likely to be studying full time. Approximately 55 to 65 percent had parents with a high school education or less, meaning that most were first-generation college students. About three-fourths of both urban and rural GED recipients lived in poverty or near-poverty. Rural GED recipients' mean total AGI and mean EFC were about \$23,400 and \$2,600, respectively, compared to \$19,800 and \$2,200 for urban GED students. However, similar to previous results, the mean income gap between GED and non-GED applicants in rural counties (\$32,405) seems to be smaller than in urban ones (\$37,557).

Adult learners comprised about one-third of all FAFSA applicants (32 percent of rural and 36 percent of urban applicants, respectively). Overall, the quantitative findings on adult learners mirror the interviewees' observations about their distinct family obligations, financial situations, and life circumstances. About two-fifths were pursuing a BA/BS, but compared to traditional-age students, these learners were far more likely to pursue an associate degree (especially technical/vocational programs) or certificate/diploma of less than 2 years. They were also more likely to be 1st year/continuing students; to submit the FAFSA to community colleges, technical schools, or other types of postsecondary institutions; to study half-time rather than full-time; and to be veterans. With an average age of 33, adult learners were less likely to be single than traditional-age students, and more than one-half supported one or more children. Rural adult learners were more likely to report these family characteristics than urban adult students. Similar to GED recipients, most adult learners had parents with a high school education or less (about 59 to 68 percent). And as with other quantitative results, parental educational attainment was significantly lower in rural areas. Among both urban and rural applicants, traditional-age students had a mean income more than twice that of adult learners, and about 60 percent of adult learners lived in poverty or near-poverty. Rural adult learners' mean total AGI and mean EFC were about \$30,000 and \$3,600, respectively, compared to \$27,600 and \$3,600 for their urban peers. As noted for GED recipients, the income gap between rural adult and traditional-age students was smaller than for *urban* ones.

In sum, both adult learners and GED recipients have much greater financial need than their traditional-age and high school diploma peers. Table 20 shows that as a percentage of income, this gap seems to be greatest for GED versus high school graduates. For both groups of students, the financial need gap is larger in urban areas, primarily because traditional-age and high school

graduates in these areas have significantly higher incomes than their rural counterparts, while urban adult learners and GED recipients have significantly lower incomes than their rural peers.

Table 20: Income Inequality between GED Versus High School Diploma and Adult Versus Traditional-Age FAFSA Applicants

	Difference in mean total AGI...			
	Among rural applicants		Among urban applicants	
Type of FAFSA Applicant	In \$	As % of AGI	In \$	As % of AGI
GED certificate vs. all others	\$32,405	139%	\$37,557	190%
Adult learner vs. traditional-age	\$36,499	122%	\$46,384	168%

Interview Findings

The interview findings revealed that students’ and families’ financial needs have increased because: their income (in many cases) has declined in the wake of the recession; tuition and cost of living have increased; and federal and state aid has not kept pace. Consequently, students’ unmet need “goes up every year,” and more families are unable to afford college—even though many of these institutions are awarding more institutional aid. In brief, students’ economic situations have become more precarious in recent years. In turn, these limited economic resources hinder their degree completion (Dooris et al., 2007), even at lower-cost institutions such as community colleges. This is supported by the quantitative finding that students who advance beyond the first year have higher family incomes than beginning or 1st year/continuing students. Despite declining family income, the 2-year college FAAs observed little or no increase in students’ unmet financial need, either because they already receive substantial aid (business/technical school) or because tuition is relatively low (community college).

Other key trends included more parents taking out loans and also being denied loans due to poor credit, more students borrowing the maximum amount, and more students working. Echoing current research on student loan debt (Dwyer, McCloud, and Hodson, 2012; Simmons, 2012), two

FAAs noted that middle-income families are assuming disproportionately more loan debt because they do not qualify for some need-based aid, yet cannot afford to pay out-of-pocket.

FAAs and policy experts argued that state higher education budget cuts have increased students' financial need by driving up tuition. As one FAA stated, "the best form of financial aid is really to have...low tuition." Budget cuts have disproportionately affected the highest-need students.

The variety and amount of institutional aid differed considerably across institutional types. In general, institutions did not offer different financial aid packages for traditional versus adult learners or new versus continuing students. Given the quantitative findings showing that adult learners and beginning and 1st year students are significantly more disadvantaged, institutions should reconsider how aid is packaged. In response to growing financial need, two institutions sought to help students to apply for private scholarships, and three institutions awarded more institutional aid. Despite these increases, though, students' unmet need continued to grow. Smaller institutions tended to tailor financial aid awards and counseling to students' specific situations.

According to FAAs and policy experts, rural students had less geographic access to higher education, higher transportation or relocation costs related to college attendance, and more limited Internet access, which hampered registration, communication, and FAFSA completion. In addition, they were predominately first-generation students with limited knowledge of financial aid options and procedures. These results echo the quantitative findings that rural applicants have parents with lower levels of educational attainment, live in counties with a less educated population, and are more likely to be beginning students and to attend public 4-year institutions. For many rural residents, public universities are the only available choice.

Four institutions reported increased adult learner enrollment in recent years. The exceptions were the two private 4-year colleges, which serve a traditional-age population. These adults have different economic situations and enrollment patterns, and thus require different financial aid, than traditional students. For example, they typically have families and dependents, and often take classes sporadically. Since many adult learners have lost their jobs, they are seeking to improve their skills or to pursue retraining. As such, they tend to enroll in programs of less than 2 years, making them ineligible for state grants (with the exception of PA TIP programs).

Estimated FAFSA submission rates for eligible students were very high, supported by various institutional efforts, especially at the community college. Deterrents to FAFSA completion included limited financial literacy, fear of linking the FAFSA to federal tax returns, and excessive documentation requirements to prove financial independence for students under age 24. Electronic submission simplified FAFSA completion, yet it also created many technical problems (especially the IRS Data Retrieval tool) and posed a barrier for rural students with limited Internet access.

Finally, FAAs recommended more financial education and more public awareness of ways to pay for college, including the availability of income-based loan repayment plans (Federal Student Aid, 2013), the importance of saving for college, and information about college savings options. In addition, financial and academic planning for college are intertwined, underscoring the importance of adequate counseling for junior high and high school students and their families.

POLICY CONSIDERATIONS

The following policy considerations are drawn from analysis of the research findings, the recommendations made by financial aid administrators and policy experts, and the literature review. Respondents' considerations pertaining to the federal government (e.g., low-interest

student loans, simplifying the FAFSA, redefining EFC) and institutional aid (e.g., establishing programs similar to the Carolina Covenant¹⁵) are beyond the scope of this report.

Increase appropriations for public higher education institutions and state grants

Financial aid officials and policy makers praised Pennsylvania for maintaining its focus on need-based state aid rather than shifting to merit-based aid, as some states have done. At the same time, study participants strongly argued for the need to increase (1) state appropriations for public higher education and (2) funding for the state grant program. Low state appropriations are directly linked to high tuition and therefore limited access to higher education and increasing financial needs of postsecondary students. Ron Cowell of EPLC commented:

We rank in the bottom several states by a couple of measures, whether it is state appropriations per capita or state appropriations per \$1,000 of personal income in the state. By both of those measures, I think we rank in the bottom five and have for a fairly long period of time. So this is not a new phenomenon. In fact, our position may get even worse, given the stinginess of the state in the last couple years. The Governor's commission, in its report in November [2012], did acknowledge...that we have relatively high tuitions because state appropriations are relatively low in this state. It has always amazed me, the poor math skills of...some state policymakers who don't get the connection between relatively high tuition in our public institutions and the miserable position of the state in terms of state support for public higher education. There is clearly a link between Pennsylvania ranking...in the bottom five in the country in terms of state support for higher education, and on the other hand, ranking among those states with the highest tuition in the public sector.

In addition, as more students pursue postsecondary education and as costs rise, increased funding for the state grant program is essential:

The grant program would have been defunded significantly if it were not for the use of other PHEAA resources: their profits from other activities....I would remind state policymakers that they should not become so dependent on non-recurring resources that

¹⁵ The Carolina Covenant program at University of North Carolina-Chapel Hill targets low-income students, and meets their full financial need with grants rather than loans (<https://carolinacovenant.unc.edu/>). Penn State analysts (Senate Committee on Admissions, 2006, pp. 16-17) calculated that, based on 2004 figures, it would cost approximately \$100 million to implement a similar program at PSU, primarily because North Carolina students received four times more in per-student state appropriations (\$14,472 and \$3,440, respectively) and paid less than one-half as much for in-state tuition (\$4,072 and \$10,856, respectively).

PHEAA has been able to make available to supplant state appropriations. The PHEAA grant program ought to be supported with state appropriations and perhaps supplemented, but not supplanted, by the use of those other PHEAA resources.

The 2012-13 *Grapevine* report (Center for the Study of Education Policy, 2013) shows that Pennsylvania ranked 46th in state support for higher education per \$1,000 in personal income (\$3.24; national mean: \$5.42) and per capita (\$140.45; national mean: \$229.72). State budget cuts in 2011-12, including higher education funding reductions of more than 20 percent, helped the state end that fiscal year with a \$659 million surplus (Wood, 2013). Since then, little higher education funding has been restored. As the economy improves, and as tax revenues increase, additional funding should be invested in higher education. This restoration could be accelerated by increasing state revenue sources; viable strategies for raising revenue, such as closing corporate tax loopholes or adopting a Marcellus Shale tax, have been described by the Pennsylvania Budget and Policy Center (2013).

Increased funding for state-related and PASSHE institutions is essential for increasing higher education access and meeting financial needs for rural residents. FAFSA and qualitative data indicate that rural students—especially those enrolled in BA/BS programs—are more likely than their urban peers to apply to 4-year public institutions, since they live farther from community and private colleges and are less able to afford private college tuition. This leaves PASSHE schools and Penn State campuses as their primary option. Rural BA/BS students also have much greater financial need than their urban counterparts. In sum, higher appropriations for state-related and PASSHE institutions will benefit rural students by lowering tuition and reducing their financial need.

Expanded funding for short-duration, part-time postsecondary study

The study findings underscore the need to expand state aid for part-time students and those pursuing a degree of less than 2 years. This is particularly important for adult learners and

lower-income students who do not currently intend to complete a 2- or 4-year degree. Ron Cowell of EPLC commented:

Until about...20 years ago, we didn't offer any PHEAA aid to part-time students. And now there is some PHEAA aid to part-time students, but it is still a limited piece of the PHEAA grant program. And that's one of the things that may require some additional attention by policymakers, and even the PHEAA Board and the decision-makers there: the degree to which we provide assistance to students, not only in those non-traditional programs, you know, like those that are doing more online learning, but those that are doing more part-time learning....I would think that we probably have more part-time students, and we don't necessarily have a student grant program that is responsive enough to that changing dynamic.

FAFSA data show that 60 percent of both rural and urban applicants planned to enroll in a BA/BS program. However, beginning rural students were significantly less likely to pursue a bachelor's degree than continuing rural students, and significantly more likely to enroll in a program of less than 2 years or participate in some other program (approximately 20 percent). Overall, rural students were also more likely than urban students to be starting their postsecondary education. These findings, combined with qualitative data on the types of programs that rural students (especially adults) are pursuing in the current economy, indicates the need to expand financial aid to include certificates or diplomas of less than two years.

Specifically, policymakers should consider expanding initiatives such as the Pennsylvania Targeted Industry Program (PA TIP), which targets students in the energy, advanced materials and diversified manufacturing, and agriculture and food production sectors, to include other academic and vocational areas. This is especially important for meeting the financial needs of rural students who are most likely to enroll in short-term programs: beginning students, GED recipients, low-income applicants, and adult learners. The quantitative data suggest that once students continue past their first year, they are more likely to enroll in 2- or 4-year degrees and to plan on attending 4-

year institutions. As such, funding for students who are beginning a short-duration program can provide a vital platform to pursue future study.

State grants for distance learning

Until the 2013-14 state budget was passed, Pennsylvania was the last state to maintain restrictions on using state higher education grants for online instruction. To qualify for a state grant, students must take 50 percent of their classes in face-to-face settings during a given semester. As the Lumina Foundation President/CEO Jaime Merisotis (2013) stated in a keynote address to the Pennsylvania Association of Councils of Trustees, this is “a rule that no longer makes sense, one that runs counter to the vital goals of increased access and attainment.”

Pennsylvania’s policy stemmed from two factors. First, unlike other states, grant restrictions for students taking online courses are enshrined in state regulations. When the U.S. Department of Education eliminated the face-to-face instruction requirement in 2006, other states followed suit. Since their state grant eligibility rules were tied to federal Title IV (not state regulations), they did not have to seek state legislature approval. By contrast, legislative approval is required to change the online enrollment policy for Pennsylvania state grant recipients. Second, PHEAA operates on a narrow financial margin and cannot incur a deficit. Without accurate data on the number of postsecondary distance learners, PHEAA could not calculate how much costs would increase if state grants were extended to distance learners.

State grant restrictions concerning online enrollment disproportionately affect rural and adult students. As the community college FAA observed, online courses are “very popular” with rural students, yet many are not eligible for state grants. In addition, this policy complicates financial planning because students may learn this only upon enrolling in classes that they are no longer eligible for a grant (i.e., if they take more than 50 percent of their semester credits online).

Moreover, adult learners are over-represented among online students. For instance, in 2012-13, nearly 6,000 adult undergraduate students (14 percent) were enrolled in Penn State's World Campus.

Act 59 of 2013 established a pilot program (2013-14 to 2017-18) that allows

students who take more than half of their postsecondary credits via distance education, usually on-line, to qualify for PHEAA student grants. The total amount to be disbursed through such grants is limited to \$10 million and will come from PHEAA's earnings, not from the state General Fund. (p. 3)

Students at participating pilot program institutions who are enrolled at least half-time in a program of at least 2 years are eligible for a state grant.

Given rural students' limited geographic access to postsecondary institutions and the greater costs they incur for transportation or relocation, they were disproportionately affected by the previous online instruction restrictions. Thus, the legislature's decision to extend state grant eligibility to distance learners at institutions in the pilot project is especially important for increasing postsecondary access and completion in rural communities and for reducing rural students' unmet financial need. Depending on the success of the pilot study, the state General Fund may be needed to continue funding.

Targeted financial aid for adult learners

Financial aid administrators in this study observed a growing adult student population, which reflects a national and statewide trend noted by Jamie Merisotis (2013) in his aforementioned keynote address:

You should do all you can to shift the focus of the state's higher-education system from serving traditional-aged students to serving those in the adult population. It's easy to make a case for urgency and opportunity in this area. For one thing, Pennsylvania has a declining number of high school graduates and an aging population. In fact, demographers predict that, by 2020, the number of high school graduates in the state will decrease by 10 percent. What's more, much of the state's working-age population already has a leg up on college

success. According to the most recent Census figures, nearly 18 percent of Pennsylvanians between ages 25 and 64—almost 1.2 million people—have some college credit but have not yet earned a credential. That group represents a deep well of potential, one that can be tapped fairly quickly if policymakers and campus leaders take the right steps now....[T]his emphasis on adult learners is huge in scope; it's an area that encompasses dozens, perhaps hundreds, of individual policy issues that you as trustees can make your own. Focusing on the state's adult students means everything from boosting online delivery[,] to easing student transfers[,] to pushing for wider acceptance of credits earned through prior learning[,] to increased cooperation with employers in developing workforce-relevant programs.

Despite the large number of adults with some college credit, the 2008 *Measuring Up* report (NCPPE, 2008, p. 6) indicates that only about 4 percent of adults age 25 to 49 (without a bachelor's degree) are enrolled in postsecondary study, compared to about 9 percent in the state with highest adult participation. The study's quantitative results show that adult learners are over-represented among "some college" students—those who, upon completing the FAFSA, have taken a class or two, but have not progressed beyond 1st-year status. As Merisotis argued, this population holds great, untapped potential for increasing educational attainment, especially in rural communities.

Because adult learners have far greater financial need than traditional-age students and are more likely to study part-time and pursue ACD programs, they need different types of financial aid. For instance, analysis of PSU adult learners (aged 24 and older) from 1999 to 2005 showed that they tend to apply for both admission to the university and for financial aid later than traditional students. This is important, because it can significantly affect the amount of state grants that students receive; full-time adult students meeting deadlines typically received about twice the state aid as those who did not meet deadlines. (Guidos and Dooris, 2007, p. 1)

Similarly, the small public university FAA reported that non-traditional, first-generation students tend to file paperwork later and are therefore ineligible for various institutional scholarships.

In 2011, PHEAA announced that state grant deadlines for first-time and non-renewal community college students would be extended from May 1 to August 1. This change was expected to “increase community college state grant recipients by 35 percent to approximately 33,000 students” (PHEAA, 2011). (At the time of the research, data on the actual increase were not yet available for public release.) Policy makers should consider a similar extension for first-time and non-renewal adult students (age 24 or older) to help increase financial aid and college enrollment for this population. Since PHEAA cannot anticipate the added cost in state grants for the first funding cycle, a supplemental state appropriation is needed to ensure that all qualifying applicants receive their state grant, as stipulated in PHEAA policy.

State grant reciprocity agreements with bordering states

The private, 4-year FAA recommended establishing more state grant reciprocity agreements with bordering states:

I would like to see them [Pennsylvania policy makers] make more reciprocity agreements with other states so that state grants could transfer. For instance, New York does not have one with Pennsylvania, and we get a lot of New York students, and they receive no state grant assistance. We do with Ohio, but it's very small. They can only transfer in \$600 of their state grant, so, I mean, it's very little amounts. I think if state grants would be more [transferrable]...across the state borders, I think that would help a lot of students.

PHEAA awards small grants to Pennsylvania residents who attend institutions in certain states. For 2012-13, the maximum out-of-state award was \$600 for portable states, \$400 for non-portable states, and \$800 for veterans (PHEAA, 2012, p. 5).¹⁶ The portable states that border

¹⁶ “A student, who otherwise qualifies for a State Grant award, may use his or her award to pay for attendance costs at an institution in another state, under these conditions. (1) If the institution is in a state bordering Pennsylvania, the state must allow its need-based awards to follow its students to Pennsylvania, i.e., the portability relationship must be reciprocal. (2) If the institution is in a state that does not border Pennsylvania, and the state allows its need-based awards to follow its students to Pennsylvania, awards through the State Grant Program are portable at up to the higher maximum value set for out-of-state awards for the specific year. (3) If the institution is in a state that does not border Pennsylvania, and the state does not allow its need-based awards to follow its students to Pennsylvania, awards through the State Grant Program are portable at up to the lower

Pennsylvania are Delaware, Ohio, and West Virginia. The latter two states border one or more rural Pennsylvania counties. However, Pennsylvania residents attending institutions in the other bordering states—Maryland, New York, and New Jersey—are ineligible for state grants, except for “unique programs of study not available at any other approved institution” (PHEAA, 2012, p. 5).

For rural Pennsylvanians living near these state borders (and vice versa), being able to use PHEAA grants to attend out-of-state institutions could increase access to higher education and reduce their financial burden. Policy makers should consider further negotiations with these states to establish a state grant reciprocity agreement.

State tax incentives for higher education

A financial aid official recommended offering state tax incentives for higher education, similar to those at the federal level. Another director, though, noted that families who receive a credit or deduction do not typically consider it money to set aside for next year’s college expenses. However, for economically vulnerable students and families, even several hundred dollars in lower taxes could make the difference between enrolling or not. To increase the economic benefit to Pennsylvania, tax incentives could be limited to students enrolled at in-state institutions. GED recipients should not be excluded from tax incentives (unlike South Carolina, below).

The following states currently offer tax credits and/or deductions for undergraduate study (excluding college savings tuition savings programs). Information from other such states either was not discussed in scholarly literature or was not readily available through Internet searching.

- New York taxpayers may claim a tuition tax credit *or* deduction for undergraduate study at in- or out-of-state institutions:

maximum value set for out-of-state awards for the specific year. In all cases, portability requires that the receiving institution also meet the terms of the participation agreement that the State Grant Program mandates” (Mark Lafer, personal communication, September 18, 2013).

The **college tuition credit** is a tax credit allowed for qualified college tuition expenses paid for an eligible student. For taxpayers with allowable expenses of \$5,000 or more, the credit equals the applicable percentage of qualified tuition expenses multiplied by 4 percent. The maximum amount of allowed qualified college tuition expenses is \$10,000; therefore, the maximum tuition credit is \$400 per eligible student.

If your total qualified college tuition expenses for all eligible students total less than \$5,000, the credit is equal to your qualified college tuition expenses or \$200, whichever is less.

The **college tuition itemized deduction** is equal to the amount of your qualified college tuition expenses paid, up to a maximum deduction of \$10,000 for each eligible student.¹⁷

- Massachusetts taxpayers are eligible for a college tuition deduction “equal to the amount by which the tuition payments, less any scholarships, grants or financial aid received, exceed 25 percent of the taxpayer’s Massachusetts adjusted gross income.”¹⁸ For example, a taxpayer with an AGI of \$45,000 and \$13,000 in tuition expenses would receive a \$1,750 deduction.¹⁹
- Arkansas’s Postsecondary Tuition Deduction
is an itemized deduction that may be taken for a portion of the tuition paid by the taxpayer for the taxpayer or the taxpayer’s spouse or dependents to attend a postsecondary educational institution. The deduction is limited to the lesser of 50 percent of the amount actually paid for the tuition or 50 percent of a ‘weighted average tuition’ for institutes or colleges with the same classification....The institutions do not have to be located in Arkansas to qualify.”²⁰
- South Carolina taxpayers can claim of credit of 25 percent of actual tuition costs, up to \$850 for a 4-year institution and \$350 for a 2-year institution. Only graduates of South Carolina high schools and homeschools are eligible; GED recipients are ineligible.²¹
- New Jersey provides a \$1,000 exemption for dependents under age 22 pursuing full-time undergraduate study, if the taxpayer paid at least one-half of tuition and maintenance costs.²²

¹⁷ http://www.hesc.ny.gov/content.nsf/SFC/NYS_College_Tuition_Tax_CreditDeduction

¹⁸ <http://www.mass.gov/dor/individuals/filing-and-payment-information/guide-to-personal-income-tax/deductions/education-related-deductions.html#College>

¹⁹ <http://www.mass.gov/dor/individuals/filing-and-payment-information/guide-to-personal-income-tax/forms-schedules-and-worksheets/worksheet-examples/college-tuition-deduction-worksheet-example.html>

²⁰ <http://www.dfa.arkansas.gov/offices/incomeTax/individual/Documents/408-PostSecondaryTuitionDeduction.pdf>

²¹ <http://www.sctax.org/Publications/College+Tuition+Tax+Credit.htm>

- The federal tuition deduction does not apply to Wisconsin. Instead, state taxpayers may claim a deduction of up to \$6,543 per student for tuition and fees paid for themselves, a spouse, or dependent. The deduction only applies to in-state institutions and public institutions in Minnesota, as specified in the Minnesota–Wisconsin tuition reciprocity agreement.²³

Financial analyses of these state higher education tax incentives were unavailable. To assess the financial feasibility for Pennsylvania, policy makers should contact budget analysts in the aforementioned states.

In conclusion, these policy considerations offer strategies for alleviating financial needs and expanding higher education access for Pennsylvania postsecondary students, especially in rural counties and among the most vulnerable groups, including beginning and 1st-year/continuing students, adult learners, GED recipients, low-income students, and those enrolled in associate degree and certificate/diploma programs.

²² <http://www.state.nj.us/treasury/taxation/njit4.shtml>

²³ http://www.revenue.wi.gov/forms/2012/Form1NPR_inst.pdf

REFERENCES

- Agresti, A. (1984). *Analysis of ordinal categorical data*. New York: John Wiley and Sons.
- Bettinger, E., Long, B.T., Oreopoulos, P., and Sanbonmatsu, L. (2009). *The role of simplification and information in college decisions: Results from the HandR Block FAFSA experiment*. Cambridge, MA: National Bureau of Economic Research.
- Bragg, D. D. (2011). Examining pathways to and through community colleges for youth and adults. In L. Hagedorn (Ed.), *Higher education: Handbook of theory and research*. New York: Springer.
- Burd, S. (2013). *Undermining Pell: How colleges compete for wealthy students and leave the low-income behind*. Washington, DC: New America Foundation.
- Center for Rural Pennsylvania. (2013a). Demographics. Retrieved July 28, 2013, from http://www.rural.palegislature.us/demographics_about_rural_pa.html
- Center for Rural Pennsylvania. (2013b). Rural snapshot: Adults without a high school diploma. Retrieved July 28, 2013, from http://www.rural.palegislature.us/publications_newsletter_0512.html#4
- Center for the Study of Education Policy. (2013). Grapevine Table 5: State support for higher education in fiscal year 2013, by state, per \$1,000 in personal income and per capita. Retrieved July 26, 2013, from http://grapevine.illinoisstate.edu/tables/FY13/Table5_FY13.pdf
- College Board. (2013). Federal Pell grant awards in current and constant dollars over time. Retrieved from <http://trends.collegeboard.org/student-aid/figures-tables/fed-aid-federal-pell-grant-awards-current-and-constant-dollars-over-time>
- Council for Adult and Experiential Learning. (2008). *Adult learning in focus: National and state-by-state data*. Chicago, IL: Author.
- Dooris, M. J., Guidos, M., and Stine, M. (2007). *Looking beyond access: Academic ability, ability to pay, and degree completion*. Paper presented at the Association for Institutional Research Annual Forum, Kansas City, MO.
- Doyle, W. R. (2010). Changes in institutional aid, 1992-2003: The evolving role of merit aid. *Research in Higher Education*, 51(8), 789-789-810. doi: 10.1007/s11162-010-9177-0
- Dwyer, R. E., McCloud, L., and Hodson, R. (2012). Debt and graduation from American universities. *Social Forces*, 90(4), 1133-1155. doi: 10.1093/sf/sos072
- Dynarski, S. (2004). The new merit aid. In C. Hoxby (Ed.), *College choices: The economics of where to go, when to go, and how to pay for it* (pp. 63-100). Chicago: University of Chicago Press and the National Bureau of Economic Research.

- Dynarski, S., and Scott Clayton, J. (2006). *The cost of complexity in federal student aid: Lessons from optimal tax theory and behavioral economics*. Cambridge, MA: National Bureau of Economic Research.
- Federal Student Aid (2013). Completing the FAFSASM 2013-14. Retrived from <http://studentaid.ed.gov/sites/default/files/2013-14-completing-fafsa.pdf>
- Federal Student Aid. (2013). Income-based plan. Retrieved from <http://studentaid.ed.gov/repay-loans/understand/plans/income-based>
- Governor's Budget Office. (2011). Line-Item Appropriations: 2010-11 Total Funds, 2011-12 Proposed Budget and 2011-12 Enacted Budget. Retrieved September 6, 2011, from http://www.portal.state.pa.us/portal/server.pt/community/current_and_proposed_commonwealth_budgets/4566
- Guidos, M., and Dooris, M. J. (2007). *Understanding adult learner program completion*. Paper presented at the North East Association for Institutional Research Annual Conference, Brunswick, New Jersey. http://www.psu.edu/president/pia/planning_research/reports/understanding_adult_learner_completion.pdf
- Handel, S. J. (2008). Aid and advocacy: Why community college transfer students do not apply for financial aid and how counselors can help them get in the game. *Journal of College Admission, 201*, 9-16.
- Hardy, D. E., and Katsinas, S.G. (2008). Patterns in student financial aid at rural community colleges. *Journal of Student Financial Aid, 38*(1), 40-52.
- Heller, D. E. (2002). The policy shift in state financial aid programs. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 17, pp. 221-261). Dordrecht, The Netherlands: Kluwer.
- Heller, D. E. (2008). The impact of student loans on college access. In S. Baum, M. McPherson and P. Steele (Eds.), *The effectiveness of student aid policies: What the research tells us* (pp. 39-68). New York: The College Board.
- Heller, D. E., and Marin, P. (Eds.). (2004). *State merit scholarship programs and racial inequality*. Cambridge, MA: The Civil Rights Project at Harvard University.
- Houle, J. (2012). Disparities in debt: Parents' socioeconomic status and young adult student loan debt. Paper presented at the Annual Meeting of the American Sociological Association, Denver, Colorado.
- House Committee on Appropriations. (2013). Fiscal note. Retrieved July 8, 2013, from <http://www.legis.state.pa.us/WU01/LI/BI/FN/2013/0/HB1141P2200.pdf>

- Huang, J., Beverly, S., Clancy, M., Lassar, T., and Sherraden, M. (2011). Early enrollment in a statewide Child Development Account program (CSD Working Papers No. 11-23). St. Louis, MO: Center for Social Development.
- Huang, J., Beverly, S., Clancy, M., Lassar, T., and Sherraden, M. (2013). Early program enrollment in a statewide Child Development Account program. *Journal of Policy Practice*, 12(1), 62-81.
- Internal Revenue Service. (2013). 529 plans: Questions and answers. Retrieved from <http://www.irs.gov/uac/529-Plans:-Questions-and-Answers>
- Johnson, R. B., Onwuegbuzie, A. J., and Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- King, J. E. (2004). Missed opportunities: Students who do not apply for financial aid. Washington, DC: American Council on Education.
- King, J. E. (2006). Missed opportunities revisited: New information on students who do not apply for financial aid. ACE Issue Brief (Vol. 22). Washington, DC: American Council on Education.
- Merisotis, J. P. (2013, April 18). The changing higher education agenda...and the trustee's role as change agent. Retrieved July 26, 2013, from http://www.luminafoundation.org/about_us/president/speeches/2013-04-16.html
- National Center for Public Policy and Higher Education [NCPPE]. (2006). *Measuring up 2006: The state report card on higher education: Pennsylvania*. San Jose, CA: Author.
- National Center for Public Policy and Higher Education [NCPPE]. (2008a). *Measuring up 2008: The national report card on higher education*. San Jose, CA: Author.
- National Center for Public Policy and Higher Education [NCPPE]. (2008b). *Measuring up 2008: The state report card on higher education: Pennsylvania*. San Jose, CA: Author.
- Neter, J., Wasserman, W., and Kutner, M. (1985). *Applied linear statistical models: Regression, analysis of variance, and experimental design* (2nd ed.). Homewood, IL: Irwin.
- Office of Vocational and Adult Education. (2011). Transitions to postsecondary education. Retrieved August 29, 2011, from <http://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/transition.html>
- Ott, L. (1984). *An introduction to statistical methods and data analysis* (2nd ed.). Boston: Duxbury Press.
- Patterson, M. B., Song, W., and Zhang, J. (2009). GED candidates and their postsecondary educational outcomes: A pilot study (GED Testing Service Research Studies, 2009-5). Washington, DC: GED Testing Service.

- Pennsylvania Budget and Policy Center. (2013). Pa. needs comprehensive addback law, ending practices banned in majority of states. Retrieved July 26, 2013, from <http://pennbpc.org/PA-needs-comprehensive-addback-law>
- Pennsylvania Department of Education. (2013). Colleges and universities fall enrollments by institution, student level, race and gender, 2010. Retrieved from http://www.education.state.pa.us/portal/server.pt/community/higher_education/8684
- Pennsylvania Higher Education Assistance Agency. (2011). State grant deadline for first-time community college students extended to August 1. Retrieved July 26, 2013, from <http://www.pheaa.org/about/press-releases/2011/jul-12.shtml>
- Pennsylvania Higher Education Assistance Agency. (2012). Pennsylvania state grant program manual. Retrieved July 26, 2013, from <http://www.pheaa.org/funding-opportunities/state-grant-program/pdf/2012-2013/Program-Manual.pdf>
- Perna, L. W. (2004). *Impact of student aid program design, operations, and marketing on the formation of family college-going plans and resulting college-going behaviors of potential students*. Boston, MA: The Education Resources Institute.
- Perna, L. W., and Steele, P. (2011). The role of context in understanding the contributions of financial aid to college opportunity. *Teachers College Record*, 113(5), 895-933.
- Provasnik, S., KewalRamani, A., Coleman, M.M.L., Gilbertson, L., Herring, W., and Xie, Q. (2007). Status of education in rural America. NCES 2007-040. Washington, DC: National Center for Education Statistics.
- Sallie Mae College Answer. (2011). Student financial aid. Retrieved August 24, 2011, from http://www.collegeanswer.com/paying/content/pay_aid_fc.jsp
- Senate Committee on Admissions, Records, Scheduling, and Student Aid. (2006). *Report on access and affordability at Penn State*. University Park, PA: Pennsylvania State University.
- Simmons, D. (2012, August 20). On campus: UW study on college debt finds 'middle-income squeeze', *Wisconsin State Journal*. Retrieved from http://host.madison.com/news/local/education/on_campus/on-campus-uw-study-on-college-debt-finds-middle-income/article_cc634bbe-eaf7-11e1-b985-0019bb2963f4.html
- Turner, S. E., Breneman, D. W., Milam, J. H., Levin, J. S., Kohl, K., Gansneder, B. M., and Pusser, B. (2007). *Returning to learning: Adults' success in college is key to America's future*. Indianapolis, IN: Lumina Foundation for Education.
- Wood, M. (2013). *Time to get back on track: The 2013-14 budget*. Paper presented at the Pennsylvania Education Policy Forum, State College, PA. <http://www.eplc.org/notebook2013/PBPC%20EPLC-PHila%20Feb%2027%202013.pdf>

Yan, W. (2002). Postsecondary enrollment and persistence of students from rural Pennsylvania.
Harrisburg, PA: Center for Rural Pennsylvania.

\

The Center for Rural Pennsylvania Board of Directors

Chairman
Senator Gene Yaw

Vice Chairman
Senator John N. Wozniak

Treasurer
Representative Garth D. Everett

Secretary
Dr. Nancy Falvo
Clarion University

Representative Rick Mirabito

Dr. Livingston Alexander
University of Pittsburgh

Dr. Theodore R. Alter
Pennsylvania State University

Stephen M. Brame
Governor's Representative

Taylor A. Doebler, III
Governor's Representative

Dr. Stephan J. Goetz
Northeast Regional Center for Rural Development

Dr. Karen Whitney
Clarion University



The Center for Rural Pennsylvania, 625 Forster St., Room 902, Harrisburg, PA 17120

Phone: (717) 787-9555, www.rural.palegislature.us

May 2014