Analysis of Quality Assurance Program Sample Data: 2006–07

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Executive Summary

In lieu of following federally prescribed verification of the information students supply on their Free Application for Federal Student Aid (FAFSA) form, schools participating in the Quality Assurance Program are empowered to develop their own school procedures for verifying the accuracy of these data. During the 2006–07 award year, schools participating in the Quality Assurance Program drew random samples of at least 350 aid applicants, including those students whom they normally would not verify, and completed federal verification worksheets for all selected students. This report pools 132 of these samples and conducts a program-wide analysis of the ISIR records of 62,958 applicants.

We organized our analysis with six research questions. This executive summary provides condensed answers to each of the questions and identifies three implications for our findings. Refer to the text of the full report for more details.

Research Question #1: Which schools participate in the Quality Assurance Program?

- Most the schools that provided data for this report were public-four year universities, 101 of the 132 (77 percent).

- The average enrollment was 20,105.

- The 132 Quality Assurance schools included in the analysis constituted only 2 percent of the all schools that disbursed Pell Grants in 2006–07, but given their large size disbursed 11 percent of the Pell Grant dollars during this award year.

Research Question #2: Which ISIR elements are most likely to change when verified?

- We found Parents' Adjusted Gross Income; Parents' Total from Worksheet B; Parents' U.S. Income Tax Paid; Mother's Income from Work; and Parents' Tax Return to be the five most commonly changed ISIR fields among dependent students. Between 20 and 30 percent of dependents records experienced a change to each of these data fields when schools verified the information as part of the random sample process.

- We found Student's Income from Work, Student's Adjusted Gross Income; Student's U.S. Income Tax Paid; Student's Total from Worksheet B; and Student's Tax Return to be the five most commonly changed ISIR fields among independent students. Between 12 and 20 percent of independents records experienced a change to each of these data fields when schools verified the information as part of the random sample process.

- Whether the result of a change to a single or multiple ISIR data fields, forty percent of records in the random sample experienced what we labeled a "major change" to aid eligibility. We defined "major change" as any change to a Pell Grant or an EFC change in excess of 400.

- We identified the same problematic fields in our previous analysis of 2004–05 award year data.

Research Question #3: What proportion of the value of verification would remain if verification were limited to the information available from the IRS?

- We found that records experiencing changes to only adjusted gross income and U.S. taxes paid to be relatively rare; 9 percent of dependent and 10 percent of independent records have changes only to these two data fields.

- We found that changes to other ISIR fields either with or without accompanying changes to the IRS fields to be much more common; 48 percent of dependent and 27 percent of independent records had changes to other ISIR fields.

- We estimated the effect of each change to an ISIR field on EFC and found that changes to adjusted gross income and federal taxes paid capture roughly half of the impact of the corrections detected by the full verification worksheets.

Research Question #4: How accurately do financial aid applicants estimate their tax information?

- Roughly one third of dependent and one fifth of independent students estimated their tax information on their initial FAFSA.

- Estimated filers were much more likely to experience a change to income and tax data then applicants who had filed or indicated they were not required to file a tax return.

- Estimating tax information increases the risk of experiencing a "major change" to aid eligibility, especially for dependent students and higher income applicants.

Research Question #5: What is the implication of changes to initial ISIR data upon potential improper payments in the Pell Grant program?

- We found that awarding Pell Grants solely on the basis of initial transaction data would have resulted in over-payments equal to 9.2 percent and under-payments equal to 6.7 percent of the total initial awards. Hence 15.9 percent (6.7 plus 9.2) of initial Pell dollars were "at risk" for an improper payment.

- We found that school verification reduced potential over-awards (3.3 percent) and under-awards (3.1 percent) to approximately equal levels. Therefore, the total in improper payments was reduced from 15.9 to 6.4 percent (3.3+3.1).

- CPS verification reduced potential over-awards (1.8 percent) to a lower level than it corrected under-awards (4.1 percent). If only the records flagged by the CPS were verified the remaining risk for improper payments would constitute 5.9 percent (4.1+1.8) of the initial award amount.

Research Question #6: How effective and efficient are current CPS and school verification criteria?

- Quality Assurance schools selected more records (51 percent) for verification than they would have been required to under CPS (41 percent).

- The majority of records selected by the CPS were also selected by school verification and vice versa.

- Both verification systems emphasized verification among students who were initially eligible for Pell, had zero EFC, were from low income ranges, and claimed they did not need to file a federal tax return. This concentration on the most eligible population was, however, much more pronounced for CPS verification than it is for school verification.

- A higher percentage of high-need applicants were selected by both school and CPS verification without any subsequent change to aid awards than was the case for higher income groups.

- A higher percentage of higher income groups experienced a "major change" in aid eligibility without being selected for CPS or school verification than was the case for high-need subgroups.

Implications

- Our finding that adjusted gross income and federal taxes paid capture roughly half of the impact of the corrections detected by the full verification worksheets raises questions about the viability of an IRS match involving only these two data fields.

- Our analysis suggests that both school and CPS verification consider being more selective when targeting high need students for verification. For example, CPS selected 68 percent and Quality Assurance schools selected 61 percent of dependent students who had an automatic zero EFC for verification. When schools verified the information for all students with an automatic zero as part of the random sample process, we found that only eight percent experienced a "major change" in aid eligibility.

- Our analysis of Quality Assurance Program data suggests that the CPS consider expanding their verification efforts among records initially ineligible for Pell Grants. In our analysis group, only four percent of the records that were not eligible for Pell on the initial transaction were selected by the CPS. Therefore, CPS verification's prevention of potential Pell Grant under-awards was generally limited to increasing the dollar amount of Pell Grants made to initially eligible students, as opposed to finding new Pell Grant eligible students among the initially ineligible.

Introduction

Federal, state, and private financial aid programs help students and their families finance higher education. Many of these aid programs are "need based;" they target their assistance toward students with the least ability to pay for college themselves. This targeting of aid is based on student and parental self-reports about their financial condition. Therefore, ensuring the accuracy of the information plays an important role in equalizing the educational opportunities available to all Americans. Colleges and universities routinely check the accuracy of a subset of aid applications during a process called "verification." This report looks at the outcomes of verification at schools participating in the Quality Assurance Program of the U.S. Department of Education (ED).

In lieu of following federally prescribed verification of the information students supply on their Free Application for Federal Student Aid (FAFSA) form, schools participating in the Quality Assurance Program are empowered to develop their own school procedures for verifying the accuracy of these data. The basic idea behind the Quality Assurance Program is that schools are in the best position to know how to target verification at the aid applicants who are the most likely to experience a change in eligibility at their school.

The information submitted by students on their FAFSAs is sent electronically to schools on institutional student information records (ISIRs). The data on the ISIR includes all the elements used to calculate students' expected family contribution (EFC) toward their postsecondary expenses. The difference between the total price of attending a specific college or university and a student's EFC determines his or her eligibility for need-based Federal Student Aid (FSA) programs.

During the 2006–07 award year, schools participating in the Quality Assurance Program drew random samples of at least 350 aid applicants, including those students whom they normally would not verify, and completed federal verification worksheets for all selected students. The schools uploaded the initial and any changes to sampled students' ISIR information into the ISIR Analysis Tool (the Tool) and generated statistical reports that allowed schools to evaluate their own verification procedures. Because data from these random samples contain verified information for all students, not just those students who met the schools' own or CPS verification, we can use this information to address questions about what current school and CPS verification procedures may be missing.

Federal Student Aid's CPS and mainframe contractor, Vangent Inc., provided us with a data file containing all the 2006–07 data schools had uploaded into the Tool. We removed records for students who were not attending Quality Assurance Program schools, as these records were not part of a random sample that was subjected to 100 percent verification. We also deleted records from a few Quality Assurance Program schools because we had reason to believe that these schools failed to draw their random sample properly or were unable to identify the records in their random sample that met their own school verification criteria. This winnowing process left 132 schools and 62,958 records in our analysis group.

We organize our presentation of the analysis we conducted with the following six overarching research questions:

1. Which schools participate in the Quality Assurance Program?
2. Which ISIR elements are most likely to change when verified?
3. What proportion of the value of verification would remain if verification were limited to the information available from the IRS?
4. How accurately do financial aid applicants estimate their tax information?
5. What is the implication of changes to initial ISIR data upon improper payments in the Pell Grant program?
6. How effective and efficient are current CPS and school verification criteria?

Below we address each of these research questions in turn. The answer to the first question, "what types of schools participate?" provides important context for all of our findings. The answers to the second, "which ISIR elements?" identify the sections of the FAFSA that applicants had the most trouble providing accurate information on their initial transaction. Our responses to the third and fourth questions provide insight into both recent (potential IRS match) and perennial (estimated filers) verification issues. The answers to the fifth question provide estimates of the total potential under- payments and over-payments in the Pell Grant program and the propensity of school and CPS verification to reduce the risk of both types of improper payments. Finally, we examine the tendency of school and CPS verification to select the records with the most and the least need of verification.

Following our analysis we provide a summary and list the implications of our findings.

Research Question #1: Which schools participate in the Quality Assurance Program?

It is important to keep in mind when interpreting all the results we present in this report that Quality Assurance schools are not a random subset of all higher education institutions participating in Title IV. Both the school's initial decision to apply for and the Department of Education's decision to allow participation in the Quality Assurance Program depend on a school's willingness to demonstrate a commitment to improving the quality of administration of federal aid programs.

In addition to being willing to take an active role in improving the accuracy of aid awards on their campus, the Quality Assurance schools providing data for these analyses are concentrated in the public four-year sector of higher education institutions. See **Figure 1**. We also have data from public two-year and private not for profit four-year schools, but there are substantially fewer of these two types of schools in the analysis group. Please note that currently no proprietary schools participate in the Quality Assurance Program. Therefore, our analysis does not address changes to ISIR data in that sector.

Figure 1: Schools in Analysis Group by Sector

8,6%

23,17%

101,77%

■ Private Four-Year   ■ Public Four-Year   ■ Public Two-Year
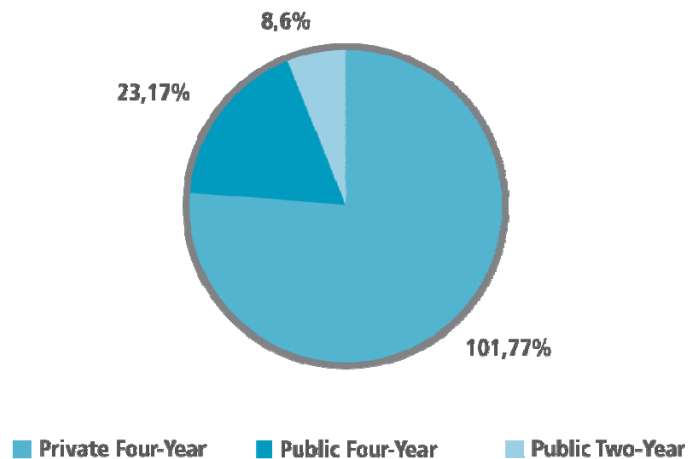
Sources: Quality Assurance Program and Integrated Postsecondary Education Data, 2006–07.

In addition to having a disproportionate representation of public-four year universities, Quality Assurance schools tend to be large. The high average enrollment at all three types of institutions reflects the positive relationship between school size and participation in the Quality Assurance Program. While there are exceptions, the additional analysis and assessment activities required of all Quality Assurance participants generally preclude small schools from participating. See **Figure 2**.

Figure 2 also provides the average number of Pell Grants at each type of institution. Note that Pell recipients constitute a greater proportion of total enrollment at public two-year schools (34 percent) than at either public four-year (21 percent) or private four-year (15 percent).

Figure 2: Average Enrollment and Number of Pell Recipients by Type of Institution
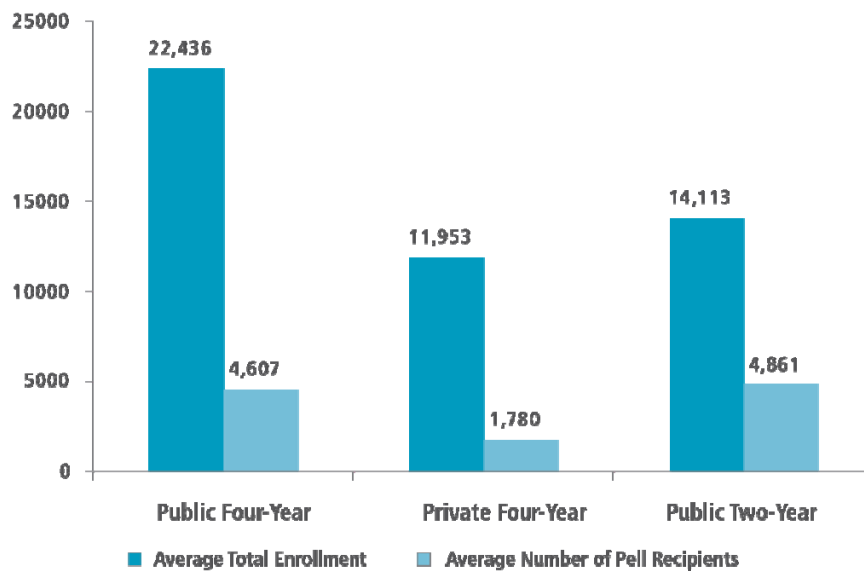
Sources: Integrated Postsecondary Education Data System and National Student Loan Data System, 2006–07

This report presents data from only 132, or 2 percent of the 5,389 schools that disbursed Pell grants during the 2006–07 award year. See Figure 3.

Figure 3: Schools that made Pell Grant Disbursements in 2006–07
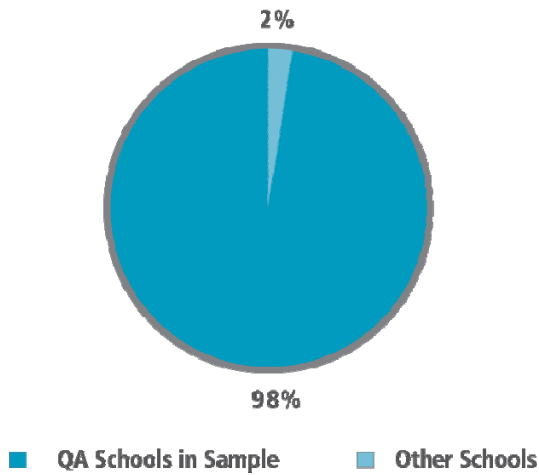
Source: National Student Loan Data System, 2006–07.

However, due to the large average size of Quality Assurance schools, this modest number of schools disbursed a much larger proportion (11 percent) of the Pell grant dollars disbursed in 2006–07 than would be expected for so few schools. See **Figure 4**.

Figure 4: Distribution of Dollars of 2006–07 Pell Disbursements
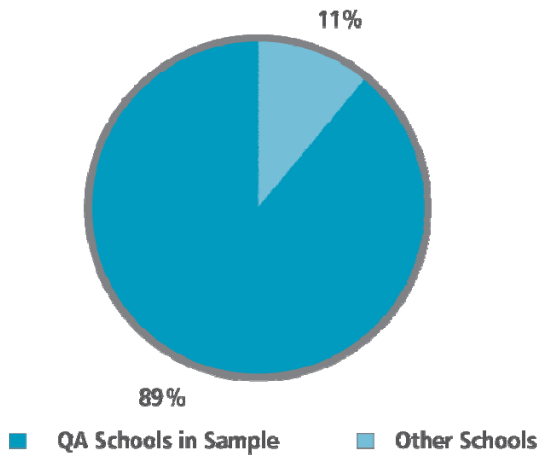
Source: National Student Loan Data System, 2006–07.

While Quality Assurance schools are larger than average and predominately drawn from the public four-year sector, the Quality Assurance Program has attracted schools from all over the country. While the largest numbers of schools are located in the West and Midwest, we have a good representation of schools from all four of the census regions in the analysis group as shown in **Figure 5**.

Figure 5: Number of Schools in Analysis Group by Region (Total=132)
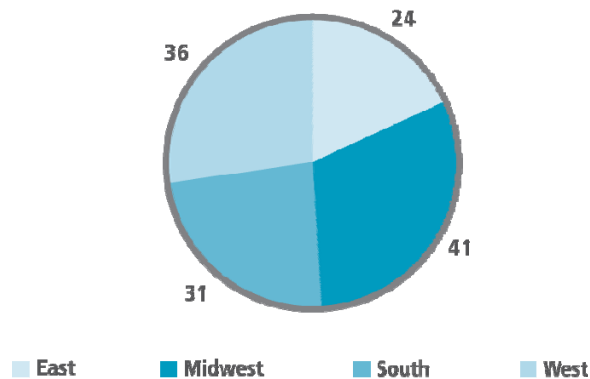
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07.

Figures 1 through 5 above describe the 132 schools that provided data. The next five figures and two tables provide demographic statistics based on the 62,958 individual ISIR records we analyzed.

The distribution of student records across the three types of institutions shown in **Figure 6** closely mirrors the representation of schools by type**.** The slight discrepancies between the percentage of schools and percentage of students in a given type of school stems from the fact that Quality Assurance schools were required to draw an initial random sample of *at least* 350 applications, but could choose to select more. Furthermore, variability in the attrition from these initial samples contributed to differences in the sample size between Quality Assurance schools. We directed schools not to disburse any federal aid to sampled students who failed to supply documentation, but some students decided not to comply. Students who failed to supply documentation either attended the Quality Assurance school without the benefit of federal aid, attended another postsecondary institution, or did not attend college at all in 2006–07.

Figure 6: Number of Student Records by Sector
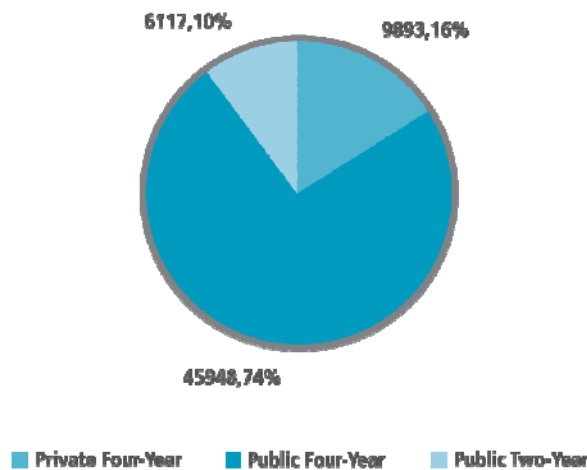
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07.

Roughly, two-thirds of the students in the combined sample data of Quality Assurance schools were dependent. See **Figure 7**. Note that we observed the opposite pattern at the public two-year schools in the analysis group; at these schools the majority of financial aid applicants were independent students.

Over half of all the student records examined were eligible for Pell grants based on the information on their initial ISIR transaction. See **Figure 8**. Note that a significantly higher percentage of students (over 80 percent) attending public two-year schools were initially eligible for Pell than was the case at either type of four-year school. The reason why the percentage of Pell eligible applicants is so much higher than the ratio of the total number of Pell recipients to total enrollment shown in **Figure 2** is because only students who applied for aid, and therefore had ISIR data, were included in **Figure 8** while all students attending a school were included in **Figure 2**.

Figure 7: Dependency Status by School Type
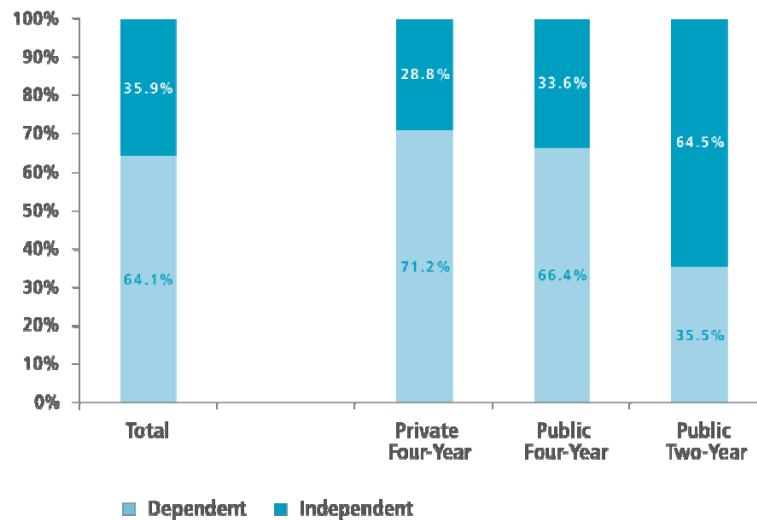
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07

Figure 8: Initial Pell Eligibility by Type of School
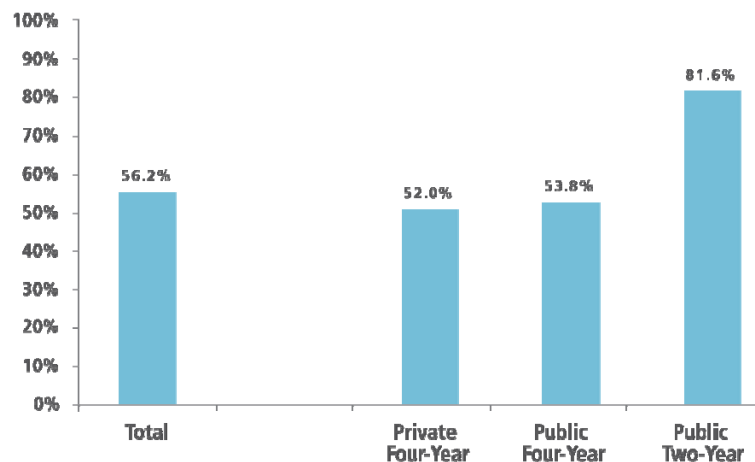
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07.

Quality Assurance schools collected the information requested by the federal verification worksheets from all the students drawn into their random samples. We can use these data to identify which students are the best candidates for verification. We created a summary measure to capture the effect that this universal verification exercise had on each student's aid eligibility. We classified each student into one of the following five mutually exclusive and exhaustive categories.

1. No change—EFC and Pell Grant Award remained the same
2. Major decrease—Pell Grant decreased or EFC increased at least 400
3. Major increase—Pell Grant increased or EFC decreased at least 400
4. Minor decrease—EFC increased less than 400 and Pell Grant remained the same
5. Minor increase—EFC decreased less than 400 and Pell Grant remained the same

Figure 9 displays the distribution of students across these five categories, first for the entire analysis group and then broken out by type of school. The most prominent finding in these results is that the majority (51.7 percent) of all records did not experience a change to EFC or Pell. See **Figure 9**. Major decreases (24.2 percent) in aid eligibility as defined above were more common than major increases (15.5 percent). Given the narrow 1 to 400 range of EFC change and the exclusion of all changes to Pell Grants, "minor" increases and decreases were relatively rare, with fewer than 10 percent of all records falling into the two minor categories combined.

Figure 9: Impact of Collecting Documentation on Aid Eligibility by School Type
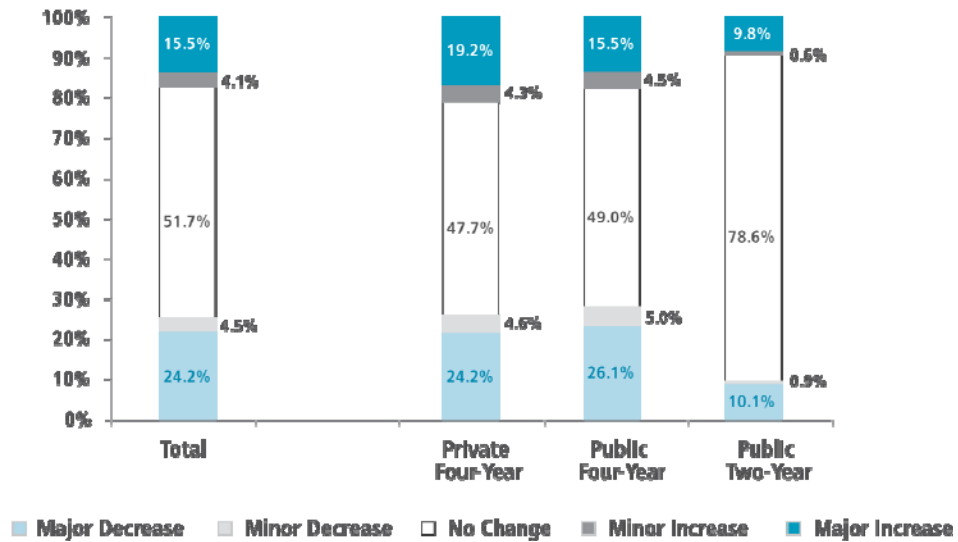
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07.

At public-two year schools, more than three-quarters of the records had no change to EFC after collecting verifying documentation. We spoke to three of the eight public two-year schools that had the most accurate initial data and found two primary reasons behind the accuracy of initial applications on these campuses. First, the aid offices at these schools provide potential applicants a great deal of assistance in completing the FAFSA. The type of assistance varied, ranging from community outreach presentations to sitting down with individual students and walking them through the online application process. Second, the students who attended these schools were primarily independent students of modest economic means. Many students had incomes well below the income protection allowances used by the CPS during EFC calculation. For these students it is quite possible that schools could find the need for minor corrections during the verification process without affecting aid eligibility.

The results from **Figure 9** indicate that the majority of aid applicants at Quality Assurance schools do not "need" to be verified. For most students, eligibility for need-based aid was not affected at all when schools went through the time and expense of collecting documenting information. However, a sizeable minority of applicants experienced a "major" change, defined as a change to Pell award or a change in EFC of at least 400. Combining major increases and decreases, we calculate that roughly 40 percent of all initial records in the Quality Assurance data seem to be good candidates for verification. Nevertheless, it is important to remember that even among these applicants with an EFC change of 400 or more there are some initial EFCs well above the cost of attendance of their school. A change to EFC only affects aid eligibility if a student's initial or paid on EFC is less than his/her school's cost of attendance. Due to variation in the cost of attendance between schools and even within schools depending on a student's enrollment status, we did not include cost of attendance in our analysis, but remind schools reading this report that they should factor in their own cost of attendance when interpreting the results.

So at most there is a need to verify forty percent of the Quality Assurance sample records. Interestingly enough the CPS selected roughly forty (40.7 percent) of the records for verification. See Figures 10 and 11. Recall that schools verified all of the records in their random sample, including those not selected for either school or CPS verification. Of course, only some of the records selected by the CPS experienced a "major" change and "major" changes occurred among some of the records not flagged by the CPS, but the point we would like to make is that verifying all the major changes would not necessarily involve verifying more applicants. Recall that Quality Assurance schools are not required to verify records selected by the CPS, but instead develop their own school verification profiles. On average schools chose to verify more (50.7 percent) records than they would have to if they did not participate in the Quality Assurance Program. Quality Assurance schools on average had a slightly larger verification net to catch the "major" changes.

Figure 10: Verification Status by Dependency Status
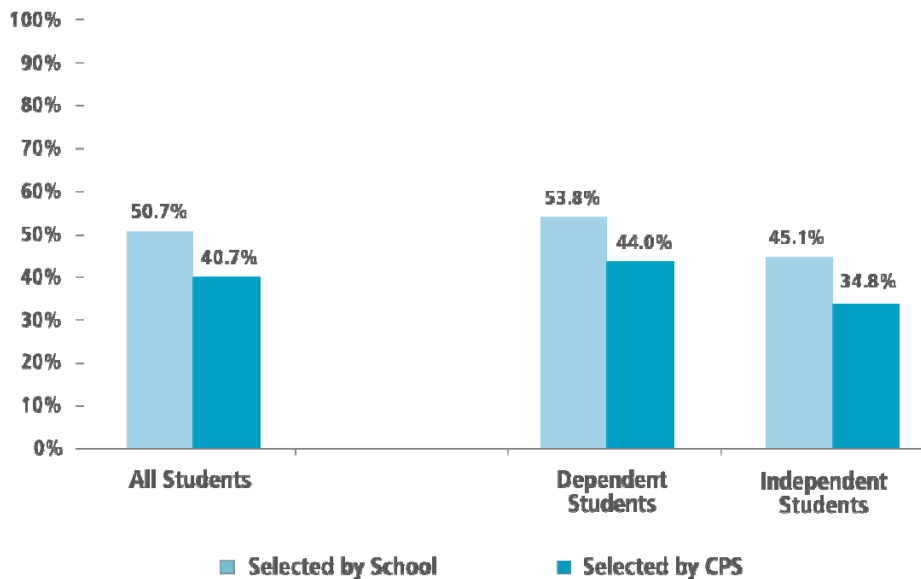
Source: Quality Assurance Program sample data, 2006–07.

Figure 11: Verification Status by School Type
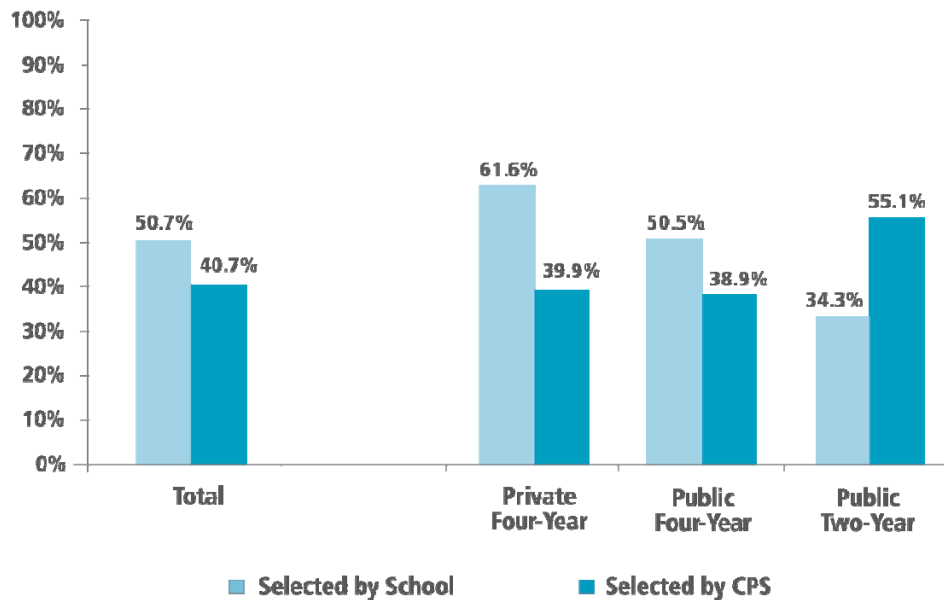
Sources: Quality Assurance Program sample data and Integrated Postsecondary Education Data System, 2006–07.

Figure 10 indicates that both school and CPS selected a higher percentage of dependent than independent records for verification. We see in **Figure 11** that at both public and private four-year schools, Quality Assurance participants targeted a higher percentage of records for verification than the CPS. On average, public two-year schools selected fewer students for verification than the CPS. Recall, however, that the accuracy of aid awards based on the initial transaction by the Quality Assurance schools in this sector was quite high. Given educational outreach efforts and the economic circumstances of their students there may be less need to verify ISIR data at these eight schools than at two-year public schools in general.

Ideally, schools would target verification exclusively at students that experience a "major" change and avoid collecting documentation from students where verification yields "no change." The impact of verifying a specific applicant is, of course, unknown before going through the time and expense of collecting documentation. By conducting verification on all the records in a random sample and then using the ISIR Tool to determine which ISIR fields and type of students are most problematic, Quality Assurance schools improve the focus of their school verification efforts.

Before moving on to the rest of the report, we provide a demographic description of all the dependent and independent students included in the Quality Assurance samples used in this analysis. Later, we will compare student demographic data for particular sub-groups of students to these overall statistics. See Tables 1 and 2.

Table 1: Demographic Description of All Dependent Records in Analysis Group

Number of records	39,725
Selected by CPS	44.0%
Selected by School	53.8%
Initially Pell Eligible	55.9%
Auto Zero EFC	10.1%
Zero EFC	15.6%
EFC 1 to 3850	40.5%
EFC 3851 or more	43.9%
Negative income	0.7%
Zero income	6.2%
1 to 9,999	4.4%
10,000 to 19,999	10.6%
20,000 to 29,999	12.9%
30,000 to 39,999	15.0%
40,000 to 49,999	12.1%
50,000 to 59,999	8.7%
60,000 to 74,999	10.3%
75,000 to 99,999	10.6%
100,000 or more	8.5%
Estimated Filer	33.8%
Non-Filer	5.1%
Parents married	62.1%
Parent(s) completed college	60.2%
Major Increase	29.3%
Minor Increase	5.3%
Zero Change to EFC	42.0%
Minor Decrease	4.9%
Major Decrease	18.5%

Source: Quality Assurance Program sample data, 2006–07.

Table 2: Demographic Description of All Independent Records in Analysis Group

Number of records	22,233
Selected by CPS	34.8%
Selected by School	45.1%
Initially Pell Eligible	59.9%
Auto Zero EFC	13.9%
Zero EFC	47.3%
EFC 1 to 3850	31.7%
EFC 3851 or more	21.0%
Negative income	0.7%
Zero income	16.8%
1 to 4,999	13.7%
5,000 to 9,999	16.3%
10,000 to 14,999	12.4%
15,000 to 19,999	9.0%
20,000 to 24,999	7.4%
25,000 to 29,999	5.6%
30,000 to 39,999	7.4%
40,000 or more	10.7%
Estimated Filer	19.0%
Non-Filer	15.0%
Have Children	35.8%
Have Dependents	6.7%
DOB	81.7%
Graduate Students	27.0%
Married	31.5%
Orphan	5.1%
Veteran	6.3%
Major Increase	15.2%
Minor Increase	3.1%
Zero Change to EFC	69.0%
Minor Decrease	2.6%
Major Decrease	10.2%

Source: Quality Assurance Program sample data, 2006–07.

The rest of this report will use the data collected by Quality Assurance schools to identify which ISIR data elements and which groups of students are most likely to experience meaningful change to their aid eligibility when selected for verification. We begin this analysis in the next section by examining which ISIR data elements were the most likely to change when Quality Assurance schools collected verifying documentation.

Research Question #2: Which ISIR elements are most likely to change when verified?

This section of the report closely mirrors the ISIR Analysis Tool's "Field Change Report." The Field Change Report displays the percentage of records that experience a change to each ISIR field, the percentage of records with each type of change that experience an increase or decrease to EFC and to Pell, and finally the percentage of records selected for school and CPS verification. This information not only identifies the ISIR fields that were most likely to be corrected, but also addresses two related questions, "Which corrections were most likely to be associated with a change to aid eligibility?" and "Which corrections were most likely to be selected by CPS or school verification criteria?" Below, we present analysis inspired by the Field Change Report as a series of three graphs. We add a fourth graph that mirrors the new ISIR Tool "EFC Impact Analysis Report." This report provides the distribution of students that experience changes to the five most commonly changed ISIR fields across three initial EFC levels: zero EFC; Pell Eligible but not zero EFC; and EFC in excess of Pell eligibility. We conducted separate "four graph" analyses sets for dependent and independent students.

Figure 12 identifies the five most commonly changed ISIR fields among dependent students. These fields were in descending order: Parents' Adjusted Gross Income; Parents' Total from Worksheet B; Parents' U.S. Income Tax Paid; Mother's Income from Work; and Parents' Tax Return Filed. Roughly, one quarter of dependent records experienced a change to each of these fields. While correcting this information when students make mistakes is important, we would like to point out that the vast majority, nearly three out of four, of dependent applicants provided the correct value on their initial application for the fields that were most error prone.

Figure 13 summarizes the impact of the changes to these five fields on aid eligibility by providing the percentage of records with the indicated change that experienced: a decrease to Pell; an increase to EFC that did not result in a change to Pell; no change to EFC; a decrease to EFC that did not result in a change to Pell; and, an increase to Pell. Given the prominent role that each of these ISIR fields has in the calculation of EFC during needs analysis, most of the changes to these ISIR fields cause a change to EFC. The prevalence of this occurrence varied by field from a low of 9 percent of changes to Worksheet B to a high of 26 percent of changes to U.S. income taxes paid. Note that changes to all of the fields were more likely to be associated with a Pell decrease than a Pell increase; the percentage of records with a decrease to Pell was roughly 10 percentage points higher than the corresponding percent of increases to Pell.

Figure 12: Percent of Dependent Records with a Change to Indicated ISIR Field
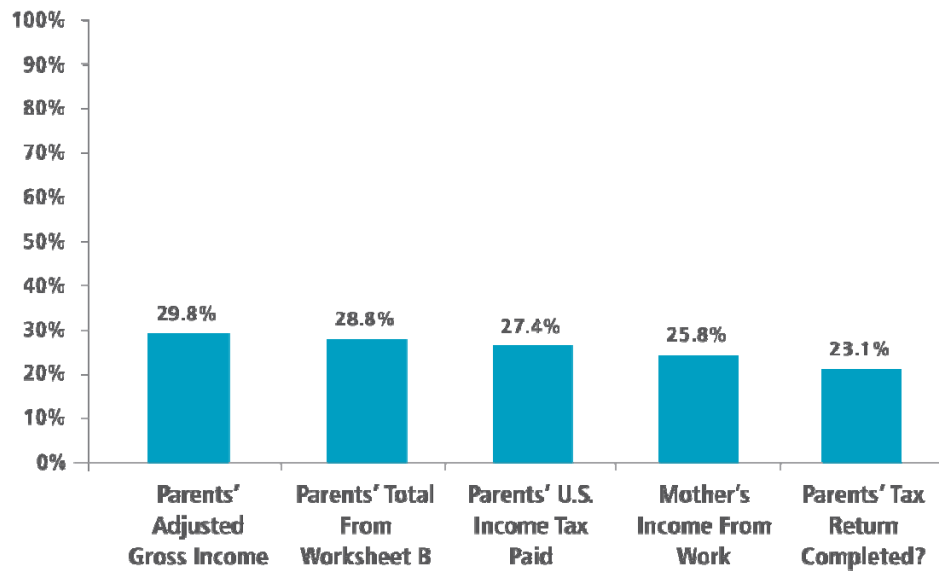
Source: Quality Assurance Program sample data, 2006–07.

Figure 13: Impact of a Change to the Indicated ISIR Field on Aid Eligibility, Dependent Students
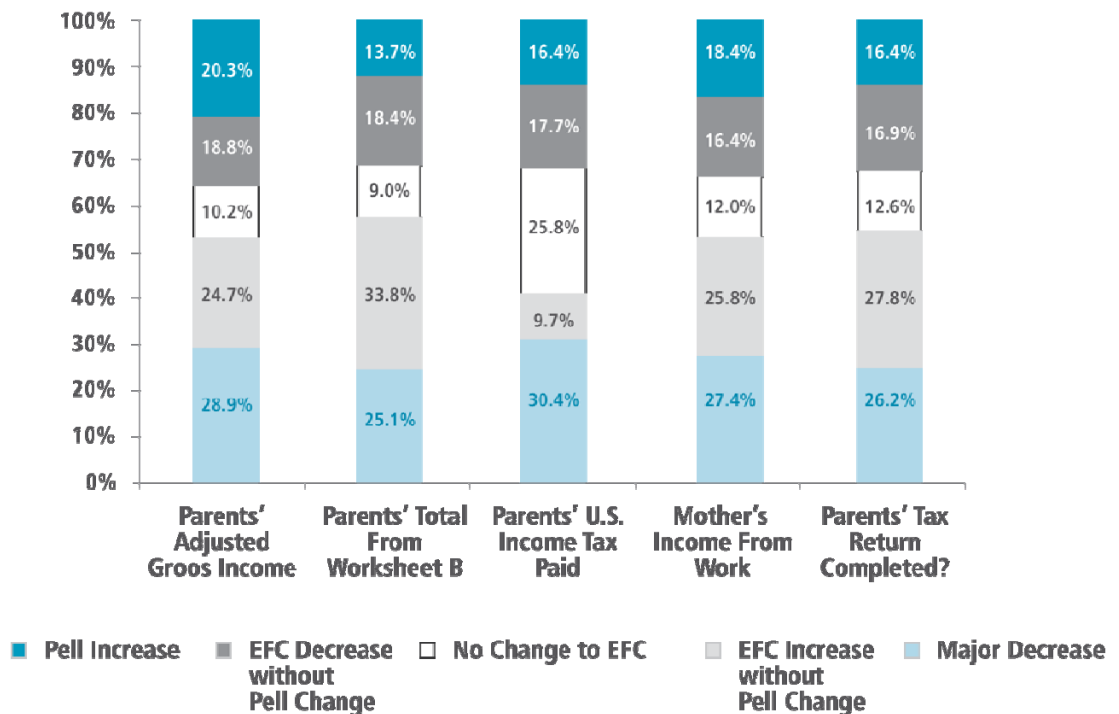
Source: Quality Assurance Program sample data, 2006–07.

Figure 14 provides the percentage of records that experienced a change that would have been subject to school or CPS verification even if schools had not drawn them into the random sample. Interpret these results in light of the overall percentage of all dependent records selected by the two verification systems. Recall that **Figure 10** indicated that school verification selected 53.8 percent of dependent records and CPS selected 44.0 percent. The fact that the values displayed in **Figure 14** are all quite close to these overall averages suggests that neither school nor CPS verification was very effective in terms of targeting records that experienced changes to the problematic ISIR fields.

Figure 14: Percent of Records with Change to Indicated Field Selected by School or CPS Verification, Dependent Students
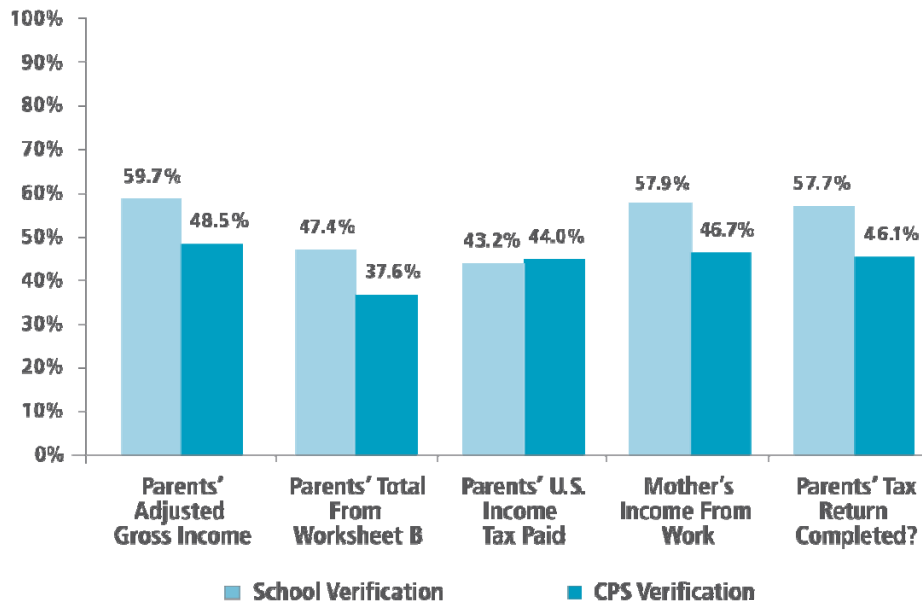
Source: Quality Assurance Program sample data, 2006–07.

Before moving on to changes to ISIR data among independent students, we would like to examine program-wide results that mirror a new ISIR Tool report, the EFC Impact Analysis Report. See **Figure 15**. In order to properly interpret the results in **Figure 15**, the reader needs to keep in mind the overall distribution of the dependent records across the EFC categories. Out of the 39,725 dependent records in the analysis group: 6,196 records (15.6 percent) had a zero EFC on their initial transaction; 16,093 (40.5 percent) had an initial EFC between 1 and 3,850; and 17,436 (43.9 percent) had an EFC in excess of 3,850. The first group of three bars in **Figure 15** closely mirrors this distribution. These bars represent the counts (in 1000's) of cases with a change to any of the 32 fields that could affect the calculation of EFC. The other bars reflect counts of records that experienced a change to the single ISIR item indicated. The reader should look for differences in the distribution of changes to the particular ISIR fields across the three EFC ranges. Note that the records with an initial zero EFC were under-represented among cases that experienced a change to any of the five most commonly changed items. Records with an initial EFC between 1 and 3,850 were over-represented among records with a change to Parents' Adjusted Gross Income and Mother's Income from work. Records with initial EFC values above 3,850 were over-represented among the records with changes to the other three most commonly changed fields: Parents' Total from Worksheet B, Parents' U.S. Income Taxes Paid, and Parents' Tax Return Completed.

Figure 15: EFC Impact Analysis Dependent Students (N=1000s of records)
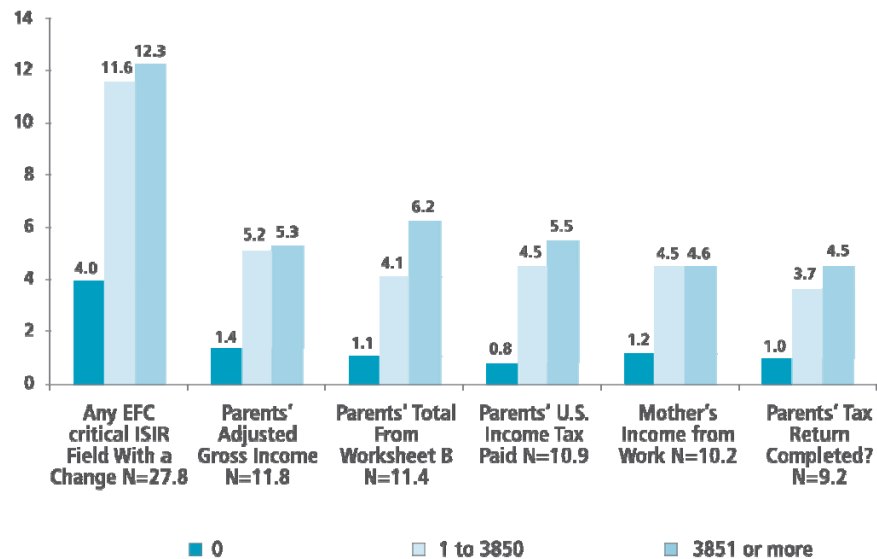
Source: Quality Assurance Program sample data, 2006–07.

We now move on to an analysis of the most common changes among independent records. **Figure 16** identifies the five most commonly changed ISIR fields among independent students. These fields were in descending order: Student's Income from Work, Student's Adjusted Gross Income; Student's U.S. Income Tax Paid; Student's Total from Worksheet B; and Student's Tax Return Completed. Note that changes to independent records were even less common than changes to dependent records. More than 80 percent of independent applicants provided the correct value for each of these fields on their initial application.

Figure 16: Percent of Independent Records with Changes to Indicated ISIR Field
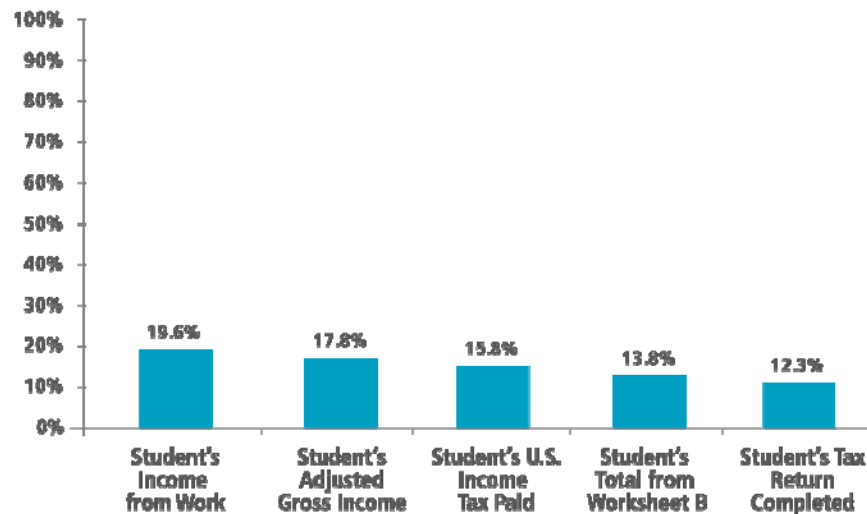
Source: Quality Assurance Program sample data, 2006–07.

Figure 17 summarizes the impact of the changes to these five fields on aid eligibility. As we saw for dependent students, reductions to Pell and other increases to EFC were more common than increases to Pell and other decreases to EFC. Note that it was much more common for an independent record to experience a change to a critical field without also experiencing a change to EFC than was the case for dependent students. Roughly, a third of the records that had a correction to each of these fields experienced no subsequent change to EFC. The reason for this lies in the combination of the modest financial circumstances of many independent students and the presence of income and asset allowances in the formulas used to calculate EFC; changes to ISIR information that occur below these thresholds will not affect eligibility for need based aid.

Figure 17: Impact of a Change to the Indicated ISIR Field on Aid Eligibility—Independent Records
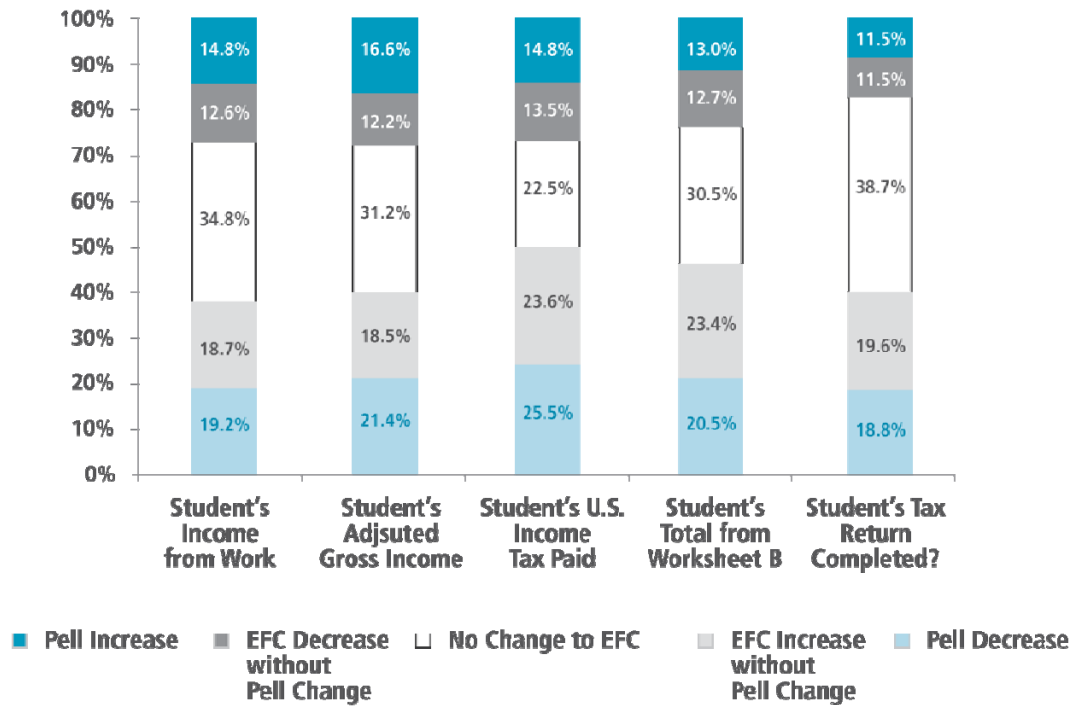
Source: Quality Assurance Program sample data, 2006–07.

Figure 18 presents the percentage of independent records that experienced a change to each of the examined ISIR fields that would have been subject to school or CPS verification. We saw in **Figure 10** that school verification selected 45.1 percent of all independent records and the CPS flagged 34.8 percent for verification. The values in **Figure 18** are consistently 5 to 10 percentage points higher than the overall average of independent verification. This suggests that both the CPS and schools had some success targeting the independent records that experience a change to the most problematic FAFSA fields.

Figure 18: Percent of Records with Changes to Indicated ISIR Field Select by School or CPS Verification, Independent Records
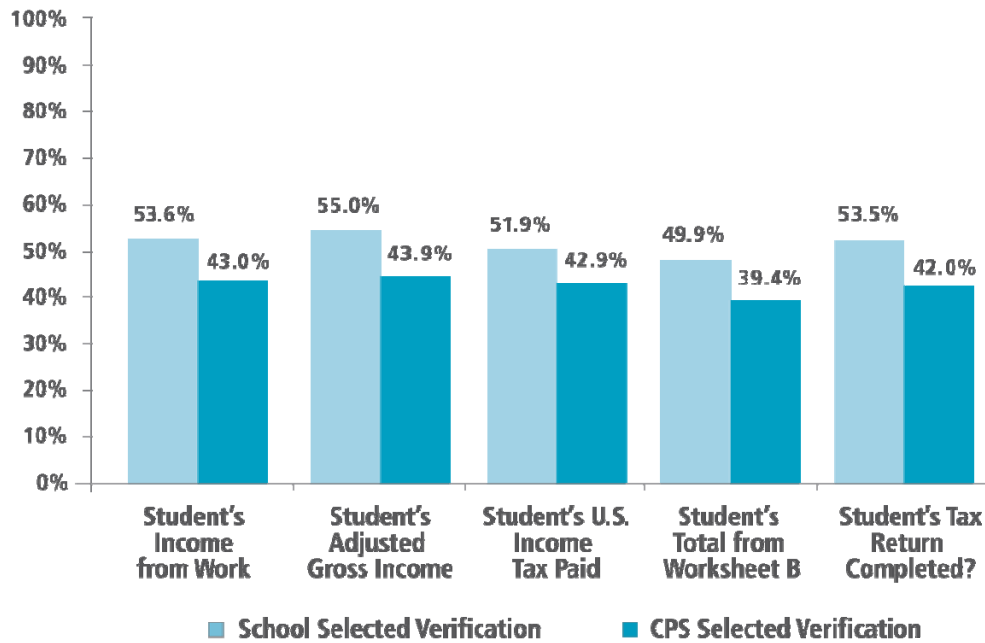
Source: Quality Assurance Program sample data, 2006–07.

Figure 19 presents an EFC Impact Analysis Report program-wide analysis for independent students. Interpret the results in **Figure 19**, keeping in mind the overall distribution of the independent records across the EFC categories. There were 22,233 independent records in the analysis group: 10,512 (47.3 percent) had a zero EFC on their initial transaction; 7,047 (31.7 percent) had an initial EFC between 1 and 3,850; and the remaining 4,674 (21.0 percent) had an EFC in excess of 3,850. The first group of three bars in **Figure 19** represents the counts (in 1000's) of cases with a change to any of the 16 fields that could potentially come into play when calculating EFC closely mirrors this distribution. The distribution of changes to Student's Adjusted Gross Income, Student's Income from Work, and Student's Tax Return Completed also closely mirror the overall distribution of records across EFC categories. Records with an initial zero EFC were under-represented among cases that experienced a change to Student's U.S. Income Taxes Paid and Student's Total from Worksheet B. Records with an initial EFC between 1 and 3,850 were over-represented among records with a change to Student's U.S. Income Taxes Paid and records with initial EFC values above 3,850 were over-represented among both the records with changes to Student's U.S. Income Taxes Paid and Student's Total from Worksheet B.

Figure 19: EFC Impact Analysis Independent Students (N=1000s of records)
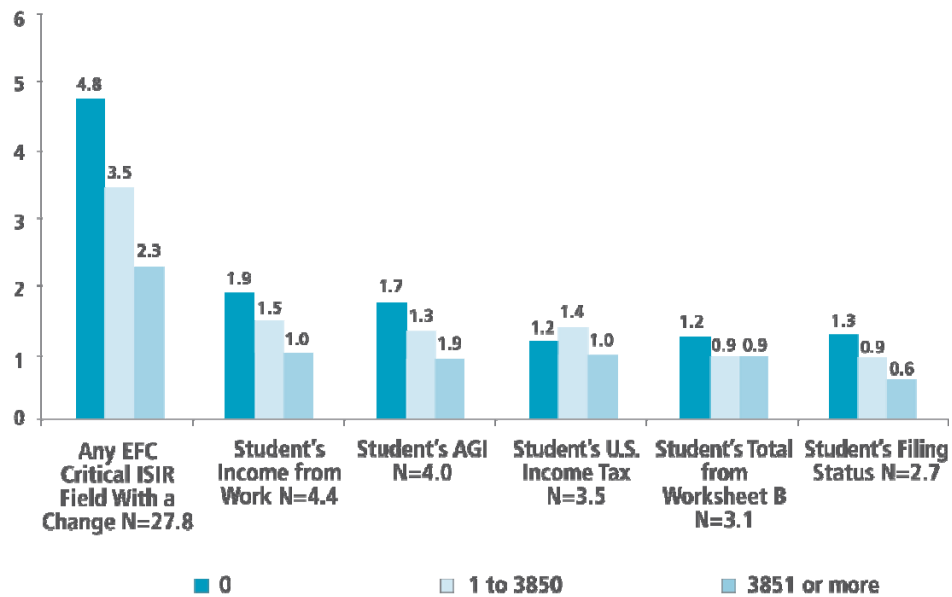
Source: Quality Assurance Program sample data, 2006–07.

Before concluding this section of the report, we would like to compare our findings in the 2006–07 data to the results from the previous Quality Assurance sample collected in 2004–05. We were interested in determining whether there had been any change in terms of aid applicants supplying correct information on the initial transaction over time. We found a good deal of similarity in the two most recent Quality Assurance samples in terms of the accuracy of initial ISIR data. See Figures 20 and 21.

Figure 20: Changes to ISIR Critical Fields over Time, Dependent Students
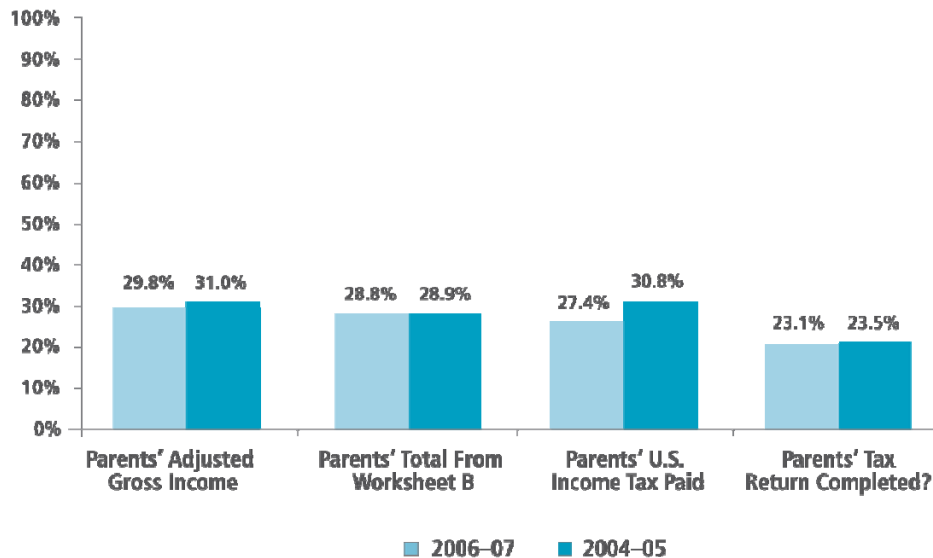
Source: Quality Assurance Program sample data, 2004–05 and 2006–07.

Figure 21: Changes to ISIR Critical Fields over Time, Independent Students

	Student's Adjusted Gross Income	Student's U.S. Income Tax Paid	Student's Total From Worksheet B	Student's Tax Return Completed?
2006–07	17.8%	15.8%	13.8%	12.3%
2004–05	19.2%	17.9%	14.3%	13.4%
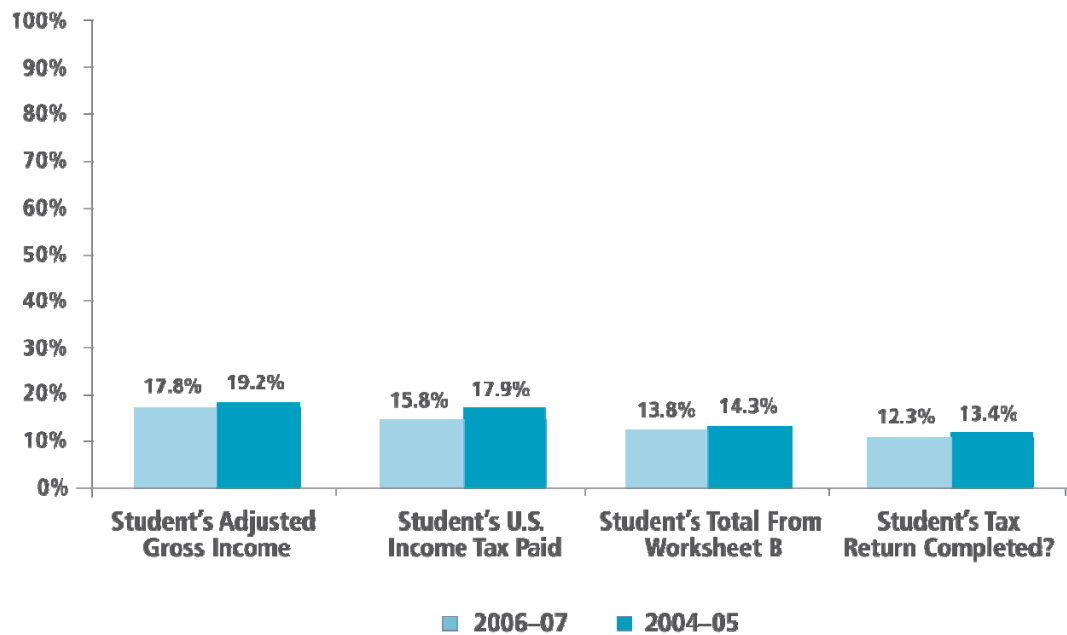
Source: Quality Assurance Program sample data, 2004–05 and 2006–07.

This look back to 2004–05 revealed that the accuracy of initial information improved a little over time. The largest of these small improvements were for parent and student tax return items, adjusted gross income and U.S. taxes paid. Note that we did not include correction rates for the individual components of Adjusted Gross Income (e.g., Mother's and Student's Income from Work) in these graphs because our analysis of the 2004–05 data did not address these fields separately.

The analyses above identified the most commonly changed ISIR items. For both dependent and independent students the list of most problematic ISIR data elements included adjusted gross income and U.S. Income Taxes paid. Federal Student Aid has been in conversations with the Internal Revenue Service (IRS) of exploring the feasibility of replacing CPS verification with an IRS data match. Adjusted gross income and taxes paid are the two data elements that the inter-agency discussions and preliminary analysis have focused on. In the next section we use the Quality Assurance sample data to explore what portion of the changes to aid eligibility are captured solely by these two important determinants of EFC.

Research Question #3: What proportion of the value of full verification could be recouped by relying just on IRS data elements?

Much of the information collected during the verification process is found on federal tax returns and supporting documents. Hence, the attractiveness of an IRS data match to replace the process of schools physically collecting copies of student tax forms. However, the current federal verification worksheets also collect non-tax information. These non-tax items include the number of postsecondary students a student's family may have enrolled in college. Current verification also requires students to confirm household size by listing the members included in the count. While household size and the number of exemptions a student or parent claims on their tax return(s) are correlated, the definitions of household size for financial aid purposes and exemptions for federal tax purposes are not the same. The 2006–07 FAFSA required applicants to sum tax and non-tax return information to calculate values on Worksheets A, B, and C. Therefore, worksheet values could be accurately reproduced from tax data for some but not all aid applicants. Furthermore, while a portion of household size and worksheet data could, in theory, be part of an IRS match, current discussions between Federal Student Aid and the IRS have focused exclusively on only two data elements, adjusted gross income and taxes paid. Finally, some financial aid applicants have so little income that they are not required to file a tax return and thus an IRS match could not address the accuracy of these awards.

To address research question #3, we will use the Quality Assurance sample data to determine:

1. How often do the differences in the definitions of household size and exemptions lead to actually different values?
2. What percentage of aid applicants have changes to tax data only, only non-tax data, both types of information, and what percentage of applicants could be missed by an IRS match because they do not make enough money to have to file a return?
3. What portion of the total change to aid eligibility would be captured if corrections were limited to only the information for adjusted gross income and U.S. taxes paid data fields?

We mentioned above that the definition for household size is not the same as the definition for number of exemptions. The differences between the two include how students with divorced parents are treated in terms of which parent gets to claim a tax exemption (greatest level of support or court decree) and which household a student resides in for financial aid purposes (where the student spent the most of the time during the last 12 months). Additional differences include how other adults (e.g., siblings and unmarried partners) are included in the respective counts. Finally, the two measures reflect the living situation during two different periods of time. The number in a household is determined based on the people living in the home now and those who will be living in the home during the upcoming academic year, while the number of exemptions is based on the previous calendar year.

How much do these differences matter? **Figure 22** presents the percentage of records in the Quality Assurance analysis group where the value for household size does not equal the value for the number of exemptions on the initial transaction for dependent and independent records.

Figure 22: Comparison of Household Size and Number of Exemption by Dependency Status
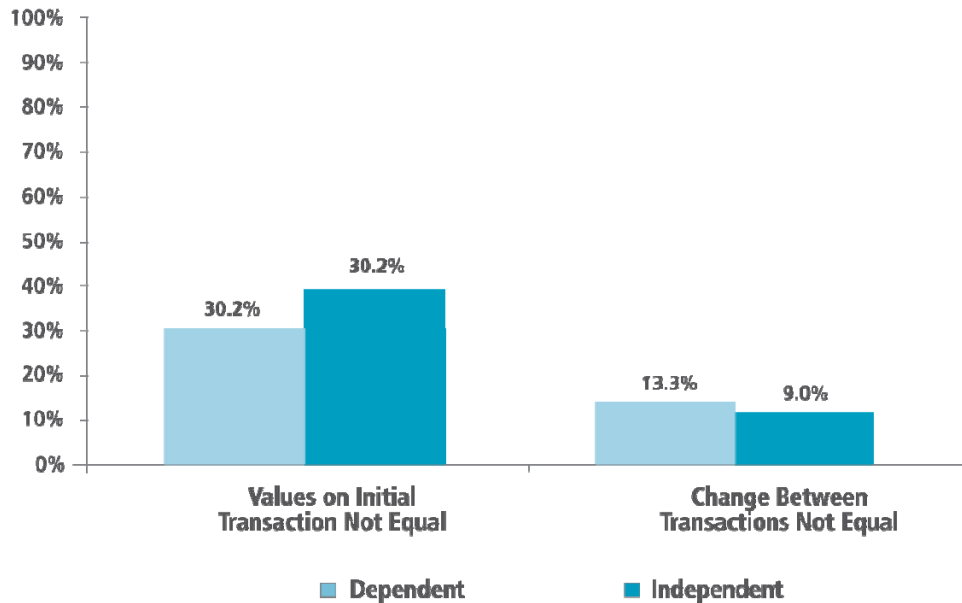
Source: Quality Assurance Program sample data, 2006–07.

We used parent information for dependent students and student information for independent students in these calculations. The values for household size and number of exemptions were not the same for a large minority of both dependent and independent students. We also observed disparities in the change made to household size and exemption after verification; 13 percent of dependent students and 9 percent of independent students did not have the same correction after verification. Based on the differences observed in the Quality Assurance data, we conclude that the number of exemptions is not good proxy measure for the number in household.

In the previous section, we identified the most commonly changed ISIR fields; our analysis there did not concern itself with how many other changes a record may have had. However, to evaluate what would be lost if Federal Student Aid switched to an IRS match it is crucial to take into account all the fields that were corrected during verification. It is also important to determine how many financial aid applicants are not required to file taxes because the accuracy of awards to non-filers could not be addressed with an IRS match.

Figure 23 displays the percentage of records with the specified change or combination of changes to ISIR data. In creating this graph, we defined changes to IRS data as changes to adjusted gross income or U.S. income taxes paid. We defined changes to number in college, household size, and worksheets A, B, and C as changes to "other." For non-filers, we checked whether there were changes to the values of the income from work fields in addition to the non-IRS fields.

Figure 23: Type of Change to ISR Data Observed
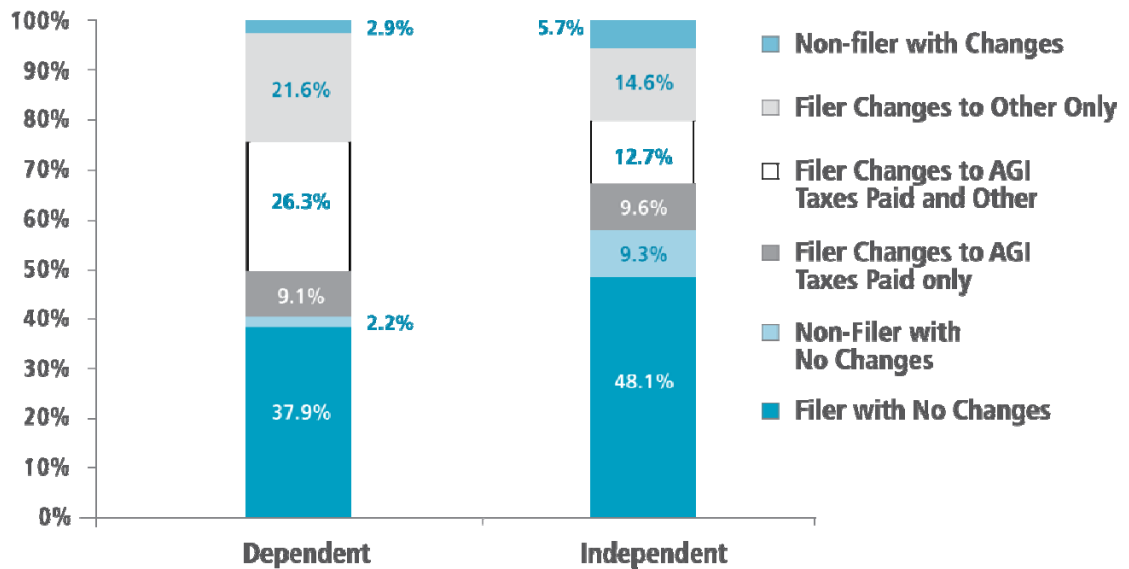
Figure 23 indicates that records experiencing changes only to IRS data were relatively rare in the Quality Assurance data; 9.1 percent of dependent and 9.6 percent of independent records have changes only to adjusted gross income or U.S. taxes paid. Much more common are records that experience changes to the "other" ISIR fields either with or without accompanying changes to the IRS fields. Note that while non-tax filer applicants are less common among dependent records than among independent records, the dependent non-filers were more likely to have a change to ISIR data than their independent counterparts.

While less than 10 percent of records experienced changes to IRS data exclusively, it is still possible for these changes to account for a much larger share of the change in EFC. Unfortunately determining the impact of the change to a single ISIR field is quite challenging. This is because the calculation of EFC depends on multiple ISIR values and the effect of a change to a given field depends on the values of others fields. As previously mentioned needs analysis includes income and asset allowances in the formulas used to calculate EFC that cause changes to ISIR fields that occur below these thresholds to have no effect on aid eligibility. The size of an applicant's household affects EFC because households of different size are assigned different income protection allowances. The number in college also plays a role in determining the income protection allowance. However, the primary impact of the number in college is the divisor for the EFC calculated based on all other information. Finally, for dependent and independent students with dependents other than a spouse, the effect of the ISIR fields pass through a progressive rate structure that allocates a higher percentage of available income to EFC as the amount of available income rises.

Given these complications, we devised an estimate for the effect of the change observed on EFC. The reader needs to keep the following facts about our estimate in mind when interpreting the results. First, we examined the impact of all changes in isolation; we calculated the impact of the change observed within each ISIR field as if it were the only change experienced by that case. By defining the total impact as the sum of these individual components, we are ignoring the tendency for some errors to cancel each other out. For example, if a student initially reported the correct Worksheet A value on the FAFSA line for Worksheet B, that error in reality would have no impact on EFC, but in our calculations, we would record errors to both Worksheet A and B as affecting EFC.

Second, we calculated and summed the impact in terms of absolute dollars. This prevented a change in "record A" leading to decrease in aid eligibility from canceling out a change to "record B" leading to an increase in aid eligibility. Third, we assumed that all changes occurred above the income protection allowance. Fourth, we assigned all changes that would affect adjusted available income during needs analysis a contribution rate that fell in the middle of the progressive range (34 percent) for dependent and independent students with dependents. Independent students without dependents were assigned a 50 percent contribution rate. We factored in changes to household by multiplying the marginal increase in the income protection allowance (3,460) by the appropriate contribution percentage. Finally, we calculated the impact of number in college by making the appropriate reduction to the income protection allowance and either multiplying or dividing the initial EFC by the change to the number in college field.

The results of these estimates are presented in **Figure 24**. Based on the Quality Assurance data we found that relying solely on adjusted gross income and taxes paid would only capture half of the estimated changes to EFC detected by full verification in the Quality Assurance samples. Changes to adjusted gross income were the single most important factor in terms of the potential impact on aid eligibility. By itself adjusted gross income accounts for roughly 40 percent of all estimated changes to EFC. Among the other fields, Worksheet B contributed roughly 15% of the estimated total change to initial EFC for both dependent and independent records. Number in college was a third major factor for dependent students.

Figure 24: Share of Estimated Change to EFC Attributable to Indicated ISIR Data Element
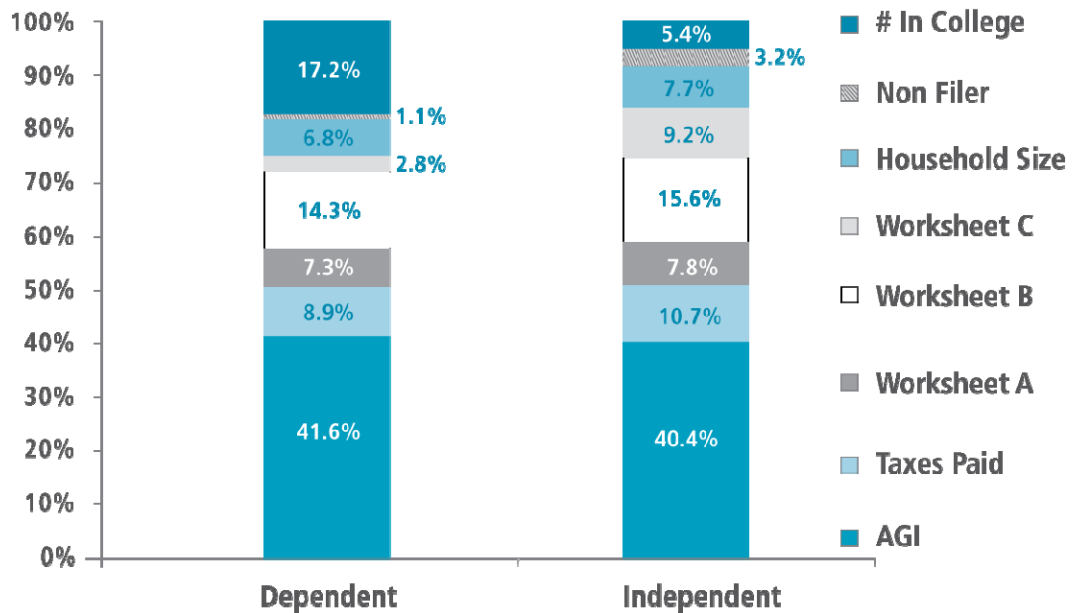
Source: Quality Assurance Program sample data, 2006–07.

Our analysis of Quality Assurance data suggests that moving toward an IRS match may be problematic, especially if that match is limited to only adjusted gross income and U.S. income taxes paid. We found that changes to these IRS data elements exclusively were quite rare among the records in the Quality Assurance sample. When we estimated the impact of changes to both IRS and other ISIR data fields on EFC we found that changes to adjusted gross income and U.S. taxes paid accounted for only half of the impact of full verification.

Another separate challenge posed by an IRS match is one of timing. As tax returns are not due until April 15, it is unclear whether the IRS and the Department could process the information quickly enough to ensure that initial disbursements of aid reflect "verified" information. The fact that tax returns are not due until April 15 already prompts many students to submit their initial application with estimated tax information. The next section looks at the accuracy of these estimates and how well Quality Assurance School and CPS verification target inaccurate tax estimates for verification.

Research Question #4: How accurately do financial aid applicants estimate their tax information?

As mentioned above, students and their parents often complete their initial FAFSA prior to completing their taxes. In previous analyses, we have found that the verification procedures of many Quality Assurance schools target some or all of these estimated filers for verification. In this section, we examine how well aid applicants in the Quality Assurance sample data managed to estimate their tax information and how well school and CPS verification target their verification efforts among the subset of applicants that estimate their tax information.

Figure 25 displays the percentage of initial applications that estimated their tax information. The graph displays information separately for dependent and independent students. We divided the applicants who estimated their tax data into two groups, those that experienced a major change to their aid eligibility after verification and those that did not. Recall that we defined a "major" change as any change to a Pell Award or an EFC increase or decrease of at least 400.

Figure 25: The Effect of Estimated Filing Status on Aid Eligibility by Dependency Status
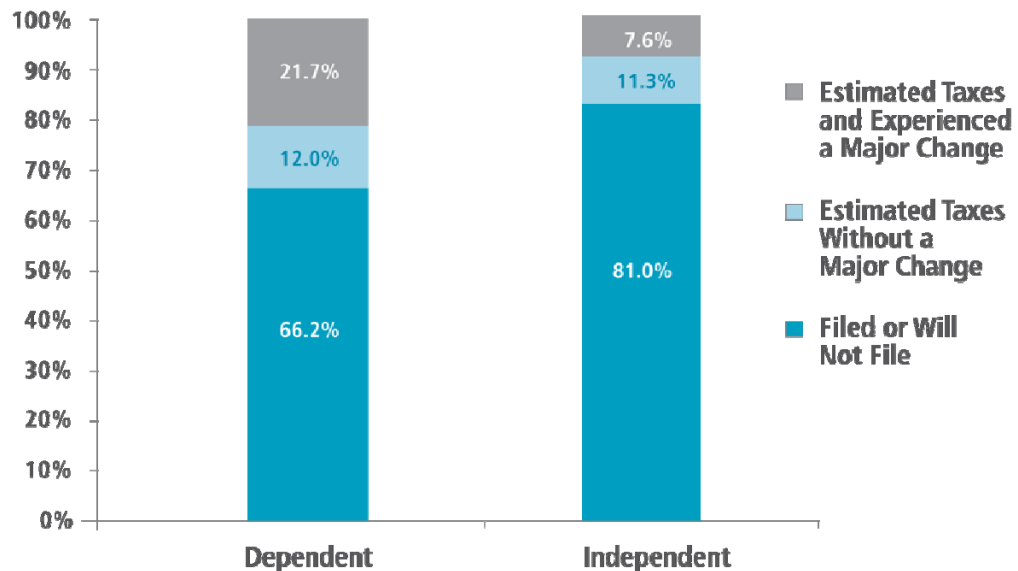
Source: Quality Assurance Program sample data, 2006–07.

Note in **Figure 25**, that estimating values for tax information on the FAFSA was more of an issue for dependent than independent students. Not only did a larger portion of dependent students estimate their tax data (roughly one third vs. one fifth), but a greater percentage of the estimates resulted in a major change in aid eligibility. Roughly, two-thirds of dependent estimated filers experienced a major change to aid eligibility compared to less than half of independent students.

Figure 26 contrasts the prevalence of changes to individual ISIR data elements during verification among those who estimated their taxes to the other aid applicants who either had filed or did not need to file a tax return. Before interpreting the results, we want to acknowledge that many applicants who initially estimated their tax information would have self-corrected their information after filing their tax return. Therefore, **Figure 26** reflects the accuracy of initial estimates *not* the accuracy of what the paid on information would have been used to award aid in the absence of verification.

Figure 26: Percentage of Records Experiencing a Change to the Indicated ISIR Field by Tax Estimation Status, Dependent Students
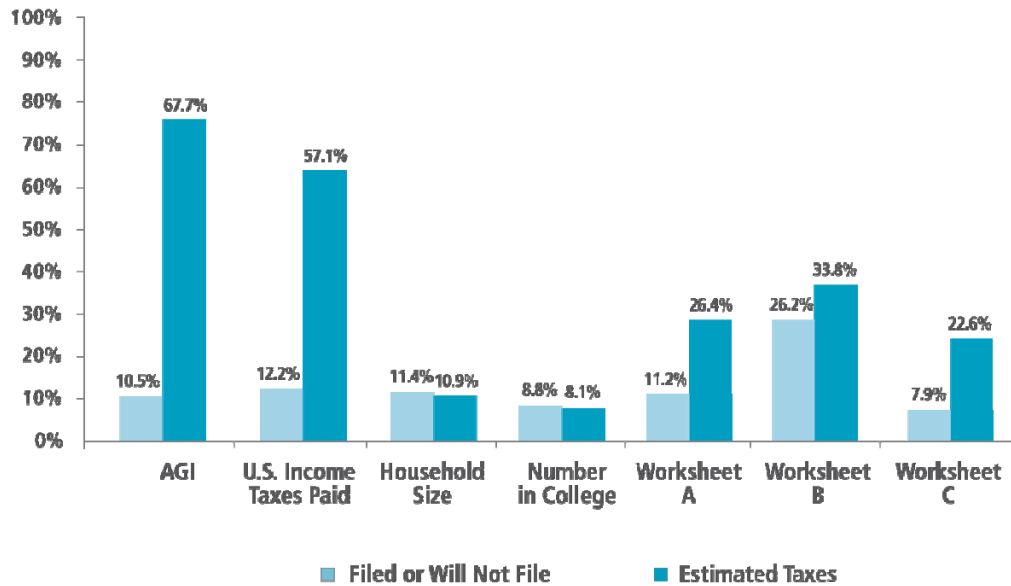
Source: Quality Assurance Program sample data, 2006–07.

Figure 26 quantifies the non-surprising result that applicants who initially estimated their information were more likely to have that information corrected during verification. Perhaps the biggest surprise is that the percentages were as low as they were. While the majority of tax estimates did need to be corrected, sizeable minorities of dependent students supplied precise estimates of adjusted gross income and U.S. taxes paid. Subtracting the values in **Figure 26** from 100 provides the percentage of the initial estimates that were right. Among dependent students that estimated their taxes, 32 percent got adjusted gross income right and 43 percent of the estimates for U.S. taxes paid were correct. There was also a noticeable difference in the initial accuracy of values on the three worksheets, with tax estimators being more likely to experience a correction to these fields. There was no difference between dependent students who estimated their taxes and the other applicants in terms of the accuracy of initial reports of household size and number in college.

Figure 27 provides the average absolute value change in adjusted gross income, U.S. taxes paid, and the three FAFSA worksheets for dependent students. We used absolute values to provide a measure of the total dollar amount of change associated with corrections to these fields. The simple arithmetic average would have allowed positive and negative changes to offset each other. The results in **Figure 27** mirror the results in **Figure 26**, but do indicate that the magnitude of changes was greatest for adjusted gross income. The dependent students who estimated their taxes experienced an average correction to adjusted gross income that was more than 6,000 dollars greater than the average correction to adjusted gross income among other dependent applicants. This disparity dwarfed the others observed.

Figure 27: Average Absolute Value Change to the Indicated ISIR Filed by Tax Estimation Status, Dependent Students
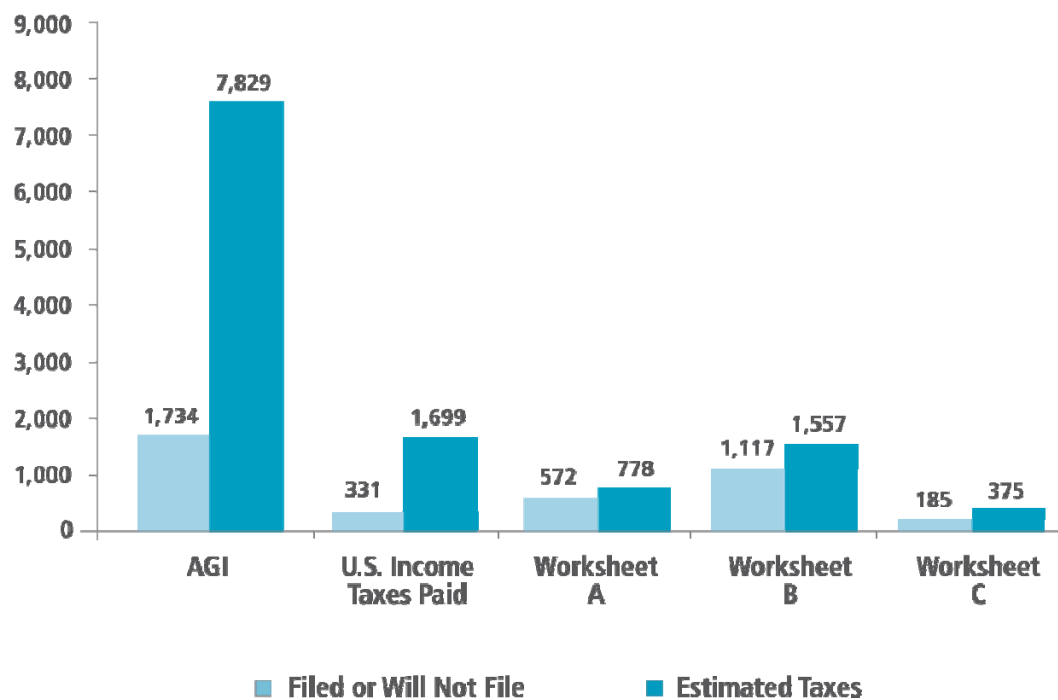
Source: Quality Assurance Program sample data, 2006–07.

Figures 28 and 29 present similar finding for independent students.

Figure 28: Percentage of Records with a Change to the Indicated ISIR Field by Tax Estimation Status, Independent Students
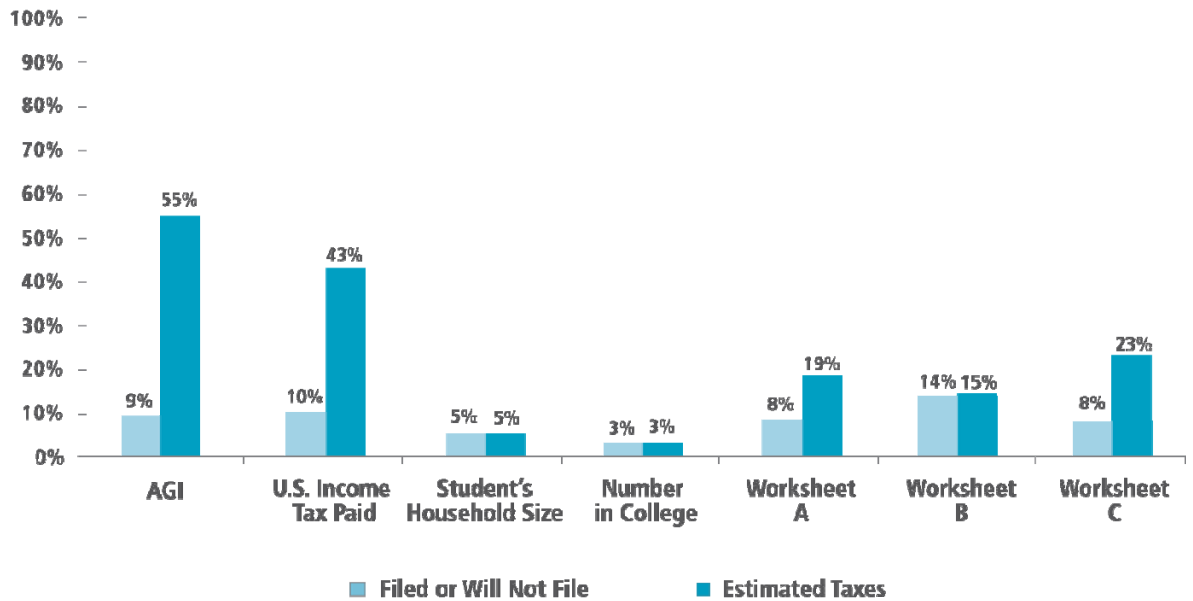
Source: Quality Assurance Program sample data, 2006–07.

Figure 29: Average Absolute Value Change to Indicated ISIR Field by Tax Estimation Status, Independent Records
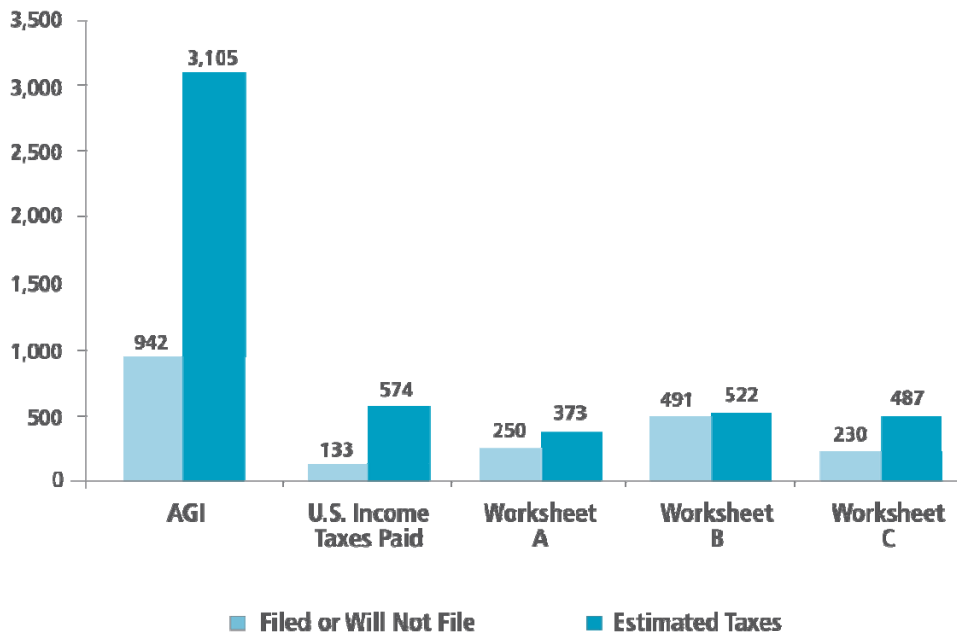
Source: Quality Assurance Program sample data, 2006–07.

While quite similar to the results of dependent students, we found that independent students were on average more accurate than dependent students when estimating tax data. In **Figure 28**, we saw a lower percentage of corrections needed for adjusted gross income and taxes paid among independent students who were estimating their taxes compared to the correction rates observed for dependent students in **Figure 26**. The average absolute value of correction to the tax fields for independent students in **Figure 29** was also substantially lower than the results displayed for dependent students in **Figure 27**. Our finding that tax estimates among independent students were more accurate than they were among dependent applicants is probably due to the lower income levels, lower tax burdens and relative simplicity of tax returns of independent students in comparison to the parents of dependent students.

Our analysis of the level of inaccuracy of the tax estimates within the Quality Assurance data suggests a potential need to verify many of these students, especially if we have reason to believe that applicants will not self-correct their application or if we question the accuracy of these updates. However, our analysis also revealed that a sizeable minority of students who estimated tax data provided correct values. Are certain types of students better at providing estimates of their tax data? To begin to answer this question, Tables 3 and 4 provide a demographic description of the dependent and independent students that estimated their tax data.

The first column of numbers in these tables provides the percentage of estimated filers that fall into the category identified in each row. If we compare these percentages to the corresponding values in Tables 1 and 2, which provide demographic descriptions of the entire dependent and independent populations, we can identify groups of students that are more (or less) likely to estimate their taxes. These comparisons reveal that, in general, estimated filers are not dramatically different from the total applicant population, but a few minor differences are noteworthy.

Among dependent students, those who estimate their taxes are more likely to: be selected for verification by both the CPS and Quality Assurance schools; have parents who are married and completed college; have parental adjusted gross income above $50,000; and experience a major increase or decrease in aid eligibility. Dependent students with low parental income levels, especially zero EFC, were less likely to estimate their taxes.

Among independent students, tax estimators were more likely to be selected for CPS verification; to be enrolled as graduate students; and to experience a major increase or decrease to aid eligibility. Independent students who estimated their taxes were less likely to: have an automatic zero EFC; have children or other dependents other than a spouse; and, be selected by Quality Assurance school verification than independent students in general.

The second column of numbers provides a more useful statistic in terms of identifying which group(s) of students among the sub-population that estimates their taxes may be the most in need of verification. This percentage reflects the proportion of the students in each row that experienced a major change in aid eligibility. Recall that we are defining a "major" change as any modification of a Pell award or an EFC change in excess of 400. Please interpret values in this column relative to the overall percentage of tax estimating population that experience a major change in eligibility, 64 percent of dependent students and 40 percent of independent records that estimated their taxes on their initial application experienced a major change. Values above these percentages should be targeted for verification and values below the overall average identify types of students where the need to verify is lower.

Among dependent tax estimators, we saw dramatically lower percentages of major changes in aid eligibility among records with automatic zero EFC (22 percent) and zero EFC (31 percent). In line with this finding, we see relatively few major changes among the low adjusted gross income ranges (less then $20,000) and high levels of change among the middle-income ranges ($30,000 to $60,000). The fact that the percentages of records being verified by both the CPS (66 percent) and school (65 percent) that experience a major change are so close to the overall percentage (64 percent) suggest that both verification criteria could benefit by looking for ways to exclude some of the dependent records with low incomes, especially zero EFCs, from verification and considering how to verify more records with parental adjusted gross incomes between $30,000 to $60,000.

Similar to the results for dependent students, we found independent applicants that estimated their tax information with zero EFC, especially if this zero was automatic, were much less likely to experience a major change than other independent students who estimated their taxes. Graduate students who estimated their taxes were also somewhat less likely to experience a major change than other independent students. We observed a non-linear pattern for student's adjusted gross income ranges. In general, we found lower student income levels were associated with reduced chances for a major change, but for students with initial adjusted gross income in the range of $1 to $4,999 we found an elevated chance of a major change. The percentage of records in **Table 4** selected for Quality Assurance school verification that experienced a major change (41 percent) is nearly identical to the overall tendency of estimated filers. Therefore, Quality Assurance schools might want to consider eliminating zero EFC and low-income independent students from the estimated filers they verify. The fact that the percentage of independent tax estimator records selected for CPS verification that experience a major change is higher (47 percent) suggests that Quality Assurance schools could use the CPS verification flag to help them expand their verification of independent records that estimate their tax data.

**Table 3: Demographic Description of All Dependent Records
That Estimated their Taxes N=13,426**

	Percent of Records that Estimated Taxes	Percent of Row with a "major" change to aid eligibility
All applicants who estimated their taxes	100.0%	64.4%
Selected by CPS	48.1%	65.6%
Selected by School	67.3%	64.5%
Auto Zero EFC	4.6%	22.1%
Zero EFC	10.2%	30.9%
EFC 1 to 3850	42.0%	74.2%
EFC 3851 or more	47.8%	62.8%
Negative income	0.6%	34.1%
Zero income	2.4%	50.8%
1 to 9,999	4.3%	31.8%
10,000 to 19,999	8.7%	42.8%
20,000 to 29,999	12.3%	68.3%
30,000 to 39,999	15.1%	78.1%
40,000 to 49,999	12.5%	74.9%
50,000 to 59,999	9.5%	72.4%
60,000 to 74,999	11.6%	66.3%
75,000 to 99,999	11.2%	62.8%
100,000 or more	11.8%	57.0%
Parents' married	67.8%	64.5%
Parent(s) completed college	67.3%	64.5%
Major Increase	40.4%	100.0%
Minor Increase	4.9%	0.0%
Zero Change to EFC	26.2%	0.0%
Minor Decrease	4.6%	0.0%
Major Decrease	24.0%	100.0%

Source: Quality Assurance Program sample data, 2006–07

**Table 4: Demographic Description of Independent Records
That Estimated their Taxes N=4,214**

	Percent of Records that Estimated Taxes	Percent of Row with a "major" change to aid eligibility
All estimated filers	100.0%	40.2%
Selected by CPS	38.1%	46.7%
Selected by School	52.4%	40.7%
Auto Zero EFC	8.9%	14.2%
Zero EFC	47.6%	18.5%
EFC 1 to 3850	30.9%	62.7%
EFC 3851 or more	21.5%	55.8%
Negative income	0.5%	0.0%
Zero income	6.4%	24.8%
1 to 4,999	7.1%	47.2%
5,000 to 9,999	21.4%	37.5%
10,000 to 14,999	13.2%	50.9%
15,000 to 19,999	7.8%	51.8%
20,000 to 24,999	6.0%	54.2%
25,000 to 29,999	4.7%	63.5%
30,000 to 39,999	6.3%	65.2%
40,000 or more	9.6%	62.8%
Have Children	24.4%	39.6%
Have Dependents	4.6%	43.2%
DOB	80.5%	42.1%
Graduate Students	35.2%	34.1%
Married	26.8%	52.1%
Orphan	5.4%	38.3%
Veteran	6.2%	44.6%
Major Increase	25.4%	100.0%
Minor Increase	4.5%	0.0%
Zero Change to EFC	52.0%	0.0%
Minor Decrease	3.3%	0.0%
Major Decrease	14.8%	100.0%

Source: Quality Assurance Program sample data, 2006–07

Research Question #5: What is the implication of changes to initial ISIR data upon improper payments in the Pell Grant program?

As we have done in the past, we conducted analysis of potential improper payments in the Pell program. The "potential" qualifier is necessary because we are looking at all changes from the initial application. Students would have self-corrected some of these changes even if a Quality Assurance school had not selected them into the sample. Further, all the awards made to students in the sample were corrected prior to disbursement.

This analysis calculated total dollars "at risk" for under- and over-awards based on the initial transaction and the dollars that "remained at risk" after accounting for CPS and school verification. When we produced these program-wide results, we "weighted" the data in such a way as to allow Quality Assurance schools that disbursed a greater volume of Pell Grant to their aid population to count more. We constructed a weight by dividing the number of Pell recipients in each school's sample by the total number of Pell awards that the school made during the 2006–07 award year. We got the data for the total number of Pell awards made by each school from the National Student Loan Data System. We weighted the results of each school by the inverse of this ratio. For example, if a school had 100 records in their Quality Assurance sample that were initially eligible for Pell and disbursed 1,000 Pell Grants in 2006–07, the ratio would be 100/1,000 or 1/10. The weight for this school would be 10 (the inverse of 1/10). The idea behind weighting results is to allow each school's sample data to reflect the relative size of the school population when generating program-wide results. If a second school also had 100 records that were eligible for Pell in their sample, but 10,000 students receiving Pell Grants in their population, the ratio would be 100/10,000 or 1/100 and the weight 100.

Figure 30: Potential Improper Payments in the Pell Grant Program
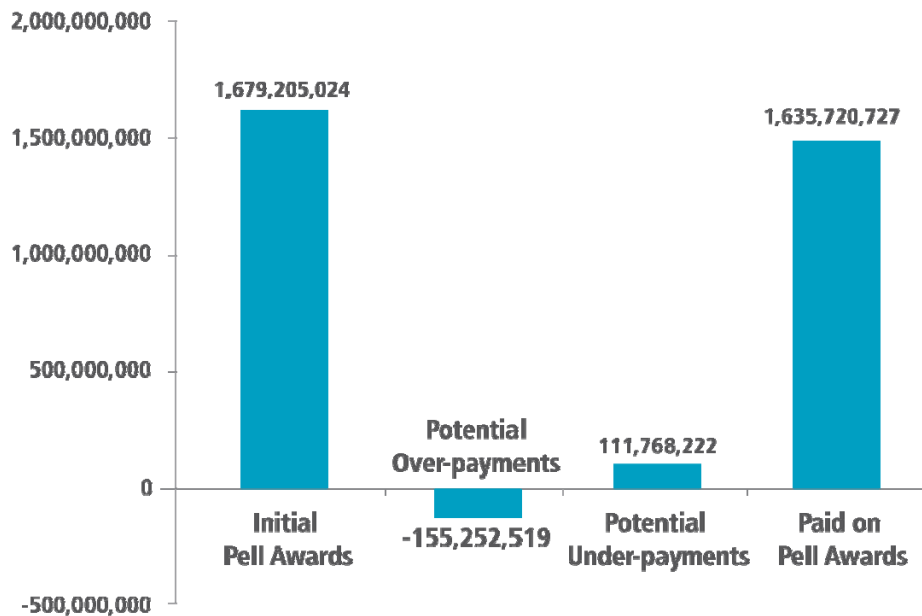
Source: Quality Assurance Program sample data and National Student Loan Data System, 2006–07.

Figure 30 presents our weighted estimates for the potential Pell over- and under-awards at the 132 Quality Assurance schools that provided data for this analysis. If these Quality Assurance schools had awarded Pell Grants in 2006–07 based on the information supplied by their students' initial ISIRs they would have disbursed roughly 1.68 billion dollars in Pell Grants. Based on the records in their random sample that were subjected to 100 percent verification, we estimate that there was a total potential for 155 million dollars in Pell over-payments at these schools. We represent this as a negative number in **Figure 30** because it would reduce the total dollars of Pell awarded. These over-awards represent 9.2 percent of the $1.68 billion. We also estimated that there was the potential for nearly 112 million dollars of in Pell under-awards. We present this as positive number because it would increase the volume of Pell. These under-payments constitute 6.7 percent of the initial Pell amount. Correcting both of these types of improper payments would reduce the amount of Pell disbursed to $1.64 billon or 2.6 percent from the initial level. We derived this final number by summing the three other values displayed in the figure.

Of course, Quality Assurance schools did not disburse all Pell Grants based on the initial transactions. Instead, they verified those students who met their school's verification criteria. **Figure 31** illustrates how the potential for improper payments was reduced by school verification efforts during the 2006–07 award year.

Figure 31: Improper Payments in Pell Before and After School Verification
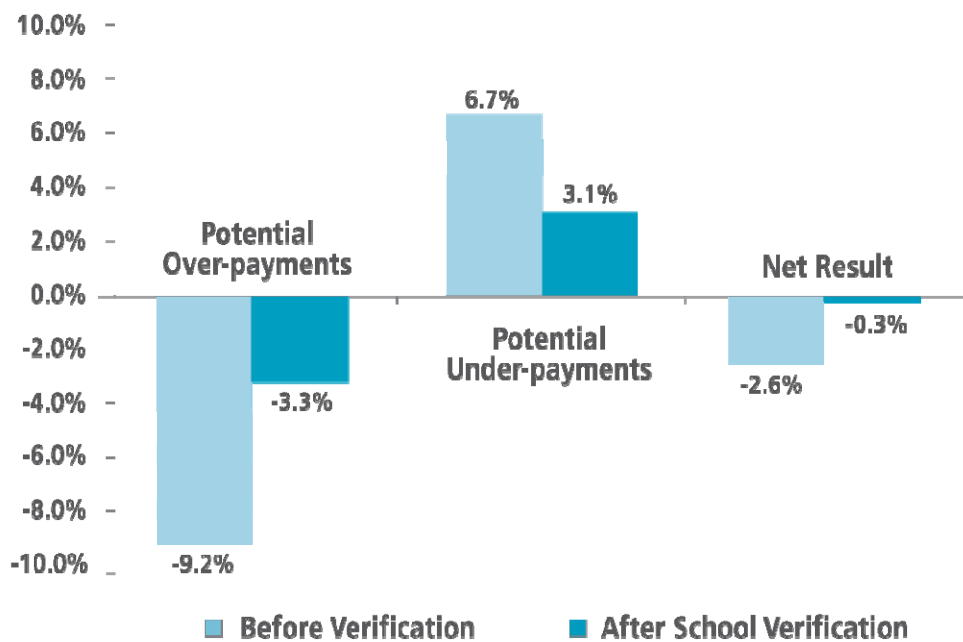
Note how both the percentage of over-awards and under-awards were reduced to around 3 percent. Therefore, the total in improper payments was reduced from 16 percent (9.2+6.7) to 6.4 percent (3.3+3.1). Some unknown percentage of these remaining dollars at risk would have been eliminated by students' self-corrections. The errors after school verification were roughly equivalent and in opposite directions so they offset each other when calculating the net effect of improper payments. After school verification the total amount of Pell Dollars disbursed at 132

Quality Assurance schools was within 0.3 percent of the dollars that would have been disbursed if every single ISIR record had been verified.

Even though Quality Assurance schools are not normally required to verify the records selected by the CPS for verification, the fact that all records in the random samples were verified allows us to conduct a parallel analysis of CPS verification, see **Figure 32.** CPS verification appears to be doing a somewhat better job than Quality Assurance school verification in terms of reducing over-awards (1.8 percent) and not quite as good a job at preventing under-awards (4.1 percent). If all the records flagged by the CPS were verified the remaining improper payments would constitute 5.9 percent (4.1+1.8) of the initial award amount. However, even non-Quality Assurance schools are not required to verify all the CPS selected records if the CPS selects more than 30 percent of their population. So some unknown percentage of the CPS selected records may not be verified under normal circumstances. As we mentioned before, some other unknown percentage of the remaining dollars at risk would be addressed by students' self-corrections. CPS verification's preponderance for addressing over-awards results in an interesting net result. If only the CPS flagged records had been corrected, then 2.3 percent fewer Pell dollars would have been awarded than was the case when schools verified all the records in the sample.

Figure 32: Improper Payments in Pell Before and After CPS Verification
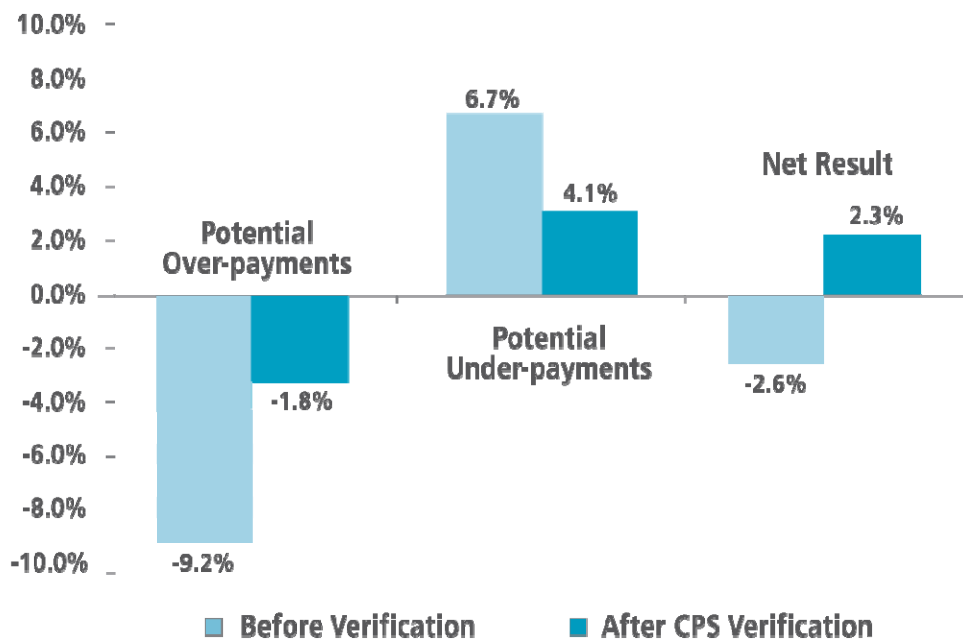
Source: Quality Assurance Program sample data and National Student Loan Data System, 2006–07

Our program-wide data were collected from a random sample of ISIRs at individual Quality Assurance Program schools. Therefore, the findings we present here are not generalizable to all colleges and universities that disburse Pell Grants. Given the over-representation of large and four-year public schools in the analysis group, these results are more illustrative of the potential for improper payments in the Pell Grant program at these types of institutions of higher education.

Analysis of Quality Assurance Program Sample Data: 2006–2007

Research Question #6: How effective and efficient are current CPS and school verification criteria?

Our final section evaluates the effectiveness and efficiency of CPS and school verification. We will present the percentage of different demographic groups of students selected by each type of verification. Following our examination of what types of students both verification systems target, we will examine the effectiveness of current verification efforts in terms of the tendency for the two different verification systems to target their verification efforts on applicants that experience a "major change." We will also consider the efficiency of the systems by looking at the percentage of cases with no and only a minor change that were selected for verification. Given the fundamental role Pell Grants play in providing access to higher education we will also examine how verification efforts target changes to Pell awards.

Table 5 provides the percentage of different groups of dependent students that were selected for CPS and school verification. The way to read this table is to compare each of the entries to the top value in each column, the overall percentage of dependent records selected by the indicated verification system. Groups that have higher values are more likely to be verified than average**. Table 6** presents the same type of data for independent students.

The first thing to notice in **Table 5** is that there is a good deal of overlap between CPS and school verification. The majority of dependent records selected by the CPS were also selected by school verification and vice versa. This similarity extends to the type of students being targeted for verification. Both verification systems emphasize verification among lower income students. Dependent students who were initially eligible for Pell, had zero EFC, were from low income ranges, and claimed they did not need to file a federal tax return were more likely to be selected for verification by both systems. This makes some sense given these students are eligible for the most need-based aid. The concentration on the most eligible population is, however, much more pronounced for CPS verification than it is for school verification. A few extreme examples make this point. CPS verification selected three quarters of the initial Pell eligible population compared to only two thirds selected by the Quality Assurance schools. CPS selected nearly all of the non-filers (85 percent) compared to 64 percent selected by Quality Assurance schools. This concentration on low-income populations makes CPS verification above the Pell threshold quite rare. In fact, the CPS selected only 4 percent of the records with an initial EFC above 3,850; in comparison the Quality Assurance schools verified 37 percent of these records.

**Table 5: School and CPS Verification Rates for Dependent Students
by Demographic Categories N=39,725**

	Selected by CPS	Selected by School
All Dependent students	44.0%	53.8%
Selected by CPS	100.0%	69.1%
Selected by School	56.5%	100.0%
Initially Pell Eligible	75.5%	66.9%
Auto Zero EFC	68.2%	60.9%
Zero EFC	67.5%	61.5%
EFC 1 to 3850	78.3%	69.0%
EFC 3851 or more	4.0%	37.1%
Negative income	86.4%	62.0%
Zero income	84.7%	67.1%
1 to 9,999	56.4%	59.6%
10,000 to 19,999	59.4%	58.6%
20,000 to 29,999	66.4%	65.9%
30,000 to 39,999	65.3%	68.9%
40,000 to 49,999	50.7%	59.5%
50,000 to 59,999	30.1%	47.3%
60,000 to 74,999	13.6%	38.6%
75,000 to 99,999	4.6%	29.8%
100,000 or more	3.9%	36.4%
Estimated Filer	48.1%	59.9%
Non-Filer	84.9%	64.1%
Parents' married	36.7%	49.5%
Parent(s) completed college	39.0%	51.8%

Source: Quality Assurance Program sample data, 2006–07.

Analysis of Quality Assurance Program Sample Data: 2006–2007

Table 6: School and CPS Verification Rates for Independent Students by Demographic Categories N=22,233

|	Selected by CPS	Selected by School
All independent Students	34.8%	45.1%
Selected by CPS	100.0%	59.5%
Selected by School	45.9%	100.0%
Initially Pell Eligible	55.5%	53.6%
Auto Zero EFC	47.7%	50.2%
Zero EFC	43.6%	51.6%
EFC 1 to 3850	41.9%	46.7%
EFC 3851 or more	4.3%	28.2%
Negative income	52.0%	48.7%
Zero income	72.4%	52.0%
1 to 4,999	22.4%	49.3%
5,000 to 9,999	24.2%	51.0%
10,000 to 14,999	32.9%	46.5%
15,000 to 19,999	30.2%	44.6%
20,000 to 24,999	33.0%	39.6%
25,000 to 29,999	31.2%	37.5%
30,000 to 39,999	31.8%	37.7%
40,000 or more	14.2%	31.5%
Estimated Filer	38.1%	55.7%
Non-Filer	73.4%	50.9%
Have Children	40.2%	45.2%
Have Dependents	63.8%	54.2%
DOB	34.0%	43.8%
Graduate Students	4.0%	33.2%
Married	37.4%	43.9%
Orphan	51.2%	53.1%
Veteran	37.5%	48.5%

Source: Quality Assurance Program sample data, 2006–07

We saw the same tendency for both CPS and school verification to focus on the most eligible independent students that we witnessed among dependent students. However, both CPS and school verification selected fewer independent than dependent students for verification. Even among the most eligible sub-groups the percentages are lower for independent than dependent students. For example, both CPS (56 percent) and school (54 percent) verify just over half the independent records initially eligible for a Pell Grant. Just as was the case for dependent students, we observed greater exclusivity of focus for CPS verification. The CPS selected only 4 percent of independent records with an initial EFC above 3,850 for verification; in contrast, Quality Assurance schools selected 28 percent of these records. In addition to high-need applicants, applicants who indicated on their initial application that they had dependents (other than a spouse and children) and who indicated that they were an orphan or ward of the court were more like to be selected by both the CPS and Quality Assurance schools than independent records in general. Presumably verification for these cases was, at least in part, to confirm the accuracy of these initial claims to independent status and excluded independent students 24 years of age or older.

To assess both the effectiveness and efficiency of school and CPS verification we calculated the percentage of records that were selected for verification within each of our five categories for classifying the result of verification. In theory, we would want to see a higher percentage of the records experiencing a major increase or decrease in aid eligibility being verified than records that experienced only a minor or no change. **Figure 33** displays the results for dependent students and **Figure 34** provides the results for independent records.

If verification criteria were able to identify all the records that experienced a major change in eligibility, then the two graphs in **Figure 33** would resemble the letter "U." School and CPS verification would verify a high percentage of the "major" changes and very low percentage of minor and no change cases. Instead the figures resemble toppled letter "E's" for both verification systems. This indicates that both CPS and school verification did not exclusively select only those applicants where verification mattered. Interestingly enough both school and CPS did a better job at avoiding verifying records that experience a "minor" change—an EFC change of less than 400 without changing Pell—than they did avoiding cases with zero change. This was especially the case for CPS verification. The tendency of both verification systems to target low-income applicants whose available income on both the initial and paid on transactions may remain below income protection allowances even if values on the initial FAFSA experience minor corrections may explain this finding.

**Figure 33: Percent of Dependent Records Selected for Verification
by the Observed Change to Eligibility for Need-Based Aid**
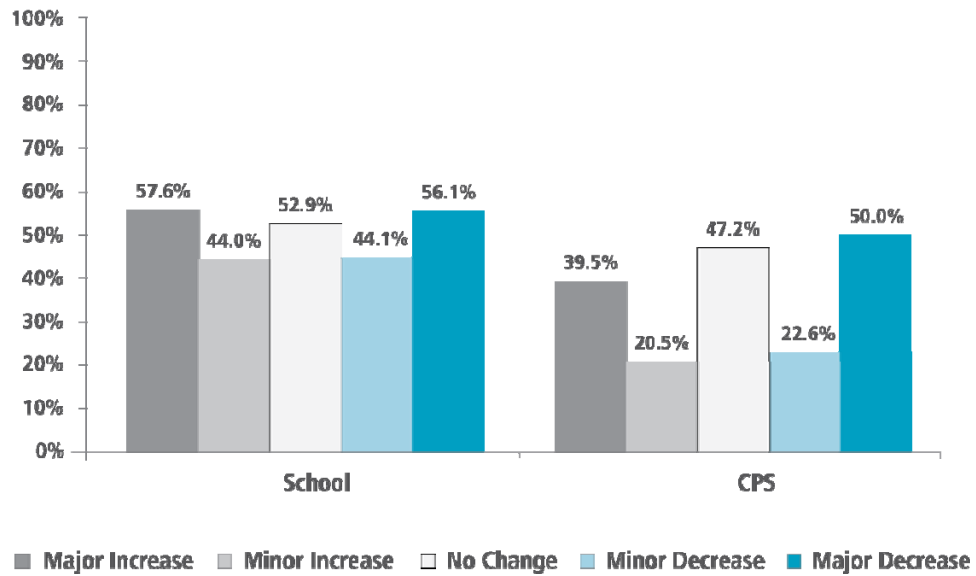
Source: Quality Assurance Program sample data, 2006–07.

Note in **Figure 33** that school verification seems to be targeting both major decreases (56 percent) and major increases (58 percent) for verification, while CPS seems to be focusing more exclusively on major decreases (50 percent). In fact, CPS verification selected a greater percentage of dependent records that experienced no change in subsequent eligibility for need-based aid (47 percent) than they did records that experienced a major increase (40 percent).

On the next page, **Figure 34** presents a similar analysis for independent students. We again saw a "toppled E" pattern for CPS verification. We saw something different for school verification. Here we see the highest percentage of records verified among independent students with a "major decrease" (56 percent). The differences in the percentages selected for school verification among the other four categories were modest (37 to 47 percent). Both school and CPS verification efforts seem more focused on preventing independent students from getting more aid than they are entitled to than on ensuring that independent students get all the aid they are entitled to. Both select significantly higher percentages of independent records with a "major decrease" than they do records with a "major increase." Again this pattern is more pronounced in CPS than school verification.

**Figure 34: Percent of Independent Records Selected for Verification
by the Observed Change to Eligibility for Need-Based Aid**

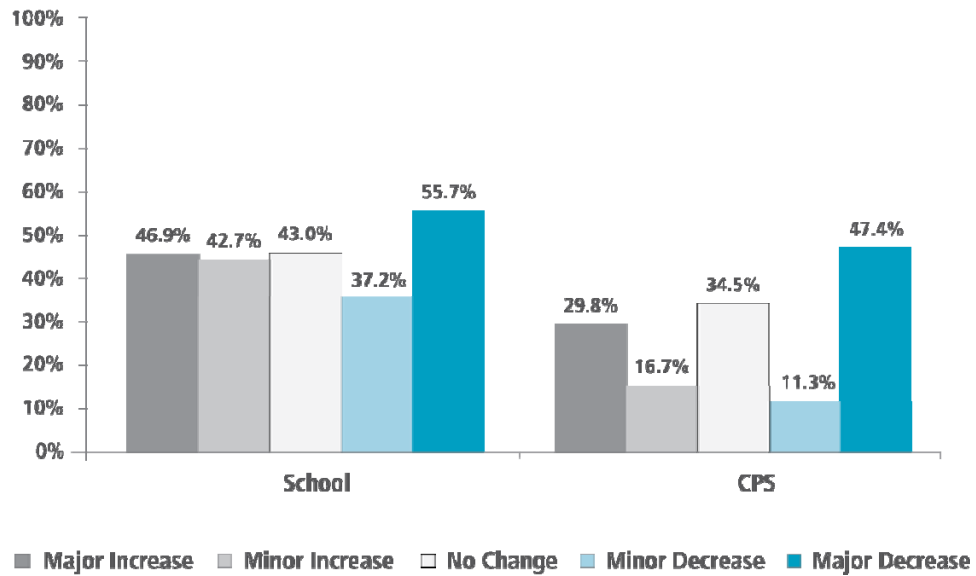*Source: Quality Assurance Program sample data, 2006–07.*

Figures 33 and 34 provide insight into the overall effectiveness and efficiency of school and CPS verification efforts. Tables 7 through 10 examine the performance of the two verification systems for specific sub-groups of students. These tables provide the distribution of a given sub-set of students into one of four mutually exclusive categories:

1. Verified and experienced a major change in aid eligibility—a change to a Pell Grant amount or an EFC change of 400 or more.
2. Not verified and experienced a major change in aid eligibility.
3. Verified and did not experience a major change in aid eligibility—no change to Pell and EFC change less than 400.
4. Not verified and did not experience a major change to aid eligibility.

We would like to make the case that records that fell into either the first or fourth category were being treated "correctly." Of course, some of the changes to EFC in excess of 400 in the first category would not result in a change to actual aid eligibility because a student's EFC exceeded their cost of attendance on both the initial and paid on transaction. Given the wide variation in cost of attendance, schools are encouraged to apply their own "ceiling" when interpreting the results that follow. We think witnessing a relatively large percentage of records in the second or the third category is problematic. Records that experience a major change that schools are not normally selecting for verification are in a sense "missed." Schools expending time and effort on the verification of records that do not demonstrate a major change is in most cases "unnecessary." Therefore these two middle categories capture the twin dangers faced by anyone attempting to improve verification efforts, failing to verify records that were in need of correction and verifying records with little or no benefit.

We conducted analysis of school verification in Tables 7 and 8 for dependent and independent students respectively. Tables 9 and 10 provide simple reports for CPS verification. Given the amount of detail we provide in these tables, we will not write up every single comparison. Rather, we ask the reader to keep this simple construction in mind when interpreting the results in Tables 7 through 10, "columns on the edge good, columns in the middle bad." The first two columns reading left to right both include "major" changes. The columns on the left edge were selected for verification so these changes will not affect the disbursement of aid. The second column from the left—in the middle—is major change left uncorrected by verification. These changes could potentially lead to an inaccurate disbursement of aid. The next two columns include records that did not experience a change to a Pell Grant and any change to EFC was less than 400. Therefore, we would submit that verifying these records was probably unnecessary. The values in the third column from the left—still in the middle—were verified. The values on the right edge were not.

See tables 7 through 10 on the next four pages.

To illustrate how to interpret these tables, we will walk through the findings for applicants who indicated that they would not file federal taxes on their initial application in **Table 7**. The first number in this row indicates that just fewer than six percent of non-filers both would have been selected for school verification and experienced a "major change." Another four percent of these cases were found to have a major change because of the random sample process. Therefore, current school verification efforts correct six out of ten (six plus four) major changes to aid eligibility stemming from corrections to all ISIR fields verified by federal verification worksheet among records that initially said they would not file a federal tax return. However, the third column indicates that schools verified another 58 percent of the non-filers records without detecting a major change. The final 32 percent of non-filers were not selected for school verification and did not experience a major change. Therefore, despite the fact that 80 percent of non-filers did not experience a major change (58 plus 32) Quality Assurance schools decided to verify 64 percent of these records (58 plus 6). To put it another way only 9 percent (6 percent divided by 64 percent) of current school verification effort among non-filers yield major changes to aid eligibility.

These tables consistency show the tendency for both school and CPS verification to over-verify low-income populations and potentially under-verify students who initially report greater economic capacity to contribute toward their postsecondary education. This pattern was more pronounced for CPS verification than school verification.

**Table 7: Effectiveness and Efficiency of School Verification
among Dependent Student (N=39,725)**

	Major Change		Without Major Change	
	Verified and Major Change	Not Verified Major Change	Verified No Major Change	Not Verified No Major Change
All Dependent Records	27.1%	20.7%	26.7%	25.5%
Initially Pell Eligible	32.3%	13.7%	34.5%	19.4%
Auto Zero EFC	5.5%	2.8%	55.4%	36.2%
Zero EFC	10.3%	4.5%	51.1%	34.1%
EFC 1 to 3850	40.9%	17.3%	28.0%	13.7%
EFC 3851 or more	20.3%	29.6%	16.8%	33.3%
Negative income	19.0%	7.1%	43.1%	30.8%
Zero income	11.5%	4.8%	55.6%	28.1%
1 to 9,999	14.7%	7.4%	44.8%	33.0%
10,000 to 19,999	19.5%	12.2%	39.0%	29.2%
20,000 to 29,999	37.4%	17.2%	28.5%	16.9%
30,000 to 39,999	41.1%	18.3%	27.8%	12.8%
40,000 to 49,999	36.1%	21.5%	23.3%	19.0%
50,000 to 59,999	28.9%	25.5%	18.4%	27.2%
60,000 to 74,999	22.1%	30.2%	16.5%	31.2%
75,000 to 99,999	16.0%	32.2%	13.8%	38.0%
100,000 or more	19.4%	28.6%	17.0%	34.9%
Estimated Filers	40.0%	24.4%	20.0%	15.7%
Non-Filers	5.8%	3.9%	58.4%	32.0%
Parents married	26.2%	23.2%	23.3%	27.3%
Parent(s) completed college	27.5%	22.6%	24.3%	25.6%

Source: Quality Assurance Program sample data, 2006–07.

Table 8: Effectiveness and Efficiency of School Verification among Independent Student (N=22,233)

	Major Change		Without Major Change	
	Selected for Verification	Not Selected for Verification	Selected for Verification	Not Selected for Verification
All independent Students	13.2%	12.1%	31.9%	42.8%
Initially Pell Eligible	15.1%	9.0%	38.4%	37.4%
Auto Zero EFC	4.2%	2.2%	46.0%	47.6%
Zero EFC	6.9%	3.9%	44.7%	44.6%
EFC 1 to 3850	23.2%	17.8%	23.5%	35.5%
EFC 3851 or more	12.4%	22.0%	15.8%	49.8%
Negative income	2.7%	1.3%	46.0%	50.0%
Zero income	7.9%	4.8%	44.1%	43.1%
1 to 4,999	5.1%	4.6%	44.3%	46.1%
5,000 to 9,999	13.6%	8.7%	37.4%	40.3%
10,000 to 14,999	15.1%	13.0%	31.4%	40.6%
15,000 to 19,999	17.6%	13.1%	27.0%	42.4%
20,000 to 24,999	17.0%	16.1%	22.6%	44.3%
25,000 to 29,999	19.5%	20.3%	18.0%	42.2%
30,000 to 39,999	18.4%	19.7%	19.3%	42.6%
40,000 or more	16.7%	24.7%	14.8%	43.8%
Estimated Filers	23.8%	16.4%	31.9%	27.9%
Non-Filers	6.9%	4.7%	44.0%	44.3%
Have Children	12.9%	11.4%	32.3%	43.3%
Have Dependents	18.9%	12.9%	35.4%	32.8%
DOB	13.0%	12.7%	30.8%	43.4%
Graduate Students	8.2%	15.3%	25.1%	51.5%
Married	17.8%	16.5%	26.1%	39.6%
Orphan	15.0%	10.1%	38.2%	36.8%
Veteran	16.5%	15.2%	32.0%	36.3%

Source: Quality Assurance Program sample data, 2006–07

	Major Change		Without Major Change	
	Selected for Verification	Not Selected for Verification	Selected for Verification	Not Selected for Verification
All Dependent Records	21.9%	25.8%	22.0%	30.2%
Initially Pell Eligible	37.7%	8.3%	37.8%	16.1%
Auto Zero EFC	6.3%	2.0%	61.9%	29.7%
Zero EFC	11.3%	3.5%	56.2%	29.0%
EFC 1 to 3850	47.7%	10.5%	30.5%	11.2%
EFC 3851 or more	1.9%	47.9%	2.1%	48.1%
Negative income	19.7%	6.4%	66.8%	7.1%
Zero income	12.2%	4.0%	72.5%	11.3%
1 to 9,999	15.0%	7.2%	41.4%	36.5%
10,000 to 19,999	21.4%	10.3%	38.0%	30.3%
20,000 to 29,999	38.2%	16.4%	28.2%	17.3%
30,000 to 39,999	41.1%	18.3%	24.2%	16.4%
40,000 to 49,999	32.5%	25.2%	18.2%	24.1%
50,000 to 59,999	19.9%	34.5%	10.2%	35.4%
60,000 to 74,999	8.8%	43.6%	4.9%	42.8%
75,000 to 99,999	2.5%	45.7%	2.0%	49.8%
100,000 or more	2.2%	45.9%	1.7%	50.2%
Estimated Filer	31.6%	32.8%	16.5%	19.1%
Non-Filer	6.7%	2.9%	78.2%	12.1%
Parents' married	19.5%	29.9%	17.1%	33.4%
Parent(s) completed college	20.7%	29.4%	18.3%	31.6%

Table 9: Effectiveness and Efficiency of CPS Verification among Dependent Student (N=39,725)

Source: Quality Assurance Program sample data, 2006–07

Table 10: Effectiveness and Efficiency of CPS Verification among Independent Student (N=22,233)

	Major Change		Without Major Change	
	Selected for Verification	Not Selected for Verification	Selected for Verification	Not Selected for Verification
All independent Students	10.2%	15.1%	24.6%	50.1%
Initially Pell Eligible	16.3%	7.8%	39.1%	36.7%
Auto Zero EFC	3.8%	2.6%	43.9%	49.7%
Zero EFC	6.0%	4.8%	37.6%	51.6%
EFC 1 to 3850	22.4%	18.6%	19.5%	39.5%
EFC 3851 or more	1.4%	33.1%	2.9%	62.6%
Negative income	1.3%	2.7%	50.7%	45.3%
Zero income	8.6%	4.1%	63.8%	23.4%
1 to 4,999	8.9%	13.4%	15.3%	62.4%
5,000 to 9,999	3.3%	6.4%	19.1%	71.3%
10,000 to 14,999	12.8%	15.3%	20.1%	51.8%
15,000 to 19,999	12.2%	18.5%	18.0%	51.3%
20,000 to 24,999	13.6%	19.5%	19.3%	47.5%
25,000 to 29,999	17.2%	22.7%	14.0%	46.1%
30,000 to 39,999	16.1%	22.1%	15.8%	46.1%
40,000 or more	9.4%	32.0%	8.5%	50.0%
Estimated Filers	17.8%	22.4%	20.3%	39.5%
Non-Filers	7.9%	3.7%	65.5%	22.9%
Have Children	11.0%	13.3%	29.2%	46.5%
Have Dependents	20.6%	11.3%	43.3%	24.9%
DOB	10.0%	15.8%	24.0%	50.2%
Graduate Students	0.9%	22.6%	3.1%	73.4%
Married	14.9%	19.3%	22.5%	43.2%
Orphan	13.1%	12.0%	38.1%	36.9%
Veteran	12.1%	19.6%	25.4%	42.9%

Source: Quality Assurance Program sample data, 2006–07

In the previous section, we examined the role verification played in preventing potential improper payments in the Pell Grant program at the aggregate level. Below we explore how the tendency of both school and CPS verification to focus more on dependent than independent students and the greater emphasis CPS verification places on preventing over-awards shapes these corrections to Pell awards. Unlike the other results in this section where we used records as the unit of analysis, we used dollars of potential Pell improper payments as the unit analysis in Figures 35 and 36.

Figure 35 reports the percentage of Pell over- and under-award dollars that were accounted for by school and CPS verification. All records in the analysis group were verified, but these records would have been verified even if they had not been drawn into the sample. Remember, students would have prevented some of the non-verified improper payments by making self-corrections even if they had not been drawn into a Quality Assurance school random sample. Keeping these caveats in mind, our calculations show school verification was fairly even handed in terms of preventing potential over-awards (70 percent) and under-awards (65 percent). In contrast CPS verification was much more likely to prevent over-payments (85 percent) than under-payments (45 percent).

Figure 35: Percent of Potential Improper Payments to Dependent Students Prevented by Verification
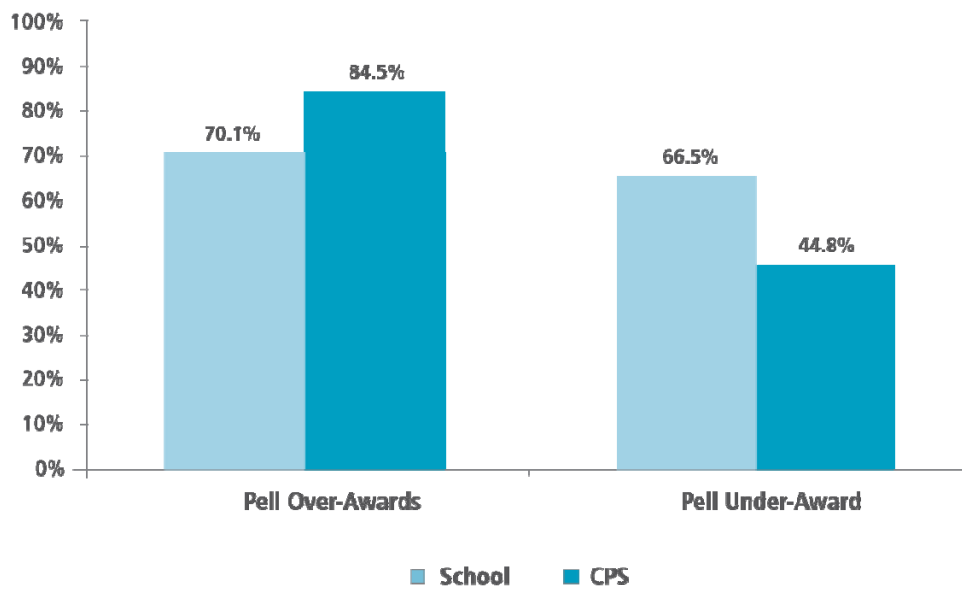
Source: Quality Assurance Program sample data, 2006–07.

Figure 36 compares the propensity of school and CPS verification to prevent under- and over-payments among independent students. We found that school verification prevented the same portion of potential over-payment dollars (70 percent) that school verification prevented among dependent students. The percentage of Pell under-payments among independent students addressed by school verification fell to 54 percent. We found that 77 percent of potential Pell over-payments to independent students were prevented by CPS verification. This value was slightly larger than the percentage of independent records selected by Quality Assurance schools, but slightly smaller than the percentage of Pell over-payments prevented by CPS verification among dependent students. CPS verification corrected less than a third of the potential under-payments among independent students; this figure is lower than both the school percentage for independent and the CPS percentage for dependent students.

Figure 36: Percent of Potential Improper Payments to Independent Students Prevented by Verification
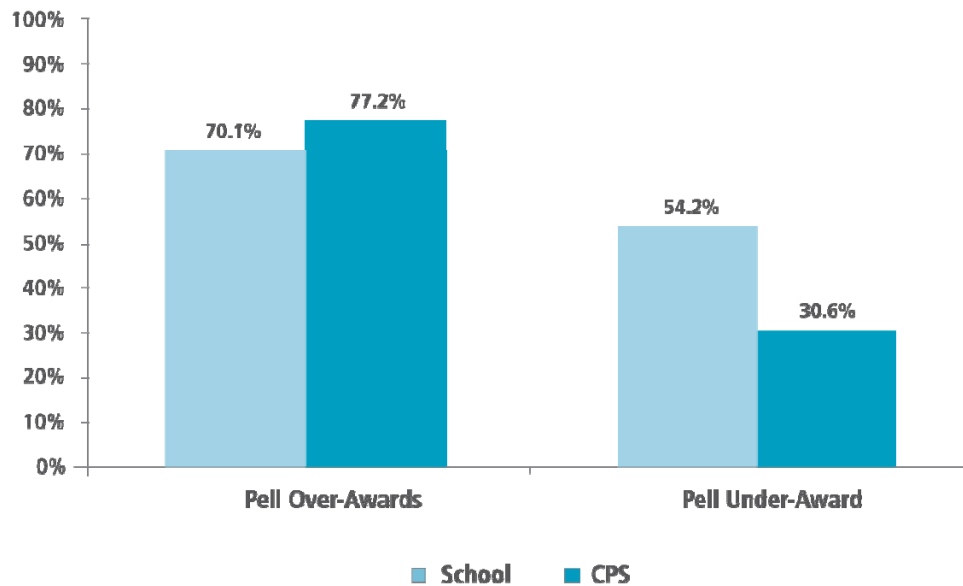
Source: Quality Assurance Program sample data, 2006–07.

Summary

When interpreting all of the preceding results it is important to keep the context of the QA Program in mind. While national in scope, most schools participating in the Quality Assurance are big; the average enrollment of schools supplying data was 20,105. Public four-year universities are over-represented within the program and therefore the data analyzed in this report are most representative of that sector.

While not a random sample of all financial aid applicants, students attending Quality Assurance schools did a very good job of supplying accurate information on their initial FAFSA. More than 70 percent of dependent and 80 percent of independent students managed to supply the correct information on each of the most problematic ISIR data elements. We were even surprised at the level of accuracy observed among applicants who indicated that they were estimating tax return information on their initial application. Nearly one third of dependent and almost half of independent students were able to estimate their adjusted gross income correctly.

Despite the ability of most students to supply correct information on their initial FAFSA, many students would get too much or too little need-based financial aid if all awards were simply disbursed on the basis of those initial applications. Forty percent of records in the random sample experienced what we dubbed a "major change," either a change to a Pell award or an EFC change in excess of 400 when a school verified their information as part of the random sample process.

We identified Parents' Adjusted Gross Income; Parents' Total from Worksheet B; Parents' U.S. Income Tax Paid; Mother's Income from Work; and Parents' Tax Return Filed (Estimated Filers) as the five most commonly changed ISIR fields among dependent students. Student's Income from Work, Student's Adjusted Gross Income; Student's U.S. Income Tax Paid; Student's Total from Worksheet B; and Student's Tax Return Filed (Estimated Filers) were the five most commonly changed ISIR fields among independent students. These results were very to similar to what we found the last time we analyzed random sample data collected during the 2004–05 award year.

Federal Student Aid has been in conversations with the Internal Revenue Service (IRS) exploring the feasibility of replacing CPS verification with an IRS data match of adjusted gross income and federal taxes paid. We used the Quality Assurance sample data to explore what portion of the changes to aid eligibility was captured solely by these two determinants of EFC. We found that records experiencing changes to only these two IRS data elements were relatively rare. Records that experience changes to the other ISIR fields either with or without accompanying changes to the IRS fields were much more common. While less than 10 percent of records experienced changes to adjusted gross income and federal taxes paid exclusively, changes to these fields did account for roughly half of our estimated change to EFC.

The fact that tax returns are not due until April 15 prompts many students to submit their initial application with estimated tax information. We examined the accuracy of these estimates. We found that estimating values for tax information on the FAFSA was more of an issue for dependent than independent students. Not only did a larger portion of dependent students estimate their tax data (roughly one third vs. one fifth), but a greater percentage of the estimates resulted in a major change in aid eligibility. Roughly, two-thirds of dependent estimated filers experienced a major change to aid eligibility compared to less than half of independent students. Both Quality Assurance schools and the CPS select a high percentage of all applicants who estimate their tax data for verification. Our analysis found that low income, especially zero EFC, applicants who estimated their taxes were significantly less likely to experience a "major" change in aid eligibility compared to applicants with higher incomes.

We addressed potential improper payments in the Pell Grant program by contrasting the dollar volume of grants that would have been awarded based on the information supplied by the students' initial ISIRs to the awards based on the verified transaction. This exercise found 15.9 percent of Pell dollars "at risk" for an improper payment. Awarding Pell Grants solely on the basis of initial transaction data would have resulted in over-payments equal to 9.2 percent and under-payments equal to 6.7 percent of the total initial awards. Correcting both types of improper payments reduced the amount of Pell disbursed 2.6 percent.

Of course, Quality Assurance schools do not disburse Pell Grants based solely on the initial transactions. Instead, they verify those students who meet their school's verification criteria. Because schools verified all the students in their random sample, whether or not they met the school's criteria, we can use these data to determine what portion of the potential improper payments current school verification efforts prevent. We found the school verification reduced both the percentage of over-awards and under-awards to around 3 percent, thereby reducing the total potential improper payments reduced from 15.9 to 6.4 percent. Our parallel analysis of CPS verification revealed that CPS is doing a somewhat better job than Quality Assurance school verification in terms of reducing over-awards (1.8 percent) and not quite as good as job at preventing under-awards (4.1 percent). The differences in the propensity of CPS and school verification to correct improper payments in Pell reflects the more exclusive focus of on the initially Pell eligible on the part of the CPS. School verification focuses on student eligibility for campus-based, subsidized loans, state, and institutional funds as well.

The proportion of records that were selected for school (51 percent) and CPS (41 percent) verification was in line with the percentage of records experiencing a meaningful change in aid eligibility. But, of course, neither school nor CPS was perfect in selecting only those records that needed to be verified. Therefore, both verification systems verified records that did not experience a "major" change to aid eligibility and failed to verify some records that did.

There was a good deal of overlap between CPS and school verification. The majority of records selected by the CPS were also selected by school verification and vice versa. Both verification systems emphasize verification among lower income students. Students who were initially eligible for Pell, had zero EFC, were from low income ranges, and claimed they did not need to file a federal tax return were more likely to be selected for verification by both systems. The concentration on the most eligible population is, however, much more pronounced for CPS verification than it is for school verification. Our analysis shows that the tendency of both school and CPS verification to focus on the most needy applicants results in a disproportionate percentage of the most needy applicants being verified without any subsequent change to aid awards, while at the same time allowing the population of "nearly" needy based on the information in their initial transaction to receive less assistance than is their due. This pattern was more pronounced for CPS verification than school verification.

Implications

There are three main implications of our findings.

First, the finding that changes to adjusted gross income and U.S. income taxes paid account for only half of the estimated change to EFC detected by the current federal verification worksheets raises concerns about a potential IRS match. As currently conceived, restricted to just two data fields, an IRS match would miss roughly half the value of current federal verification. Federal Student Aid may want to revisit the feasibility of adding additional fields with the IRS. If additional data fields are implausible, Federal Student Aid may want to consider augmenting any IRS match with stand alone verification efforts.

Second, both school and CPS verification would benefit from being more selective in terms of which high need students they flag for verification. For example, CPS selected 68 percent and schools selected 61 percent of dependent students who had an automatic zero EFC for verification despite the fact that only 8 percent of these students experienced a major change in aid eligibility—we defined a "major" change as a change to Pell or change to EFC in excess of 400. The Quality Assurance Program staff should work with participating schools to determine how to better distinguish between high need applicants that need and don't need to be verified. One promising source of information to address this issue is previous year data. Returning to our example, if a school could effectively link data from the previous award year(s) they could exclude from the current school verification efforts auto zero EFC applicants who had their auto zero EFC confirmed by a previous year's verification process. Federal Student Aid may want to consider each applicant's "history" in setting the CPS verification flag. At some point Federal Student Aid may even want to consider including the prior year's EFC and verification status on the ISIR.

Finally, Federal Student Aid should look for ways to selectively expand their CPS verification among records initially ineligible for Pell Grants. Our data from Quality Assurance school random samples revealed that CPS selected only 4 percent of records with an EFC above the threshold for Pell. This near exclusion of records initially not eligible for Pell led to CPS correcting less than half of the potential Pell under-award dollars through verification. Only 45 percent of potential under-awards were made to dependent students selected by the CPS. This figure was only 31 percent for independent students.