

Report and Suggestions from College Scorecard Technical Review Panel 3: College Scorecard Earnings Calculations and Other Metrics

The Technical Review Panel met to discuss strategies to improve the earnings calculations and other metrics that the College Scorecard provides consumers. This summary provides feedback from the group on how to best construct earnings cohorts, calculate threshold earnings measures, present data on institutional faculty/staff diversity, and navigate loan repayment data in the context of the COVID-19 pandemic. Comments from interested parties are due to Erin Velez, Director of Education Research at RTI International, at ScorecardTRPcomment@rti.org by May 5, 2022.

RTI International (RTI) is under contract to the U.S. Department of Education (Department) to form a Technical Review Panel (TRP) and conduct meetings that solicit expert discussion and suggestions on a range of topics related to the College Scorecard. The TRP is designed to provide input to RTI regarding data, tools, and presentations that foster ongoing improvements to the College Scorecard. The TRP does not advise or report to the Department.

On March 9, 2022, RTI convened a meeting of the College Scorecard TRP using videoconference technology. RTI's specific purpose for this TRP was to critically examine how the College Scorecard can improve the reporting of earnings data, expand information available regarding the diversity of institutional staff, and provide the appropriate context regarding loan repayment information during the COVID-19 pandemic. Expert panelists were asked to provide advice that could refine and enhance the presentation of data on the College Scorecard web tool and fortify the level of detail available for download. The panel consisted of 43 individuals representing postsecondary institutions, researchers and other data users, higher education associations, the federal government, and other experts reflecting a wide range of expertise and a diverse array of perspectives.

Background

The Department introduced the College Scorecard in 2015 as an open data, consumer information initiative. The tool includes two components: (1) a consumer tool designed to help students, parents, and counselors make informed decisions about college; and (2) a website through which interested parties can download and integrate federal data into their research applications. The data sources that contribute to these components include more than 20 years of information from 7,000 institutions. The information also derives from other federal data sources including earnings data from tax records collected by the Department of the Treasury, the Integrated Postsecondary Education Data System (IPEDS), and the National Student Loan Data System (NSLDS).

The TRP considered how to prioritize methodologies for calculating the data elements used by consumers and professionals, with the acknowledgement that there are constraints to the number of data elements and variations that can be produced. In addition to resource constraints, a privacy budget limits what can be produced accurately. For example, calculating median earnings for a cohort of students requires perturbation of values to protect the privacy of students in the cohort. Adding additional metrics about this cohort (e.g., additional percentiles, the average, medians disaggregated by subgroups of students) requires more perturbation (less accuracy) to protect privacy. In addition, too many versions of data elements could lead to oversaturation and confusion for prospective students, their parents, counselors, and other users. The discussion below includes an overview of the data

available on the College Scorecard web tool to provide the panel with the appropriate context to improve the tool, strengthen downloadable data, and better address consumer needs.

Discussion Item #1: Earnings Cohort Construction

The College Scorecard web tool presents institution-level earnings data. Consumers have easy access to the median earnings, 10 years after entering the institution, of former students who received federal financial aid. The consumer tool also reports the percentage of the entry-cohort who are earning more than a high school graduate 6 years after enrolling at the institution. This information is generated by Federal Student Aid data systems, with individual records matched against administrative W-2 and 1040SE records at the Internal Revenue Service (IRS).

Downloadable data that the College Scorecard makes available include entry cohort earnings information at 6-, 8-, and 10-year benchmarks as well as exit cohort data at 1 and 3 years post-completion. The dataset compares entry cohorts against earnings of high school graduates. Exit cohort data are measured against 150% of the poverty rate.

Methods to construct institution-level cohorts for analysis. Panelists were asked to consider how to prioritize different methodologies for institution-level earnings calculations. The discussion focused on entry cohorts versus exit cohorts and how to account for completers and non-completers.

While panelists acknowledged the value for the entry cohort perspective because it reflects the value-add of any postsecondary education, the group felt information on exit cohorts better met the needs of prospective students and their families or counselors. The shift away from entry cohort data was motivated by arguments that it is subject to multiple sources of “noise,” including the varied times necessary to earn credentials in different postsecondary sectors. Such variation impacts the amount of time individuals spend in the workforce, and therefore their earning potential, ahead of the 10-year median measurement post-entry. A panelist suggested that such impacts were especially acute for nontraditional students who may follow a nonlinear path to earning postsecondary degrees or credentials.

Panelists generally supported the idea of an exit cohort that focuses on completers (e.g., those who earn the academic credential). Arguments for this perspective included the suggestion that consumers typically enter a degree program with the assumption that they will earn the credential. In addition, panelists suggested that a focus on an exit cohort of completers would address the question about the value-add of obtaining a particular credential.

While some panelists discussed the advantages of maintaining entry level cohorts to avoid disrupting historical trend lines in the College Scorecard data, the majority of panelists agreed that the benefits to consumers outweighed any complications that may accompany a trend-break caused by the shift from entry to exit cohorts. Panelists pointed out that the downloadable data could be used to help mitigate any issues introduced by a trend break in the College Scorecard web tool by including previously used metrics, like entry cohorts.

Methods to report data that include non-completers. Panelists expressed concern with a lack of data on non-completers but also expressed concern on challenges with interpreting data on non-completers. As such, the panel generally agreed that non-completer data could play a useful role in the downloadable data but may not be appropriate for the College Scorecard webtool.

“Noise” was also a focal point of the discussion around non-completers. Some panelists suggested that the type and field of credential sought is paramount to understanding non-completers, especially since completion rates—and corresponding earning potential—vary widely by program. Those who seek certain trade-based credentials (e.g., HVAC certification) may increase their earning potential regardless of completion status, while others, such as students in health care fields, must complete the program to improve their earnings. Another panelist found a corollary among students seeking bachelor’s degrees, noting that non-completers in engineering fields may out-earn humanities completers.

Additional context important for understanding earning potential among non-completers included the level of training received or credits earned. Multiple panelists suggested that it would not be appropriate to lump a non-completer who left after 3 months together with a peer who left the program after working towards a credential for 6 years. Though important, panelists were unsure if this credit-level detail would be available for non-completers. For this reason, further disaggregation by credits earned or time-before-withdrawal were not considered viable datapoints to explore.

One panelist raised the concern that individuals who choose to leave one institution may go on to complete the degree or certificate at a different institution. This situation could lead to an individual being reported and included in data by the two different institutions, once as a completer and again as a non-completer. Further, non-completers in community colleges that transfer many students to four-year institutions could consistently have higher earnings than completers which could make for potential confusion among prospective students. Similarly, another panelist described approximately 8% of community college students as students who already hold a bachelor’s degree. Such situations underscore the complicated nature of these data and the need to equip consumers with the information necessary to interpret information on non-completers. With this in mind, the panel recommended further exploration of non-completer data before any decisions are made regarding their inclusion in data that researchers can download. Information on non-completers was not recommended for the consumer web tool.

Program-level earnings data methodology for including/excluding students who receive higher-level credentials. Earnings data for students who receive higher level credentials resulted in a lively discussion regarding credit for earnings outcomes. Panelists from academic institutions suggested that former students who earn further credentials represent some of the most successful members of an institution’s exit cohort. Excluding this group would thus misrepresent the program’s data, as it would only display earnings of those who did not continue their education. Other panelists suggested that undergraduate degrees are a springboard for students to earn advanced degrees and that springboard role should be acknowledged through the inclusion of advanced degree earners in that institution’s exit cohort data. Panelists suggested that this argument did not only apply to advanced degrees, as credit should also be attributed to a community college program that prepared students to successfully transfer into a bachelor’s degree program.

After further discussion, panelists suggested a middle ground: rather than disaggregate data further, consider reporting in the College Scorecard web tool the percent of the exit cohort who had gone on to complete a higher degree, in addition to the earnings of all completers, regardless of additional attainment. Panelists generally agreed that an approach that included earnings by exit cohort and percent of that cohort who earned a subsequent credential efficiently met the needs of consumers and allocated credit to programs preparing students to earn additional credentials.

The panel also touched on the utility of disaggregating the exit cohort of completers by demographic characteristics. Panelists shared broad support for disaggregation by race, ethnicity, and gender. A panelist with expert knowledge on the College Scorecard data spoke to the feasibility of further disaggregation, noting that the College Scorecard derives demographic data from the Free Application for Federal Student Aid (FAFSA) form. The Department intends to add race and ethnicity data to the FAFSA by 2023. Because the panel had recommended a backwards-looking metric that focuses on an exit cohort, the 10-year median earnings data on an exit cohort with demographic data will not be available before 2033.

Discussion Item #2: Threshold Earnings Calculation

The next discussion item was a consideration of how to prioritize calculating the proportion of individuals earning above the threshold. As mentioned above, the College Scorecard currently applies two thresholds: median earnings of working high school graduates and 150% of the federal poverty line. For reference, median earnings of working high school graduates, including GED earners, who were 25-34 years old in 2020 was \$30,628¹ and 150% of the federal poverty line for a family of one, in 2020, was \$19,140.²

How to prioritize different thresholds when measuring the proportion of former students earning above a reference group. Discussion of the earnings comparisons addressed the expectations of web tool data users like students, families, and counselors. Panelists agreed that the federal poverty line was not as useful a metric. While these data can index the likelihood of reliance on public benefits, panelists agreed that 150% of the federal poverty line was too low a metric. Further, they did not see how the specific factor of 150% was helpful for consumer information because the level is notably lower than the amount high school graduates or postsecondary enrollees can expect to earn. Panelists further pointed out that the federal poverty measure varies by family size—a factor that can introduce bias and inconsistency in a manner that the College Scorecard should avoid.

Panelists expected consumers to better relate with earnings of high school graduates, as postsecondary enrollees are members of this group themselves. Other evidence in support of comparing against the earnings of working high school graduates in the College Scorecard web tool data included other publications from the Department. A panelist noted that the Department recently published an issue paper on gainful employment that proposed using a high school earnings threshold as an accountability metric. The panelist suggested the College Scorecard could use a similar methodology as a consumer information metric.

While TRP members agreed that earnings of high school graduates was a more useful comparison, panelists also offered suggestions that could improve the data. For context, the working high school graduate data is compiled from 25- to 34-year-old individuals working in part-time or full-time positions. Panelists suggested that ages and/or workforce experience of the high school earner cohort would not align exactly with that of an entry or exit cohort from a postsecondary institution because students

¹ U.S. Census Bureau, Current Population Survey, 2021 Annual Social and Economic Supplement (CPS ASEC). Table: PINC-03. Educational Attainment--People 25 Years Old and Over by Total Money Earnings in 2020, Work Experience in 2020, Age, Race, Hispanic Origin, and Sex

https://www2.census.gov/programs-surveys/cps/tables/pinc-03/2021/pinc03_1_3_1_1.xlsx.

² U.S. Federal Poverty Guidelines: 2020 Poverty Guidelines; ASPE, U.S. Department of Health and Human Services.

enter and exit at different ages. The panel agreed that it would be beneficial to compare measurements against time in the workforce but did not suggest specific methods to achieve this more equitable comparison. The TRP theorized that it would be difficult to disaggregate part-time and full-time earnings. Given the limitations to do so the TRP recommended that the College Scorecard continue to include both in the high school and postsecondary earning data.

After recommending that the College Scorecard compare earnings against those of working high school graduates, the panel then considered whether the College Scorecard web tool should also include net price of the institution. The argument for the inclusion of net price data was that it would inform consumers of the cost of the postsecondary credential and indicate whether an individual would be better off financially for having attended college. Panelists theorized this would be a powerful set of information for consumers. However, some panelists expressed concern with current net price data. Arguments against net price included concerns that consumers expect this information to be standard across institutions, but in reality, institutions have the capacity to manipulate school-level net cost calculations. Additionally, it is difficult for one single net cost measure to be meaningful given the variation in costs students face (e.g., in-state versus out-of-state students, living on campus versus living with family). Several panelists voiced concern that institutions had the capacity to artificially deflate the cost of enrollment and mislead consumers. The fact that the net price only includes in-state costs could also cause confusion and create a set of calculations that are not comparable between public and private institutions, which have a single set of fees and tuition costs. Panelists supported the idea of net cost at the level of a student, not an institution. Student-level data are not readily available outside of some limited case studies and thus cannot be included in the College Scorecard web tool or database at this time.

While discussing cost and repayment, the panel discussed the Postsecondary Value Commission's "threshold zero" measure that is a function of high school graduate earnings, net price, time to degree, and interest over a 10-year repayment period. Concerns over net price carried into the discussion of threshold zero, as did the idea that the metric was too complicated for the consumer audience. Despite these issues, panelists noted that the College Scorecard is designed to provide transparent information for students, families, and counselors about the value of postsecondary education. Panelists suggested that cost and repayment fit into this mission and more complicated approaches might be appropriate although further investigation in this area is needed.

Adjustment of thresholds for geography. Panelists considered whether thresholds comparing the earnings of an exit cohort to the earnings of working high school graduates should be adjusted for geography, by either the location of the credential-granting institution or of the graduate. Panelists agreed that geographic adjustments in theory would be a welcome addition to the College Scorecard web tool, but the group also suggested that the College Scorecard should proceed with caution as it would be difficult to integrate geographic data.

A panelist suggested that people who earn a bachelor's degree have access to a regional or national workforce in a manner that high school graduates or those who earn sub-bachelor's degrees often do not. For this reason, the panelist suggested that geographic information only be incorporated for sub-bachelor's degrees. Others agreed with the differences in mobility and suggested that the geography-specific data would be more impactful at a sub-state level. The notion here was that earners in a metropolitan environment can expect to out-earn those in a rural location, regardless of educational

attainment or state. Thus, the earnings adjustment may not be useful if geographic data is at the state-level given how much variation in wages there is across states.

An expert clarified that the earnings data come from the IRS and include zip code information for each individual filer. The information could be leveraged and potentially included in the College Scorecard dataset at the sub-state level, which meets the recommendation of panel members. The panel also supported that this geographic adjustment occurs where the individual earner lives and works, not where the educational institution is located. On this point, a panelist added that cost of living data should include an appreciation of choice, as individuals—particularly those with a bachelor’s degree or above—have the capacity to choose where they live.

The panel recommended that the Department explore and test datasets on the College Scorecard web tool that report percent of an exit cohort of completers from a given institution who out-earn the median earnings of high school graduates, adjusted for a local geographic context down to ZIP code. Outcomes of the tests would not need to be published but would illuminate the utility of this data and help identify issues, biases, or inconsistencies that may exist. Another option to consider is the inclusion of a link in the web tool whereby consumers could access cost of living in a ZIP code of their choosing.

What are appropriate comparisons for graduate degree earners? While discussing threshold comparisons against graduate-level degrees, panelists theorized that consumers seeking an advanced degree or credential are likely to be more informed than those considering postsecondary education. Furthermore, this group of data users likely already has a frame of reference regarding their earnings potential if they do not attend graduate school. One panelist also suggested that using the word “threshold” connotes accountability, so if the College Scorecard were to include the percent of graduates earning more than a certain reference amount, the metric should be described as a “comparison” not “threshold.” However, the earnings of bachelor’s degree recipients was not considered a meaningful reference amount and no other more appropriate reference amount was suggested. For these reasons, panelists did not support the idea of a threshold comparison for program-level graduate degree earnings.

The TRP then discussed alternative treatments of graduate-level program earnings. Panelists were interested in debt related to post-bachelor’s training, with several participants speaking to the importance of a debt-to-earnings ratio for graduate degree seekers. The consensus was that this ratio would help consumers understand whether they would be better off with an advanced degree.

Much like geography, panelists suggested that debt could be a function of individual circumstances. Students may borrow more than the cost of their academic credentials and the level of debt that a student incurs could be a function of multiple social factors. Others suggested that the debt level and cost can vary drastically between type of program, degree, and institution in which an individual chooses to pursue post-bachelor’s education. For these reasons, panelists opined that data that aggregate master’s- and doctoral-level debt, are limited to federal loans (excluding private or institutional loans), or include other similar limitations could mislead consumers and ultimately do more harm than good. The panel agreed that the College Scorecard web tool could not control for social factors, disaggregate graduates sufficiently, or offer the appropriate context to adequately inform consumers on the motivation for debt-to-income ratios. Thus, the panel did not recommend moving forward with any threshold comparison for graduate-level programs or a debt-to-earnings ratio without additional investigation and study.

Discussion Item #3: Faculty Diversity

Faculty and staff diversity at postsecondary institutions is a topic of considerable interest in the higher education community. The College Scorecard has access to demographic information of postsecondary institutions by employee type, information which could help potential students identify an institution that would be a good fit or offer a comfortable or supportive environment. This information comes from IPEDS and includes sex, race, and ethnicity data by occupation type, occupation category, academic rank, and tenure status.

Panelists debated whether the College Scorecard web tool was an appropriate venue to display demographic information on an institution's employees. Some members voiced the opinion that this type of data would be a better fit for College Navigator, another web-based source of information that the Department offers.

Panelists concerned with student fit recommended the Department test, among consumer focus groups, the value of including institutional employee demographics. Panelists were hopeful that such testing would quantify the utility of this information to students when selecting a postsecondary institution. A panelist familiar with the College Scorecard web tool theorized that faculty demographic data would complement the existing student body demographic data already available on the College Scorecard web tool and would help students assess whether they would encounter other students and faculty "like them" at the institution. The panel generally agreed that this information was useful and would help a consumer, but wanted to ensure the information was included in the tool that would best serve the correct audience.

Discussion Item #4: Displaying Earnings and Repayment During COVID

The College Scorecard web tool displays typical monthly loan payment rates by institution and program, defined as median loan payment assuming all federal debt was repaid over a 10-year period at a 3.73% interest rate. The web tool also offers data on loan repayment among undergraduates who had taken federal loans, documenting the percentage of loan payers who are in one of eight repayment categories. The TRP discussed many of the ways that the COVID-19 pandemic has complicated this data, quantifying how the pandemic had contributed to increased unemployment rates³, reduced household income⁴, and contributed to an extended pause of federal education loan repayment and 0% interest rates via the CARES Act.

Given the circumstances outlined above, panelists considered possible improvements to how the College Scorecard web tool displays earnings and repayment rates during COVID-19 affected years. Panelists representing postsecondary institutions noted their reluctance to have the web tool document years of reduced earnings data. Similarly, panelists agreed that all data users should be provided with context regarding economic impacts of the pandemic so as to adequately interpret earnings and repayment data from this period. A member of the panel noted that the Department had, on prior publications or data releases, used highlighting or shading to signify data reported during prior periods

³ U.S. Bureau of Labor Statistics, Current Population Survey. 2019 and 2020 Annual Averages, 2019 Table: <https://www.bls.gov/cps/aa2019/cpsaat07.xlsx>. 2020 Table: <https://www.bls.gov/cps/aa2020/cpsaat07.xlsx>.

⁴ U.S. Census Bureau, Current Population Survey, 2020 and 2021 Annual Social and Economic Supplements (CPS ASEC). Table: <https://www2.census.gov/programs-surveys/demo/tables/p60/273/tableA1.xlsx>.

of change, like a recession. The panelist continued that this approach could be useful to document the issues of COVID-19 as well.

Panelists felt the CARES Act and associated pauses in repayment and interest rates had lessened the relevance of repayment data. Several panelists argued that repayment data is useful with the adequate context of trend lines before, during, and after the pandemic. An expert on data available to the Department noted the post-COVID-19 data would not be available for some time, given the lag in measurement periods and the number of reporting cohorts affected by the COVID-19 pandemic. Even then, trends may be difficult to present, particularly at the program level. For these reasons, the panel recommended that the College Scorecard not report repayment data for COVID-affected years, unless there are data to present that would be useful to students, parents, and counselors. The panel also suggested that the Department consider an additional TRP to further explore the repayment and earnings during the pandemic once that data is available.

Next Steps

Once the TRP summary comment period has closed, RTI will review the comments and outline recommendations for the Department based on the outcomes of the TRP meeting and subsequent public comment period. The Department will review the recommendations to determine changes for future versions of the College Scorecard.

Comments

RTI is committed to improving the quality and usefulness of the College Scorecard. We encourage interested parties to send any comments or concerns about this topic to Erin Velez, Director of Education Research at RTI, at ScorecardTRPComment@rti.org by **May 5, 2022**.