Calculating Impact Series

Postsecondary Scholarship Programs

Scholarships can give students access to the myriad economic and health benefits that come with having a higher education. The primary benefit is widely considered to be the higher earning potential associated with having a degree compared to not having a degree.

The success of scholarship programs is captured in the outcome “increase in income for a scholarship recipient.” This guide includes protocols for calculating increased income and the cost to administer scholarships.

This guide is appropriate for nonprofits of any size operating a program whose primary charitable activity is to administer scholarships to students for postsecondary degrees. The impact calculation uses data typically on hand already and does not require intermediate or advanced training in data analysis. The output of this exercise is an impact statement, e.g., $1,000 increases income for a scholarship recipient by $2,000.

Resources

→ Use this free template to automatically calculate impact.

→ For more information, see the impact methodology for scholarships.

About This Guide

Impact is the change in social outcomes caused by a nonprofit’s program relative to the cost to achieve those outcomes. The Calculating Impact Series provides how-to guides for nonprofits to estimate impact using data generally already on hand. The series is based on ImpactMatters’ Methodology for Estimating Impact (M.E.I.).

Calculating Impact Series

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<th>Audience</th>
<th>Comms, M&amp;E, program staff</th>
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<td>Burden of data collection</td>
<td>Low</td>
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<td>Required technical experience</td>
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<td>Methodology Calculation Template</td>
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Learn more at impactmatters.org/nonprofit-center
Impact Calculation Steps

1. Define the program (<10 minutes)
2. Gather program data (1-2 hours)
3. Calculate impact (<30 minutes using template)
   a. Estimate outcomes attributable to the nonprofit's program
   b. Count costs needed to achieve those outcomes
   c. Divide costs by outcomes to calculate impact
4. Communicate findings (1 hour)

1. Define the program
   Identify the following:
   - Name of the program
   - Scope of the program. If there are multiple locations, it is acceptable to aggregate them into one equation or analyze them one at a time.
   - Time period of analysis. Select a period with complete data on scholarships and completed financial statements.

2. Gather program data
   Impact analysis of scholarship programs requires 10 data points, of which at least 6 are supplied by the nonprofit. Below is a list of the most important data points.

   When collecting data, keep in mind:
   - All data must match the chosen time period
   - If missing or incomplete, data can be estimated
   - Some data are standard values derived from research literature, government statistics or other organizations. This is indicated.
   - Be prepared with the basics of the program: program activities, geography, beneficiary type, and timeframe.

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<tr>
<th>Data Point</th>
<th>Description</th>
<th>Source</th>
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<tr>
<td>Outcomes Data</td>
<td></td>
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<tr>
<td><strong>Number of scholarship recipients</strong></td>
<td>Provide the total number of students who received scholarship funding over the specified timeframe.</td>
<td>Nonprofit</td>
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| **Total scholarship funding awarded**  
| ID: 03-005-02 | Use the total value of scholarships provided over the specified timeframe, excluding any grants awarded for purposes other than helping students cover the costs of tuition, required fees, room, board and living expenses. | Nonprofit |
| **Eligibility requirements**  
| ID: 03-005-03 | Report which of these eligibility requirements best describe your scholarships: (a) need based; (b) merit based; (c) both need and merit based; or (d) neither need nor merit based. | Nonprofit |
| **Destination institution**  
| ID: 03-005-04 | If you provide scholarships for study at specific institutions, provide the names of those institutions. | Nonprofit |
| **Type of institution**  
| ID: 03-005-05 | If scholarships are not limited to specific institutions, report whether scholarship recipients attend (a) public schools, (b) private schools, or (c) both. | Nonprofit |
| **Average cost of attendance**  
| ID: 03-005-06 | The cost of education at institutions where scholarship recipients attend (including tuition, room and board, fees). Used to calculate scholarship coverage ratio (the average proportion of educational costs covered by the nonprofit's scholarship). If this data is not available on hand, the default estimate provided on the calculation template can be used. The default estimate is automatically calculated based on institution, state and degree level specified by the nonprofit. | Nonprofit or standard value |
| **Type of degree**  
| ID: 03-005-07 | Report the level of education pursued by scholarship recipients: (a) associate’s degree; (b) bachelor’s degree; (c) master’s degree; (d) vocational certificate; or (e) some specific combination of the aforementioned options. | Nonprofit |

**Cost Data**

| **Total program costs related to scholarships**  
| ID: 04-000-00 | Use total program costs related to scholarship disbursement, including the actual amount of scholarships awarded. Exclude any costs of non-scholarship activities. Non-scholarship activities could be programs for beneficiaries other than scholarship recipients (e.g., job training for formerly incarcerated adults) or extra services provided to scholarship recipients (e.g., mentoring and test preparation). | Nonprofit |
| **Beneficiary costs**  
| ID: 04-000-20 | The remaining cost of attendance not covered by the scholarship is generally borne by a combination of the university, the government, the student | Automatically calculated |

Learn more at impactmatters.org/nonprofit-center
3. Calculate impact

To calculate the impact of a postsecondary scholarship program, divide aggregate attributable outcomes (additional income for all scholars) by aggregate costs incurred by all cost-bearing parties (including beneficiaries and partner organizations). If using the calculations template, follow the instructions there and skip to the next section.

Outcomes calculation

\[ \text{Outcomes} = (\text{Number of scholarship recipients} \times \text{Increase in graduation due to scholarship} \times \text{Average additional earnings for graduates}) + \text{Total dollar value of scholarships} \times (1 - \text{Increase in enrollment}) \]

**Number of scholarship recipients**: Total number of students who received scholarship funding over the given timeframe.

**Increase in graduation due to scholarship**: Percentage point increase in graduation rate caused by the scholarship program. This is a measure of how many students graduated from college who otherwise would not have graduated without the scholarship. This is taken from research literature and adjusted for scholarship coverage (the average proportion of educational costs covered by the nonprofit’s scholarship). To calculate scholarship coverage, the total dollar value of a scholarship is divided by the average cost of attendance at the schools attended by scholarship recipients.

**Average additional earnings for graduates**: Additional earnings for a graduate compared to a non-graduate — cumulative over working life and discounted to present value. Earnings estimates are based on data from the U.S. Census Bureau’s Current Population Survey (C.P.S.). Estimates are adjusted based on the characteristics of the recipients (gender, race, etc.) to account for different earnings across different demographics. Non-graduates are assumed to obtain one level of education lower — if a scholarship is for bachelor’s degrees, then earnings are compared to those who obtain associate’s degrees.

**Total dollar value of scholarships**: The total dollar value of scholarships provided to all recipients over the specified timeframe.

**Increase in enrollment**: Percentage point increase in enrollment as a result of the scholarship program — a measure of how many more students were induced to attend school upon receiving the scholarship. This number is taken from the research literature based on studies of comparable scholarship programs. For these “induced” students, the scholarship
does not save them any money. The scholarship only saves money for students who were always going to pursue postsecondary education regardless of a scholarship. These students’ savings are equivalent to an immediate boost to income, so they are added to the impact calculation.

Cost calculation

\[
Cost = Program\ Costs + Partner\ Costs + Beneficiary\ Costs
\]

**Program Costs**: Direct expenses. Include the number of scholarships disbursed, and any costs related to administering scholarships. Exclude the costs of non-scholarship activities, such as additional services for scholarship recipients or programs aimed at non-scholarship recipients (e.g., mentorship, entrance exam preparation, career counseling). Also, exclude fundraising and management expenses.

**Partner and Beneficiary Costs**: This is calculated automatically by the calculation template by subtracting the scholarship amount from the average cost of attendance (presented above). This represents the balance of costs paid by others besides the nonprofit (unless the scholarship covers the full costs of tuition, room and board, fees).

Impact Calculation

\[
Impact = \frac{Outcomes}{Costs}
\]

Apply a 5% discount rate to convert impact into current year values.

4. Communicate findings

Impact calculations are presented as an impact statement:

\$1,000 increases income for a scholarship recipient in need by \$2,000.

At a minimum, accompany the impact statement with the name of the nonprofit. Space permitting, the following can be added:

- Program details (name, activities, beneficiaries served, geography)
- Outcome and cost data source and time period
- Method for attributing outcomes
- Outcomes, cost and impact calculations

Learn more at [impactmatters.org/nonprofit-center](http://impactmatters.org/nonprofit-center)
Website

We recommend you post the impact statement on your website. Impact statements can accompany other program information, such as number of people served, or be presented standalone on the home, program, impact or other relevant pages.

ImpactMatters Rating

If you have completed the impact calculation template, you may be eligible for an impact rating from ImpactMatters. Submit the spreadsheet here and ImpactMatters will be in touch: https://forms.gle/3N8feJsyTX3TR47E9

GuideStar Platinum

GuideStar is a database of millions of organizations used by donors and nonprofit professionals. GuideStar awards seals based on transparency. This impact calculation can be used to attain GuideStar’s highest seal, Platinum. To do so:

- Click “Update nonprofit profile” in the top menu. If you haven’t already gained access to your organization, click “Find and get approved” and follow the instructions. Then, click on your organization’s name to get started.
- To receive a Platinum seal, you must first complete the steps for Bronze, Silver and Gold. Follow GuideStar’s instructions for doing so.
  - When filling out the programs section of Bronze, make sure to create a program that matches the program or programs you used to calculate impact. Enter the details for the program, including the budget. We recommend including this note in the program description: “The impact of this program was calculated using ImpactMatters' Methodology for Estimating Impact and reported through GuideStar’s Platinum Seal program.”
- On the Platinum screen, click “Add a new metric.” Search for “scholarship” and select the metrics “Number of students who receive funds and/or tuition assistance” and “Total dollar amount of scholarship awarded.” After selecting the metrics, enter your results and add details, including totals by year and the characteristics of your scholarship recipients. Select “Output” as the metric type for both.
- Complete your GuideStar Platinum level.

Example: Vance Granville Community College Endowment Fund

Program activities: Granting scholarships to beneficiaries

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**Calculating Impact Series**  Postsecondary Scholarship Programs

**Geography:**  Henderson, NC  
**Beneficiaries:**  Economically disadvantaged, low-income and poor people  
Students

Data was collected by reviewing nonprofit's tax form 990. Other data was estimated from research literature and government data on earnings.

We estimate the increase in income caused by a nonprofit's scholarship program in two steps. First, we compare the estimated postsecondary graduation rate of its scholars to that of comparable students who did not receive a scholarship (the “counterfactual”). Our estimates are drawn from rigorous social science studies of similar scholarship programs. The result is the number of scholars whose graduation was caused by the nonprofit. Second, we compare the earnings of graduates to non-graduates based on publicly available census data, matching on student demographic characteristics. We apply the earnings boost owing to a degree to those scholars whose graduation was caused by the nonprofit. Both steps are necessary to properly net out counterfactual successes from observed successes. Otherwise, we would be attributing changes (increase in graduation rate and increase in earnings) to the nonprofit when they would have happened anyway. Few nonprofits estimate the counterfactual themselves, so we construct our own counterfactual estimate based on research and publicly available data.

### Outcomes calculation

$1,159,006 \text{ in additional income } = (300 \text{ scholarship recipients } \times 2.5\% \text{ increase in graduation due to scholarships } \times $140,464 \text{ average additional earnings for graduates}) + $100,873 \text{ total dollar value of scholarships } \times (1 - 8.8\% \text{ increase in enrollment})$

### Cost calculation

$186,433 \text{ total costs } = $100,873 \text{ program costs } + $42,780 \text{ partner costs } + $42,780 \text{ beneficiary costs}$

### Impact Calculation

$6.22 \text{ in additional income for every dollar donated } = \frac{$1,309,798 \text{ in total additional income}}{$210,688 \text{ total costs}}$

5% discount rate has been applied to convert impact into current year values. Impact statement is rounded and in individual units.

Learn more at [impactmatters.org/nonprofit-center](http://impactmatters.org/nonprofit-center)
Calculating Impact Series  Postsecondary Scholarship Programs

Impact: $700 increases income for a scholarship recipient in need by $4,000.

Click here to see their full rating.

This guide was prepared by ImpactMatters, a nonprofit rating agency that helps donors find high impact nonprofits. ImpactMatters develops and disseminates resources, tools and guidelines to help nonprofits communicate impact. Learn more at impactmatters.org/nonprofit-center.

Direct feedback on this guideline to info@impactmatters.org.