



rpK GROUP's Student Success Initiative Financial Model:

A User Guide

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Overview

rpk GROUP's Student Success Initiative Financial Model is designed to help colleges and universities understand the financial sustainability of student success initiatives (SSIs) on their campuses. The model allows institutions to examine the expenditures and resources required to support their campus SSIs, and estimate the potential financial return from that investment. This information is intended to encourage robust communications within institutions, and assist leaders as they make resource allocation decisions.

Purpose & Objective

rpk GROUP's financial model was created to examine the business models behind various types of student success initiatives. It is intended to help institutions develop initiatives that are financially sustainable, without having to rely upon ongoing external funding. The model captures all initiative costs and sources of funding, considers the potential efficacy impacts of SSIs, and projects the financial benefits of the initiative relative to its costs.

The model is initiative agnostic and can be utilized with different types of SSIs, including: transformative advising models; technology-assisted advising; intensive student support programs; tutoring programs, co-curricular development education models; first-year experience programs; and other similar initiatives. Although versatile, **it is designed for use with initiatives intended to increase student retention or course taking.**

The model evaluates student success initiatives from a return on investment (ROI) perspective. It addresses a key set questions common to most new initiatives, such as: 1) What are the initiative's costs and funding sources? 2) What is the potential return on investment? and 3) Is the initiative financially sustainable?

Key Business Model Questions

How Much Does the Initiative Cost?

- What is the full cost, including reallocated time of existing faculty and staff?
- What are the cost drivers?
- What level of resources are required to support the initiative?

What's the Potential Return on Investment (ROI)?

- How does the initiative generate revenue?
- What levers can be adjusted to increase the ROI?

Is the Initiative Financially Sustainable?

- What sources of funding/revenue are available to sustain it?
- What level of student activity is needed to self-sustain it?

The strong financial focus of this SSI model originates from the belief that when programs are financially secure, they are better positioned to serve and benefit more students. Financial sustainability provides the foundation for continued support of current initiatives and also seeds new ones.

This particular financial model only captures the financial return to colleges and universities. Clearly, the primary motivation for SSIs are to assist students, and these initiatives can produce widespread benefits. This particular model does not attempt to capture the ROI to students, higher education systems, or states, even though programs can certainly produce financial and non-financial returns to those groups as well.

Origins and Use-cases

The SSI financial model grew out of rpk GROUP's work with a diverse set of clients who sought to understand the financial impacts of investing in student success. Colleges and universities are looking for greater clarity on where to invest their resources; higher education systems want to provide their constituent colleges with guidance and technical support; and philanthropic foundations want to understand the potential ROI from the grant-funded initiatives they support.

rpk GROUP's financial model was developed through an iterative process that incorporated the experiences and feedback from those colleges and universities we have guided through this process. Various incarnations of this model have examined the financial structures of technology-assisted advising, open educational resources, redesigned advising models, and cohort-based student support programs. We also have used similar models designed for recruitment-based initiatives to examine the business models behind credit for prior learning, competency-based education, dual enrollment, and establishing new academic programs.

We have tested and refined our financial model through collaboration with public two-year and four-year institutions and private nonprofit four-year institutions. Our collaborations also have included large multi-college foundation-funded grant evaluations, as well as system-based transformation initiatives.¹

Implementation Lessons

rpk GROUP's work across higher education has repeatedly shown that populating this financial model is only a first step in resource allocation decisions. Creating financial sustainability requires using this information to make data-informed decisions and educate other stakeholders throughout this process. Prior experience has shown:

- **Institutions need a framework to have the financial sustainability conversation.** Improving students' educational outcomes provides the strongest motivation for investing in new SSIs. But it's important for campus stakeholders to understand how student success connects to ROI and sustainability: What's good for students can also have a positive financial impact for campuses, and those new dollars can be reinvested back in the same or new initiatives to serve more even more students.
- **The framework must acknowledge different views of ROI for different stakeholders.** This financial model focuses squarely on the financial ROI to institutions. But SSIs also provide ROI to students when it results in them spend less money to repeat courses or reduces their time to degree. SSIs can also provide a financial ROI to systems and states that are investing public tax dollars in higher education; states and employers also benefit from a more educated workforce that propels economic growth.
- **Applying a business model lens can create a data informed culture and engagement across institutions and systems.** Adopting an ROI approach includes key lessons around the importance of communication, managing culture change, and data-driven decision making. Creating a data-informed culture helps colleges become better stewards of their resources. It helps them direct their resources in ways that improve student outcomes, and ensure they understand the financial implications—and potential benefits—of those choices. Importantly, applying a business model lens must touch on culture and be recognized as a change management process.

¹ Prior clients and funders that have supported work informing rpk GROUP's financial model development have included the State University System of New York; Ohio Association of Community Colleges; EDUCAUSE; American Public Land Grant Universities (APLU); Achieving the Dream; The Bill and Melinda Gates Foundation; Lumina Foundation, William and Flora Hewlett Foundation; Ascendium Education Philanthropy; and College Futures Foundation.

Model Approach & Organization

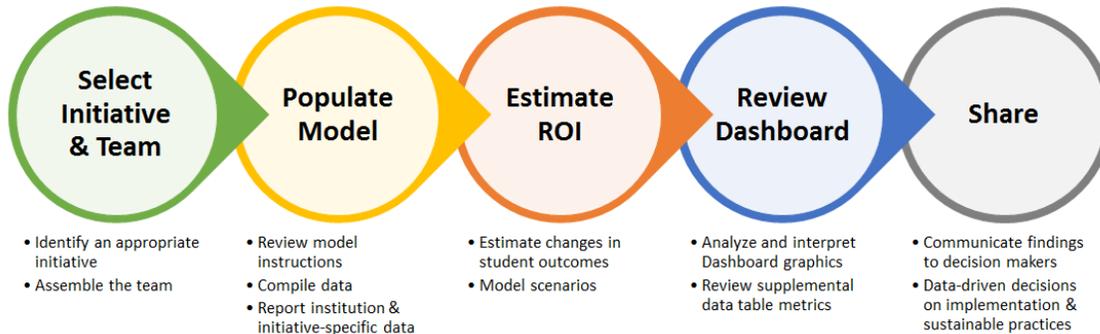
rpk GROUP’s financial model can be used at almost any time in the lifecycle of an initiative. It can function as an advance planning tool in the formative stages (using projected data), or as an evaluation tool once the initiative is operational (using actual data).

General Approach & Steps

This User Guide outlines 10 steps to assist campuses in making full use of the rpk GROUP SSI Financial Model. It begins by outlining the preparatory work needed to select an appropriate initiative and assemble a data team (Steps 1&2), and then details how to populate the model with institution and initiative data (Steps 3 to 7).

Once the model is populated with initial data, the potential ROI can be estimated. Campus teams can model different impacts an initiative might have on student retention and student credit hour (SCH) load, and project different ROI scenarios (Step 8). Teams can then review the resulting financial metrics in the model dashboard (Step 9). The final step is to interpret the information, communicate results, and use it to engage in data-driven decision making (Step 10).

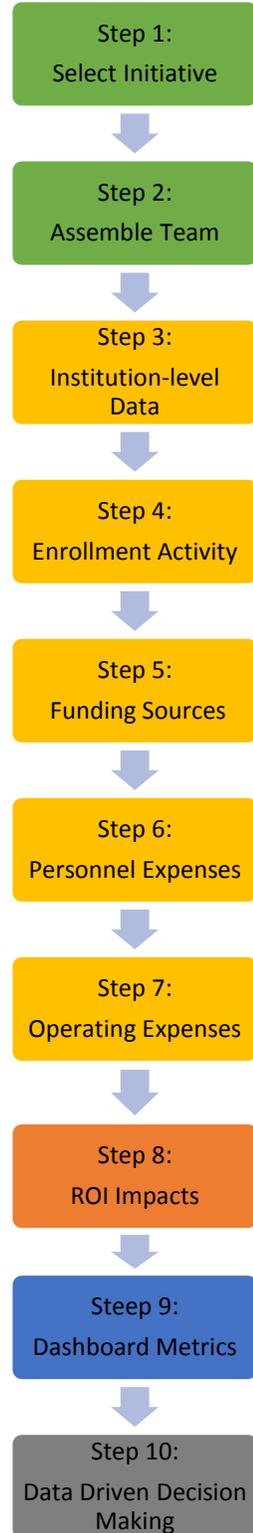
rpk GROUP recommends refreshing the model annually to update projected data with actual data, and monitor the model’s dashboard metrics to determine if any programmatic changes are necessary.



PRO TIP: Before populating the model, review the general instruction on the green ‘Getting Started’ tab.

- Yellow tabs signify data entry tabs; enter data in yellow cells.
- Orange tabs signify ROI/efficiency modeling metrics; model the expected impacts from the initiative.
- Blue tabs signify data output on the ‘Dashboard’ and ‘Data Table’ tabs.

Detailed guidance on populating and interpreting the data on each model tab can be found in the green ‘Data Entry Instructions’ tab located at the end of the model.



Data & Levers

Data requirements for the model are organized around the following types of information:

1. **Institution-level data** – Institution-wide data on student credit hours, student retention rates, tuition & fees, education and general spending, state and local appropriations, instructional employees, and personnel benefit rates. This information is used in the background calculations underlying the model.
2. **Enrollment & Initiative Activity** – Institutional enrollment and the number of students that are able to access and participate in the initiative.
3. **Funding** – Sources of program funding, including internal and external sources.
4. **Expenses** - All personnel expenses (derived from time estimates that new and/or existing staff spend supporting the initiative), any paid stipends, and any non-personnel operating expenses.

The model includes two levers used to estimate the ‘net revenue’ (e.g., ROI) for the initiative.

1. **Student Retention** – Estimates the additional tuition and fee revenue the institution receives when students are retained.²
2. **Average Student Credit Hour Load** – Estimates the additional tuition and fee revenue the institution receives when students enroll in additional courses.

 **PRO TIP: Understanding ‘net revenue’ and ROI:** The financial model measures ROI both in dollars (e.g., ‘net revenue’) and in percentage terms. First, gross revenue is calculated by estimating the additional revenue from tuition, fees, and state and local appropriations (as applicable) generated from changes in student retention and/or SCH load. Gross revenue is then adjusted to deduct the direct costs of the initiative and the additional instructional costs associated with an increase in student activity; the result is net revenue.³ The ROI percent metrics are calculated by dividing net revenue by the direct costs of the initiative. ROI can be calculated annually, or cumulatively across multiple years.

Dashboard Metrics

Key outcome metrics are presented graphically on the model ‘Dashboard’ tab and described in greater detail in Step 9 of this user guide. These metrics are organized around three areas:

1. **Initiative Funding & Expenses**
 - Figure 1 - What does it cost?
 - Figure 2 - What are the cost drivers?
 - Figure 3 - How does scale impact unit costs?
2. **Net Revenue & ROI**
 - Figures 4 & 5 - What is the magnitude of the financial impact?
 - Figures 4 & 5 - How long until the initiative’s annual cost and/or total investment is recouped?
3. **Net Financial Impact**
 - Figure 6 - What is the holistic financial picture including all sources of income and expenses?

² The retention ROI levels allow users to decide whether to include potential increases in state and local appropriations associated with changes in enrollment arising from retention.

³ The model applies an industry standard rate, which is customizable in the model assumptions tab.

Best Practices & Pitfalls to Avoid

rpK GROUP's work with colleges and universities to populate various types of financial models has surfaced several best practices:

- **Utilize a team approach.** A cross-functional team can help with data collection by easing data burdens and time constraints. However, be mindful of time constraints, particularly at small institutions with limited staff or expertise to contribute.
- **Make realistic assumptions.** One of the more challenging parts of the model is estimating the time commitments to develop and operate the initiative. Undercounting these efforts jeopardizes planning timelines and resource requirements; overcounting can inflate costs and lower ROI.
- **Become comfortable with projections.** Solid projections can be made by considering past trends, program capacity, and past implementation of similar initiatives. Projections can easily be updated when actual data becomes available or when situations change.
- **Model various scenarios.** It's helpful to identify low-impact, high-impact, and preferred scenarios that reflect a range of potential student outcomes.
- **Recognize this is one tool in the decision-making toolbox.** There are many reasons to implement a particular initiative, and not everything has to produce a positive financial return. Consideration of other compelling interests alongside the financial impact contributes to an informed decision-making process.

rpK GROUP's experiences have revealed several pitfalls to avoid:

- **Avoid becoming mired in details.** The model can become overly burdensome when data expectations are set too high. Start with good approximations and if more precise data become available the model can easily be updated.
- **Failure to capture all staff costs.** Compensation costs should include all staff involved in the initiative, regardless of how their time is funded. There is no 'free' time. However, be careful only to capture the portion of each person's time that is spent on the initiative, which may represent only part of their job.
- **Forcing funding to equal expenditures.** The model is intended to reveal funding gaps and encourage active conversation about how they will be filled. Don't assume these gaps will be filled with general fund revenues.

 **PRO TIP: Logistical pitfalls & recommendations:** The model was designed in Microsoft Excel and works best in that format. Uploading the model to Google sheets is not recommended because functionality is often lost when converting it back to MS Excel (especially the 'Dashboard' tab graphics). For multi-team accessibility, we recommend hosting the model on a shared file system, such as Dropbox or MS OneDrive, that continues to provide access to MS Excel.

Similarly, individual tabs (e.g., data sheets) cannot be sent to team members for data entry and then copied back into the Excel model as entire sheets. The model includes unseen tabs and background calculations and this approach breaks important formulas and graphic links. Instead, when individual data tabs are returned, the data in each cell should be 'copied' and then put back into the original model using "paste values" to add the data into the appropriate cells.

Step-by-Step Guide to the Model

The 10-step approach to completing the financial model is organized around four activities: 1) advance preparation; 2) populating the model; 3) estimating ROI; and 4) interpreting and communicating the results.

Advance Preparation

Users should begin by identifying an initiative that is intended to impact student success, and then assemble a data team to help procure and interpret data, and communicate the findings.

Step 1: Select an appropriate initiative. Selected initiatives should:

- ✓ **Focus on students that are already enrolled at the institution**, not programs intended to drive new student enrollment.
- ✓ **Impact interim indicators of student success**, measured through student retention or average student credit hour load.
- ✓ **Serve all students** (e.g., advising redesign) **or a subset of enrolled students** (e.g., first-year; economically disadvantaged students).

What initiatives are inappropriate for this particular financial model?⁴

- ⊗ **Exclude initiatives focused directly on graduation or career services.** These initiatives can boost important non-financial metrics (e.g., graduation and employment rates), but they do not generate revenue back to the institution and therefore do not produce ROI as defined in this particular model.
- ⊗ **Exclude initiatives to add new academic programs or campuses.** These can certainly generate new revenue, but are best estimated through alternate financial models that account for enrollment-based revenue from new students.⁵
- ⊗ **Exclude campus initiatives designed only to save money or improve processes** but are unrelated to student success (e.g., new procurement processes, or new software to reduce staff time on task). These are best estimated with a traditional business lens/model.

Appropriate Initiatives for the SSI Financial Model:	Inappropriate Initiatives for the SSI Financial Model:
<ul style="list-style-type: none">•Advising redesign•Co-curricular models•First-year redesign programs•Open-educational resources•Tutoring programs•Guided pathways	<ul style="list-style-type: none">•New campuses•New academic programs•New enrollment-focused programs (e.g., competency-based education; dual enrollment; credit for prior learning)•Career services programs•New backoffice operations/technology•Social services (e.g., Food pantries; vouchers)

⁴ The model can be used for basic budgeting purposes for any type of initiative. The framework for reporting enrollment, initiative funding, and initiative staffing and operating expenses (tabs 2-4b) is broadly applicable across many types of initiatives, and could be utilized for budgeting purposes even when the initiative will not generate ROI as defined in the model 'Success Metric & ROI Estimates' tab.

⁵ rpk GROUP maintains alternate financial models for these types of initiatives.

Step 2: Assemble an appropriate data team. Financial modeling is a team sport. Compiling a cross functional project team is important for data collection and reporting, framing model assumptions, and effectively communicating results to leadership.

The recommended project team includes staff from the following offices and experiences indicated:

- ✓ **Initiative Sponsor/Center** – The initiative’s project lead typically manages the financial model activities and communicates findings. Initiative staff provides specific information on student access/enrollment, project revenues/expenses/staffing, and expected outcome impacts.
- ✓ **Finance/Business Office** – Assists with interpretation and communication of the ROI framework and concepts; provides data on institutional expenses, revenues, and overhead rates.
- ✓ **Institutional Research** – Provides institution-level data on enrollment, student credit hours, student retention rates, and faculty/staff positions.
- ✓ **Human Resources** – Provides information on salary levels and benefit rates.

Populating the Model

Once an appropriate initiative has been selected and a data team assembled, it's time to begin collecting data and populating the model.

Step 3: Add institution-level data. Populate the model with institution-level data on student credit hours, annual student retention rates (fall to fall), tuition and fees, revenue and expenditures, and staffing. Most of this data can be drawn directly from publicly available data reported through the Integrated Postsecondary Education Data System (IPEDS). See the 'Data Entry Instructions' tab at the end of the model for detailed instructions on how to access the institutional information requested on this tab.

These institutional data are used to produce the underlying ROI/Efficiency calculations in the model. A series of calculated variables shown in the lower panel on this tab are used in those underlying calculations. The model also utilizes various assumptions which are shown at in the bottom panel of this tab. These assumptions can be customized, as necessary.

Student Credit Hours		
Total (UG & GR) student credit hours attempted (12 months)	199,400	Report total credits (do not restrict to credential-seeking students only).
Total undergraduate student credit hours attempted (12 months)	197,600	Report total credits (do not restrict to credential-seeking students only).
Total undergraduate student credit hours completed (12 months)	128,500	Report total credits (do not restrict to credential-seeking students only).
Retention Rate		
Retention rate (Fall to Fall)	61.2%	Recommend using the rate for all first-time undergraduates (full-time, part-time, and transfer students), or the rate for the population of students impacted by the initiative.
Tuition and Fees		
Instate/Indistrict tuition rate per credit hour	\$105.50	Posted rate up to 12 credit hours
Mandatory fees per credit hour	\$15.50	
Revenue and Expenditures		
Total state and local appropriations revenue	\$30,000,000	Report total state and local appropriations received by the college, if applicable. <i>Note: To exclude state and local appropriations from the ROI calculations, enter 0; the net revenue impact shown on the Dashboard ROI metrics will then only show the additional revenue generated from tuition & fees.</i>
Total education and general (E&G) spending	\$90,800,700	Core expenses only (exclude auxiliary enterprises, hospitals and independent operations).
Personnel Benefits		
Full-time Benefit Rate (as % of salaries)	25.0%	This rates typically reflects benefits related to retirement, health insurance, payroll taxes, unemployment insurance, etc.
Faculty/Instructors		
Full-time instructional staff	115	Include: instruction only and instruction/research/public (exclude medical schools)
Part-time FTE instructional staff	179	May calculated as: total number of part-time instructors (fall and spring) / 3
Average adjunct faculty stipend/salary for teaching a 3 credit course	\$3,000	May be calculated as: adjunct pay rate per credit hour * 3
Average 12-month course load for full-time faculty	8	Default course load for full-time faculty is set at 8 courses; colleges may adjust as appropriate.

Step 4: Add enrollment data. On tab '2. Initiative Enrollment' add data on total undergraduate enrollment for the institution, and initiative specific data on student access and participation.

- ✓ **Total undergraduate enrollment** is used as a base for metrics related to initiative enrollment (e.g., percent of undergraduate students enrolled in initiative).
- ✓ **'Initiative access'** refers to the number of students eligible to participate in the initiative. This could include all undergraduates (e.g., if an advising initiative is modeled) or a portion of students (e.g., the number of Pell eligible students, for an initiative focused on economically disadvantaged students).
- ✓ **Students 'enrolled in or utilizing the initiative'** represents the number students with access who are actually engaged in the initiative. This could represent all or most students with access (e.g., a majority of students utilizing the colleges advising services) or a limited subset of students (e.g., an initiative accessible to Pell-eligible students only has funding/capacity to service 100 eligible students).

	Year 0 (Base Year)	Year 1	Year 2	Year 3
Total undergraduate enrollment (12-month unduplicated headcount)	14,815	14,963	15,113	15,264
Number of students with access to the initiative		10,000	10,100	10,201
Number of students enrolled in/utilizing the initiative		4,000	4,000	4,500

 **PRO TIP:** The model can be populated with actual and/or projected data in any of the data tabs/cells.

- 'Year 0' represents the planning or development activity BEFORE students can participate in the initiative.
- 'Year 1' is the first year that student have access to the initiative.
- The model is can be expanded to model five years of activity (unlock tabs and unhide columns for year 4 and year 5).

Step 5: Add initiative funding. All funding received to support the initiative should be reported on tab '3. Initiative Funding.' Sources of funding should include any grants from philanthropic foundations or other external sources, and federal, state or local funding provided through contracts or appropriations.

Any funding that the college provides should also be reported. New budgeted funding is most often visible as a new budget line item. In other instances, a fee may be assessed to support the initiative. 'Reallocated funding' includes existing funding that was redirected to this initiative. This often represents 'in kind' funding, or existing staff time that was redirected to this project and away from other work.

Reallocated funding can be estimated from information reported during Step 6 (tab '4a. Initiative Staffing Expense'). Any staff time (e.g., compensation) reported on tab 4a that is NOT paid out of other funding already reported (e.g., grants, federal/state/local funding, or a new budget line item) should be reported as reallocated funding.

	Year 0 (Start-up)	Year 1	Year 2	Year 3
Institutional Budget Allocation (CV)	\$158,750	\$140,125	\$121,528	\$102,958
New funding	\$90,000	\$70,000	\$50,000	\$30,000
Reallocated funding	\$68,750	\$70,125	\$71,528	\$72,958
State and Local Funding (CV)	\$0	\$0	\$0	\$0
Appropriations				
Contracts				
Grant Funding (CV)	\$100,000	\$100,000	\$100,000	\$100,000
Foundations	\$100,000	\$100,000	\$100,000	\$100,000
Other third party sources				
Other Funding				
TOTAL INITIATIVE FUNDING	\$258,750	\$240,125	\$221,528	\$202,958

Step 6: Report initiative staffing and stipends. Most initiatives largest expense is staff time. The ‘4a Initiative Staffing Expense’ tab is used to capture all staff—existing and new—that contribute to the initiative. That time is then converted into salary and benefit expenditures, which are combined to estimate total compensation costs.

Importantly, all staff time should be reported regardless of how it is funded. Time of existing staff redirected to the initiative is time that is not spent elsewhere. So, the cost of that time needs to be captured, even when it is funded out of another cost center instead of the initiative’s budget or grant (e.g., Dean’s time or IT staff time).

Likewise, users are cautioned against overinflating costs. Staff often wear multiple hats and their time should be accurately reported. For example, senior leadership or Deans may devote 1-2 percent of their time only during the initial development year and/or first year of operation.

Position Title	Average Annual Salary	Benefit Eligible? (Select from Drop Down)	Number of Positions	% of Time Allocated to Initiative			
				Year 0 (Start-up)	Year 1	Year 2	Year 3
<i>Example: Vice President, Student Services</i>	\$100,000	Yes	1	5.0%	5.0%	5.0%	5.0%
Dean	\$100,000	Yes	1	10.0%	10.0%	10.0%	10.0%
Director of Advising	\$75,000	Yes	1	50.0%	50.0%	50.0%	50.0%
Advisors	\$60,000	Yes	3	50.0%	50.0%	50.0%	50.0%
IT staff	\$75,000	Yes	2	5.0%	5.0%	5.0%	5.0%
Position 5							
Position 6							
Position 7							
Position 8							
Position 9							
Position 10							
Position 11							
Position 12							
Position 13							
Position 14							
Position 15							
Salary Expense: Existing Personnel (CV)				\$145,000	\$147,900	\$150,858	\$153,875
Personnel Benefits Expense (CV)				\$36,250	\$36,975	\$37,715	\$38,469
Compensation: Existing Personnel (CV)				\$181,250	\$184,875	\$188,573	\$192,344

- ✓ **Report all existing staff positions** or individual staff working on the project in the top panel of tab ‘4a. Initiative Staffing Expense.’ **Any new staff hired** (or expected to be hired) should be reported on the lower panel.
- ✓ **Average Salaries** can be reported for the position (available from HR); they do not have to reflect the salary of the specific individual performing the work.
- ✓ **Report the annualized salary amount**, even if the position (or the person in that position) is part time. The model will automatically calculate the correct compensation expense once the time estimates are entered (e.g., if a person is employed part time, report their annualized salary amount and then report they work 50% time).
- ✓ **Confirm whether the position includes personnel benefits** (health insurance, retirement benefits, vacation/sick days etc.). The benefit cost will be automatically calculated using the benefit rate reported on the ‘1. Institution-wide information’ tab. For part-time staff, a standard part-time benefit rate (7.65%) will be added to reflect employer-paid payroll taxes (this percentage can be customized under the assumption section on the ‘1. Institution-wide Information’ tab).
- ✓ **Report the number of positions/staff** performing the work.

- ✓ **Report the approximate percentage of time** spent on the initiative on an annual basis, carefully considering how that work may shift over time. Some staff may only work on the project in certain years (e.g., start-up year) while others may only become involved (or devote more time) once it's operational.⁶
 - For staff devoting regular time to the project, consider the time spent each week. For example, two full days a week is 40% time (2/5), and is equivalent to four hours/day for four days a week (16 hours per week / 40-hour work week).
 - When time is devoted to the project during specific work periods (rather than each week), estimate the annualized contribution. For example, if IT staff worked 20 hours a week for three months, report 11.5% of their annual hours (calculated as (20 hours * 12 weeks) / (40 hours * 52 weeks), which equals 240 hours/2080 hours, or 11.5% annually).
 - Senior leadership may spend a small amount of time, but it can equate to significant spending because their salary levels are higher. For example, if the Provost spent two hours/month in meetings during the initial development years, report 1.15% of their annual time in year 0 (calculated as (2 hours * 12 months) / (40 hours * 52 weeks), which equals 24 hours/2080 hours, or 1.15%).
- ✓ **Report any stipends paid** in the panel below the existing personnel and new staff hire panels.
 - Stipends typically reflect an 'incentive' paid *in addition* to the time spent on the activity; in those situations, both staff time and incentive stipends should be reported on the personnel expense tab.
 - Less frequently, stipends reflect 'payment' for actual hours worked; in these limited instances reporting only the stipend amount is appropriate.
 - If the stipend did not sufficiently pay for all time spent on the initiative, the staff time can be reduced proportionally to reflect the portion paid with the stipend, so the combined compensation and stipend expense represents the true expense.

Total compensation expenses (salaries and benefits) are shown for existing personnel and new staff hires directly below the data entry panels. The combined total is shown in orange at the bottom of the '4a. Initiative Staffing Expense' tab.

 **PRO TIP: Consider the following scenario to help frame the 'costs' that should be reported:** A college president is impressed by the SSI that your college has developed and asks how much it would cost to replicate something similar at their college. You didn't hire any new staff for the project, so would you reply it didn't cost anything? Consider all the people, their time, and the expenses that were required to get the program up and running—that's the cost. Cost should be reported regardless of how they are funded. Even when initiatives are supported with grant funding, those resources typically only cover a portion of the full costs, with institutions paying for the remainder in the form of reallocated time of existing personnel.

⁶ To see the salary expense associated with the time reported, users can unlock the spreadsheet, and expand the hidden columns after between the time estimates and the comment column.

Step 7: Report applicable operating expenses. The final data entry tab captures any operating expenses incurred by the initiative. Operating expenses are non-personnel expenses that often include spending on office supplies, printing, computer equipment and software, marketing/advertising, and contractual services. The '4b. Initiative Operating Expenses' tab presents a comprehensive set of expense categories; only report data for the categories applicable to your initiative.

The model will automatically calculate recurring expenses after the first year (and apply an annual inflation adjustment). If expenses are non-recurring, or recur in different amounts each year, the operating expense entries can be customized by overwriting the formulas in the cells in the outlying years.

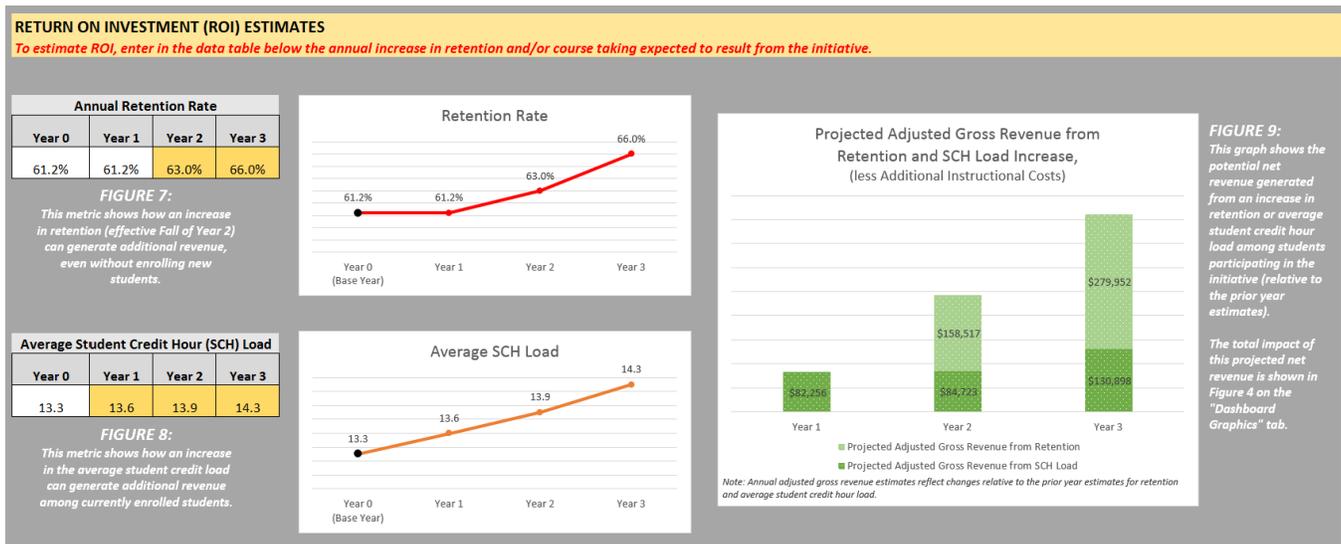
	Year 0 (Start-up)	Year 1	Year 2	Year 3
General Operating Expenses				
Office supplies	\$5,000	\$5,100	\$5,202	\$5,306
Printing/postage		\$0	\$0	\$0
Consulting		\$0	\$0	\$0
Meetings/conferences		\$0	\$0	\$0
Travel		\$0	\$0	\$0
Academic Support (non-personnel expenses)				
Information technology (CV)	\$120,000	\$122,400	\$124,848	\$127,345
Computer software/licenses	\$120,000	\$122,400	\$124,848	\$127,345
Equipment (IT)		\$0	\$0	\$0
Instructional design/development		\$0	\$0	\$0
Professional development/training		\$0	\$0	\$0
Faculty recruitment		\$0	\$0	\$0
Student tuition waiver		\$0	\$0	\$0
Student textbook support		\$0	\$0	\$0
Student living (transit, childcare, emergency aid)		\$0	\$0	\$0
Student Services (non-personnel expenses)				
Student recruitment/admissions		\$0	\$0	\$0
Marketing		\$0	\$0	\$0
Advising/coaching	\$10,000	\$10,200	\$10,404	\$10,612
Operations & Maintenance (O&M)				
Contractual services		\$0	\$0	\$0
Equipment (non-IT)		\$0	\$0	\$0
Facility expenses		\$0	\$0	\$0
Other Expenses (CV)*	\$0	\$0	\$0	\$0
TOTAL INITIATIVE OPERATING EXPENSE	\$135,000	\$137,700	\$140,454	\$143,263

Estimating ROI & Efficiency Impacts

Once all the model enrollment and financial data has been reported, users can begin estimating the potential return on investment (or efficiency impacts) from expected changes in student behavior and outcomes.

The ‘Success Metrics & ROI Estimates’ tab includes a combination of data entry cells (yellow) and output graphics. The ROI data and graphics also feed into the information provided on the ‘Dashboard’ and ‘Data Table’ tabs.

Step 8: Model ROI impacts. The top two figures on the ‘Success Metrics & ROI Estimates’ tab (Figures 7 and 8) ask users to project the impact the student success initiative will have on annual student retention and average student credit hour load. (The baseline data for year 0 and/or year 1 are generated from the data first reported on the ‘1. Institution-wide Information’ tab.)



- ✓ **Retention rate changes** can be modeled by entering projected rates into the yellow cells, with trends appearing on the Figure 7 graph.⁷
- ✓ **Average student credit hour load changes** can be modeled by entering projected load rates into the yellow cells; trends appear on the Figure 8 graph.⁸
- ✓ **Gross ROI Impacts** are shown in Figure 9. The light green bars show the gross revenue from a change in the retention rate, and the dark green bars show the impact from a change in SCH load. The revenues shown in this graph are adjusted to account for the additional instructional costs associated with students taking more courses; however, these data DO NOT account for the direct costs of the initiative (this is shown as ‘net revenue’ on the ‘Dashboard’ tab Figures 4 and 5).

⁷ The retention and SCH Load changes are applied to the number of students enrolled in/utilizing the initiative (as reported on tab ‘2. Initiative Enrollment’). Note that the retention rate impact is based on the *change* in retention, so the impact of moving retention from 25% to 26% is the same as moving from 85% to 86%—in both instances retention increased by one percentage point.

Retention rates changes are not effective until year 2 because the first year of initiative activity is year 1. For example, if 500 students are utilizing the initiative in year 1, and the retention rate is expected to increase by one percentage point the next year (e.g., from 65% to 66%), then five additional students would now be retained into year 2; there is no impact on year 1 enrollment.

Impacts are calculated relative to prior year estimates, not the ‘base’ year (e.g., year 0).

⁸ Note that the retention and SCH load impacts are interactive. So, if the SCH load changes, the newly retained students are expected to enroll at the newly projected SCH load rate, not at the initial base year rate.

 **PRO TIP: How can I estimate the student impacts?** Several methods can be used to estimate potential impacts. First, survey published research studies to determine if any program evaluations have been conducted for similar initiatives and examine the magnitude of the outcomes reported. Those evaluation impacts can be used as a guide for modeling the potential impact at your institution.

Second, metrics for peer institutions can be used to set reasonable expectations or aspirational goals. For example, if average retention rates at your peer institution are 10 percentage points higher than at your institution, that rate could be modeled as an institutional goal. Or, if your peers increased their retention rates by five percentage points over past three years, that trend could be adopted as a reasonable institutional impact.

Finally, set an aspirational financial goal. Model different scenarios to determine what retention rate and/or SCH load the institution would need to meet to achieve financial sustainability at a certain point in time.

Optional: Model Efficiency Impacts. The lower portion of the success metrics tab includes two optional metrics to calculate efficiency impacts which may be applicable for certain types of initiatives (see Appendix A).

1. **Course Completion Rates** – Estimates the institutional resources that could be recaptured and reallocated from a reduction in ‘unproductive’ course taking (e.g., grades of D, F, or withdrawal).
2. **Faculty Throughput** – Estimates the compensation savings that arise from activities to increase academic capacity (e.g., optimizing course sections sizes, reducing low enrollment sections and/or academic programs).

Model Interpretation & Communication

After steps one through nine are completed, it's time to review, analyze, and interpret the model results.

Step 9: Analyze dashboard and data table. The model results are available in graphic format on the 'Dashboard' tab and in tabular format on the 'Data Table' tab. The 'Dashboard' tab presents six graphics that highlight key metrics and data from the model.

The first three graphics examine initiative funding and expenses.

- **Figure 1 shows whether the initiative has adequate financial planning and support.** Gaps in funding indicate that to become sustainable, the initiative may need to secure additional funding, reduce expenses, or examine whether the return on investment (from figure 4) is sufficient to address unmet financial needs.
- **Figure 2 shows the areas of spending driving the overall cost of the initiative.** Users can identify the compensation share of costs for existing or new personnel and the types of operating expenses the initiative is incurring. This information can be used to identify areas for cost reductions or additional investment. Trend data for this metric can be viewed on the 'Data Table' tab.
- **Figure 3 shows utilization rates and unit costs for the initiative.** This utilization rate shows the percent of students with access to the initiative that are utilizing it, and indicates whether there is capacity to serve additional students. The unit costs show the cost per student utilizing the initiative, and indicates how expanding access (and/or reducing expenses) can lower the cost per student served over time.

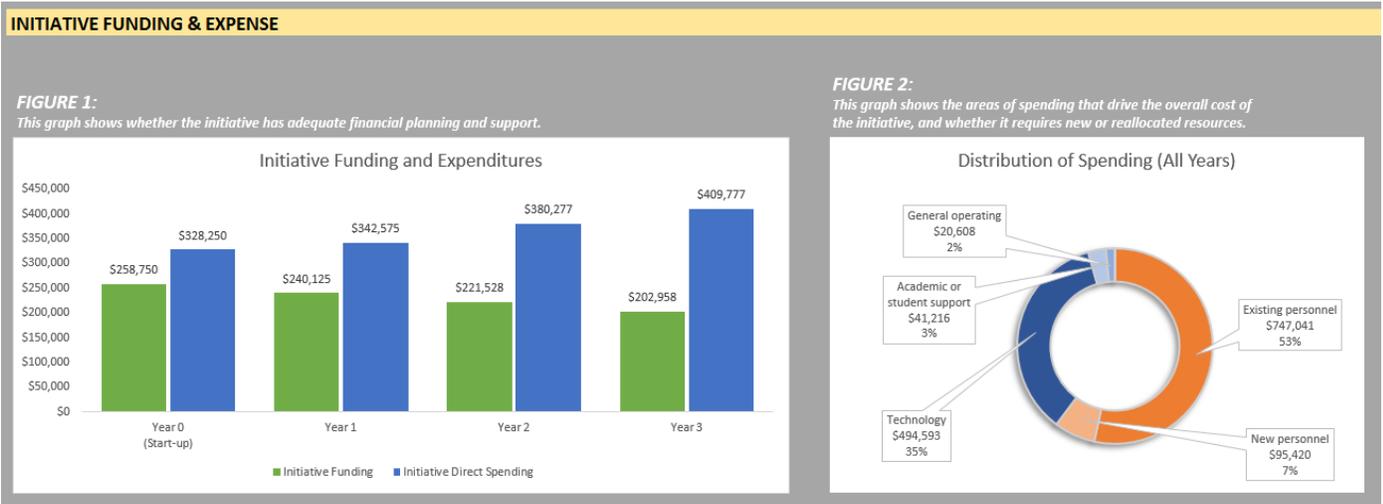
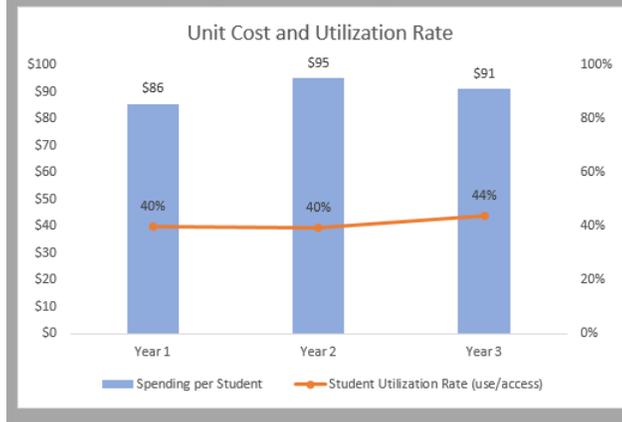


FIGURE 3:
This graph shows whether the initiative has capacity to serve additional students, and how expanding access lowers the cost per student served.



The net revenue and return on investment graphics show whether the net revenue generated from the initiative (from changes in student retention and/or average student credit hour load) exceeds the cost of the initiative. Revenue is generated from tuition, fees, and state and local appropriations (if applicable); costs include the direct cost of the initiative and the additional instructional costs institutions incur when more students are retained or increase their course load.

- **Figure 4 shows the annual projected net revenue generated from the initiative.** The first-year net revenue exceeds zero is the year the initiative becomes profitable, or surpasses the 'breakeven' point. The ROI percentage shows the net revenue relative to the direct expense of the initiative.
- **Figure 5 shows the cumulative projected net revenue generated from the initiative.** This metric accounts for the total investment in the initiative over time. When the cumulative net revenue is greater than zero, the total net revenue from the initiative will have exceeded the total investment (including the start-up costs in year 0).

NET REVENUE & RETURN ON INVESTMENT (ROI)

FIGURE 4:
This graph shows the "breakeven" year in which the projected net revenues (from changes in annual student retention and average student credit hour load) are expected to exceed the annual cost of the initiative (direct program costs and additional instructional delivery expenses). The net revenue is shown in dollars and the ROI is shown as a percent. These metrics exclude other sources of initiative funding.

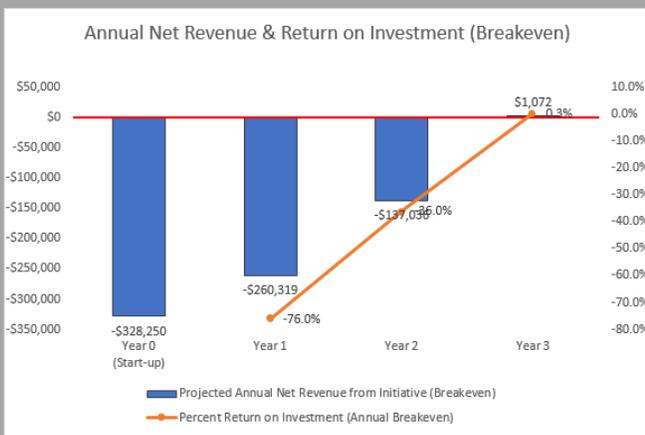
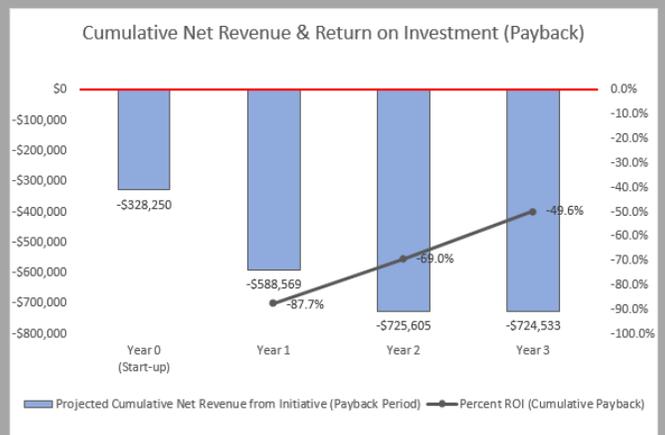
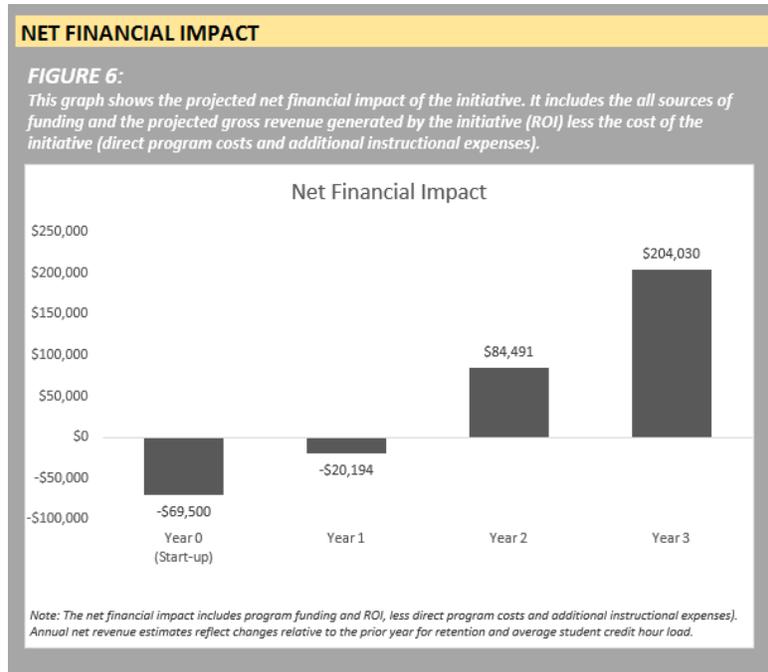


FIGURE 5:
This graph shows the "payback" year in which the projected cumulative net revenue (from changes in annual student retention and average student credit hour load) is expected to exceed the cumulative cost of the initiative (direct program costs and additional instructional delivery expenses). The net revenue is shown in dollars and the ROI is shown as a percent. These metrics exclude other sources of initiative funding.



The final dashboard metric, the net financial impact, accounts for all financial sources and expenses.

- **Figure 6 shows the projected net financial impact of the initiative.** It includes the all sources of funding and the projected gross revenue generated by the initiative, less the cost of the initiative (direct program costs and additional instructional expenses).



Step 10: Data-driven decision making. The final step in this process is to share and socialize the results. The results can be used in various ways.

The program team can use the information to assess whether the initiative, as designed, is expected to be financially sustainable. It can be used to recommend modifications to cost structures, re-examine revenue sources, or consider ways to scale the program to engage more students and lower the cost per student served.

The information also can be used as part of a ‘pitch’ to senior leadership to garner support for a new or redesigned initiative. Providing information about the costs and financial sustainability of the initiative nurtures a common understanding of the financial responsibilities among the key players.

Finally, some colleges have proactively used this information for campus or program goalsetting. It is often easier to solicit faculty and staff support for new campus initiatives when they understand the rationale, the goal, and the pathway to action. Connecting the dots between student success and financial sustainability shows that what’s good for students can also be good for colleges and universities.

Appendix A: Optional Efficiency Impacts

Modeling efficiency impacts. The bottom two figures on the ‘Success Metrics & ROI Estimates’ (Figures 10 and 12) provide an opportunity for users to estimate the financial impact of ‘efficiency’ improvements. These metrics are optional and may not apply to all initiatives; these are stand-alone metrics and do not carry over to inform the metrics on the ‘Dashboard’ tab.

These metrics estimate existing resources that can be ‘freed up’ when the colleges are operating at a more efficient level. They do not measure ‘new’ dollars to institutions, in terms of paid tuition and fee revenues, as captured by the ROI metrics.



- ✓ **Credit hour completion rates** rise when ‘DFW rates’ decline—meaning fewer students are receiving grades of D, F, or withdrawing from the course without earning credit. In these instances, institutional resources (classroom seats and course sections) are considered ‘unproductive’ because they didn’t result in credit awards, and the college may need to expend additional resources to redeliver that education. Figure 11 estimates how a reduction in the number of these ‘unproductive’ credit hours could free up resources that could be redirected to other activity if not spent on unproductive course taking.
- ✓ **Faculty throughput rates** are another measure of academic efficiency, which provides information to help right-size colleges’ instructional capacity. This metric illustrates the balance between course enrollments and instructional faculty. Increases in academic efficiency—by optimizing course section sizes, reducing low enrollment sections and programs, and increasing instructional capacity—mean that colleges can serve more students without increasing compensation expenses. Similarly, Figure 13 shows that when colleges are able to increase faculty throughput, they can serve more students at lower costs, saving on compensation expenditures because fewer new adjunct faculty are needed.

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