# AIA Best Practices:
# Creating an annual budget for a small firm

## Part 3 of Developing company financial budgets

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**Summary**

Parts one and two of *Developing company financial budgets*, established a firm foundation of budgeting basics and vocabulary. Part three covers how to set a budget for your company, with an emphasis on small firms (for large firms, refer to part 4). A small firm's budget is most affected by staffing and projects—and starting with historical information can make it more accurate.

## The past is the key to the future

Setting utilization rate, net multiplier, and effective multiplier targets is important in developing a budget and any type of financial forecast. Targets can be facilitated by looking at historic results. Figures 5 and 6 provide the historical results of a hypothetical firm from 2018 to 2021. (The year-to-year financial fluctuations and key performance indicators [KPIs] are not dissimilar to that of the architectural profession's actual trends during those years.)

**Figure 5: Basic income statement (by year)**

| | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2018-2021 Average | 2022 Budget |
|---|---|---|---|---|---|---|
| **Total Revenue** | **$62,425** | **$70,230** | **$63,389** | **$120,419** | **$79,116** | **$131,600** |
| Direct Expenses | $10,763 | $15,051 | $14,466 | $30,032 | $17,578 | $31,600 |
| **Net Revenue** | **$57,018** | **$56,703** | **$52,536** | **$91,595** | **$64,463** | **$100,000** |
| Direct Labor | $17,323 | $16,810 | $23,335 | $33,350 | $22,705 | $33,333 |
| **Gross profit** | **$39,460** | **$39,960** | **$29,812** | **$58,251** | **$41,871** | **$66,667** |
| Indirect Labor | $15,515 | $15,903 | $17,168 | $21,321 | $17,477 | $21,333 |
| Payroll-Related Expenses | $4,809 | $4,370 | $6,950 | $9,503 | $6,408 | $10,113 |
| Other Indirect Expenses | $13,455 | $11,393 | $13,634 | $18,668 | $14,288 | $25,220 |
| **Operating Profit (Pre-Bonus, Pre-Tax)** | **$5,681** | **$8,295** | **($7,941)** | **$8,758** | **$3,698** | **$10,000** |
| Bonuses | $3,233 | $3,590 | $0 | $5,001 | $2,956 | $6,000 |
| **After-Bonus, Pre-Tax Profit** | **2,448** | **4,705** | **($7,941)** | **3,757** | **742** | **4,000** |
| Other (Income) / Expense | $100 | $100 | $100 | $100 | $100 | $100 |
| **Pre-Tax Profit (Loss)** | **$ 2,348** | **$ 4,605** | **($7,841)** | **$ 3,657** | **$642** | **$ 3,900** |

**Figure 6: Key performance indicators (by year)**

| | 2018 Actual | 2019 Actual | 2020 Actual | 2021 Actual | 2018–2021 Average | 2022 Budget |
|---|---|---|---|---|---|---|
| Total Labor | $32,838 | $32,713 | $40,503 | $54,671 | $40,181 | $54,666 |
| Tot Lab + P/R-Related Exp | $37,647 | $37,083 | $47,453 | $64,174 | $46,589 | $64,780 |
| Other Overhead | $13,455 | $11,393 | $13,634 | $18,668 | $14,288 | $25,220 |
| Operating Profit Rate | 10.0% | 14.6% | (15.1%) | 9.6% | 5.7% | 10.0% |
| Net Multiplier | 3.29 | 3.37 | 2.25 | 2.75 | 2.84 | 3.00 |
| Utilization Rate | 52.8% | 51.4% | 57.6% | 61.0% | 56.5% | 61.0% |
| Payroll Multiplier | 1.74 | 1.73 | 1.30 | 1.68 | 1.60 | 1.83 |
| OH Rate w/o Bonuses | 195.0% | 188.4% | 161.8% | 148.4% | 168.1% | 170.0% |

Operating profit rates ranged from a positive 14.6% (in 2019) to a negative 15.1% (in 2020). The net multiplier was a respectable 3.29 and 3.37 in 2018 and 2019 before crashing the following year to only 2.25. This drop could have been caused by any number of things, for example, fewer new project opportunities, poor project management, rework at the firm's cost, or unsuccessful but costly marketing efforts. As a result of the firm's 2020 loss, the firm's average annual profit from 2018 to 2021 was only $131.

With this historical information to reference, we can now begin the task of setting metrics for next year's (2022) budget.

## Net revenue capacity of staff

Setting and monitoring minimal targets and metrics are essential in developing budgets, forecasting financial results, and leading the company toward profitability. Setting these targets dictates a firm's net revenue target. We'll begin by assuming that the firm will start 2022 with staff levels and total labor costs similar to 2021, and that through "rightsizing" (having the right number of people with the right skills working on the right projects), the firm's utilization rate can remain at 61% (a reasonable if not ambitious target). Further, we'll presume that the firm is committed to generating an overall industry-average 3.0 net multiplier on its mix of projects.

The $54,666 estimated total labor cost multiplied by the 61% utilization rate target gives us a direct labor target of $33,333. This number, times the industry average 3.0 net multiplier, means that the firm must achieve $100,000 of net revenue.

The estimated total labor cost multiplied by the target utilization rate multiplied by the target net multiplier gives us the estimated net revenue (or capacity for producing) for the year.

*Net Revenue = Total Labor x Utilization Rate x Net Multiplier*

The 2022 budget shown in Figure 5 is based on the firm's achieving general industry averages of around 61% utilization rate, with a 3.0 net multiplier and an overall 1.83 payroll multiplier (0.61 x 3.00 = 1.83).

The next question is, how much work does the firm have in backlog (billable fees remaining in current contracts), and how much new work can be reasonably anticipated for 2022?

## Backlog and forecasts of projects: Balancing to net revenue capacity

Firms typically have many active projects underway, with each in a different phase or stage of completion. A projection for meeting deadlines for each active project provides a projection of staff needs and anticipated net revenue billings remaining for each project. In addition, ongoing marketing efforts and anticipated new work need to be evaluated and estimated. When all this is summed, the firm has an estimate of the total net revenue for the given period. This number is compared with the 2022 net revenue "capacity" levels ($100,000 in Figure 5) to see if there is a deficit or excess of short-term and long-term work. If, say, the net revenue forecast is $150,000, production staff will need to be increased quickly or project deadlines adjusted (or both). If the forecast is only $50,000, the firm needs to estimate the likelihood of obtaining additional work or consider reducing staff. Either way, these decisions need to be made quickly to avoid significant fluctuations in operating metrics—and, therefore, profitability—such as those seen in 2020.

In most cases, capacity analysis and forecasting are done by considering actual utilization rates and staff skills. This will help anticipate excesses or deficits, considering the current projects, phases, and expected work.

In Part 4: Creating an annual budget for a large firm, we'll look at creating a budget for multiple operating units within a firm.

## Developing company financial budgets: the five-part series

This Best Practice is the third in a series of five articles that address budget development for architectural firms. Each article builds on, but tries to not repeat, information provided in previous articles.

- Part 1: Budgeting basics
- Part 2: Budgeting key performance indicators
- Part 3: Creating an annual budget for a small firm
- Part 4: Creating an annual budget for a larger firm
- Part 5: Budgeting indirect expenses

## About the contributor

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This article corresponds to:

*Architect's Handbook of Professional Practice, 15th edition* Unit 1 - The Profession
Chapter 07 – Financial Management
Section 04 – Developing Annual Budgets and Profit Planning