



PERSPECTIVES

USING LABOR PRODUCTIVITY
ANALYSIS TO IMPROVE BUDGET
ACCURACY AND IDENTIFY
INEFFICIENCIES IN EMERGENCY
MITIGATION SERVICES

Our perspectives feature the viewpoints of our subject matter experts on current topics and emerging trends.

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Introduction

In any process where labor is a significant cost driver, understanding productivity is essential. Labor productivity analysis isn't just a management buzzword; it's a practical tool that helps emergency [mitigation experts](#) sharpen their budgets and root out inefficiencies. When properly measured and applied, labor productivity data provides concrete insights that speed up the budgeting process, make it more accurate, and expose the real causes of cost overruns and project delays.

It is the intent of this article to explain this perspective on cost analysis, with a focus on actionable, real-world use of labor productivity data for estimating, tracking, and analyzing the mitigation/[remediation phase](#) of losses.

Understanding Labor Efficiency Metrics

At its core, labor productivity measures the quantity of output per unit of labor input. In simple terms: how much work is getting done for every hour or dollar spent on labor?

In manufacturing, this might mean units produced per labor hour. In construction, the quantity could be measured in square footage built per day. In terms of services, maybe it is the number of customers served, or reports completed. For the purposes of this article, it is the amount of area successfully remediated by one worker in one shift of 8-10 hours.

It's not a perfect measure—context matters—but for an expert in the field, it's a powerful starting point.

How Labor Productivity Analysis Improves Budget Accuracy, Speed, and Flexibility

Budgets for contractors and a rough order of magnitude (ROM) for claims teams involve projecting costs based on expected input: labor, materials, equipment, overhead, etc. Labor is often one of the biggest line items when it comes to emergency mitigation services. If your estimates of how much work a team can do in a given time are incorrect, the whole budget or reserve could be at risk.

This is where labor productivity analysis comes in. Instead of relying on rough estimates, it utilizes historical data and performance metrics to build budgets and reserves that are grounded in real output rates. This makes budgets and reserves:

- » More accurate because they reflect actual labor performance, not guesses or outdated benchmarks. Rates and certain hard costs can be adjusted in real time.
- » Faster to produce because once a solid labor productivity model is built, it can be quickly applied across new projects.
- » More flexible because productivity data allows for rapid scenario testing (What happens to the budget if output drops 10%, if overtime increases, if staffing levels shift?)

In the following sections, we will break down the direct benefits of the process.

Refining Budget Estimates Through Historical Labor Productivity Data

Consider a budget/reserve for a project expected to take 10,000 labor hours. Without productivity data, that number might be based on an expert's best guess—or copied from a similar past project that had different conditions.

With proper analysis, that estimate can be refined. Looking at past projects with similar scopes, as well as examining actual labor hours vs. deliverables and calculating realistic productivity rates sheds some light on potential production or timeline issues. Perhaps the average production rate for this project is 90 sq ft per shift, not 150. That difference could mean thousands or even millions depending on the size or complexity of the project. It also could mean significant delays if the estimate has not been calculated correctly based on the correct data.

Accuracy isn't just about hitting the final number. It's about understanding why your labor costs are what they are. If you know that a specific contractor or team completes tasks faster, you can budget accordingly. If you see patterns of lagging performance, you can adjust assumptions or build in contingencies. You can also have real world data for analyzing bid situations that move beyond proposed rates, which, all too often, are a stumbling block to true understanding of a project.

Streamlining Budget Creation

Building budgets from scratch for large or complex losses is time-consuming. But if you retain an expert that has done the work of

analyzing labor productivity and codifying it into budget models, they will be able to create reusable inputs with accurate/repeatable results, for example:

- » They should have a productivity database by task type or worker role.
- » They can link those productivity metrics to unit costs, or, even better, they can adjust unit costs in real time to match market/contractor conditions.
- » They can identify the important variables (e.g., team skill level, project type, environmental factors) that affect productivity.

This way, it is not necessary to start each budget with a blank sheet. Project parameters are plugged in, and the model produces an initial estimate. Of course, some fine-tuning can be done, but the heavy lifting is through.

This dramatically speeds up the process, especially in the emergency mitigation service arena where similar work is repeated across many sites or clients.

Using Productivity Data to Uncover the Root Causes of Budget Overruns

When budgets or reserves go wrong, it is often a time consuming and costly endeavor to pinpoint why. Did labor costs overrun because people were working inefficiently? Was it the material or equipment costs? Did the initial estimate factor in most common mitigation issues? Labor productivity analysis gives you clarity. If the budget assumed a productivity rate of 50 ft² per worker-day, but actual data shows 35 ft², you now have a measurable gap and can investigate questions such as:

- » Was the estimate too aggressive?
- » Did unexpected events slow progress?
- » Was the workforce undertrained or mismanaged?
- » Was there an inordinate number of “fixes” or rework that needed to be implemented?

Instead of speculation, now there is a way to deal with data. This makes post-mortems more useful and future budgets or reserves more accurate.

Revealing Operational Breakdowns Through Productivity Trends

Productivity data isn’t just about individuals; it’s a lens into systems. For example, maybe one shift consistently outperforms another, or a certain team has lower output across all tasks. Maybe certain equipment correlates with better labor efficiency. By aggregating and analyzing this data, you can uncover trends that would not be visible otherwise. These insights help answer deeper questions such as:

- » Is there a training issue?
- » Are any processes broken?
- » Is there a management issue with a particular contractor or location?
- » Is layout or tool access slowing people down?
- » Is the task more involved or harder to solve than initially anticipated?

This kind of analysis is proactive. It does not just look at how much things cost, it explains why those costs occurred and how to deal with them in real time.

Using Productivity Benchmarks to Elevate Team and Contractor Performance

Labor productivity data lets the analyst benchmark internally (across contractor teams or time) and externally (against industry expectations).

Internal benchmarking lets an analyst identify high- and low-performing teams within a project. That creates opportunities to replicate success—to copy best practices, adjust team compositions, and revise scheduling. It also flags teams that need intervention by an expert.

External benchmarking, meanwhile, can expose whether the operations are lagging industry norms. If the contractor is averaging 80% of the output rate that competitors achieve, that’s not just a productivity issue, it’s a competitive risk to their business. By identifying this issue, your team becomes an ally to multiple stakeholders simply by delivering the news.

Budgets built around poor performance become bloated. Knowing where the mitigation contractor stands lets them aim for better performance and leaner, more aggressive budgeting in the future.

Maintaining Budget Discipline with Real-Time Productivity Tracking

Productivity analysis isn’t just for planning—it’s essential during project execution. Modern systems allow for real-time labor tracking. As work progresses, comparing actual

productivity to the plan (i.e., via [remediation monitoring](#)) allows you to:

- » Spot budget overrun risks early.
- » Request reallocation of resources before the project incurs significant delay or cost overruns.
- » Adjust timelines or expectations with data to back it up.

For example, if productivity is trending 20% below plan after the first two weeks of a ten-week project, there is time to recover. Without that insight, you may not realize the problem until the budget is exceeded. Conversely, if the budget was simply too aggressive, or the estimate was wrong, it may be time to adjust the budget and have a conversation with the interested parties.

Building a Smarter Future Through Historical Data Productivity Insights

Creating estimates or reserves is iterative. Each project provides more data. When you track labor productivity closely, you are constantly building a richer database of performance metrics. Over time, this allows for:

- » Smarter assumptions.
- » Tighter budgets.
- » More precise forecasts.
- » Higher accountability.

Contractors and experts get better because it is possible to measure what matters, and budgeting becomes less of a challenge and more of a strategic tool.

Navigating the Pitfalls of Labor Productivity Tracking in Real-World Conditions

While the benefits are real, labor productivity analysis has challenges, including:

- » **Data accuracy** - Bad tracking or inconsistent reporting can ruin the analysis.
- » **Resistance to measurement** - Some contractors may feel threatened by the labor productivity tracking model.
- » **Complex environments** - Productivity in an emergency mitigation environment varies with weather, tools, team dynamics, etc. It is not good practice to try to use one-size-fits-all benchmarks.

The point is to utilize a system that works for the reality of emergency services, not one that looks good on paper but ignores context. Even small steps—tracking a few tasks or teams to start—can yield outsized value.

Conclusion & How Mitigation Consultants Can Help

Labor productivity analysis is more than a management metric—it is key to faster, more accurate budgeting and offers a spotlight on inefficiency. It turns budgeting and estimating from an art into more of a science. Instead of relying on assumptions, rely on evidence. Instead of accepting cost overruns, investigate their root causes.

In an economy where labor costs are rising and efficiency is under pressure, the ability to measure, understand, and optimize labor performance is not optional, it is a competitive

advantage for the contractor and a necessity for those responsible for analyzing costs.

Joe can be reached at joseph.weitz@jsheld.com or +1 570 597 1718.

Whether you are the one managing projects and running operations or trying to get a better understanding of whether costs are fair and reasonable, labor productivity is a metric that should not be ignored.

Please contact the author for a more in-depth presentation regarding the models utilized by J.S. Held and our mitigation services team to analyze labor productivity in emergency mitigation environments.

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We would like to thank our colleague Joe Weitz for providing insight and expertise that greatly assisted this research.

Joseph Weitz is a Senior Vice President in **J.S. Held's Building Consulting practice** with over 25 years of experience in the insurance restoration industry working with insurance professionals, business owners, property management companies, and industry executives. Mr. Weitz began his career with an international mitigation and dehumidification company, where he learned about structural drying and temporary climate control. With that knowledge and experience, he began honing his full-service restoration skills with regional and national restoration companies, managing many complex, high-value projects. Joe has served on several CAT Teams. He is well-versed in structural and specialty drying, fire and water restoration, mold remediation, content restoration, document recovery, and hazardous material cleanup and disposal, and became a mitigation and construction consultant, utilizing his expertise to bring many complex and high-value losses to a fair and reasonable conclusion for his clients.



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