

How to Improve Construction Project Scheduling for Timely Completion

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In construction, every minute wasted translates to expense. That's why project managers do their best to create the most effective construction project timetable with response plans to avoid downtimes. What's on paper isn't always implemented, but at least it guides them on what steps to take in case any unexpected issues arise. Your schedule is a critical part of the project. Discover 10 practical ways to improve construction project scheduling.

WHY IS A PROJECT SCHEDULE IMPORTANT?

The main essence of having an itinerary is turning over a completed project to a client within the expected delivery time. It serves as a timeline with key milestones for all your activities, from preconstruction to project closeout. With construction scheduling software you can summarize all your efforts, progress, risks, and budget at a glance. Consequently, you and your team can ensure that you meet your client's expectations down to the finest detail.

WAYS TO IMPROVE CONSTRUCTION PROJECT SCHEDULING

A construction project plan comprises tasks, duration, deadline, resource management, and asset allocation. Compressing all these bits of information in a single document – or software solution – can pose a challenge. Here are some strategies to enhance your tools to guarantee all activities and construction sequences adhere to the timeline.



1. Identify the project scope to create a realistic project schedule

It starts with specifying the scope, including the goals, requirements, deliverables, and other crucial factors. Without a clear project description, deviations can eventually happen, causing scope creep and delays.

A well-defined scope that meets the expectations of stakeholders, clients, and the entire team will help you craft a realistic schedule with better time estimates, increasing the chance of success. Using a construction project scheduling tool allows you to divide tasks into phases. You can map out a visual representation of the timeline that you can review or adjust anytime.

2. Allocate resources based on data

Data can save you from making bad decisions, preventing client dissatisfaction, and internal issues.

Strategic resource allocation is a massive time-saver on a project. It refers to how well you can designate a labor workforce, materials, and equipment for seamless execution and on-time completion of tasks. These resources and their availability influence your overall timeline, efficiency, and budget.

How can you improve your allocation? With construction management software you leverage historical data from past projects to better grasp how to assign team members based on their skills, experience, and equipment specialty. You can identify efficiencies between trade partners and internal teams to create better material and resource estimates for the next project.

3. Plot tasks based on dependencies

The correct sequence of construction activities can boost project flow, efficiency, and productivity.

It's standard for project managers to sequence tasks based on dependencies. After all, building a structure is primarily a series of simple interrelated functions. For example, a start-to-start dependency means contractors can only start pouring concrete for the foundation after cleaning and excavating the site.

By understanding the connection between each task and representing this on your project calendar, your team can accomplish what needs finishing with minimal to zero bottlenecks. Construction project management software can help simplify and streamline this process for project managers and superintendents. By creating a Baseline (original) schedule, you can compare your current schedule at any point in time to see where each task should have fallen and where it is now. It further provides a comparison based on approved owner and vendor changes and dates pushed out.

4. Expand the accessibility of your workflow

Technology has changed how construction professionals approach projects. Today, the workflow is more tailored, convenient, and simplified.

A reliable construction scheduling software can streamline all

your processes in one place. You, the stakeholders, and all team members can view updates using a phone, tablet, laptop, or desktop computer. Gantt charts are ideal for representing your schedule and data since they're an industry standard model for representing your project schedule. With a navigable end-to-end project management tool, everyone can stay in the same loop, improving collaboration, productivity, and deadlines.

5. Perform an advance equipment maintenance

Well-functioning heavy equipment is a critical component of on-time deliverables. Visual inspections determine only half of the fleet's wear and tear and overall health. Include fluid analysis as part of your routine maintenance – whatever issues you can't see, an advanced chemistry test has a high chance of detecting.

Fluid analysis involves examining samples of used coolant, oil, and fuel for contaminants like water and dirt to locate triggers for future equipment failure and downtime – or worse, occupational injuries.

OSHA recorded about 20% of worker fatalities due to unchecked machinery. This non-visual maintenance test increases onsite safety. Ensure you find trained experts to get an accurate analysis. Otherwise, contact your equipment manufacturer if they offer this service.

6. Prepare a solution for every risk

Risks are a huge factor in the project schedule. Labor shortages, unforeseen weather events, and supplier issues can postpone your timeline by several months. Fortunately, many of these are predictable and addressable.

Identify and assess these concerns and outline a solution for them. For example, a solid plan detailing your step-by-step actions on securing materials and equipment in heavy rains can minimize the impact of weather changes on your operations.

Mitigating risk is a key component of construction management solutions. From safety risks onsite that teams can clearly identify and communicate, including visual queues and callouts, to financial risk due to non-payment from a customer.

Project managers don't just have a direct reference of any aspect of a project that is off track. They can also communicate

with stakeholders and trade partners in real time using different collaboration features. This ensures that potential risks are communicated quickly, effectively, and transparently so teams can work together to reduce the impact or prevent the risk entirely.

7. Diversify your supply chain

Suppliers aren't directly involved with the construction, but they considerably impact your construction schedule. That's why relying on only a few suppliers is unwise.

Holdups in acquiring materials and equipment due to supply chain problems can cost a fortune in lost productivity, pushed-back timelines, and unmet client expectations.

Work with various suppliers to downplay the risk of disruptions and boost your supply chain resilience and reliability. Always have a backup if one supplier can't deliver their promise due to political issues, logistic mishaps, or natural disasters.

8. Allow longer than standard lead times

Previously, you could have called suppliers a week before to order construction materials – this is no longer realistic today.

Construction projects are highly demanded, impacting material lead times. Nowadays, you need 12-16 weeks to secure steel and lumber and 42-60 weeks for electrical switchgear. Receiving these early is better than late, so adjust lead times by adding weeks or months to the average interval to stay ahead of schedule.

Leverage vendor management portals and the submittal process in construction management software to clearly identify vendor timelines and account for production delays as necessary.

9. Monitor the project schedule continuously


When you have a round-the-clock eye on the timetable, it's easy to spot deviations that can stall the project. More importantly, you can compare the planned vs. actual performance and uncover discrepancies.

For example, you may need to change the due date or set a new deadline for some tasks because of unprecedented setbacks. If you lag or determine any issues, you can at least take prompt actions before they snowball into major problems.

10. Communicate with your team

Complement your schedule with tasks and action items. While construction scheduling software can rope everyone in about project updates, don't forgo in-person meetings. A daily stand-up of no more than 15 minutes can be used to answer questions, clarify concerns, and discuss strategies to increase productivity. This timeboxed meeting is also an opportunity to remind everyone of due dates, altered client expectations, or change of plans, ensuring every person is well-informed. Consider including your field team as well as trade partners who are currently and soon to be working onsite.

WIN DEADLINES BY NAILING YOUR SCHEDULE

A well-thought-out project timetable is a recipe for a winning project. It's a guide consisting of the steps you must follow to satisfy your clients and meet or surpass their expectations. Follow these nine strategies to refine your project scheduling and leverage construction management software to support your needs. 



About the Author

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About the Article

The [Builder Blog by RedTeam](#) was launched in 2023. It serves as a resource for construction professionals with industry insights, in-depth articles about solutions, and helpful customer stories. From best practices to workflow guides, the blog builds on RedTeam's expertise and knowledge of the industry to help create a better tomorrow for everyone in construction. You can learn more about RedTeam at [redteam.com](#).

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