



This white paper addresses the impact of work delays by providing examples of all the factors that affect workforce productivity. Further, it demonstrates how improving an external contractor's productivity – or wrench time – can benefit both the contractor and his client company.

To achieve these improvements, this white paper recommends implementing Track's®, proven business process automation software that provides real-time and actionable project information.



REAL RESULTS, REAL SAVINGS, REAL TIME



Another Work Request, Another List of Problems

In a typical Work Order scenario, a work request from a client company's Operations or Maintenance department leads to a Work Order (WO). The work is then planned and scheduled and the WO is assigned to a contractor. In this scenario, the contractor agrees to provide supervision and skilled labor beginning on a Wednesday day shift and complete all assigned tasks by end-of-day Friday. The contractor also agrees to provide the following resources for three, eight-hour shifts:

1 Foreman6 Craftsmen

168 straight-time hours at \$40 hour = \$6,720

For that same period of time, the client company agrees to provide:

- Equipment cleared & ready for work
- All prerequisites in place (drawings, specifications, scaffolding, MOC)
- Safe Work Permit
- Supervision

- Materials & equipment required to perform the work
- Inspections
- Acceptance of the work.

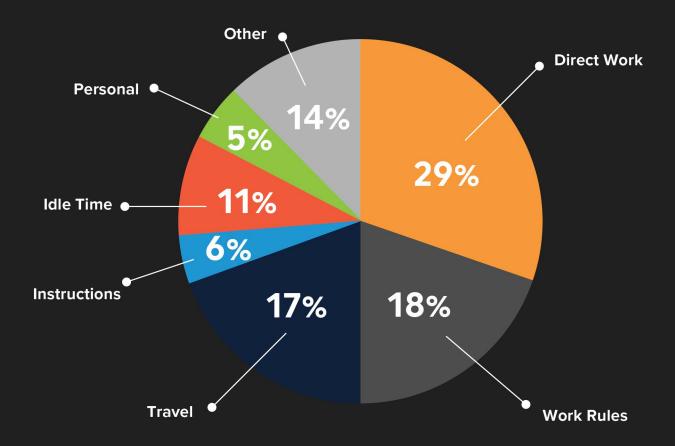
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Overtime as the Answer to Low Productivity

As a result of these delays, the job is now 70 man hours behind schedule, and the decision is made to work overtime hours to finish up by late Friday. Sound familiar? It's a situation that has been repeated at countless facilities over many years. More often than not, time and money are thrown at the problem. Few attempts to solve this problem get traction; fewer still generate permanent improvements. And yet, are we really surprised by such low productivity? A recent report by a national contractor suggests the standard workday looks like this



Intuitively, we recognize that improving wrench time is critical. To validate our beliefs, we calculate the impact of doubling productivity from 30% to 60%. One of the most stunning results is the immediate decrease in overtime – from 25% to 5%.

Overtime as the Answer to Low Productivity

In the example below, the Base Case is wrench time of 30%, which results in 25% overtime. Holding overtime constant and improving wrench time to 60% eliminates 750,000 man hours.

Improving overtime from 25% to 5% shifts 267,000 man hours to straight time. Combined, that yields \$38 million in overall cost reduction!

WRENCH TIME

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	Plan Hours	Plan Cost		Total Hours	TOTAL COST
S/T Hours @ \$40/hr	2,000,000	\$80,000,000	1,400,000	1,666,667	\$66,666,667
O/T Hours @ \$60/hr	500,000	\$30,000,000	350,000	83,333	\$5,000,000
Total Hours	2,500,000	\$110,000,000	1,750,000	1,750,000	\$71,666,667

\$38,333,333

'You Don't Know What You Don't Know'

An interesting paper by Stanley Grabil in Maintenance Technology Magazine suggests that the old adage "You don't know what you don't know" is at the heart of this continuing productivity malaise. We agree.

Referring back to the contractor's average workday analysis described earlier, it's often difficult to assess the root cause of idle time. It's even more difficult to know what to do about it. What's needed is actionable information. So, it stands to reason that any solution that gives owners and contractors real-time, actionable information on which to schedule work will help dramatically increase wrench time.

With Track® business process automation software, contractors and owners now have that solution. By delivering real-time activity, resource and cost information, Track® helps clients and contractors prevent issues that delay completion. Track's® accurate reporting translates into increased wrench time and impressive financial returns.

Track® is routinely updated with new POs, WOs and WBS elements, as they are released. Originating ERP/CMMS systems are automatically updated with actual, contractually compliant hours and costs. As a result, project teams are never in the dark about activities in the field.

How Track Can Help You

Track® works because it addresses areas of importance to both owners and contractors:

- It provides real-time metrics in an actionable format.
- It offers powerful incentives, as client companies and contractors share the \$38 million gain.
- It supplies contract language updates that support wrench time improvement.

Best of all, Track® involves everyone in the process and invests them in the success of the project. The greatest source of field data is the Foreman's crew, many of whom are often found standing around with their hands in their pockets.

The crew is scheduled to work on a specific Work Order. The Foreman knows his crew is waiting for a permit, materials, supervision, inspection or access to a Unit. Equipped with Track®, the Foreman quickly and accurately identifies and addresses these delays by WO, and the crew can get back to work.



Now we have actionable information that can be used to obtain meaningful improvements in wrench time!









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MANAGE TRACK OPTIMIZE

