Case Study Title: Digital Lean in Public Construction: How W.T. Rich Delivered Hunnewell Elementary on Schedule

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About W.T. Rich Company, Inc.: W.T. Rich Company, Inc. is a Massachusetts-based construction manager/general contractor known for delivering complex public-sector projects, including K–12 schools, higher education, public safety facilities, municipal buildings, and historic restoration. Founded in 1968, the firm supports clients across the Commonwealth and has grown from a small family business into a hundred-million-dollar company employing 70+ people.

About Touchplan®: Touchplan is the premier software offering of MOCA Systems, Inc. Used on the most projects, by the most users, to optimise the largest construction volume, Touchplan is the number one production planning and analytics platform. The real-time, cloud-based solution uses the collaborative foundation of the Last Planner System® to prevent schedule and budget slippage. It also provides owners and contractors the instant insights they need to track progress and anticipate problems on projects. To learn more, visit touchplan.io.

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Overview & Background to the Lean Initiative

W.T. Rich has differentiated itself in the construction market through disciplined scheduling and delivery performance on complex public building work. As project complexity increased and collaboration demands intensified, the company began exploring Lean planning to improve reliability, strengthen trade coordination, and reduce surprise issues that typically surface in the field. Their Lean effort used sticky-note pull planning with a Lean consultant. While the team valued the collaboration and commitment that sticky-note pull planning created, the limitations quickly became clear: physical notes could fall off boards, be moved without visibility, and made it difficult to capture performance data consistently.

Seeing the benefits of Lean, leadership sought a more durable & professional system, especially for pull planning. The requirement was to preserve the visual, commitment-based nature of sticky notes while adding structure and measurable feedback loops. After evaluating multiple solutions, W.T. Rich selected the Touchplan digital collaboration platform because it best supported the Last Planner System® end-to-end (including true pull planning), offered an intuitive visual interface (color-coded trades and swim lanes), and enabled metrics such as Percent Plan Complete (PPC) and reasons for variances. The Hunnewell Elementary School build was chosen as the pilot project to test and prove a fully digital Lean workflow from day one.

Lean Initiative Undertaken – Lean Thinking, Tools, Techniques

W.T. Rich selected the Hunnewell Elementary School project as the pilot for digitising its Lean planning processes. The 77,000-square-foot school had a tight 15.5 month schedule and a collaborative team willing to embrace Lean. The design included repeated classroom pods and clearly defined functional zones, making it practical to break the building into distinct work areas. This structure allowed the team to establish a steady pace and logical sequence while maintaining flow across trades.

Making Touchplan the Planning Backbone

A foundational implementation decision drove success. Touchplan was not treated as supplemental software. It became the project's planning backbone from day one of construction. Instead of managing pull plans, lookaheads, weekly commitments, and updates across spreadsheets and meeting notes, the team centralised all planning activities in a single shared platform.



Figure 1: Meeting Room

The project's Senior Project Manager served as the internal champion, leading onboarding and reinforcing consistency in how



Figure 2: Planning Session

plans were created and maintained. Lean planning works best when teams trust the plan, see it updated in real time, and understand how their commitments connect to others. By consolidating planning into one visible system, the team reduced fragmentation, improved transparency, and strengthened alignment across trades.

Structuring the Last Planner System® Digitally

W.T. Rich used Touchplan to support each phase of the Last Planner System®, including pull planning, lookahead planning, weekly work planning, and daily huddles.

Phase / Pull Planning

Before starting major phases such as rough-in, the team conducted collaborative pull plans. Rather than detailing workday by day months in advance, pull planning focused on sequencing by area and trade at a weekly level. Planning backward from key milestones aligned handoffs, surfaced coordination challenges early, and built shared ownership. Trades were shaping the sequence instead of reacting to a pre-issued schedule.

Lookahead and Make-Ready Planning

Approximately six weeks before execution, the team screened upcoming work for readiness. RFIs, procurement lead times, approvals, field measurements, access, and prerequisite work were identified and actively managed. These focused make-ready conversations prevented issues from surfacing unexpectedly in broader subcontractor meetings. By removing constraints early, the team increased the reliability of weekly commitments.

Weekly Work Planning

Weekly planning shifted from traditional general contractor-driven schedule reviews to commitment-based coordination. Trade partners confirmed what they could realistically complete in the upcoming week, selecting only work that was ready. Commitments were tracked using Percent Plan Complete (PPC), and missed commitments were reviewed for root causes. This feedback loop reinforced accountability and promoted continuous improvement.

Daily Coordination

Daily huddles referenced the same shared plan to ensure field execution aligned with commitments. With everyone working from a common system, misunderstandings about scope, sequence, and location were minimized.

Planning by Zones and Swim Lanes

A defining element of Hunnewell's success was the clarity of its visual planning structure. In Touchplan, the building was divided into zones, meaning distinct physical areas such as classroom pods, specialty rooms, corridors and mechanical spaces. Planning by zone allowed the team to manage work spatially and maintain logical progression from one area to the next.

Within each zone, work was organized using swim lanes, which are horizontal planning tracks that separate activities by trade or crew during pull plan ticket prep to understand each trade's intended sequence. During the pull plan, activities are then organized by work area to show a clear sequence of work in each space and understand the handoffs from trade to trade. Each trade was assigned a distinct color so the team could quickly see sequencing, overlap, and manpower distribution.

This structure has delivered several advantages:

- Trades could clearly see where they were working and for how long.
- Project leadership could identify early signs of trade stacking or over-allocation.
- The team maintained a consistent production pace rather than accelerating late to recover time.

By visualising work by location and trade, the team reduced congestion and limited inefficiencies that often occur when multiple crews compete for the same space.

Embedding Adoption Across Teams

W.T. Rich treated Lean participation as a project expectation. On projects designated for Lean delivery, Touchplan became the standard mechanism for conducting pull plans, make-ready meetings, and weekly commitments. Expectations were communicated clearly to trade partners at the outset.

Adoption was reinforced through hands-on support. The Senior Project Manager worked directly with subcontractors to demonstrate how to build tickets, manage sequencing, and track progress. The emphasis was placed on operational value, including fewer surprises, clearer coordination, and better workflow control.

The most significant change was cultural. While the software itself was straightforward, adopting shared planning responsibility required leadership and reinforcement. By maintaining consistency and visible support, Lean practices became embedded in daily operations.

Building Flexibility Through Buffer Zones

Hunnewell also demonstrated how digital Lean can accommodate change without losing momentum. Early in construction, W.T. Rich built a full-scale mock-up classroom to validate IT layout and functionality. This early review surfaced refinement before widespread installation began.

Although these changes improved the outcome, they introduced temporary disruptions to primary classroom areas. To protect the

overall schedule, the team incorporated buffer zones into the plan. Non-critical areas such as mechanical rooms and specialty spaces were intentionally sequenced later and kept ready for work.

When classroom pods paused to incorporate design adjustments, crews shifted into buffer areas instead of standing down. This preserved workforce continuity, minimised inefficiency risk, and prevented ripple effects across the schedule. The ability to pivot between zones showed how digital Lean supports adaptability while maintaining flow.

Strengthening Schedule Control and Communication

Because Touchplan functioned as a continuously updated planning system, schedule adjustments reflected real-time field conditions rather than assumptions. The team could quickly assess which zones were advancing as planned and where corrective action was needed. This improved decision-making and reduced last-minute surprises.

At the same time, stakeholder communication remained focused. While Touchplan supported detailed internal coordination, owner-facing updates were tailored to remain clear and actionable. The rigor of Lean planning remained intact behind the scenes, ensuring reliable execution without overwhelming stakeholders with unnecessary detail.

Lean Initiative Improvements & Impact

Hunnewell demonstrated that digital Lean can improve both project outcomes and team experience when it is implemented as a complete operating system. The most visible impact was delivery performance: Hunnewell was completed on schedule, despite an aggressive timeline and periods of design evolution. The team reported exceptionally high owner satisfaction, and internally the project became a benchmark, described by experienced professionals as among the most well-executed schedules of their careers.

Operationally, the initiative improved reliability in several ways. First, pull planning and make-ready planning shifted the team from reactive problem-solving to proactive constraint removal. Issues that previously would have surfaced in large, time-consuming weekly subcontractor meetings were handled earlier and more efficiently. While this required more one-on-one engagement from the GC team, it reduced wasted time for the broader group and increased the quality of commitments.



Figure 3: Completed Lobby Area

Second, visual planning by zone helped prevent trade stacking and reduced the need for late manpower spikes. With a stable production rhythm, trade partners could resource more predictably, maintain better quality control, and work more safely without the heightened risk that comes from last-minute acceleration.

Third, the use of buffers proved critical in protecting flow. The mock-up classroom process enabled valuable owner/stakeholder input (especially around technology), and Touchplan helped the team absorb resulting changes without disrupting workforce continuity. When primary areas paused, crews shifted into pre-planned buffer work rather than stopping—reducing downtime and maintaining momentum.

Finally, the project reinforced adoption scalability lessons: the success at Hunnewell directly influenced W.T. Rich's decision to expand Touchplan usage across additional public projects (schools, municipal facilities, fire/public safety, and airport work). The project validated that Lean is not limited to highly repetitive buildings; with the right structure and champions, the approach can improve predictability across varied public-sector environments.

Summary and Lessons Learned

Hunnewell's results highlight a consistent theme: successful digital Lean adoption goes beyond selecting software, it requires committing to a shared planning system, building internal champions, and embedding Lean routines into day-to-day execution. W.T. Rich's shift from sticky-note pull planning to Touchplan preserved the collaborative spirit of Lean while adding durability, transparency, and performance feedback. Making Touchplan the foundation from day one created alignment across pull planning, make-ready, weekly commitments, and daily coordination.

Several lessons stand out. First, pilot selection matters: Hunnewell's tight schedule and zone-friendly layout helped the team establish a repeatable pace. Second, visual planning clarity drives adoption—color-coded trades and swim lanes made coordination intuitive for partners in the field. Third, buffers protect flow: pre-planned flexibility allowed the team to absorb changes, including evolving technology needs, while keeping trade partners productive. Finally, W.T. Rich's experience reinforced that creating a culture of Lean is the heavier lift. While the platform is intuitive, consistent Lean behaviour's require coaching and leadership reinforcement. With the right structure and support, Hunnewell proved that digital Lean can raise planning reliability and deliver public projects with greater confidence and control.