



AUTODESK CONSTRUCTION CLOUD™



**Austin Commercial**  
An Austin Industries Company

## How Construction Quality Management Saved Austin Commercial 30,000 Hours a Year

Austin Commercial (Austin) – part of Austin Industries – is one of the largest, most diversified builders in the United States. Headquartered in Dallas, Texas, their seven regional offices serve the aviation, healthcare, higher education, and hospitality markets.

Driven by its core values of safety, service, integrity, and ownership, Austin is on a continual quest for improvement through technological innovation to produce high-quality buildings for its clients. The 100% employee-owned company is committed to exceptional client service, evidenced by their 85% repeat business.

With a safety culture that demands zero incidents, the Austin team focused on quality management to create a standardized program to improve project visibility, create consistency in reporting, and enable better communication between project stakeholders. The end goal was to enhance analytics and data management around quality for successful project delivery.



**Austin Commercial**  
An Austin Industries Company

### Customer Snapshot

FIRM SIZE: >5000  
 FIRM TYPE: GENERAL CONTRACTOR  
 REVENUE: \$493 MILLION  
 FOCUS AREA: COMMERCIAL  
 HQ: DALLAS, TX, US

### PHASE:



### PRODUCTS:



### VALUE DRIVERS:



Quality



Winning Business



Safety

## The Need for Consistent Quality Standards

Due to antiquated paper processes, scorecards were going home with field workers or being misplaced, leading to data loss.

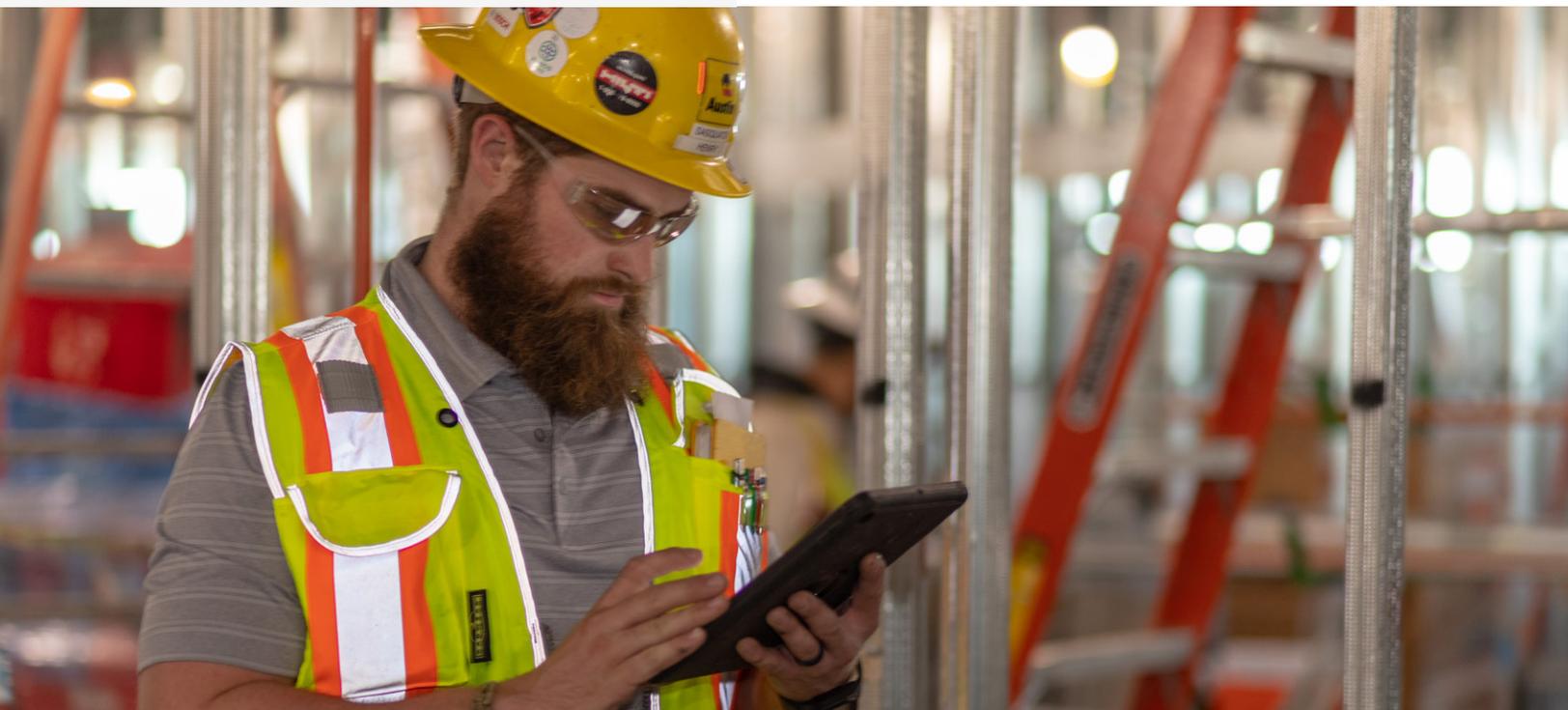
“iPads were still new, and everybody was reliant on paper-based processes,” says Jack Mangel, QA/QC Trainer at Austin Commercial. “With scorecards getting lost, we were losing an excessive amount of information that could benefit the project team and company overall.”

In addition to data loss, communication around issue management was siloed and shared across disparate systems, including email and text. The lack of a centralized database and method for creating and tracking issues led to miscommunication and inefficiencies between project teams, causing project delays, rework, and cost overruns.

“We needed to implement a field management tool that would track all the information on an issue in one place, so that if someone moved off a project, that knowledge of an issue did not leave with them,” says Mangel.

## Data Standardization Requires Diverse Stakeholder Collaboration

Austin used a Process Improvement Committee (PIC) to develop standardized operating procedures for data management to improve quality standards across projects, leveraging BIM 360 within Autodesk Construction Cloud™.



The PIC included diverse members with varying technical expertise ranging from superintendents to project engineers to senior project managers. The team assessed project data from 30 teams using BIM 360 between 24-36 months to identify what works and what does not work to refine and optimize processes. The team then used the lessons learned to create a standardized quality program that's scalable across the company.

"In the first year, we had gone from a project team having 15 different issue types to the company standard being four-issue types," says Mangel. "Stripping down the checklist was a huge undertaking, but a necessary action to drive consistency across our projects to make identifying, reporting, and tracking issues easier to drive higher quality deliverables for our clients."

With a brand-new template in place, Austin presented the checklist to a group of superintendents – a sub-PIC – to incorporate their feedback.

"We wanted to share the checklist with our superintendents for them to add their experiences and lessons learned. We also viewed it as a training opportunity to drive adoption," says Mangel.

## How to Drive Construction Quality Management Adoption

With the implementation of any new tool or process, there is always a learning curve. To ensure the successful adoption of the construction quality management program and use of BIM 360, Austin set out to win the hearts and minds of the boots on the ground.

In training project managers, office engineers, and superintendents, Mangel found that the path of least resistance is from those that have seen how the tool works before and for the better. "Those are the biggest advocates, which helps soften everybody else in the room," she says.

To increase the adoption of BIM 360 in the field, Mangel took a more calculated approach.

"It is about partnering people with differing degrees of technology together and making yourself available to answer follow-up questions," says Mangel. "Giving that extra line of support for additional help and training makes people more comfortable with something new and drives adoption."

"The fact that they see – even without having the technical experience and the background – how well BIM 360 pairs with construction performance in the field is a win-win," says Mangel.

## 30,000 Hours Saved by Standardized Data and Construction Quality Management

By developing standardized checklists in BIM 360, Austin was able to create:

1. Greater consistency in punch lists during project closeout leads to greater efficiency and organization.
2. More transparency and visibility into projects, so issues are well-documented regardless of who comes on or off a project.
3. Better alignment and flexibility in field observation reports from third-party inspections.

This new method was a dramatic change from their paper-based process and saved more than 30,000 hours annually. By getting digital tools into the hands of the field, information is managed and tracked in one place, with updates available in real-time. Once an issue is created, field workers take a picture, drop a pin, include notes for the root cause analysis, and the tool immediately notifies the respective project stakeholder. With greater detail in reporting, Austin's subcontractors have all the relevant information to resolve issues faster and with greater certainty.

By standardizing issue types on checklists, Austin can understand the root cause of construction quality issues in the field with greater certainty. For example, Austin had a project team that consistently reported issues and what they believed to be the root cause. Upon further investigation in BIM 360, they were able to assess that the root cause of the issue corresponded to a specific foreman on the jobsite. By assessing the data, they were able to work with their subcontractor to remove the foreman from the project and resolve the issue.

"This level of detail in our QA/QC process ensures issues are not only fixed to our standard, but the owner's as well," says Mangel.



## The Path Forward: Synthesizing Data for Greater Quality

Having worked with standardized data for several years, Austin is now at a point where it can synthesize that data to get better predictability and modify behaviors to increase profitability and reduce risk. “Besides delivering better projects, the data can tell us how we need to modify our program and what we need to do for projects to be more successful,” says Todd Harper, Director of Construction Technology at Austin Commercial.

To continue the evolution of its construction quality management program, Austin is using its standardized data to refine its processes and has a PIC in place to identify ways to tighten up the data during each phase of the construction to move data into a centralized platform to add value across the project lifecycle.

“You can have all of this data, but it is a matter of looking at it to understand and ensure successful outcomes,” says Harper. “We are using data to shift from measuring quality after closeout to leverage data analysis to discover leading indicators that allow us to review current projects to anticipate issues and change behaviors to direct toward better outcomes.”

“

This level of detail in our QA/QC process ensures issues are not only fixed to our standard, but the owner’s as well.”

**-Jack Mangel**  
QA/QC Trainer,  
Austin Commercial

With the success of standardizing its quality standards, the team is looking to apply the same process and learnings to use data analysis to uncover leading indicators to improve safety performance.

Austin’s mission is to drive safer job sites and deliver the highest quality projects to its clients. With better insight into their project data, they can do that.