

BACKGROUND & PROJECT OVERVIEW

To facilitate the phased renovation of existing classroom spaces during the 2025–2026 academic year, Lincoln Middle School initiated a fast-tracked retrofit project. The goal was to create 12 fully functional interior classrooms within the school's existing gymnasium.

This temporary but high-quality solution enabled uninterrupted learning while other classrooms were being upgraded.

Key Project Details:

- Building Type: Educational / K-12 Retrofit
- Scope: 12 temporary interior classrooms
- Location: Within existing gym structure
- Delivery Goal: Ready for use by 2025–2026 school year

Why Prefabrication?

Prefabrication was chosen to maximize speed and minimize disruption, while maintaining cost efficiency and quality. With limited time before the upcoming school year and constrained on-site space, a prefab solution allowed rapid deployment, simplified coordination, and reduced the need for extended work hours on site.



DESIGN & PLANNING

TJ Wies implemented panelized prefabrication systems, assembling 10-foot long by 9-foot tall panels complete with interior framing, drywall, taping, and paint—all in a controlled environment.

Design Coordination:

- Standardized panel dimensions for consistency
- Shop drawings developed by Excel Engineering
- Panels were designed with integrated electrical components for faster install
- BIM was not utilized for this project, but traditional coordination ensured accuracy

FABRICATION & ASSEMBLY

Fabrication Site: 650 E. Taylor (TJ Wies Prefab's Interior Prefab Solutions Facility)

Transportation: Tractor-trailer delivery via Negwer Materials

On-site assembly was efficient and low-impact:

- Panels were stood in place by hand and set by a small carpentry crew
- The entire panel installation was completed in just five days
- Electrical systems were fully pre-installed during fabrication



CASE STUDY:

Lincoln Middle School - Edwardsville, IL



SCHEDULE & EFFICIENCY

Prefabrication drastically accelerated the schedule, with all classroom panels delivered and installed in less than a week. This efficiency was especially critical to meet the tight school year deadline.

Key Efficiency Gains:

- Weeks of time saved over traditional construction methods
- No overtime labor required
- Seamless coordination, no delays

COST & OPERATIONAL BENEFITS

The prefab strategy led to significant cost savings for the school district, both in labor and materials.

Cost Benefits:

- Standard 8-hour workdays vs. overtime-intensive traditional construction
- Minimal material waste due to precise fabrication
- Reduced need for rework thanks to QA/QC processes

CHALLENGES & SOLUTIONS

Main Challenge:

- Maintaining square and true panel construction in a shop setting

Solutions:

- Strict use of QA/QC checklists and process controls
- Consistent build team for quality continuity

SUSTAINABILITY & QUALITY

Prefabrication contributed to the project's sustainability goals:

- Material waste was nearly eliminated through exact-length ordering
- Reduced site impact with quieter, cleaner installation
- Higher quality control achieved in a factory-like environment

TJ WIES PREFAB CONTINUES TO LEAD IN APPLYING OFF-SITE CONSTRUCTION METHODS THAT PRIORITIZE SPEED, QUALITY, AND COST-EFFICIENCY—EMPOWERING CLIENTS LIKE LINCOLN MIDDLE SCHOOL TO BUILD SMARTER AND FASTER.



OUTCOMES & LESSONS LEARNED

Results:

- Weeks saved on the schedule
- Significant cost savings for the district
- High-quality classrooms delivered quickly and efficiently

Would the team use prefabrication again?

Absolutely. The success of the Lincoln Middle School project has solidified prefabrication as a go-to solution for future retrofit and time-sensitive school construction projects. The team would replicate this approach with confidence.

