

Quality in Construction (QIC)
In-Person and Microsoft Teams Meeting
May 17, 2023
9:00 am - 12:00 pm

Attendees: *Attended in-person

- Ann McGauran, OSA*
- Chris Byerly, OSA*
- Alan Robertson, OSA*
- Paul Marshall, THEC
- Patti Miller, THEC
- Rich McNeil, AIATN*
- Jessica Stack, AIATN*
- Trey Wheeler, AIATN*
- Ashley Cates, AIATN*
- Greg Campbell, AIATN*
- Jim Cobb, TTU
- Bill Waits, MTSU
- Toney Poteet, UM
- Austin Oakes, UT
- Laura Bailey, ETSU
- Charles Milam, ETSU
- Marc Brunner, APSU
- Jennifer Murphy, STREAM
- Brian Wilson, STREAM
- Jim Prillaman, ACEC
- Kasey Anderson, ACEC*
- Bob Pitts, ABC
- Bryan Hay, ABC*
- Jason Madeiros, AGC
- Tom Lampe, AGC*

Discussion:

- I. A role call was conducted, and each attendee identified themselves by name and the organization that they represent.
- II. **CM/GC Self Performed Work – State’s Intent to Set Parameters – Alan Robertson (OSA)**
 1. Alan Robertson stated that a task force is currently being set up with the intent of discussing changes within the current contract regarding self-performed work. Alan stated that the QIC members will be updated as the task force discussion continues.
 2. Ann McGauran noted that the preliminary discussion will address a potential change in the percentage of CM/GC work and potentially the ability for CM/GC’s to bid on trade work. Ann continued that an additional component of discussion will include exploring specific parameters for SPAs , with OSA approval, to allow for additional self-performed work on specific projects.
 3. Tom Lampe stated that CM/GC’s want to be able to leverage existing labor pools in order to more efficiently deliver on the CM/GC value proposition. Tom continued that current research is ongoing for neighboring states to understand, regarding CM/GC, what they are and are not allowing and what types of guidelines are in place with respect to all stakeholders.
 4. Ann McGauran noted that the current percentage of 3% was a result of conversations when the delivery method was initially created based on concerns that this delivery method could adversely effect trades in TN. However, after many years of CM/GC project delivery within the State and considering current market conditions, the need exists to revisit these items.
 5. Alan Robertson noted that the current 3% number was established in the mid to late 90’s when CM/GC was initially implemented.
 6. Trey Wheeler asked what the task force’s goal for implementation currently is.
 - i. Ann McGauran stated that the task force is targeting the August QIC meeting for recommendations to the members.

7. Austin Oakes noted that having experienced a similar exercise before, that establishing a clear set of bidding parameters that balance competition amongst CM/GC's and amongst subcontractors are important areas of consideration.
8. Greg Campbell noted that this model of delivery is common practice in the private sector and has demonstrated the ability provide value while maintaining competition.
9. Brian Wilson noted that STREAM is interested in participating in any related discussion.
 - i. Ann McGauran responded that the task force's intent is to develop and present a potential framework to the SPA's for consideration prior to making an informal recommendation to the QIC members at the August meeting.
10. Brian Hay asked what the process would be once the recommended changes are accepted by all parties.
 - i. Ann McGauran responded that most of these items are addressed in the contract which can be updated without SBC approval but any revisions relative to SBC policy or OSA policy would have to go before the SBC. Ann reiterated that the goal is to have changes enacted by the end of 2023.

III. Construction Industry Market Update – Tom Lampe (AGC) and Bryan Hay (ABC), (A detailed report was previously distributed to the members/attendees and attached.)

1. Tom Lampe and Bryan Hay provided a detailed construction market update. (Attached)

IV. Legislative Update – Ann McGauran (OSA), Kasey Anderson (ACEC), Ashely Cates (AIATN)

1. Ann McGauran provided an update for HB 1217/SB 1459 (McNally/Sexton) "Higher Education Capital Projects Modernization Act". (Notes attached)
2. Kasey Anderson provided a legislative update which addressed the following items:
 - a. SB166/HB278 (Campbell/McKenzie) – Contracting with local government – leave policies
 - i. This bill failed to pass but would have allowed local governments to mandate leave policies for contracted entities.
 - b. SB252/HB71 (Johnson/Lamberth) – Requirement for public contracts
 - i. State prohibited from entering into a contract that establishes the venue for an action or dispute in a jurisdiction other than the TN claims commission, the chancery courts of Williamson County, and federal courts of the state. This is Public Chapter 0113 and is effective 4/4/23.
 - c. SB559/HB170 (Rose/Ragan) – Pending Ordinance Doctrine
 - i. Merits of a permit application should be judged on the law in effect at the time of application. This is awaiting the Governor's signature.
 - d. SB681/HB774 (Reeves/Moon) – Protecting Tennessee Businesses and Workers Act
 - i. Prohibits local government from adopting or enforcing an ordinance, regulation, resolution, policy, or another legal requirement that regulates or imposes a requirement upon an employer pertaining to hours worked, scheduling, or employee output during work hours. Also prohibits locals from imposing a wage or employment benefit mandate. Prohibits local government from discriminating based on wage or employment benefits set by a private company. This is Public Chapter 0309 and is effective 4/28/23.
 - e. SB707/HB1010 (Stevens/Grills) – Third party permitting
 - i. Taken off-notice
 - f. SB723/HB296 (Yarbro/Freeman) – Electrical Inspections

- i. Permissive – municipalities can allow professional engineers to do electrical inspections. This is Public Chapter 0376 and is effective 5/11/23.
 - a. Alan Robertson asked if this is a temporary or indefinite permissive change.
 - i. Kasey responded that this is an indefinite change.
 - g. SB1201/HB1276 (Johnson/Boyd) – Retainage
 - i. Deferred to 2024
 - h. SB1336/HB311 (Bailey/Butler) – Veteran-owned business – procurement
 - i. Would require state to strive to ensure at least 5% of procurement contracts are awarded to veteran-owned businesses
 - ii. Senate passed / Behind the budget in House
 - i. SB1377/HB799 (Southerland/Zachary) – Energy Conservation Codes
 - i. RESIDENTIAL ONLY – requires use of 2018 IECC. This is Public Chapter 0312 and is effective 7/1/23.
 - j. SB1459/HB1217 (McNally/Sexton) – SBC Changes
 - i. PC0411 effective 7/1/23
3. Ashley Cates provided a legislative update which addressed the following items:
 - f. Historic Development Grant Program (HDGP) | \$10M Funding Approval
 - i. The State is currently accepting letter of intent (LOI) for the HDGP through June 23. The letter of intent is required to proceed to the application. The application will be available July 10, 2023. LOI will be reviewed for eligibility prior to the application availability on July 10.
 - g. Capital Outlay | Investment over \$1.7B in Improvements & Maintenance Projects
 - i. At this time, the full summary of the final budget has not yet been released by the State. The proposed budget as well as the budget amendment are posted on AIA TN’s website. Highlights of the budget include:
 - i. \$288M in one-time capital funding for the Tennessee Department of Environment and Conservation to create four new state parks, and improvements for three existing state natural areas; and funding for renovate lodges at Henry Horton State Park and Natchez Trace State Park;
 - j. \$987.8M to fund six new Colleges of Applied Technology campuses as well as capital improvements at existing TCAT facilities across the state; and
 - k. \$30M in capital maintenance for projects across the UT System
 - f. SB1459-Lt. Gov. Randy McNally / HB1217-Speaker Cameron Sexton, Higher Education Capital Projects Modernization Act
 - i. Public Chapter 411 revised several sections related management of capital projects important to industry.
 - i. A project managed by the UT that used primarily for nonacademic purposes and is either fully funded by donations from a third-party or revenue from self-supporting auxiliary projects (including projects financed with revenue bonds or both) no longer has to go before the SBC for approval.
 - j. All Higher Education Institutions shall establish a transparent process to publicly disclose capital projects of \$10M or less that do not utilize bond funds or funds appropriated for capital outlay or capital maintenance and are paid with current or residual funds, directly to the state building commission,
 - k. The public chapter also defines “State Procurement Agency”, and
 - l. Revises the threshold amounts for maintenance projects.

- g. SB0274-Sen. Jack Johnson / HB0322-Rep. William Lamberth, K-12 School Safety Standards
 - i. Public Chapter 367 contains new state statute (Section 12) that sets specific security standards for public school buildings, including public charter school buildings, constructed, or remodeled after July 1, 2023.
- h. SB1377-Sen. Steve Southerland / HB0799-Rep. Jason Zachary, Residential Energy Code Standards
 - i. Public Chapter 312 removes outdated code language and amends the state law so local government cannot adopt a residential energy code for one-family & two-family construction that is more stringent than the TN State Fire Marshal's standards.
 - ii. Note: In July 2020, the State Fire Marshal's Office adopted the 2018 International Energy Conservation Code (IECC) with amendments for one & two-family dwellings & townhomes

V. HPBr and BIM Update – Chris Byerly (OSA)

- 1. Chris Byerly stated that 85% of HBPr documents were on file with OSA and that a tracking sheet will be updated and provided to SPA's to request any outstanding documents or comments from SPA's.
- 2. Chris stated that SB 928 will modify the standard for the Tennessee State Plane Coordinate System. Chris summarized the bill as follows:
 - b. The bill requires that plane coordinate values for a point on the Earth's surface, used to express the geographic position or location of the point, be expressed in international feet instead of the United States (U.S.) survey feet when using the Tennessee State Plane Coordinate System.
- 3. Chris added that this change will impact the TN BIMs standard and be reflected in an upcoming update to the standard.
 - a. Ashley Cates asked how this change will be reflected in the updated BIM standard.
 - i. Chris responded that a note will be added to the BIM manual that will direct users to the TCA reference for the change and that the narrative will be modified in the document to clarify what the change is and how it will impact the intent of the BIM standard.
 - b. Alan Robertson asked for an update on the Team Evaluation workbook.
 - i. Chris stated that OSA would be providing a team evaluation tracking sheet to SPA's and that the current goal is to provide an update to the QIC members in August as to the expected roll-out of the team evaluation workbook.

VI. SPA Projects Update – Brian Wilson (STREAM)

- 1. Brian Wilson stated that most projects from last year are in the design phase. Brian provided an update on projects that are in the recommended budget citing TDEC projects including a new inn for Henry Horton State Park and Natchez Trace State Park. Brian noted the Middle Fork Bottoms Visitor Center Rec Facility in Madison County, Savage Gulf and Scott's Gulf Wilderness will include improvement projects. Brian stated that additional projects include the Mental Health and Substance Abuse Services project including the phase two of the Western Mental Health Facility and a Water Education and Training Center. Brian stated that regarding capital maintenance projects, there is \$50 million anticipated in the budget for energy services contracting delivery method. Brian stated that there is an ESCO procurement for ESCO's where they are seeking a pool of vendors to utilize as projects are identified using this procurement method. Brian stated that work at MALETA and War Memorial Plaza are continuing.

SPA Projects Update – Austin Oakes (UT)

1. Austin Oakes stated that there is about 30 million in capital maintenance funded projects that will be coming forward after July 2023. Austin stated that the new budget recognizes the need for a new parking garage at UTK and a replacement residence hall at UT Martin. Austin noted that most of last year's projects are currently in design and some of these projects have CM's while remaining projects will be going out to bid soon.
 - a. Rich McNeil asked for an update on UT's P3 project.
 - i. Austin stated that the SBC recently acted to approve the award to a development firm and that UT will be returning to the SBC in June to seek approval for a pre-development agreement and finally UT will be seeking SBC approval for a ground lease and an operating agreement in November or December 2023.
 - b. Ann McGauran asked if Austin would describe the design and construction teams that have been approved for the P3 project.
 - i. Austin stated that Choate and Blaine will be involved on the construction side. Austin stated that CEC will be involved on the engineering side and that Cope Architecture will be working on the design in cooperation with a national firm. Austin that it is expected that Populous will provide services for the stadium portion of the work.
 - c. Ashley Cates asked how the pre-development agreement works regarding process.
 - i. Ann McGauran stated that the pre-development process and agreement should be formalized approved in June 2023 at which point the details will be available for review as public record.

SPA Projects Update – Tony Poteet (UoM)

1. Tony Poteet stated that UoM has several projects out for bid including a transformer replacement project for the recreation facility. Tony noted a paving project for south campus parking lot, a safety and security project and a project for boiler replacement in 3-4 buildings. Tony stated that there is also a project going out for bid soon that includes a chiller replacement and two cooling tower replacements in the Main Central Plant. Tony noted that the P3, 500 bed RFP, is moving forward with evaluations expected to continue through the end of 2023. Tony noted one new capital maintenance project for elevators, fire alarms and generators that will be coming forward to the SBC for designer selection soon. Finally, Tony noted that two major renovation projects are finishing program verification which will be prime candidates for CM/GC delivery and will be coming forward to the SBC soon as well.

SPA Projects Update – Bill Waits (MTSU)

1. Bill Waits stated that the P3 private hotel development RFP will come forward in July pending SBC approval. Bill stated that there is a plan to bring forward a P3 student housing project estimated to be approximately 700 beds. Bill stated that he anticipated the RFP will be issued in July 2024. Bill noted ~~that~~ at the July SBC meeting that MTSU will be requesting approval for the MTSU Aerospace project. Bill stated that this project will be CM/GC delivery method. Bill noted that the Central Plant and Campus Utility Updates project will be brought forward for July SBC approval with phase one of the project including new chillers and cooling towers as well as some campus utility and infrastructure. Bill stated that there is a pending CM/GC selection for KOM and Rutledge Hall. Bill indicated that The Applied Engineering Building is in the construction phase. Bill stated that the Student Athletics Performance Center is in construction as well. Bill noted that the Tennis Facility Improvements project is about halfway through construction with completion expected in late 2023. Bill stated that MTSU is updating consultant contracts and will be advertising RFQ's in July or August of 2023.
 - a. Ann McGauran asked for confirmation that the P3 housing project is anticipated for RFP advertisement in July 2024.

- i. Bill Waits confirmed that this is the anticipated date for the RFP advertisement.
- b. Ann McGauran added that because there are potential TSSBA implications, that P3 projects do need to be disclosed in the annual budget. Ann also indicated that P3 projects are not included in section 1 subject to SBC authority based on current statute. Ann added that the SBC has determined that all actions related to P3 projects be provided to the SBC.

SPA Projects Update – Jim Cobb (TTU)

1. Jim Cobb noted four capital maintenance projects that are funded including two HVAC-related projects, one elevator upgrade project and one to provide additional funding for upgrades to the auditorium in the administration building. Tony stated that three CM/GC have been awarded including the stadium project, the Johnson Hall renovation project and the Advanced Construction and Engineering building. Tony stated that there will be a solicitation for consulting contracts for those contracts expiring in August 2023. Tony stated that TTU is considering adding landscape architecture to the consultant list along with the typical expectation for architecture and engineering consultants.

SPA Projects Update – Dick Tracy (TBR)

1. TBR did not have a representative at the meeting at the time of SPA Project Updates.
2. Ann McGauran noted that OSA is in ongoing conversation with TBR and that all or most of the projects in the budget either have designer's selected or are in the designer selection process and that CM/GC selections should follow shortly thereafter.

SPA Projects Update – Marc Brunner (APSU)

1. Marc Brunner noted that one project will be coming forward in July for a building system control system upgrade which will not require a designer. Marc noted that numerous projects will be coming up for construction or bidding including the Health Professions Building which is expecting an August/September construction start date. Marc stated the welcome center conversion project is being reviewed by the SFM and that a June 2023 bidding time frame is expected. Marc noted that the schedule decompression on the Business College renovation resulted in a bid that was about \$1 million under the expected target. Marc stated that they are renewing the consultant pool for architecture, HVAC, Geotechnical and Civil Engineering.

SPA Projects Update – Laura Bailey (ETSU)

1. Laura Bailey noted that two capital maintenance projects that will be coming forward in July including the Safety Lighting and Fire Alarm System Replacement and the Multiple Buildings HVAC Repairs Phase 1. Laura stated the Powell Hall Renovation project is currently out to bid which is a renovation for a residence hall. Laura stated the Integrated Health Building is currently in the design phase and will be soliciting CM/GC delivery. Laura noted that Brown Hall renovation phase 1 is currently in program verification. Laura stated that the new academic building project is expected to begin construction in January 2024 following a planned demo of an existing building by the end of 2023. Laura stated that the housing renovation project is soliciting for CM/GC and that the RFQ has been released.

VII. SPA Projects Update – Patti Miller (THEC)

1. Patti stated that THEC is in the current FY 24-25 budget process and working on next step for capital outlay projects.
2. Paul Marshall stated that THEC has been involved in developing the K-12 security documents and that he is expecting a revised version of the higher education security document. Paul solicited questions and comments from the members for future revisions to the documents and noted that THEC welcomes furthering such conversations.
3. Patti noted that THEC will be modifying THEC policy relating to project disclosures in order to align with legislation impacting new SBC policy.

VIII. Closing Remarks

1. Alan Robertson thanked the attendees for their past input regarding meeting topics and welcomed continued input for future meeting agendas.
2. Ann McGauran welcomed virtual attendees to join in person as availability permits.
3. Alan Robertson noted that the next meeting will be August 16, 2023, both in-person and virtual.
4. Alan Robertson adjourned the meeting.

Action Items:

- CM/GC Self Performed Work - Update
- ABC and AGC representatives are requested to provide a Construction Market Update at the next QIC meeting in August.
- QIC members are encouraged to continue to provide input regarding topics of interest for future QIC meetings which can be submitted to Alan Robertson, Chris Byerly or Ann McGauran.

Next Meeting: August 16th, 2023
Ed Jones Auditorium at Ellington Ag Campus / Virtual - MS Teams

AGC/ABC Insights: QIC Construction Market Update – 5/17/2023

Contributors: Associated General Contractors – Turner, Messer, JE Dunn, Christman

Associated Builders & Contractors – Skanska, Brasfield & Gorrie, Bell Construction

Overview: Market Conditions 2Q 2023

Supply Chain - same challenges as last quarter, with electrical equipment/gear and large mechanical equipment the longest lead items. These are the biggest consistent challenges. Curtain wall and steel availability has improved although window-wall is a challenge in Middle TN. Generally, we are feeling relief in other materials/products/equipment. Mega projects (industrial, EV plants and data centers) continue contributing to the electrical and mechanical equipment issues. TN Titans is seen as the next mega project that will contribute to supply chain issues.

Labor - Inflationary pressure as a result of increased wages continues. From January 2021 through March 2023, construction wages rose 12% (Wall Street Journal, 4/7/2023). Given that about a third of construction cost equates to labor, there is an underlying cost increase of 4% due solely to wages. We can expect continued pressure on wages, as there is still a shortage of skilled workers and contractors are offering additional incentives to attract and retain workers. While the number of construction jobs decreased in March 2023, the unemployment rate in the industry continued to decline. Electricians remain at the top of the concern list (due to industrial and data mega projects being electrical-heavy scopes). Sitework has recently popped-up as being a tight trade and also drywall.

Subcontractor availability and competitiveness are also driving costs upwards. This is a result of the workforce issues and that subcontractors are generally very busy, especially in Middle, TN. Subcontractors are forced to be more selective about the projects that they choose to pursue and in addition they are carrying higher fees. As evidence of this, where CM/GC's typically expect a minimum of 3 bidders in every section, there are select trades where the industry is only seeing 1 or 2 bidders.

Escalation - The Producers Price Index (PPI) Final Demand for Construction increased 15.6% year-over-year at the end of Q1 2023. This represents an almost 3% decrease from the rate reported at the end of Q4 2022. The cost is trending in the right direction, but is still significantly higher than a year ago. Overall escalation has stabilized, and is less volatile than it has been. Industry recommends a 2% per quarter escalation for commercial construction projects. In addition, projects may need to take into consideration the subcontracting market and participation relative to each individual project.

Other general commentary: healthcare remains steady, commercial office is pretty much dead, multifamily continues but deals are moving slower hospitality has picked-up. Industrial remains very hot. Aviation will be picking up across the state.

Supply Chain Trends and Insights

Electrification is the primary means currently being pursued to eliminate the burning of fossil fuels and resultant carbon emissions. As the U.S. moves towards a future of nearly-zero emissions

by 2050, the demand for electrical infrastructure will continue and even accelerate. Obviously, this process will subsequently create huge demand for the electrical equipment required to move power around the grid and channel it to both residential and commercial spaces.

At the present time, electrical power used in commercial buildings centers around lighting, air conditioning, refrigeration and a small portion of space heating. As we convert furnaces, water heaters, cooking appliances and clothes dryers from gas and oil to electricity, power requirements will increase significantly. Add to this framework, the goal of having two out of three new cars and light trucks sold in the U.S. electrically powered by 2032, and you start to understand why The New York Times recently reported that total electricity demand in the U.S. may double by 2050.

Electrical equipment providers are already stretched to capacity. Lead times for electrical gear are in excess of 80 weeks (about a year and half) today. Many manufacturers are expanding capacity, but we have not yet seen a positive impact on lead times. This concern is highlighted to point out that long lead times for electrical equipment are here to stay. In order for project teams, design teams and owners to maintain desired project timelines, our recommendation continues to be early release of electrical equipment.

6-12 Month Lead Time and Price Forecast

- **Roofing products** - Roofing supply chain recovery is accelerating. Many roofing system components that have been problematic are now stabilizing. Polyiso insulation lead times now average 20 weeks or less, down from their 52-week peak. Most membranes are running at 18 to 20 weeks, and cover board is averaging eight weeks, down from 22 weeks. One category to watch is fasteners. Fasteners that are 9" or longer still have extended lead times.
- **Asphalt** - Asphalt pricing declines are tied to lower seasonal demand. As the PPI index suggests, we anticipate pricing increases in the upcoming quarter based on infrastructure work.
- **Concrete** - Cement and concrete markets continue to improve and are well-balanced in most geographies. However, as we enter periods of warmer weather, demand may increase dramatically. It is recommended to stay in close communication with concrete providers.
- **Structural steel** - After falling for six months after its peak in June of 2022, structural steel pricing is now rising. Hollow sections are up 10 percent and plate is up 11 percent. Wide flange remained flat through March but is expected to rise in April. Price drivers include a resurgent automotive sector, low levels of imported steel and rising scrap costs.
- **Architectural Interiors** - The availability of interior products has improved across the board, and lead times are down significantly—even glass-mat gypsum products are readily available. Pricing levels have also generally receded. However, pricing for rolled steel is

climbing. As a result, steel stud manufacturers have announced increases, with some being two separate increases of ten percent each in the first quarter of 2023.

- **Doors and Hardware** - Door hardware and hollow metal door lead times continue to hold in the 7-10 week range. The most challenging materials continue to be on the electronic access side. The availability of semiconductors is driving lead times of these products and it is recommended to allow 30 weeks lead time. Improvement is expected in the third and fourth quarters of 2023.
- **Appliances** – There are mixed reports regarding supply chain stability from different manufacturers. Some experience continued challenges from component suppliers and resulting lead-time extensions. Others report stabilizing supply chains and improved lead times in the two to three-month range. Expect more widespread improvements as housing demand continues to cool during 2023.
- **Elevators, Escalators. Moving Walks** - Material supply chains have generally improved slightly over the last quarter, but factory labor is still a challenge. Overall, lead times will likely come down over the next 6-12 months as demand from commercial projects eases. Prices are still expected to rise three to five percent this year as material and labor cost increases get passed on. Lead times for elevators vary considerably depending on the category:
 - Low-rise elevators range from 14-24 weeks
 - Mid-rise elevators range from 20-27 weeks
 - High-rise elevators range from 40-48 weeks
 - Escalators range from 12-20 weeks
- **Plumbing and Fixtures** - While lead times have come down over the past three months, prices for pipe, valves, fittings and fixtures have become variable, depending on the specific category. The average sales price of PVC and steel pipe has steadily declined over the past three months, as commodity prices and freight costs have also declined. However, recent increases in steel costs may start to push those other material prices up moderately in Q2 2023. The average price of copper pipe has decreased from its high 1 year ago but increased 14% over the past 3 months, with prices expected to rise further. Regarding valves, fittings and fixtures, approximately 100 manufacturers have announced price increases in January 2023 that range from six to eight percent. Over the next 6-12 months, prices are expected to increase by 5-10 percent.
- **HVAC Equipment** - HVAC demand continues to be driven by strong demand for new construction and HVAC upgrades in both the public and private sectors. With the HVAC equipment market being heavily fragmented by a large number of manufacturers using proprietary designs, lead times can range from 10-12 weeks up to 65+ weeks. Air-cooled chillers and certain centrifugal chillers are running 45-65 weeks. RTU lead times have a very large range based on tonnage and air handlers can range from 10 to 65 weeks based on specifications. Generally, material lead times are improving. However, this is being offset by strong backlog and a shortage of factory labor resulting from the tight labor market. Some lead times including VFDs have improved, but ECM motor lead times have

not and are still running 50-80 weeks. The key to lead time success is early specification coordination with desired manufacturers to achieve optimal lead times.

- **Electrical Gear** - Electrical gear continues to be the longest lead time material for most commercial construction projects. Lead times are specific to the type of equipment and manufacturer. However, switchgear from most manufacturers is being quoted at 70-80 weeks. Some are even quoting 100+ weeks for large transformers and double-ended substations. Other equipment, such as panel boards, busway and transformers are being quoted at 10-40 weeks depending on specifications. These lead times do not include the time for submittal approval. Demand from data center projects continues, as well as K-12, Higher Education, Healthcare and Automotive. Data Centers are the primary reason for increased lead times which is compounded by the general electrification trend to meet carbon reduction goals. The supply and demand imbalance, as well as commodity and labor costs, is predicted to push prices up over the next 6-12 months.
- **Electrical Commodity Materials (includes lighting fixtures)** – Lead times for most commodity electrical items are down as manufacturers have stabilized their supply chains. However, medium voltage cable lead times are still in the 30-45 week range. Prices for copper wire have bottomed out in March as the COMEX copper price has come down from its high in January and stabilized around \$4 per lb. Manufacturers of wire have announced price increases in the range of 5-10 percent which will be implemented over the next 6-12 months. However, aluminum wire is expected to stay relatively flat.
- **Generators** - Order intake for generators among the major manufacturers continues to run three to four times the historical rates. Demand is coming from all sectors, but data center demand continues to be extraordinary. The supply chain is still challenging. For example, even when the generator can be delivered on time, custom sound enclosure fabrication may become the constraint based on the lack of industry capacity for this level of demand. Material and labor cost inflation will drive significant price increases this year. The 2MW gensets are now exceeding 100 weeks. Forecasts indicate that the need for data centers will increase over the next three to four years. Gensets in the range of 230kW to 2MWs are running 65-75 weeks due to broad demand from many industries. Prices continue to rise at an annual rate of 15-20 percent due to material, labor and overall demand.
- **Lab Casework and Fume Hoods** - Lab casework lead times are holding steady at the standard range of 8-12 weeks. Input material pricing is escalating (steel) and causing upward pressure on pricing to the market.
- **Wood Products** – Lumber pricing continues to hold steady at pre-COVID levels. Housing starts were reported at 1.4 million (annualized) in February, which is essentially flat compared to starts reported for the end of 2022.
- **Transportation** - Shipping costs continue to decline as post-COVID consumer behavior continues to shift away from purchasing goods and shifts more towards travel and entertainment. As a result, port congestion has eased and shipping costs are approaching pre-pandemic levels.

Remedies/Solutions

- Every team needs to get deeper into the supply chain. It is not enough to depend on subcontractor and supplier input.
- Contractors should be leveraging relationships with the manufacturers to access delayed materials and equipment – can push to get partial, critical orders on critical path.
- It is not enough to look at overall escalation %, you need to look closer and account for escalation material by material because of the variation between materials.
- A robust procurement strategy is essential – leads times are emphasis.
- Example item in a procurement strategy: Buying large air handlers early and designing around it.
- Cost benefit of escalation clauses – leverage allowances – talk with trade partners about allowances in lieu of trade partner taking all the risk to keep from paying worse-case scenario all the time.
- You can drive escalation into a project by buying too early.
 - o Understand when materials need to be on site.
 - o Make acquisitions just in time where possible.
- Early release packages for long-lead items continues to be a good strategy...consider warehousing strategies (costs associated with this) to ensure schedule.

**May 17, QIC Meeting
Legislative Update – Ann McGauran**

Section 1: removes UT projects fully funded by donations/ self-supporting auxiliary's, including TSSBA funds, from SBC authority.

- Allows UT to make all designer and contractor selections. UT will have to establish a protest method for designer selections.
- Requires UT to use SBC approved delivery methods and contracts.
- Projects that use TSSBA bonds will still need to be included in the annual capital budget.
- UT is required to provide a quarterly report to the SBC listing all active projects from design contract is executed through substantial completion of the project.

Section 2: replaces the THEC Higher Education quarterly disclosure with a process that will allow for immediate disclosure upon approval by the higher education institution.

- This is for Higher Education improvement projects from \$1 to \$10M and maintenance projects from \$1M to \$10M in total cost.
- SBC will establish the requirements for consistent reporting that will likely be similar to the THEC format.
- All Higher Education institutions will report these individually on their websites, but OSA will link from their site.

Section 3: defines a State Procurement Agency to match the SBC Policy definition and allows for the SBC to name additional SPAs without a revision to statute.

Section 4: raises the Higher Education major maintenance threshold per structure for projects requiring SBC approval and defines a total project cost threshold.

- STREAM and TBR managed projects will remain at \$250,000 per structure but also defines and project over \$1,000,000 as requiring SBC approval to prevent the bundling of many structures into a single large contract managed outside of the SPA process.
- 4-year Higher Education institutions will increase to \$1,000,000 per structure and also defines and project over \$3,000,000 as requiring SBC approval to prevent the bundling of many structures into a single large contract managed outside of the SPA process.

Section 5: aligns the higher education statute that prohibits splitting up work to avoid SBC approval with the new thresholds in section 4.

Section 6: states that act takes effect July 1, 2023.