

Quantifying a Loss of Labor Productivity: When You Can't Do A Measured Mile, What Now?

S19: Construction SuperConference, Orlando, Florida

December 7, 2021





Megan Wells (Panel Moderator)

Managing Director, Ankura

30 Years Experience

Forensic Accounting, Construction Cost Auditing

Damages Expert Testimony

EDUCATION

BS, University of Washington

CERTIFICATIONS

Certified Management Accountant

CONTACT

Seattle, WA
+1.206.713.0900 Mobile
megan.wells@ankura.com



David W. Halligan, PhD, PE

Managing Director, Ankura

30 Years Experience

Construction Management

Claims Consultant

EDUCATION

PhD, University of California, Berkeley

MS, University of California, Berkeley

BS, University of California, Berkeley

CERTIFICATIONS

Professional Engineer, Civil, State of California

Fellow, Project Management College of Scheduling

CONTACT

San Francisco, CA
+1.415.356.7138 Direct
+1.510.610.4187 Mobile
david.halligan@ankura.com



Meredith Jones-McKeown

Partner

18 Years Experience

Partner, Construction Practice Group, Perkins Coie LLP

EDUCATION

UC Berkeley School of Law, J.D.

Columbia College, B.A., *cum laude*

MEMBERSHIPS AND RECOGNITIONS

Fellow, Construction Lawyers Society of America

Listed in *Chambers USA* "America's Leading Lawyers" for Construction Law, 2021

Listed in *Best Lawyers in America* 2020 - 2022: Construction Law

Named Lawyer of the Year in Construction Law, San Francisco by *Best Lawyers in America*, 2021

Listed in *Northern California Super Lawyers*, Rising Star, 2011 - 2017, Super Lawyers, 2020 - 2021

Recognized as a "Most Influential Women in Bay Area Business," *San Francisco Business Times*, 2017

CONTACT

San Francisco, CA
+1.415.344.7097 Direct
+1.415.269.8866 Mobile
mjonesmckeown@perkinscoie.com



Alexandra Krisch

Corporate Counsel, Clark Construction Group

8 Years Experience

Construction Litigation and ADR

Dispute Avoidance / Risk Management

Project Counseling

EDUCATION

JD, George Mason University School of Law

BS, James Madison University

CERTIFICATIONS

Admitted to practice law in DC, VA, and MD

CONTACT

Bethesda, MD
+1.301.272.8123 Direct
Alex.Krisch@clarkconstruction.com

Measured Mile v. Modified Total Cost v. MCAA Factors

Success Rates Substantially Different

Ranking of Quantification Methods by “Success” Rate
(that is, Claimant recovered some amount)*

Measured Mile – 61%

Modified Total Cost (MTC) – 47%

MCAA** Factors – 36%

Total Cost - 26%

*(Ibbs & Gentile, 2021)

** Mechanical Contractors Association of America

MCAA v. Modified Total Cost

Threshold Question

Initial Question: Whether the MCAA or other factor approach is allowed and accepted in relevant jurisdiction?

Courts: “Total cost method has been termed a ‘last resort’ method or determining damages... [only] where no better method of proof of damages is available.”

Cumulative impact claims are generally “not favored” and have “never been favored” by the courts.

Safeguards for reliability must exist, and evidence of impacts must be “fully” established; contractor must also consider (and account for) its own adverse impacts on the work.

MCAA v. Modified Total Cost

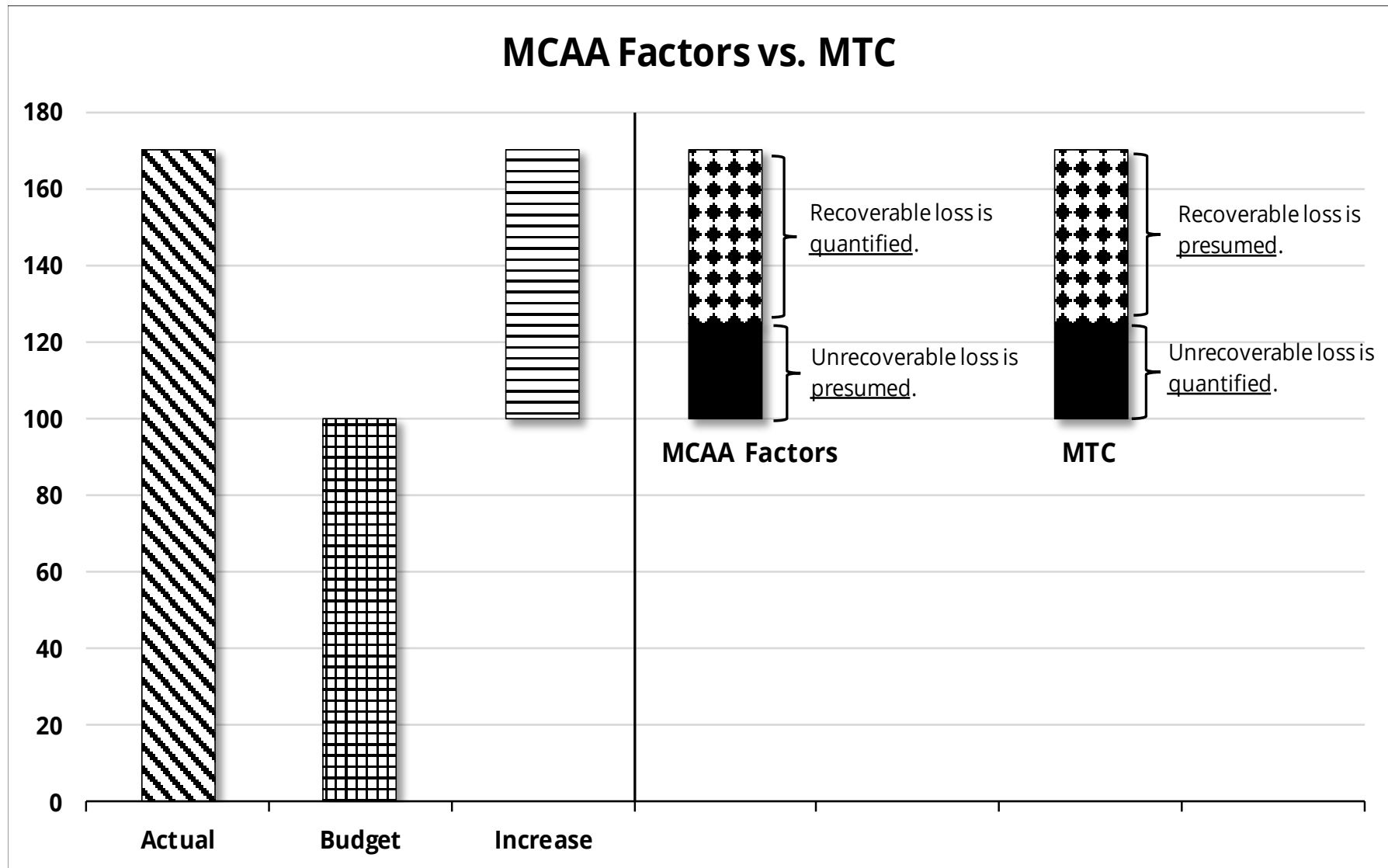
Secondary Key Questions

Question No. 1: Is MCAA or other factor approach just another way of presenting a modified total cost claim? (“Two Sides of the Same Coin?”)

Question No. 2: If so, can MCAA or other factor approach be improved to increase the success rate?

MCAA v. Modified Total Cost

Two Sides of the Same Coin – Both Methods Leave a Pool of Costs Unexplained



MCAA v. Modified Total Cost

What are the MCAA (or other) Factors?*

Stacking of Trades

Errors & Omissions

Overtime

Morale & Attitude

Beneficial Occupancy

Season & Weather Change

Reassignment of Manpower

Joint Occupancy

Factors Not Listed by MCAA

Crew Size Inefficiency

Site Access

COVID-19

Concurrent Operations

Logistics

Poor Planning

Dilution of Supervision

Fatigue

Poor Supervision

Learning Curve

Ripple

Etc., etc., etc. ...

Note: Do not confuse MCAA Factors with the MCAA Percentages!

MCAA v. Modified Total Cost

Requirements for Modified Total Cost Claim*

First Requirement: No Better Method Exists

Second Requirement: Bid Estimate was Reasonable

Third Requirement: No Fault by Claimant

Fourth Requirement: Claimed Costs are Reasonable

*(Case Law quoted herein taken from Dale & D'Onofrio, *Construction Schedule Delays*, 2020 Edition)

MCAA v. Modified Total Cost

Requirements are Effectively Identical

First Requirement: No Better Method Exists

MCAA:* “A highly regarded method of measuring productivity loss is known as the ‘measured mile’...[but] on some projects, there are no unimpacted labor hours. In such cases, the MCAA factors can be very useful...”

The Courts: “The...argument in favor of using the modified total cost is the other methods cannot be used...”

*MCAA, *Change Orders, Productivity, Overtime: A Primer for the Construction Industry* (2020 Edition)

MCAA v. Modified Total Cost

Requirements are Effectively Identical

First Requirement: No Better Method Exists

The Courts: “[MCAA is appropriate] to estimate the extent of impact on labor productivity in the absence of better evidence, such as a ‘measured mile’ analysis.”

Total cost claims have “never been favored” by the courts and have “been tolerated only when no other mode was available and when the reliability of the supporting evidence was fully substantiated.”

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Second Requirement: Original Estimate was Realistic

MCAA: “Before a contractor makes a claim for a loss of productivity...

- Was the estimate/plan of craft hours accurate and reasonable?”

The Courts: “...method assumes...the bid was accurately and reasonably computed...”

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Third Requirement: No Fault by Claimant

MCAA: “Before a contractor makes a claim for a loss of productivity...

- Did the contractor cause this loss of productivity?”

The Courts: “Adjustments must be made, for example, because the contractor is partially at fault.”

“Performance inefficiencies can inflate a contractor’s costs”

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Fourth Requirement: Claimed Costs are Reasonable

MCAA: “The actual hours must be further adjusted to deduct:*

- Time and materials hours
- Rework
- Change orders
- Hours...not affected by a loss of productivity
- Other types of productivity losses”

The Courts: “The plaintiff must establish...the contractor’s incurred costs were reasonable”

*List should be viewed as non-exhaustive (see last bullet).

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Fourth Requirement: Claimed Costs are Reasonable

MCAA: “When using the retroactive productivity loss analysis, it is prudent for the contractor to check the estimated loss of productivity, which results from using the MCAA factors against

the modified total cost method of calculating the loss of productivity.”

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Additional Consideration:

Cause and Effect Must be Separately Established

MCAA: The factors “do not address the means and methods of proving the impacts, often known as the “triad of proof,” which includes proving

- liability
- causation
- resultant injury

This is also known as the ‘cause-and-effect’ connection.”

MCAA v. Modified Total Cost

Requirements are Effectively Identical

Additional Consideration:

Cause and Effect Must Separately Established

MCAA: Using their method “...assumes that the contractor has already determined liability and causation, and is attempting to quantify the “resultant injury” by use of MCAA factors.”

The Courts: The contractor “has not proven entitlement to all of the asserted causes of inefficiency [therefore] the quantum presentation is of diminished utility.”

MCAA v. Modified Total Cost

Additional Considerations Regarding MCAA Factors

The MCAA Percentages are Frequently Misunderstood

The MCAA factors are **not** the MCAA percentages applied to a given factor. The factors are the causative event (e.g., out-of-sequence work, etc.)

The MCAA percentages when originally published were described as “necessarily arbitrary.”

“MCAA does not have in its possession any records indicating that a statistical or other type of empirical study was undertaken in order to determine the specific factors or the percentages of loss associated with the individual factors.”

MCAA v. Modified Total Cost

Additional Considerations Regarding MCAA Factors

The MCAA Percentages are Often Simplistically Misapplied (One Size Does **Not** Fit All)

“The MCAA factor percentages sometimes change as the actual project conditions change. To more accurately demonstrate the retroactive loss of productivity in a project, it may be desirable to divide the project into months (or, if possible, weeks) and to assign loss of productivity percentages by MCAA categories by time periods, based on the accounts of eyewitnesses or on documents prepared contemporaneously”

“Consideration of the areas of the project and the crews working in those areas is very important in performing this analysis.”

MCAA v. Modified Total Cost

Final Questions to Be Addressed

Would a properly implemented factors approach result in a better outcome?

- Use factors to explain every aspect of the overrun, not just the portion being claimed
- Divide the project into weeks or months and separately analyze individual elements of the project
- Do not simply “plug-in” the MCAA (or other) percentages – develop your own percentages based on records & interviews

Would a detailed modified total cost claim that examined individual overruns (vs. a global overrun) be an improvement?

Challenging a Claims Expert

Attack Each Required Element

- ❑ First Requirement: “No Better Method” Exists to Calculate Damages
 - ✓ Performed forensic review of documents?
 - ✓ Interviewed day-to-day jobsite participants?
 - ✓ Interviewed project managers / upper management?
 - ✓ Performed CPM scheduling analysis?
 - And challenged CPM logic sequencing?
 - ✓ Considered other methods (Measured Mile, MTC, MCAA, etc.)?
 - ✓ *What is the basis of conclusion that **this is the best methodology?** Why not any of these others?*

Challenging a Claims Expert

Attack Each Required Element

- ❑ Second Requirement: Contractor's Estimate was Reasonable
 - ✓ Analyzed each bid scope item?
 - ✓ What is the objectively reasonable “baseline”?
 - Compared to the other contractors/trades who bid that work?
 - Compared other jobs contractor/sub bid for similar work?
 - Identified and accounted for those differences in scope?
 - ✓ Evaluated impacts to scope/schedule based on other phases, scopes on similar projects, or prior work performed by contractor?
 - ✓ Considered efficiency factors (up or down) for the scope/project?

Challenging a Claims Expert

Attack Each Required Element

- Third Requirement: No Fault by Claimant
 - ✓ Analyzed work sequence, activity durations, manpower, expenditures?
 - ✓ Compared and determined variances between estimated and actual work durations/sequences? *Estimated* vs. *actual* productivity?
 - ✓ Performed CPM schedule analysis and identified / removed any contractor or lower-tier delays?
 - ✓ Accounted for (and removed) schedule impacts or scope changes contractor either (a) caused or (b) failed to mitigate?
 - Close supervision? Coordinated labor? Supplemental labor forces?
 - Protected against weather? Logically sequenced work? Used contractor's own forces?

Challenging a Claims Expert

Attack Each Required Element

- ❑ Fourth Requirement: Claimed Costs Are Reasonable
 - ✓ Forensic accounting with audit of all documents? CPM scheduling software? Interviewed people on jobsite?
 - ✓ Compared claimed costs to other jobs contractor/sub had for similar work? Accounted for any differences in scope?
 - ✓ Removed any non-compensable impacts?
 - Contractor and sub-tier impacts, delays, E/O's, defects, repairs, etc.
 - Contractor's illogical or inefficient sequence of work
 - Lack of manpower, inability to mobilize, high turnover, low morale, restricted site access, excessive overtime, lack of skilled labor, etc.

Challenging an Expert on Entitlement

Attacking Expert's MCAA or MTC Analysis Based on Lack of Entitlement

Checklist to challenge expert conclusions on **entitlement**:

- ✓ Explicit contractual bars (e.g., forbidding additional time or compensation for alleged differing site conditions, unapproved changes, force majeure events, etc.)
- ✓ Express or implied waiver by the contractor (or its sub-tier contractors, e.g., for any pass-through claims)
- ✓ Failure to timely provide notice or properly assert a claim
- ✓ Consider other areas that might frustrate entitlement:
 - Contributory fault, unclean hands, intentional interferences, misrepresentation, detrimental reliance, fraud, pass-through claims, laches, etc.

Challenging an Expert on Quantum

Attacking Expert's MCAA or MTC Analysis Based on Incorrect Quantum

Checklist to challenge expert conclusions on quantum:

- ✓ Any overlap between claims? Double-recovery?
- ✓ Contemporaneous documents, recordings, or observations related to phases, milestones, delays, loss of productivity?
- ✓ What comparisons did expert perform?
 - How do alleged costs compare to “unimpacted” work? What about lower-tier claims or losses?
 - Has expert prepared any corroborative or comparative analysis to other methods, phases, or scopes of work?
 - Any factors applied in error, too speculatively, without establishing causation, or “*non-conservatively*”?

Preparing Your Claims Expert

Preparing or Defending Expert's MCAA or MTC Analysis

- ❑ First Requirement: No Better Method Exists
 - ✓ Expert exhausted all other claim methodologies (Measured Mile, CPM, MTC, MCAA, etc.)
 - ✓ Performed forensic review of documents, spoke to project team, interviewed jobsite team and upper management
 - ✓ Analyzed schedule, performed CPM analysis, and arrived at conclusions / supports logic sequencing
 - ✓ Ensure expert uses scientific or “accepted methodologies” throughout the analysis

Preparing Your Claims Expert

Preparing or Defending Expert's MCAA or MTC Analysis

- ❑ Second Requirement: Estimate was Reasonable
 - ✓ Analyze contemporaneous records measuring loss of productivity, use MCAA or MTC as “corroboration” of comparative analysis using Measured Mile or similar dispute / project
 - ✓ Established objectively reasonable *baseline*
 - Compared “chunks” of project scope / time elements
 - Once project is divided into weeks or months, expert can separately analyze individual scope / time elements and their impacts, compare trends
 - Accounted for potential efficiencies / inefficiencies
 - ✓ Compared other bidders (or averages)

Preparing Your Claims Expert

Preparing or Defending Expert's MCAA or MTC Analysis

- ❑ Third Requirement: No Fault by Claimant
 - ✓ Analyzed contemporaneous records, work sequences, activity durations, manpower, mobilization / demobilization, expenditures, etc. **using accepted methods** and software
 - ✓ Compared and determined variances between estimated and actual work durations/sequences
 - Estimated vs. actual productivity
 - Performed CPM schedule analysis and identified / removed any contractor or lower-tier delays?
 - ✓ Accounted for (and removed) schedule impacts or scope changes contractor either (a) caused or (b) failed to mitigate?

Preparing Your Claims Expert

Preparing or Defending Expert's MCAA or MTC Analysis

- ❑ Fourth Requirement: Claimed Costs Are Reasonable
 - ✓ No overlap between claims or quantum
 - ✓ Used contemporaneous documents, recordings, or observations related to phases, milestones, delays, loss of productivity, etc.
 - ✓ Alleged costs align with costs for “unimpacted” or successful phases / scopes of work
 - ✓ Alleged costs align with corroborative or comparative analysis to other methods, periods, phases, or scopes of work
 - ✓ Costs are not erroneous, too speculative, lacking causation, or too overreaching

Using Expert to Establish Quantum

Preparing or Defending Expert's MCAA or MTC Conclusions on Quantum

Checklist for establishing quantum with your expert:

- ✓ Focus first on the “reasonable certainty” of the cost rather than the “reasonable certainty” of causation
 - The former is easier to prove
- ✓ Focus next on “no more precise proof of damages,” relying on the comparative analyses
- ✓ Need not establish *delay* to establish *disruption* damages (they can overlap, but not always)
- ✓ Ensure all non-compensable delays or disrupting events been identified and excluded from the claim

Court Application of MCAA

- Turner Construction Company v. Smithsonian Institution
- Suffolk Construction Company, Inc. v. General Services Administration
- Trane US Inc. v. Yearout Service, LLC
 - “The measured mile methodology uses actual facts and data from a project”

Questions

Contact Information



MEGAN WELLS

Managing Director, Ankura

Moderator

megan.wells@ankura.com



MEREDITH JONES-MCKEOWN

Partner, Perkins Coie LLP

Speaker

mjonesmckeown@perkinscoie.com



DAVID W. HALLIGAN

Managing Director, Ankura

Speaker

david.halligan@ankura.com



ALEXANDRA KRISCH

Corporate Counsel, Clark

Speaker

Alex.Krisch@clarkconstruction.com

ankura 



Disclaimer

The material in this presentation has been prepared by Ankura Consulting Group, LLC (“Ankura”) is general background information about the matters described herein to be used for informational purposes only. This information is given in summary form and does not purport to be complete. This information should not be considered legal or financial advice. You should consult with an attorney or other professional to determine what may be best for your individual needs.

Information in this presentation should not be considered as advice or a recommendation to investors or potential investors in relation to holding, purchasing or selling securities or other financial products or instruments and does not take into account your particular investment objectives, financial situation or needs. No one should make any investment decision without first consulting his or her own financial advisor and conducting his or her own research and due diligence.

Ankura does not make any guarantee or other promise as to any results that may be obtained from using the information in this presentation. Ankura shall have no liability to the recipient of this presentation or to third parties, for the quality, accuracy, timeliness, continued availability or completeness of any data or calculations contained and/or referred to in this presentation nor for any special, direct, indirect, incidental or consequential loss or damage that may be sustained because of the use of the information contained and/or referred to in this presentation or otherwise arising in connection with the information contained and/or referred to in this presentation, provided that this exclusion of liability shall not exclude or limit any liability under any law or regulation applicable to Ankura that may not be excluded or restricted.

IRS Circular 230 Disclosure: Ankura and its affiliates do not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended or written to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the “promotion or marketing” of a transaction (if relevant) contemplated in these materials. Accordingly, you should seek advice based your particular circumstances from an independent tax advisor.

This presentation contains data compilations, writings and information that are confidential and proprietary to Ankura and protected under copyright and other intellectual property laws, and may not be reproduced, distributed or otherwise transmitted by you to any other person for any purpose unless Ankura’s prior written consent have been obtained.