



Cloudy with a Chance of Windfalls: IMPROVING CIP COST AND SCHEDULE CERTAINTY

TACWA Meeting

San Antonio Water System

SEPTEMBER 23, 2022



Chitra Foster, PE, DBIA, ENV SP
Texas Water Practice Lead

25 years of experience
*Engineering and construction
in the water industry*



Dave Kinchen, DBIA
Regional Construction Business Lead

34 years of experience
Construction delivery in the water industry

123 Year History in Water

\$3 billion

annual construction delivery

**130+ COLLABORATIVE
DELIVERY PROJECTS**

in the past 10 years

2,310+ water projects

in the past 10 years

Over 1,200

Texas based construction, craft & engineering professionals

\$3.8 billion

annual procurement volume

140 procurement professionals

120MGD WICHITA NWWTF



#2

DESIGN FIRM IN
TEXAS & LOUISIANA

#6

TOP 100
DESIGN-BUILD
FIRMS

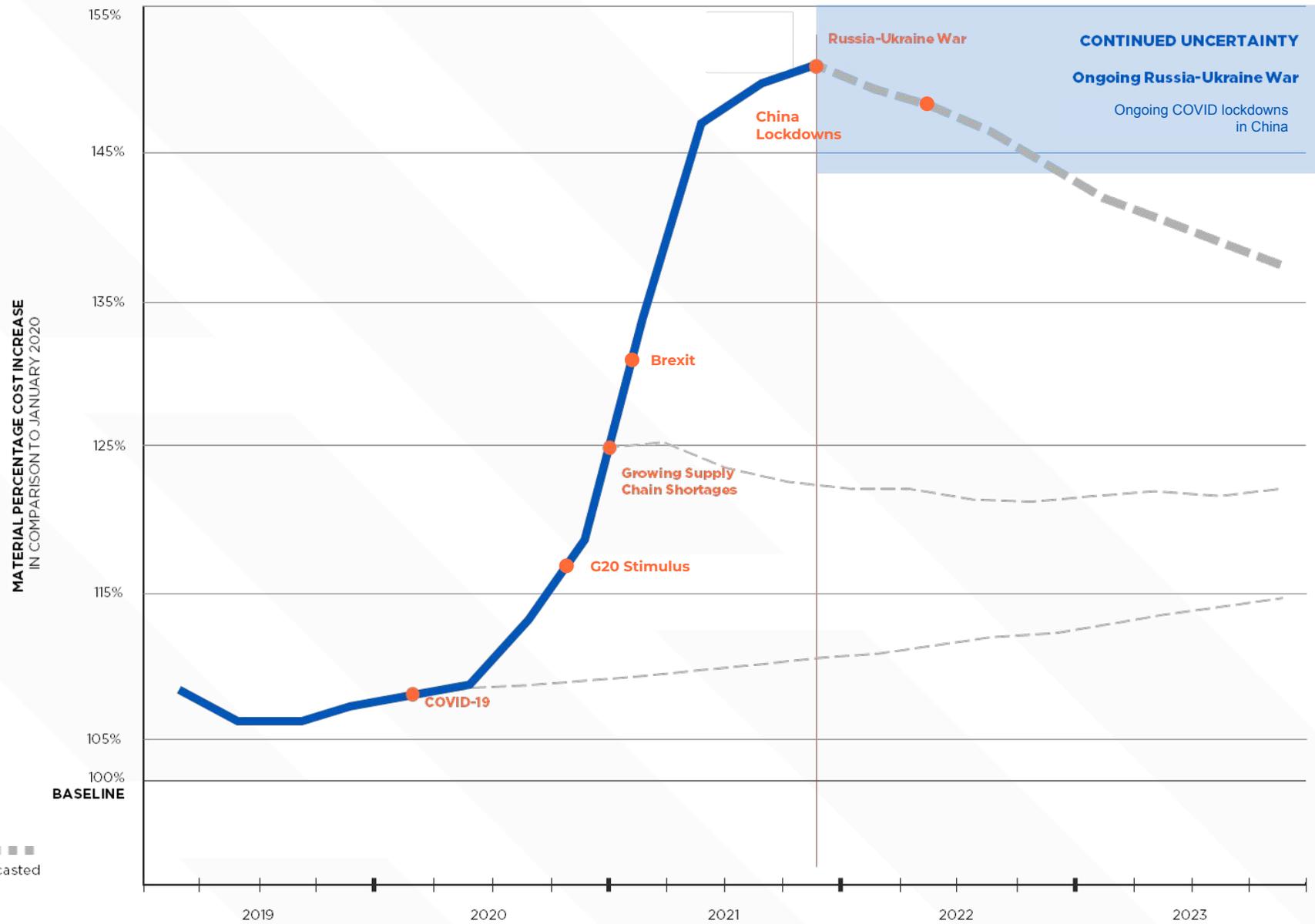
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TOP 50 PROGRAM
MANAGEMENT FIRMS

#25

LARGEST
CMAR FIRM

STATE OF THE MARKET



June 2022 WCDA Industry Poll – Top Problems

- Raw material unavailability - Basic inputs unavailable and affecting delivery
- Limited production capacity - Excess of orders extending delivery times
- Transportation/logistics - Unavailability of shipping and global shipping impacts



Project Impacts

- Short validity of quotations (<30 days) = price escalation
- High price increases & volatility (>25% within 6 months) = price escalation
- Cancelled orders = delay
- Longer delivery times (50% longer than previously purchased) = delay
- Material availability (or lack thereof) = delay
- Limited bidder pool and competition
- AIS/BABA and other provisions

Recent History on Bid Results

SAWS LS Rehab Phase 5

Eng. Estimate: \$9,933,508
\$12,668,000

BV Bid:

HPW – Southeast WWTP Pkg 1

Eng. Estimate: \$34,500,000
Low Bid \$44,917,735

Pflugerville WTP

Eng. Estimate: \$103,000,000
Low Bid: \$147,000,000

2Q 2020 – 1Q 2022

COMMODITY PRICING INCREASES

Steel Shapes & Rebar	30-40%
Fabricated Steel	10-20%
CS Pipe Material	15-25%
Fabricated Pipe	10-20%
Power Cable	40-50%
Conduit	20-30%
Freight	20-25%
Large Transformers	15-25%
Mech Equipment	10-20%
Lumber	50-100%
Ductile Iron	35-45%
Diesel Fuel	28-30%
PVC/FRP Fabrications	125-175%

Current Budget Approach is Obsolete



Cost modeling methods do not reflect current and future budget needs.



Historical lead times do not reflect new normal supply chain.

Conventional Delivery Issues



Limited bidder pool



Limits ability to manage supply chain challenges



Does not empower risk mitigation

Top Strategies to Manage Uncertainty

1.

Inject truth to the budget process

2.

Drive design to budget

3.

Drive design to procurement

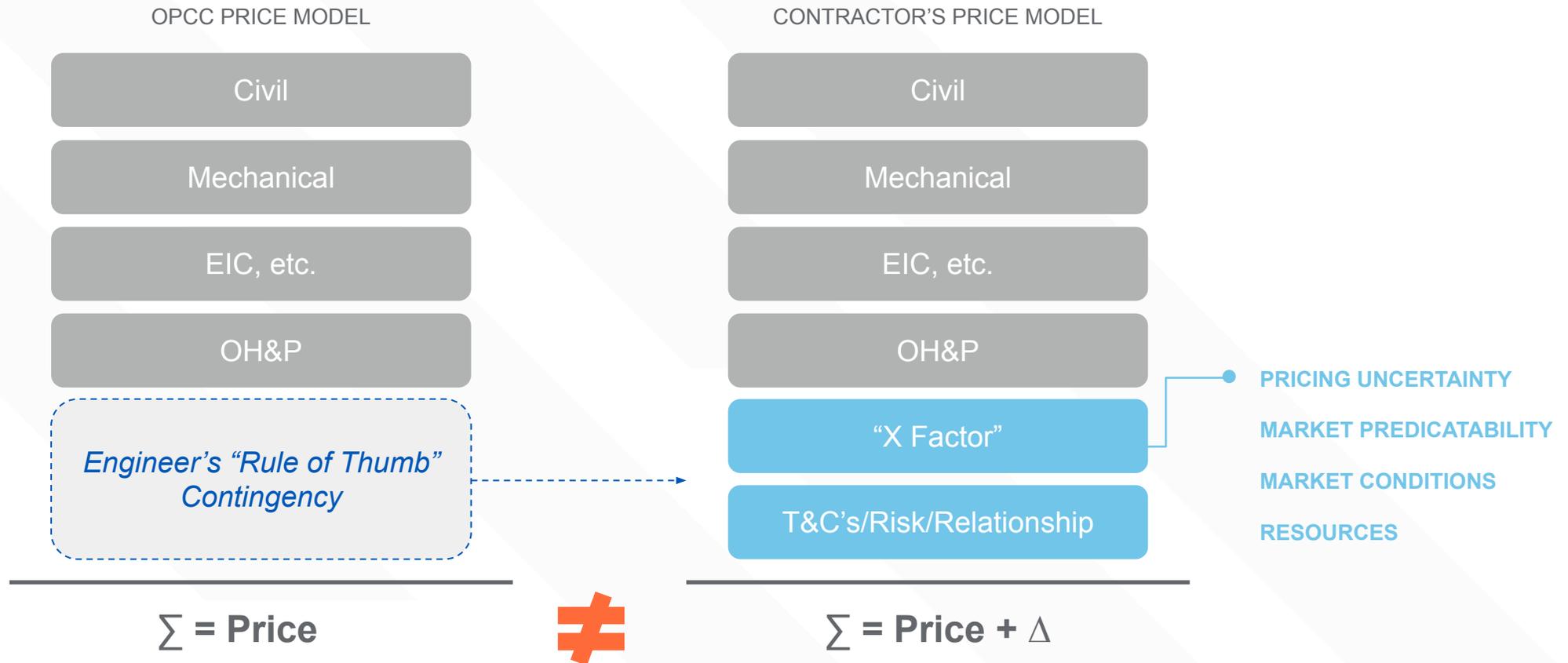
4.

Flex your delivery solution

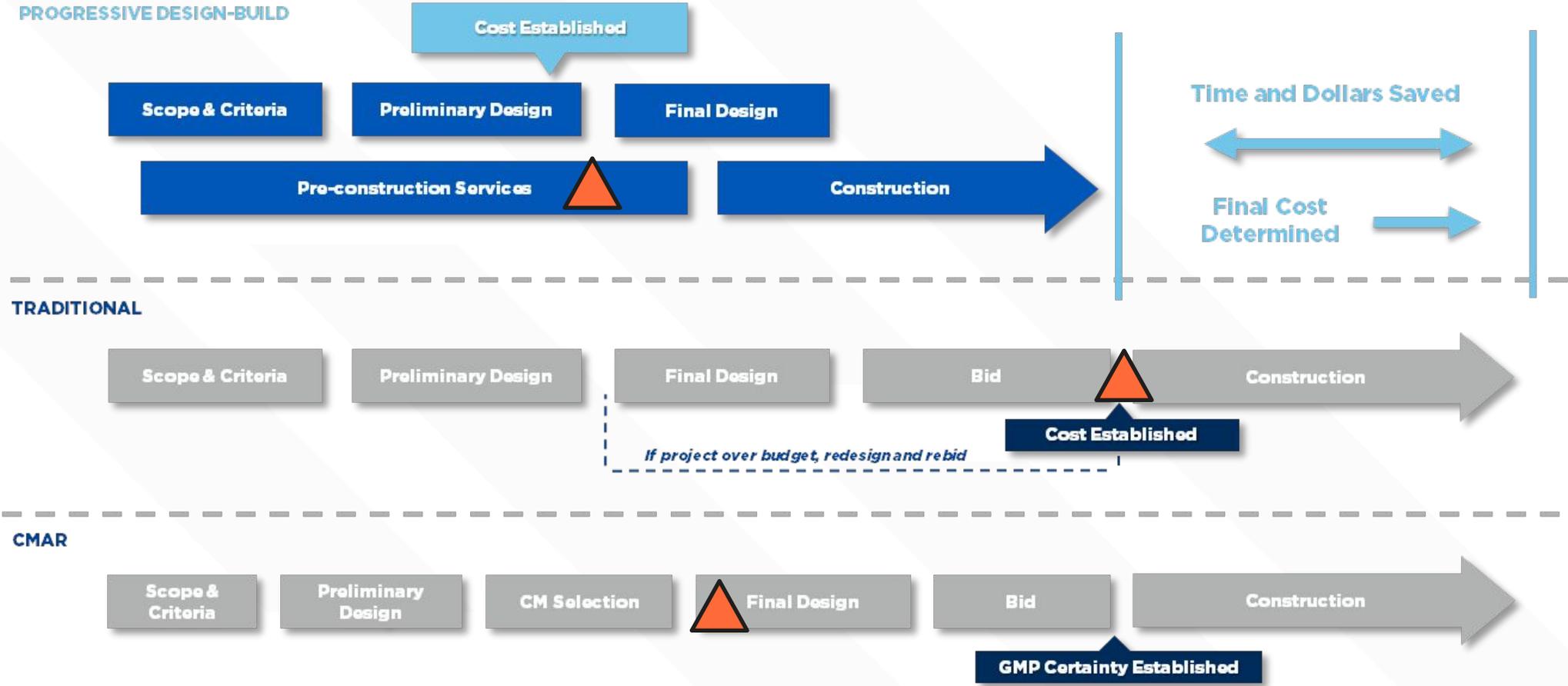


WHAT'S IN THE NUMBER?

Components of OPCC to Market Pricing Models



Procure early and manage design



 **PROCUREMENT BEGINS**

CONCLUSION

LEGISLATIVE CLOUDS

TEXAS CODE 2269

- 93% of the State cannot use DB (pop limits)
- # projects limits major systems to address broader needs

TWDB GUIDELINE DOCUMENTS

- Procedural limitations to risk mitigation
- Doesn't allow Owner to manage supply chain issues



OPPORTUNITIES FOR WINDFALLS

- Uncertainty is here to stay
- Owners need the proper tools
- Current issues are/will impact State without change
- It's time to change how we do things!



**QUESTIONS?
(WHAT'S FOR LUNCH?)**