PANY CORPS OF ENGIN OCITION DIVISION

P.I.V.O.T. SOURCE SELECTION AND PRICING METHODOLOGY

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Regional Chief of Contracting
Southwestern Division
Date: 20 October 2022

READY / RESPONSIVE / RELEVANT



CURRENT SITUATION



Languishing COVID impacts continue to negatively impact markets for everything from simple commodities to highly skilled labor, resulting in higher prices, longer acquisition schedules, increased frequency of requests for additional customer funding, less contractor willingness to hold prices and decreased competition as vendors withdraw offers and/or exit the Federal marketplace entirely.

PROBLEM STATEMENT

Current statutes, regs and policies are devoid of a simple **PRE**-award alternative to hedge market pricing risk while fostering competition.



DOCT AMADD

POST-AWARD

FAR 52.216-4 **Economic Price Adjustment – Labor & Materials**

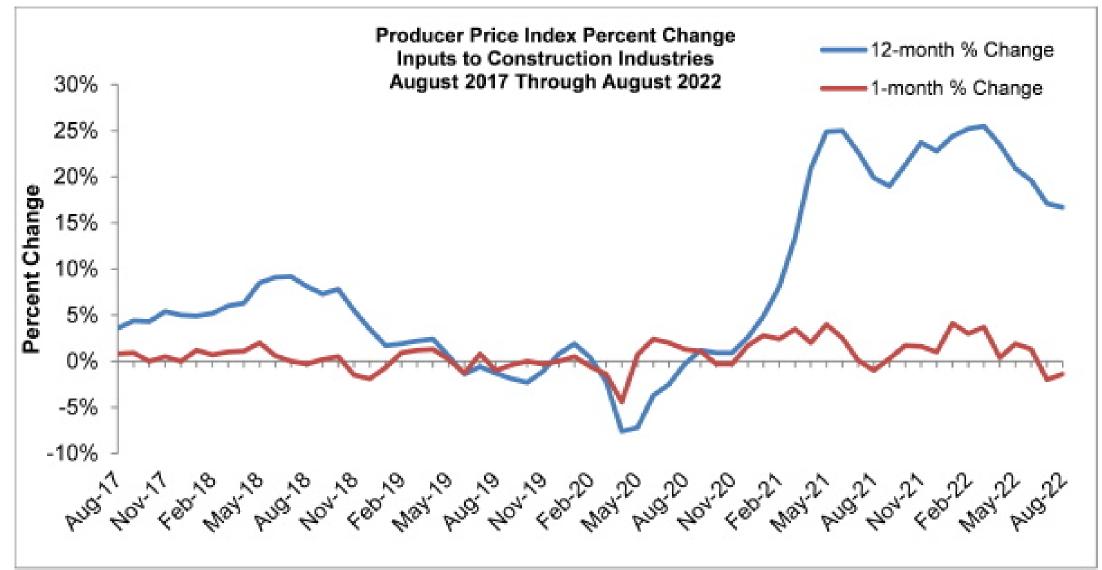






OUR MARKET IS VULNERABLE...





Source: Bureau of Labor and Statistics, Producer Price Indices, www.bls.gov/ppi



SO, OUR PORTFOLIO IS VULNERABLE...



Price increases for construction inputs Year-over-year change in December PPI

Construction materials	2020	2021
Steel mill products	2020 5.2%	2021 127%
Plastic construction products	5.4%	34%
Aluminum mill shapes	-1.7%	30%
Copper and brass mill shapes	24%	23%
Gypsum products	3.6%	21%
Lumber and plywood	37%	18%
Architectural coatings	1.9%	14%
Asphalt felts and coatings	2.1%	12%
Used by contractors		
Diesel fuel	-2.8%	55%
Truck transport of freight	2.2%	18%
Construction machinery and equipment	1.1%	10%
Truck and offroad tires	0.3%	11%

127%

55%

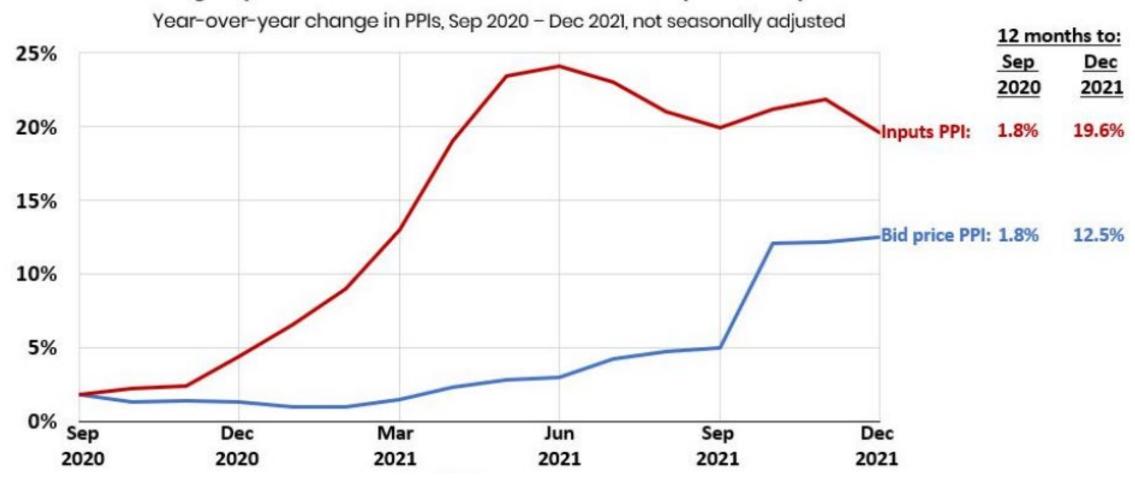
Source: Bureau of Labor and Statistics, Producer Price Indices, www.bls.gov/ppi



BID PRICES BEGINNING TO CATCH UP...



Change in prices for new nonresidential construction inputs vs. bid prices



Source: Bureau of Labor and Statistics, Producer Price Indices, www.bls.gov/ppi

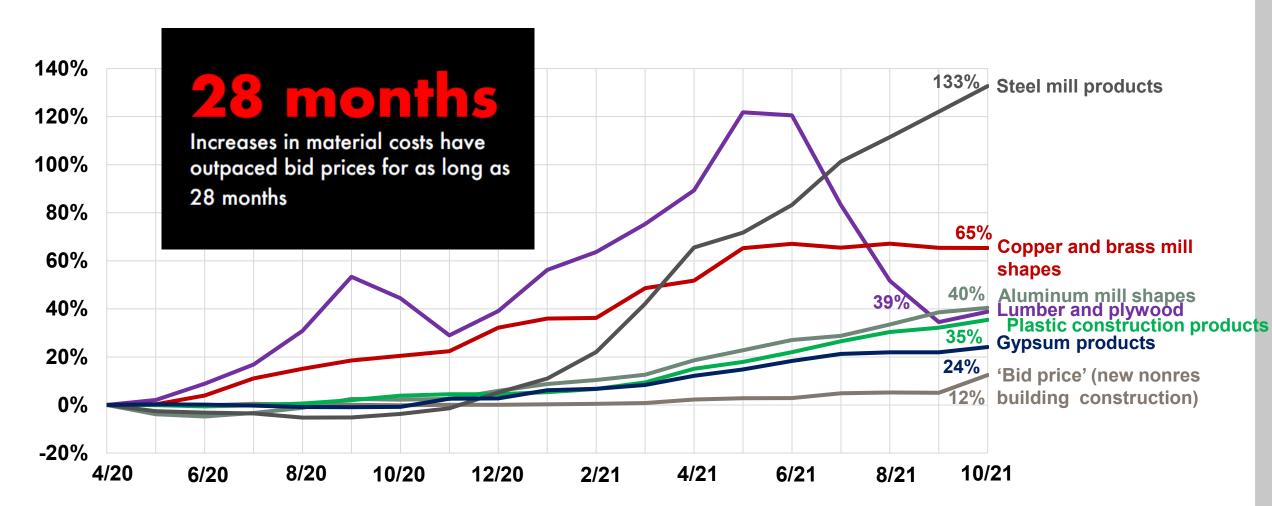


...ITS DIFFICULT TO KEEP PACE...



Price changes for construction and selected materials

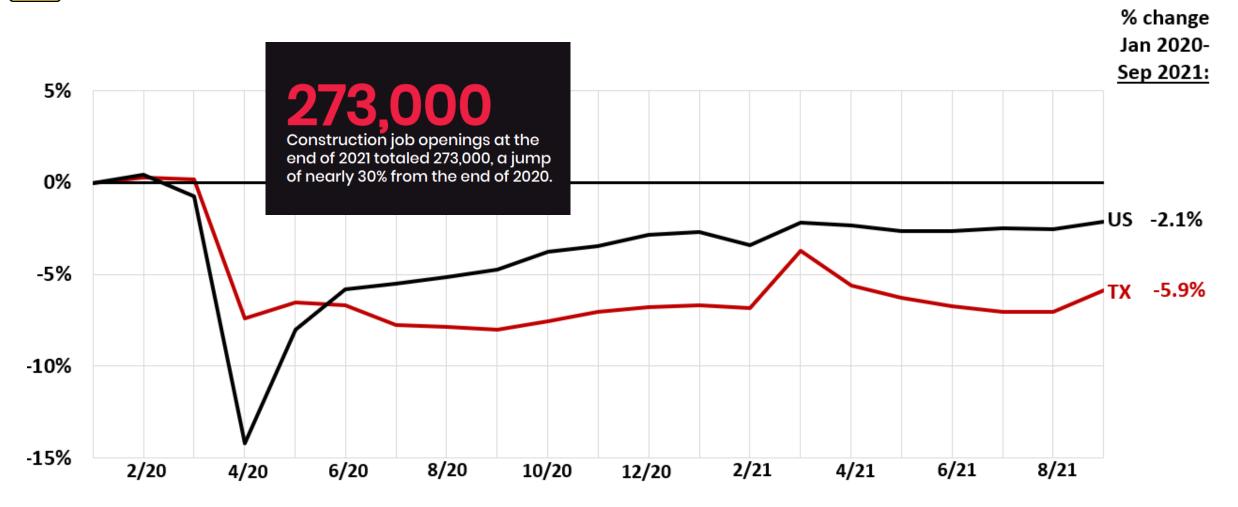
April 2020 – October 2021



Source: The Associated General Contractors of America, Inc., BLS current employment statistics, https://www.bls.gov/ces/

...CONSTRUCTION LABOR IS DOWN...



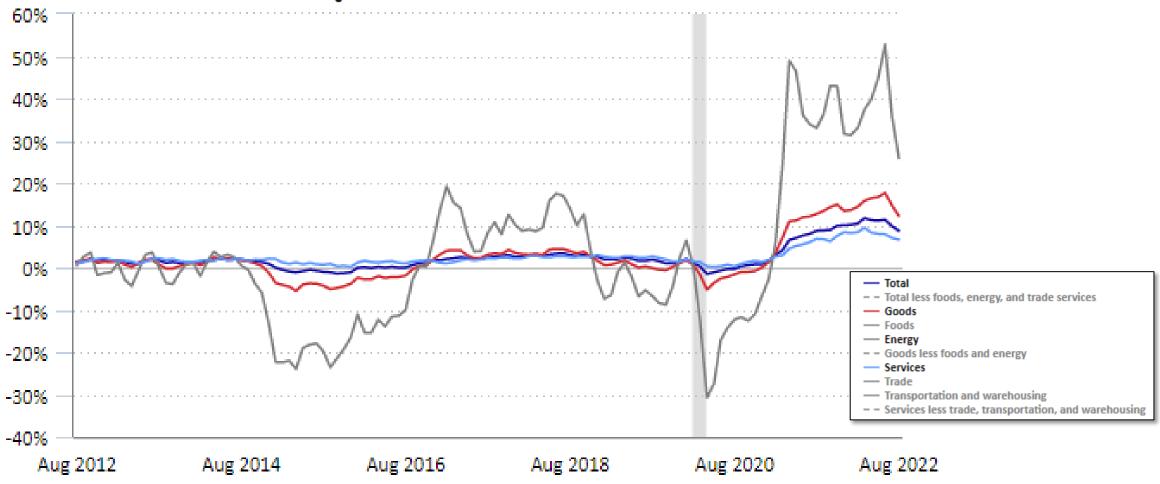




...AN INFLATION IS ON THE RISE...







Source: Trading Economics and BLS, https://www.bls.gov

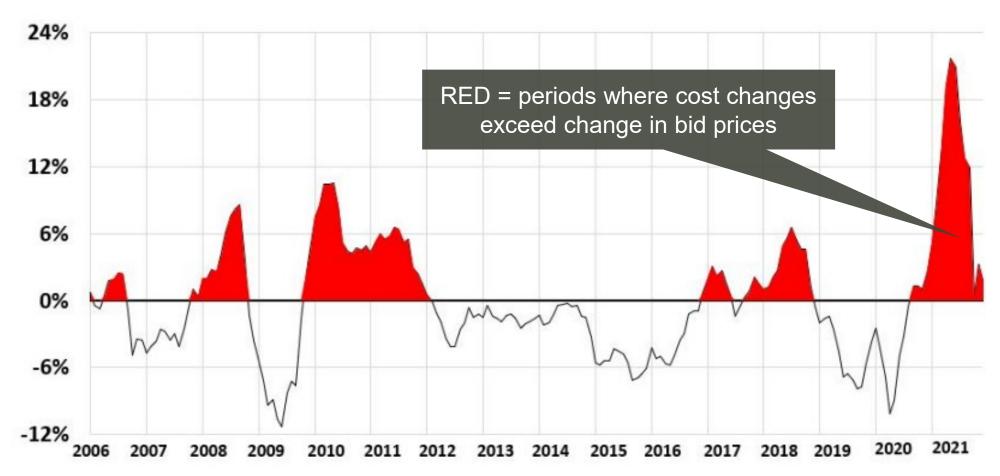


... AND IT'S NOT GOING AWAY SOON.



Cost squeeze on contractors can last two years or more

Difference between year-over-year change in materials costs vs. bid prices, Jan 2006-June 2021



Source: Source: Association of General Contractors of America (AGC) and Bureau of Labor Statistics, www.bls.gov/ppi, producer price indexes for goods inputs to nonresidential construction (material costs) and new warehouse construction (bid prices)



CHALLENGES & IMPACTS

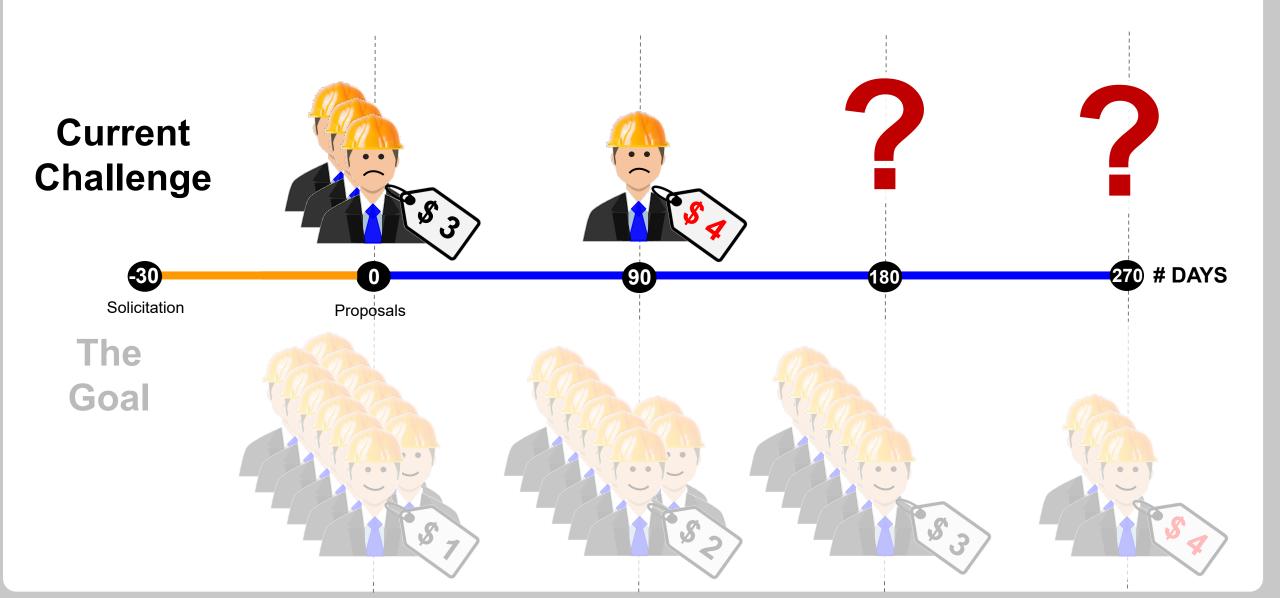


- Rapidly increasing market prices = high risk for Defense Industrial Base (DIB).
- DIB contractors (KTRs) reluctant to hold prices; e.g., was ~6mo, now ~60days.
- Greater incidence of KTRs pulling out of acquisitions.
- Widening gap between proposed prices and GOV cost estimates (IGEs).
- Increasing number of Above Threshold Requests (ATRs); ~100 across USACE.
- Schedule impacts to update IGEs and/or seek additional funds.
- KTRs shifting focus to state/municipal/residential/commercial in lieu of GOV.
- Regulatory flexibilities focus on post-award: e.g., EPA, Variation in Quantity
- Rapid market changes make price and cost realism analyses difficult.
- Determining prices fair and reasonable is a growing challenge, at best.



FEWER COMPETITORS... WHO CANNOT HOLD PRICES AS LONG!

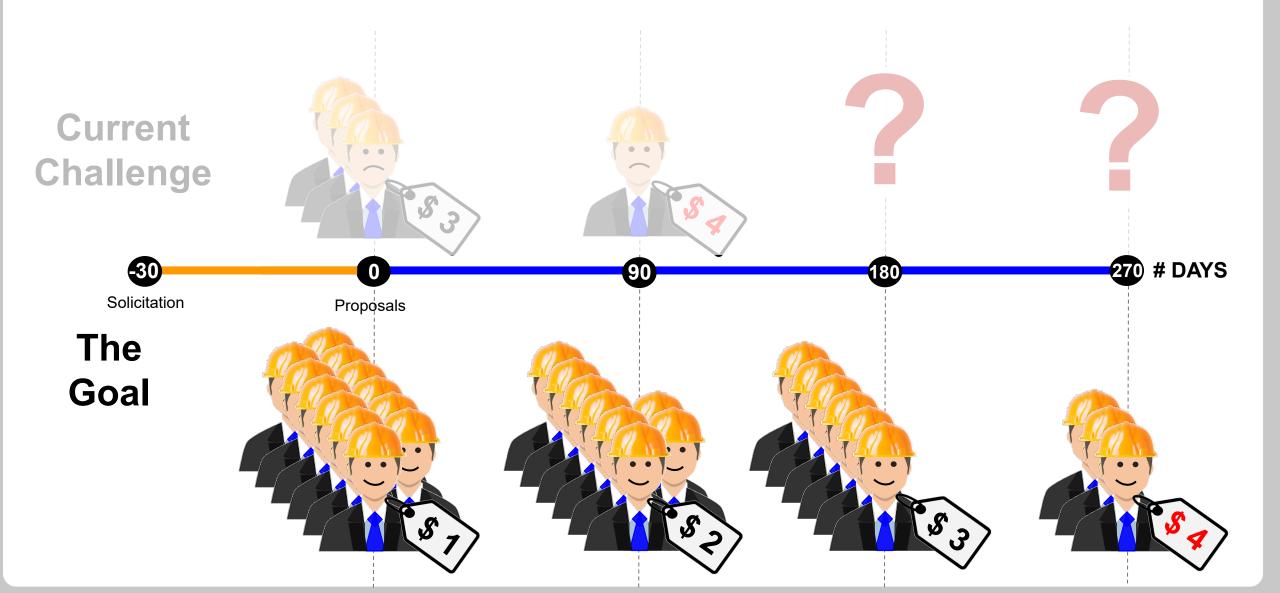






FEWER COMPETITORS... WHO CANNOT HOLD PRICES AS LONG!

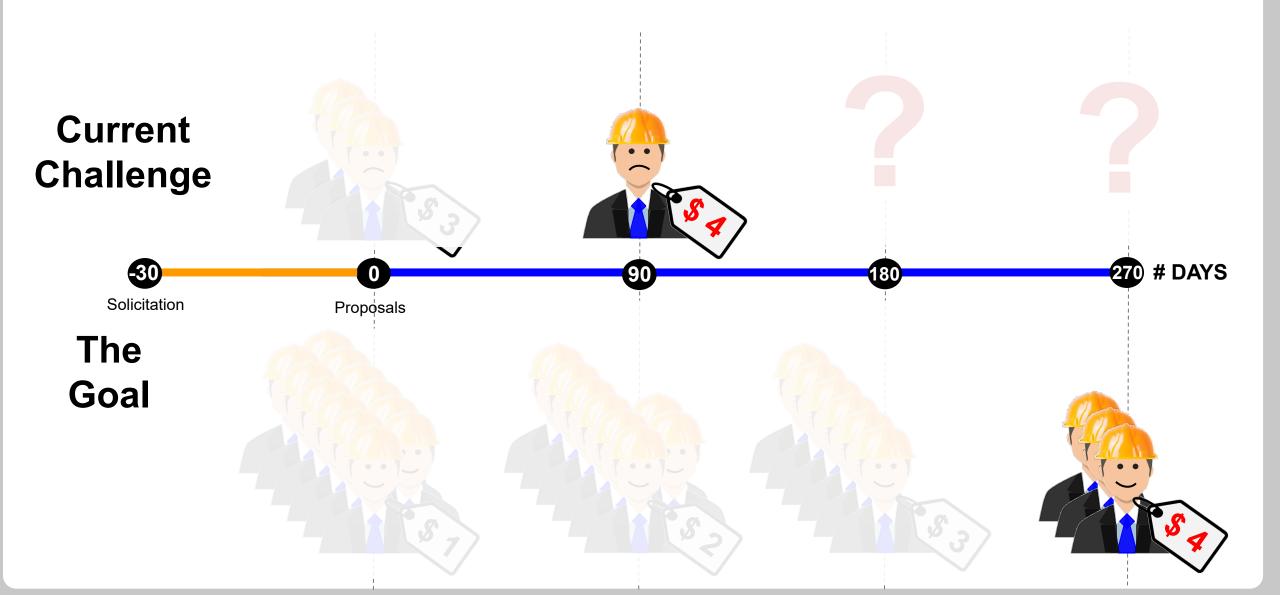






FEWER COMPETITORS... WHO CANNOT HOLD PRICES AS LONG!











PROPOSED SOLUTION



- PIVOT = (Prices Include Variation Over Time)
- Goals: keep KTRs at the table, keep prices valid longer.
- Fosters increased competition while addressing market pricing risk.
- GOV/KTR partnership to share the unique risk profile of an acquisition.
- New optional pre-award pricing and source selection methodology.
- Basic idea: scale proposed prices OVER TIME as proposals age and market moves.

Current Approach

ACME, Ison. 120 Shim Sh. Giz, UR 54021 CLIN 0001 \$1,000 CLIN 0002 \$5,000 CLIN 0003 \$4,000 TOTAL \$10,000

New Approach

ACME]	Proposal
ACME, Inc. 128 Elm S. Ceg, US 9823	Period 1 0-90 days	Period 2 91-180 days	Period 3 181-365 days
CLIN 0001	\$ 1,000	\$ 1,100	\$ 1.500
CLIN 0002	\$ 5,000	\$ 5.500	\$7,100
CLIN 0003	\$ 4,000	\$ 4.400	\$ 6,400
TOTALS	\$10,000	\$11,000	\$15,000



WHAT PIVOT IS NOT...



- A template solution instead, it will vary every time.
- A silver bullet it will not hedge all risks.
- A hammer everything isn't a nail; this solution is a scalpel.
- A cure for underlying causes = inflation, economy, etc.

WHAT PIVOT IS...

- Responsive directly addresses competition & pricing risk.
- Timely available NOW, for immediate implementation on new awards.
- Aligned with existing statutory and regulatory constraints/flexibilities.
- Dynamic version 26 and counting, an evolving solution.
- And please remember.....



TREATS SYMPTOMS, NOT ROOT CAUSE





THE PIVOT PROCESS





STEP 1: Define the Periods



- Thorough acquisition planning is critical to PIVOT success.
- GOV defines the NUMBER of "Periods" in the solicitation.
- All time periods key off the solicitation closing date; i.e when proposals are due.
- When using PIVOT, GOV must include at least (3) periods to spread the risk.
- For proposals to be deemed acceptable, KTRs must submit prices for ALL periods.
- GOV defines date RANGE of each period; tied to unique drivers of each acquisition.
- Periods may be of equal or unequal lengths, GOV prerogative.
- Ranges remain consistent across all CLINs.

ACME		Proposa	<u>d</u>
ACME, Inc. 128 Elm St. City, US 54821	Period 1 0-90 days	Period 2 Period 91-180 days 181-365 da	- 1
CLIN 0001 CLIN 0002 CLIN 0003	\$ 1,000 \$ 5,000 \$ 4,000	\$ 2,000 \$ 5,000 \$ 8,000 \$ 17,000 \$ 5,000 \$ 8,000	
TOTALS	\$10,000	\$15,000 \$30,000)

The number and length of periods are TAILORED to each unique acquisition.



Step 2: Define the Weights



- GOV defines weights for each period based on market price volatility over time.
- Each weight represents GOV/KTR confidence in prices during a given period.
- GOV cost estimates are tailored to align with same periods as the solicitation.
- KTR prices remain valid for all periods, at prices proposed by period.
- In competed actions, KTRs are NOT asked to extend prices at Period thresholds.
- However, with sole source actions, GOV may negotiate flexibility, KTR prerogative.
- PIVOT solicitations must clearly define the periods, weights and scaling alternative.

GOV weights are also TAILORED to each unique acquisition.

Example: prices in the next 90d are **MUCH** more predictable than 360d away, so Period 1 weights will be the highest.

High fidelity = Higher weight.

(\$IVI)	Period 1 0-90d	Period 2 91-180d	Period 3 181-270d	
CLIN 0001	0 000	22 2000	202 2704	272 0000
CLIN 0002				
CLIN 0003				
CLIN 0004				
CLIN 0005				
Total Award Price				
Weights	50%	30%	15%	5%
Adjusted CLIN Prices				
TOTAL Adj. Price				



Step 3: Chose Scaling Approach





Alternative #1 – Percentage Scaling.

- O GOV selects an appropriate percentage used to scale KTR prices.
- KTRs use the GOV percentage to calculate prices for each period.
- Two methods, one calculates from base price, one from previous period price.



Alternative #2 – Index Pricing.

- GOV uses public domain economic index; e.g., Producer Price Index (PPI).
- KTRs use the index rate to calculate prices for each period.
- Best approach uses subsector specific index values to better align with req't.
- Example: "Non-residential construction PPI for OCT 21".



Alternative #3 – Vendor Parlay.

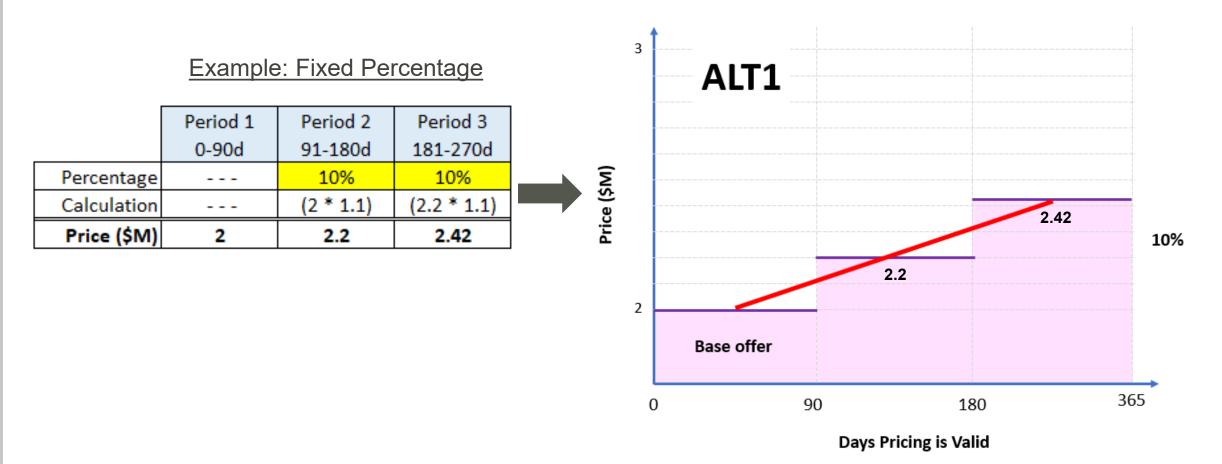
- Full KTR autonomy to choose prices by Period based on their modeling.
- Price per period is based entirely on KTR's own competition/risk model.
- GOV price exposure is hedged by GOV selected period weights.



ALT1 – Percentage Scaling



- Mechanism to scale prices is simply a fixed percentage chosen by GOV.
- Easier to align with actual regional prices compared to indices, which are typically all US.

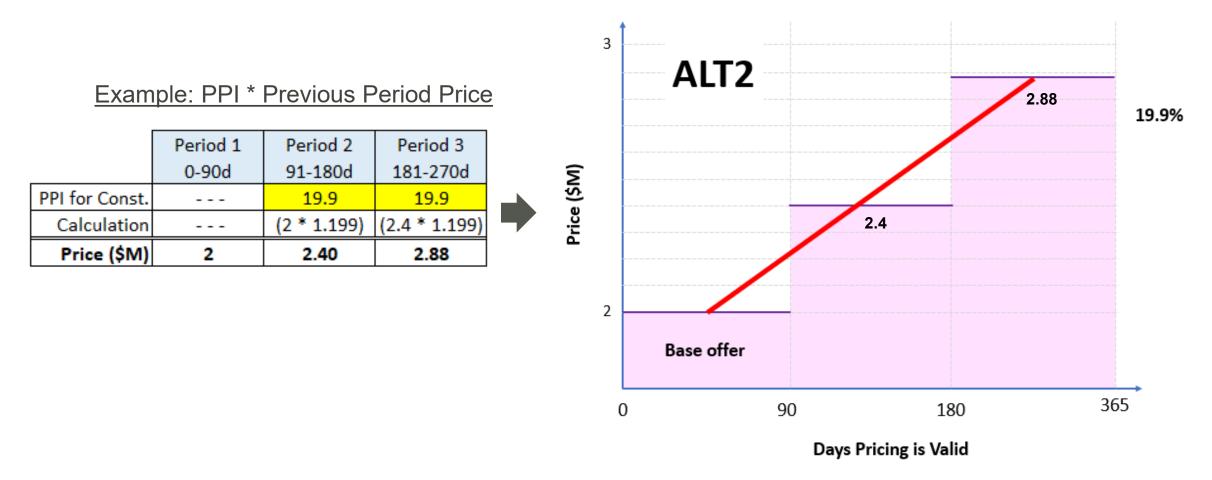




ALT2 – Indexed Pricing



- Like ALT1 except mechanism to scale prices is a well-known index available in public domain.
- Very high fidelity with the contract requirement, but some indices are more current than others.

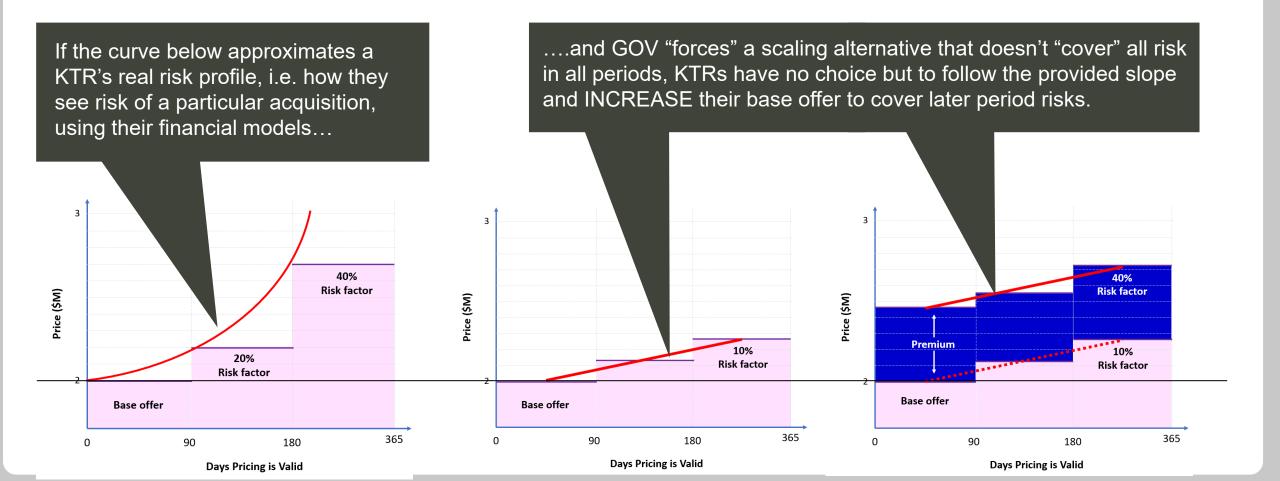




ALT1 and ALT 2 – RISKS



- Both % and index alternatives include forced scaling which may/may not cover KTR risks.
- These forced lines introduce risk that KTRs may include near-term price premiums.
- This is our current state, where GOV asks for 1 Firm Fixed Price...and then ask KTR to hold.
- To protect their exposure, they are forced to include risk premiums.





ALT3 – Vendor Parlay



Risk factor

Days Pricing is Valid

- KTR has TOTAL autonomy to customize proposed period prices and scaling.
- Pricing for all periods are REQUIRED for proposal to be deemed acceptable.
- KTRs enjoy autonomy...yet price is still subject to cost realism and balanced pricing analyses.
- This approach most closely aligns with current Firm Fixed Price (FFP) single price model.

<u>Exa</u>	mple: K	TR pricin	ig by Pe	<u>riod</u>	3	ALT3		
(\$M)	Period 1 0-90d	Period 2 91-180d	Period 3 181-270d	Period 4 271-365d				
CLIN 0001	1	1.7	1.9	2.2	` €			
CLIN 0002	1.5	2.5	4	8	(\$M)			
CLIN 0003	2	2.4	2.6	2.8	Price		Risk factor	
CLIN 0004	5.8	6.1	6.1	6.1	4			
CLIN 0005	1	1.1	0.9	1.2				
Total Award Price	11.3	13.8	15.5	20.3	2			
					2	Base offer		
					0	90	180	365



ALT3 – RISKS



- Vendors may use sophisticated tools beyond USACE norms; Monte Carlo, game theory, etc.
- However, Total Adjusted Price (TAP) helps mitigate this risk and ensure a level playing field.
- Critical that KOs perform realism analysis at all CLINS and Periods to understand anomalies.

Apparent anomalies, such as identical prices across periods, MAY be a realism issue. May also point to savvy KTRs with valid price efficiencies.

Example 1: KTR may hold a price because they're using existing supplies/inventory previously purchased at prices lower than current market.

Example 2: KTRs may have long-term pricing deals with material suppliers.

Example 3: KTRs may hold put options, locking price and allowing them to procure materials at much lower cost than their competitors.

RISK? Requires closer KO analysis by CLIN/Period.

Period 1	Period 2	Period 3	Period 4
0-90d	91-180d	181-270d	271-365d
1	1.7	1.9	2.2
1.5	2.5	4	8
2	2.4	2.6	2.8
5.8	6.1	6.1	6.1
1	1.1	0.9	1.2
11.3	13.8	15.5	20.3
50%	30%	15%	5%
5.65	4.14	2.33	1.02
13.1			
	0-90d 1 1.5 2 5.8 1 11.3 50% 5.65	0-90d 91-180d 1 1.7 1.5 2.5 2 2.4 5.8 6.1 1 1.1 11.3 13.8 50% 30% 5.65 4.14	0-90d 91-180d 181-270d 1 1.7 1.9 1.5 2.5 4 2 2.4 2.6 5.8 6.1 6.1 1 1.1 0.9 11.3 13.8 15.5 50% 30% 15% 5.65 4.14 2.33



Step 4: Tailor the Solicitation Package



- As part of a PIVOT solicitation, GOV provides KTRs with a fillable MS Excel Workbook.
- KTRs fill in their prices by CLIN and by Period.
- Workbook Periods, Ranges, and Weights align with published solicitation.
- The Excel workbook automatically calculates:
 - 1. Total Award Price by Period.
 - 2. Adjusted Prices by CLIN.
 - 3. Total Adjusted Price (TAP); used solely for the evaluation.

	Period 1	Period 2	Period 3	Period 4
	0-90d	91-180d	181-270d	271-365d
CLIN 0001	?	?	?	?
CLIN 0002	?	?	?	?
CLIN 0003	?	?	?	?
CLIN 0004	?	?	?	?
CLIN 0005	?-	?	?	?
Total Award Prices	?	?	?	?
GOV Period Weights	50%	30%	15%	5%
Adjusted CLIN Prices	?	?	?	?
TOTAL Adj. Price	?			



Step 5: Evaluate Price



- With PIVOT, price evaluation focuses ONLY on the Total Adjusted Price (TAP).
- TAP is a SUM of the weighted average calculations, by CLIN, by Period; see below.
- The weighted average approach smooths period fluctuations, while mitigating market risks.
- KTR award prices, by Period, are IRRELEVANT to the evaluation TAP is the sole focus.
- Note that KTRs are allowed to update prices with Requests for Final Proposal Revisions.
- Likewise, PIVOT works just like other contracts with respect to DoL Wage Determinations.

1) Calculate Adjusted Price by CLIN

/¢\/\	Period 1	Period 2	Period 3	Period 4
(\$M)	0-90d	91-180d	181-270d	271-365d
CLIN 0001	1.5	1.7	1.9	2.2
CLIN 0002	2	2.5	4	8
CLIN 0003	2.2	2.4	2.6	2.8
CLIN 0004	5	6	7	8
CLIN 0005	0.5	0.7	0.9	1.2
Total Award Prices	11.2	13.3	16.4	22.2
GOV Period Weights	50%	30%	15%	5%
Adjusted CLIN Prices	5.60	3.99	2.46	1.11
TOTAL Adi Prico	12.2			

2) <u>Total Adjusted CLIN Prices = TAP</u>

(\$M)	Period 1	Period 2	Period 3	Period 4
(\$141)	0-90d	91-180d	181-270d	271-365d
CLIN 0001	1.5	1.7	1.9	2.2
CLIN 0002	2	2.5	4	8
CLIN 0003	2.2	2.4	2.6	2.8
CLIN 0004	5	6	7	8
CLIN 0005	0.5	0.7	0.9	1.2
Total Award Prices	11.2	13.3	16.4	22.2
GOV Period Weights	50%	30%	15%	5%
Adjusted CLIN Prices	5.60	3.99	2.46	1.11
TOTAL Adj. Price	13.2			



Step 6: Source Selection



- Best Value Trade Off (BVTO) is the required source selection methodology for PIVOT.
- PIVOT is NOT for Lowest Price Technically Acceptable (LPTA) or sealed bid actions.
- LPTA and IFB are not appropriate as award may go to offeror with a HIGHER TAP.
- NOTE: TAP is NOT the award amount; TAP is ONLY used for price evaluation.
- Contract award value is the total of the unweighted CLIN prices in period of award.
- Example below: TAP = \$13.2M; if we award in Period 2, award value = \$13.3M.

Used in the evaluation.
Note, since this is not
LPTA but instead is
BVTO, the final
selected source MAY
have a higher TAP than
other offerors.

Vendor #1				
	Period 1	Period 2	Period 3	Period 4
(\$M)	0-90d	91-180d	181-270d	271-365d
CLIN 0001	1.5	1.7	1.9	2.2
CLIN 0002	2	2.5	4	8
CLIN 0003	2.2	2.4	2.6	2.8
CLIN 0004	5	6	7	8
CLIN 0005	0.5	0.7	0.9	1.2
Award Prices	11.2	13.3	16.4	22.2
GOV - Weights	50%	30%	15%	5%
Adjusted CLIN Paises	5.60	3.99	2.46	1.11
TOTAL Adj. Price	13.2			

Used in the award (if awarded in the 91-180d window after proposal receipt).



Step 7: Contract Award



- As a BVTO source selection, the winning offeror's TAP may be HIGHER than other offerors.
- If awardee's TAP is higher, the Source Selection Authority (SSA) TRADES price for other factor(s).
- Comparatively, the awardee's price in a period may be higher in some periods, lower in others.
- Final award price is the awardee's total prosed price in whatever period GOV awards.
- In the example below, Vendor 1 has a higher TAP, but was still chosen for award by the SSA.



Vendor #2				
	Period 1	Period 2	Period 3	Period 4
(\$M)	0-90d	91-180d	181-270d	271-365d
CLIN 0001	1	1.7	1.9	2.2
CLIN 0002	1.5	2.5	4	8
CLIN 0003	2	2.4	2.6	2.8
CLIN 0004	5.8	6	6	6
CLIN 0005	1	1.1	0.9	1.2
Total Award Price	11.3	13.7	15.4	20.2
Weights	50%	30%	15%	5%
Adjusted CLIN Prices	5.65	4.11	2.31	1.01
TOTAL Adj. Price	13.1			
		•		
Low Price By Period			Х	Х



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Vendor #2				
	Period 1	Period 2		Period 4
(\$IM)		91-180d	181-270d	271-365d
CLIN 0001	1	1.7	1.9	2.2
CLIN 0002	1.5	2.5	4	
CLIN 0003	2	2.4	2.6	2.8
CLIN 0004	5.8	6		6
CLIN 0005	1	1.1	0.9	1.2
Total Award Price	11.3	13.7	15.4	20.2
Weights	50%	30%	15%	5%
Adjusted CLIN Prices	5.65	4.11	2.31	1.01
TOTAL Adj. Price	13.1			
		•		
Low Price By Period			Х	х

Lowest award price can vary by period, thus BVTO.



SAMPLE SOLICITATION vs CONTRACT



Period time frames are identical for all CLINS. KTR enters price for Period 1, then calculates/enters their prices for Period 2, 3 and 4. Errors are considered administrative and KTRs may be given the opportunity to correct.

In preparing the final contract award documents, GOV lines through all periods other than the award period, to highlight/codify for the contract and file.

W912DY-22-R-0124 Page 4 of 30 SUPPLIES/SERVICES UNIT AMOUNT CLIN 0002 Clearing & Grubbing LUMP SUM Prices valid during periods indicated. Period 1: Prices valid from solicitation close through Day 90. \$2,000,000,00 \$2,000,000.00 Period 2: Prices valid from Day 91 through Day 180. \$2,200,000.00 \$2,200,000.00 Period 3: Prices valid from Day 181 through Day 270. \$2,420,000.00 \$2,420,000.00 Period 4: Prices valid from Day 271 through Day 365. \$2,662,000.00 \$2,662,000.00 The contractor shall provide all material, labor, supplies and services necessary to deliver subject requirement in support of Garrison Modernization Program at Fort Swampy, TX in accordance with the attached PWS. FOB: Destination PURCHASE REOUEST NO: W31RYO11460226000001

7-22-C-0124 age 4 of 30 OUANTITY UNIT PRICE AMOUNT SUPPLIES/SERVICES CLIN 0002 Clearing & Grubbing LUMI, SUM Prices valid during periods indicated. \$2,000,000,00 000 000 00 200,000.00 Period 2: Prices valid from Day 91 through Day 180. \$2,200,000.00 Period 3: Prices valid from Day 181 through Day 270 Period 4: Prices valid from Day 271 through Day 365 \$2,662,000,00 62.000.00 The contractor shall provide all material, labor, supplies and services necessary to deliver subject requirement in support of Garrison Modernization Program at Fort Swampy, TX in accordance with the attached PWS PURCHASE REQUEST NO: W31RYO11460226000001 \$2,200,000.00 NET AMT =



NEXT STEPS



- Command directive to advance PIVOT to assess/validate the methodology.
- Working on 4 **NEW** contract awards as pilots for new PIVOT approach.
- PIVOT training for the workforce and enterprise.
- Develop/deploy PIVOT videos in KnowledgeNow.
- Roadshow briefings to inform and seek GOV and industry feedback.
- Soliciting contractor suggestions/feedback through Industry Days.
- Periodic HQ reviews to report status, pilots, lessons learned.
- Tracking and reporting data on PIVOT use, lessons learned and results.

FEEDBACK PLEASE

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