



NAVAL  
POSTGRADUATE  
SCHOOL

## Price Analysis on DLA Service Contracts

By: Janie Maddox, Lecturer  
Naval Postgraduate School

Collaborator: Dr. Raluca Gera, Associate Professor  
Naval Postgraduate School

*Excellence Through Knowledge*

## “Taxpayers

want confidence that the prices the government pays are fair and reasonable.

The rules governing that determination aren’t simple.”

“One of the most controversial areas in government contracting surrounds

### **cost and pricing:**

the means by which a contracting officer makes a “fair and reasonable” price determination”



Quoted by Mr. Michael Fischetti, Executive Director, National Contract Management Association, Aug. ‘14 Federal Times article in regards to the complications of cost and pricing



- Project
  - Background
  - Goals of the Project
- Description of Data and Methodology Collected
- Data observations
  - Contract Files Reviewed
  - Contracting Personnel Interviewed
  - IGCE creators Interviewed
- Conclusions and Recommendations



1. Before the procurement reforms in the late 1990s, most contract pricing of acquisitions was conducted using “cost analysis” by Contract Specialists
2. Then came FAR Part 12 and identifying items as “commercial” (FAR 2.101)
3. As a result, the federal acquisition workforce has had to adapt to the need for new skill sets
  - Contracting specialists needed to have a greater knowledge of market conditions, industry trends, and market prices
  - So, instead of analyzing cost proposals, Contract Specialists are now using market forces to determine reasonable prices
4. Thus, the increase of both market research and extensive use of price analysis methods
5. However, since 2001 reviews by DOD-IG have concluded that new pricing skill sets have not always been present in the purchase of commercial items
6. The current gap in knowledge contributes to agencies missing cost saving opportunities as well as ventures to improve acquisition outcomes
7. Several initiatives have been introduced to improve pricing skill sets such as regulations, handbooks, DAU courses



- Review of DLA relative to service contracts as follows:
  - Diagnose key areas of areas of risks in the price reasonableness determination documents
  - Determine specific challenges internal customers may have in creating IGCEs
  - Determine specific challenges contracting personnel may have in conducting and documenting price analysis
  - Explore potential improvements based on our observations.



NAVAL  
POSTGRADUATE  
SCHOOL

# Description of Data and Methodology



# Contract File Review Data Collection

- A random sample for a total of 66 contracts. Files reviewed required an acquisition price of greater than \$150,000, and no more than two years old. \*

Category of Files	Quantity	Percentage	Value
Construction Contracts	6	5.2%	\$7,000,000
Service Contracts	58	89.8%	\$120,900,938
Supply Contracts	2	5%	\$6,804,522
All Contracts	66	100%	\$134,705,460

- Interviews with internal customers and contracting personnel (volunteers)
  - COs and Contract Specialists
  - IGCE creators (non users of the services being acquired)

**\* FAR/DFAR/DLAD based Checklist**



- data from interviews

1. **What type of services does your organization create IGCE's for? Knowledge-Advisory Assistance/ IT etc.**

- IT hardware/software/services
- Information services
- Sustainment

a. *Are you the end user of those services?*  
◊ No

2. **Does your organization have an efficient and effective cost estimating process for your service requirements?**

- We do have good emphasis in the organization for estimating, however, because every CO is different, we have no standard of estimating.

a. **Does the organizations' IGCEs closely assess acquisitions' most probable cost?**  
◊ (2) Yes

◊ I cannot give you an answer; we do not receive any feedback on whether or not we're doing a good job

b. **On a scale of 1 to 10 how would you rate you organization's ability to develop valid and reliable IGCEs?**  
◊ 9

3. **How well does your organization develop cost estimating skills or competencies?**

- a. **Does your organization provide any training or guides on developing IGCEs?**
- ◊ (1) Branch managers look at getting us training on IGCEs
  - ◊ (1) SOW course for cost-estimating for technical personnel

4. **How well educated/trained are you in creating IGCEs?**

- (1) Felt like a "9"

5. **Have you attended a course on developing IGCEs?**

- (1) On the job training
- (1) There is really no requirement for IGCE training

a. **Where? When?**

◊ Attended a course on IGCEs, was a DAU course for CORs, 3 days

b. **If yes, do you believe your training has improved your ability to create a IGCE?**

- (1) Yes - One Individual believed the COR course he took gave him this ability
- (1) No - One Individual believed the COR course he took **DID NOT** give him this ability

- data from contract files

### Comparison of Proposed Prices

Answer questions 17-18 only if Comparison of Proposed Prices received in response to the solicitation were used in determining price reasonableness and documented in the pricing memorandum on file.

\*Note: Using Proposed Prices (FAR 15.408-11(i)). Any proposed price used as a base for prices analysis must meet the general requirements.

- The price must be submitted by a firm competing independently for contract award.
- The price must be part of an offer that meets Government requirements. (Technically Acceptable)
- Award must be made to the offeror whose proposal represents the best value to the Government.
- For SEALED BIDDING ONLY –Were offers responsive to the Govt. requirement?

17) Was a price from an offeror whose proposal was technically unacceptable used

for price comparison basis?

Yes  No

18) Was a price from an offeror whose proposal was determined to be non-responsible

used for price comparison basis in the pricing memorandum?

Yes  No

\*Please proceed to question #30 when finished with questions #17-18.

### Comparison of Historical Prices

Answer questions 19-21 only if comparison of the proposed prices to historical prices paid, whether by the Government or other than the Government, for the same or similar items were used in determining price reasonableness.

19) Comparison of the proposed prices to previous prices paid, whether by the



NAVAL  
POSTGRADUATE  
SCHOOL

# Data observations of Contract Files reviewed and Personnel Interviews



# To What Extent Do Pricing Memos Deviate From FAR/DFARS Requirements?

Price Analysis Techniques	Total	Supplies	Services	Constructions
Inadequate price competition	<b>10 of 25 (40%)</b>	0	22	3
Acceptance of prior prices without establishing their reasonableness	<b>6 of 14 (43%)</b>	0	6	0
Incomplete references to current competitive price list	<b>6 of 16 (38%)</b>	1	15	0
Incomplete comparison with IGCE or use of unreliable IGCEs	<b>25 of 38 (66%)</b>	0	36	2
Incomplete statements based on references to market research	<b>5 of 7 (71%)</b>	0	7	0
Offeror did not provide data that was appropriate	<b>0 of 4 (0%)</b>	0	0	0
None of the above techniques used in pricing documentation	<b>2 of 2 (100%)</b>	1	0	1
Totals of inadequate price analysis documentation for price reasonableness justification	<b>54 of 106</b>			

A considerable number of inadequate price analysis found in our sampled memos



# To What Extent Do Pricing Memos Deviate From FAR/DFARS Requirements?

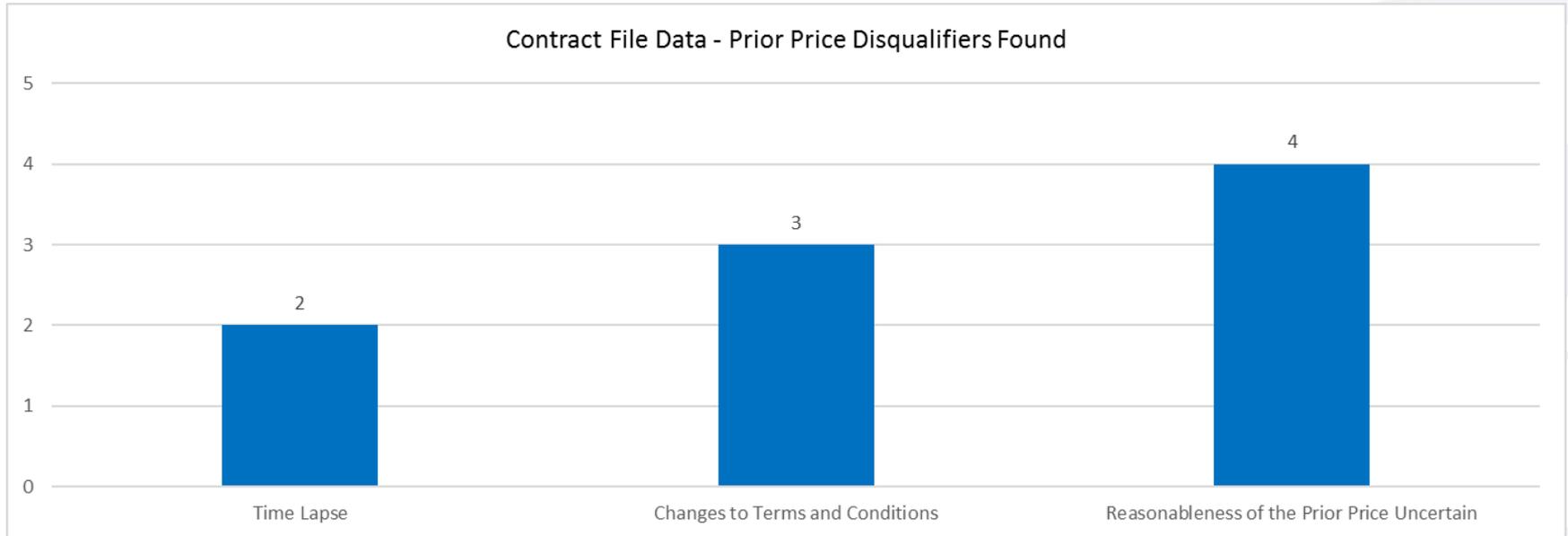
- In particular, two types of price analysis, market research and IGCEs were performed and documented incorrectly in more than 50% of the files
- Previous price documentation was found to be unjustified in 43% and price competition in 40% of the files
- Overall 54 of 106 files found inadequate

»50%



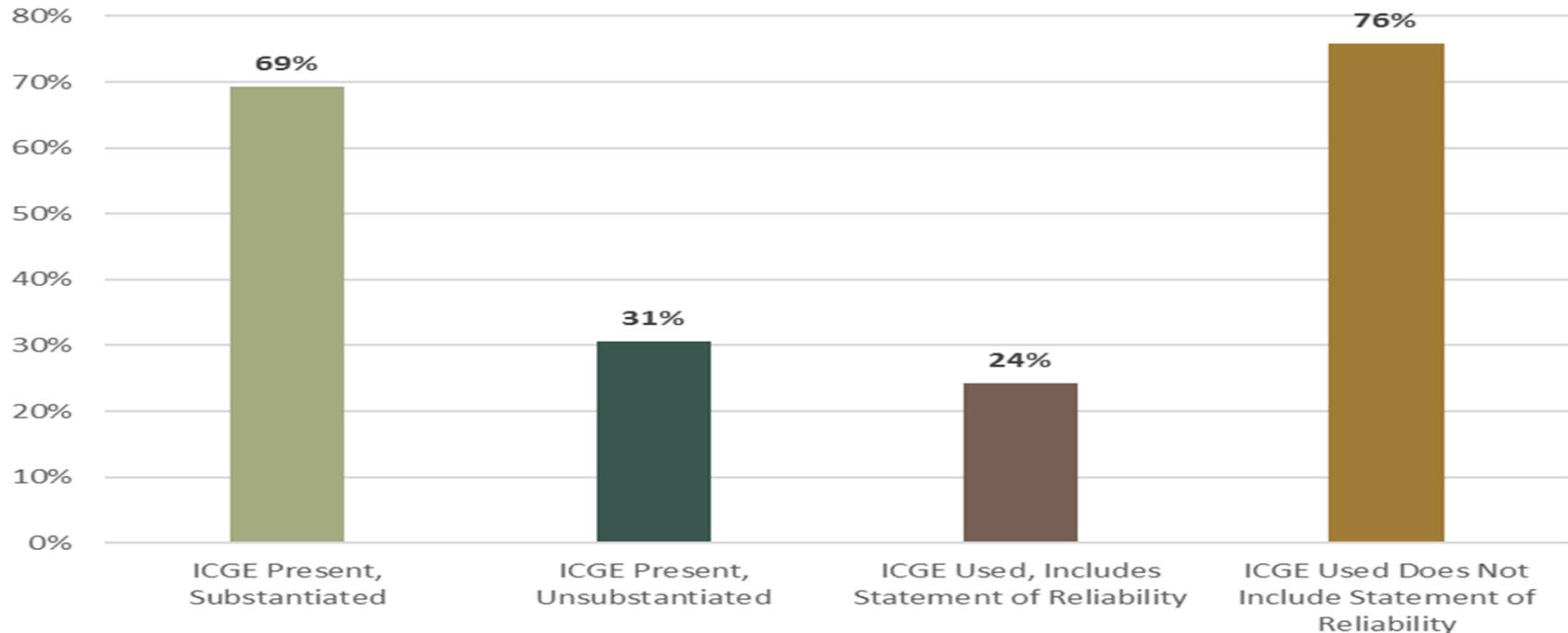
# Prior Price Disqualifiers

Invalid previous (historical) prices were found because of one or more of the reasons below:



- In this sample, more than 43% of the previous price comparisons made were invalid since the previous price was not verified, timewise acceptable, or adjusted for differences
- Keep in mind these unreasonable prices can continuously perpetuate themselves into future contracting actions

## IGCE Substantiated and Reliability



- In this sample, 69% of the IGCEs were substantiated
- Essentially the developer of these IGCEs explained the sources of information and the basis used to make the estimate
- 76% of IGCE tapped for price comparison did not include any determination of reliability behind the IGCE used to support an offered price



## Contract File Data – Adequate vs. Inadequate Justification for Price Reasonableness

	Adequate Justification	Inadequate Justification	Total	Percent Justified
<b>Contract Files</b>	36	30	66	54.5%
<b>Services</b>	32	26	58	55.1%
<b>Supplies</b>	0	2	2	0%
<b>Construction</b>	4	2	6	66%

A majority of the pricing memorandums do deviate by three consistent characteristics:

1. Lack of supporting documentation to justify the technique utilized to establish price reasonableness
2. Use of unreliable IGCEs
3. Unverified previous prices



# “What price analysis methods are being used?”

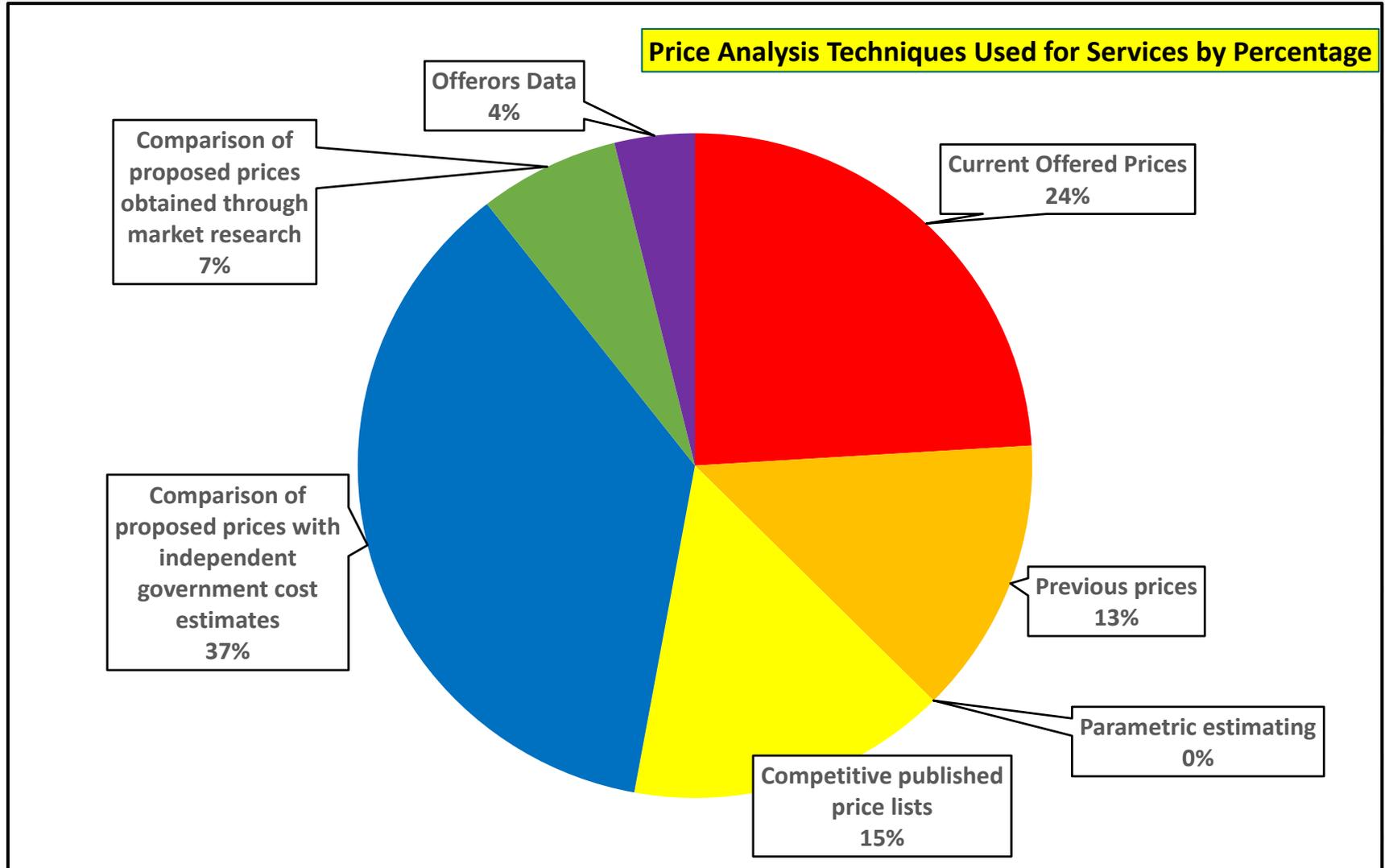
Price Justification in Pricing Memos	Total number	Supply	Services	Construction
Comparison to current offered price?	25	0	22	3
Comparison to previous prices paid?	14	0	14	0
Parametric estimating?	0	0	0	0
Competitive published price lists?	16	1	15	0
Comparison of proposed prices with independent government cost estimates?	38	0	36	2
Comparison of proposed prices obtained through market research?	7	0	7	0
Analysis of offeror data?	4	0	4	0
None of Above	2	0	0	2

## Observations:

- Next to IGCEs, Current Offered prices and Competitive Price Lists are mainly used in supporting the analysis of proposed prices
- Limited analysis of other data such as sales data from the offeror



# Contract File Data- Price Analysis Techniques Used





# Commercial Sole Source

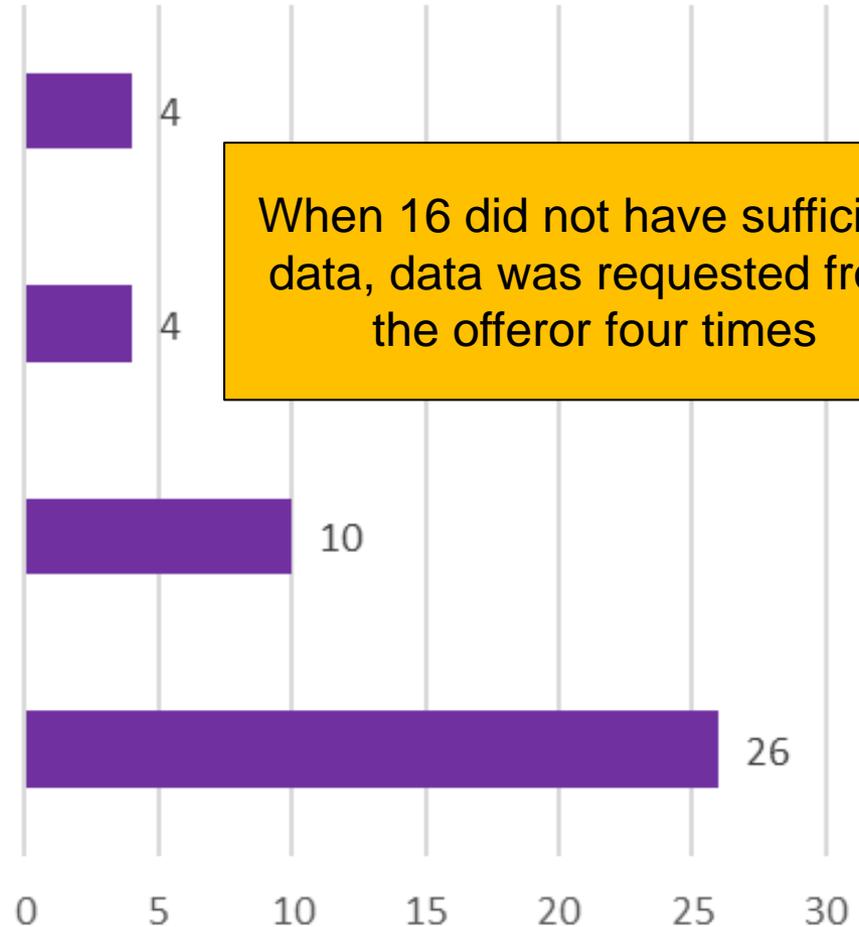
## Sole Source - Commercial

If Yes, did this include commercial sales data of items sold in similar quantities and, if such data is insufficient, data other than cost or pricing data to support the proposed price.\*

If No, was the offeror required to provide whatever data the contracting officer needs in order to determine fair and reasonable prices?

If yes, Was there sufficient data to determine price reasonableness in i-vi above?

Is this a sole source item which is determined to be Commercial? (PGI 215. 402-2 & 3)



When 16 did not have sufficient data, data was requested from the offeror four times



# What we learned from Contracting Personnel

- General:
  - Finding good comparisons for buying services
  - No particular methods were used in developing estimates
  - Lacking a clear idea on what needs to be done
  - Make practices consistent!!
  - Customers not identifying more sources
  - Like sharing of lessons learned at staff meetings or in office discussions
  - More in-house training needed
- IGCEs:
  - Customer just uses most recent price without reviewing whether it's a good price to use, instead of conducting market research
  - No accountability for bad IGCEs from customers
  - IGCEs without backup, need rationale to substantiate the labor hours, rate, and mix
- When Market Research is conducted:
  - Only if needed
  - Never—There is no time to perform
  - Depend on customers to perform
  - Depends on dollar amount of purchase



# What we learned from Contracting Personnel (cont).

- Value of price analysis training and suggested improvements:
  - Yes, but experience helps appreciate training
  - No, training was not useful (does not emphasize buying services)
  - Yes, and would like joint training with customers for developing an IGCE
  - Yes, more in-house training specific to our issues
  - Yes, training focused on requesting data from an uncertified offeror
  - Suggestion: should have online courses on buying services and developing (IGCEs)
- Biggest Challenges:
  - When it is sole source, the prices have changed from the past, and the IGCE is unreliable
  - Whether proposed labor hours are reasonable when IGCE doesn't substantiate labor effort
  - Only one source, no competition
  - Finding contracts that have historical prices
  - Buying services is harder—Same NAICs code, but not similar
  - Working with knowledgeable customers
  - Having a bad IGCE and too much work to fix a bad IGCE
  - IGCE estimate is more than 15% different than proposed price
  - Getting valid information from offeror such as sales history, discounts, favorite buyer pricing.



# What we learned from IGCE Creators

- No standard for IGCEs
  - Each CO wants something different
- Limited Training
- No particular methods were used in developing estimates
- Like going to GSA for labor rates
- More direction on which is the better price list to use
- No feedback from COs
- Helpful if DSCO built templates with recommended rates provided
- Not enough time
- Poor information from the user of services
- Challenge: leadership doesn't know what we are doing and why we're doing it



NAVAL  
POSTGRADUATE  
SCHOOL

# Conclusions and Recommendations



## Summary of Unsubstantiated Pricing Memos

	Percent of actions Justified	Potential Value not justified	Potential Value justified	Percent of Value not justified
Contract Files	54.5%	\$68,926,782	\$65,778,678	49%
Services	55.1%	\$61,765,782	\$59,135,156	51%
Supplies	0%	\$7,000,000	\$0	100%
Construction	66%	\$161,000	\$6,643,522	2%

Overall, the use of price analysis techniques is common, but serious deficiencies hamper the correct use of those techniques and limit proper supporting documentation.

Note: \$61 million in services were not adequately justified



# Overall Observations and Conclusions of Sampled Contract Files and Interviews

- What we observed:
  - Inadequate documentation to support pricing determination
    - Concerns: Current Offered Prices, Previous Price, & IGCE comparisons
  - Little use of quantitative skills learned in pricing classes,
  - Unreliable IGCEs, and
  - Infrequent requests for offeror data when needed.
  - Lack of transparency between Contracting and IGCE personnel
- What we concluded:
  - Lots of documentation of Price Analysis Techniques in file, however, did not include sufficient documentation
  - It appears that contracting personnel are not familiar with how to appropriately perform and document price analysis.
  - Poor Communication between Contracting and IGCE personnel



Determining commercial item prices for services to be fair and reasonable can be very challenging. However, **contracting personnel should be able to obtain enough information to determine price reasonableness.**

- Consider examining what is disabling contracting personnel from performing price analysis properly such as:
  - Why personnel are not following price reasonableness standards IAW the FAR/DFARS,
  - Determine if current assessment methods consistently follow price reasonableness standards in accordance with the FAR/DFARS,
  - How contracting personnel are trained in pricing commercial item purchases
  - Determine why offeror data is not requested more often. There were only four files with data requests from the offeror
- Eliminate or reduce the challenges that contracting personnel have in executing proper price reasonableness as discussed in the interviews
- Add adequate guidance on the preparation of IGCEs and market research reports by customers
- Provide guidance to contracting personnel on how to assist and guide their customers in preparing good IGCEs and market research reports
- Author suggested solicitation language to request additional price data to both save time and the frustration of requesting data after receipt of the offer when sole source commercial
- More emphasis on price analysis in DLAD
- Overall, it might be worthwhile that training be developed to totally focus on purchasing commercial services and instructs students through real life examples to work through in making a price reasonableness determination



## Pricing services is different from supplies, some suggestions:

- A step should be added to the services acquisition guidebook that focuses just on the pricing of services.
- FAR, DFARS, and PGI need to **reframe price analysis methods that are more useful in purchasing services**, as opposed to current references to supplies only (Something to consider to propose through the FAR council)
- Consideration to acknowledge IGCEs importance and as a price analysis technique and add guidance for use in the FAR/DFARS/PGI