Pricing
Cost-Plus-Incentive-Fee (CPIF) Contracts
Defense Pricing and Contracting

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DPC/PCF
Outline

- **Section 1: Basics of CPIF Contracts**
- **Section 2: How to Build a CPIF Incentive Arrangement using the Bottoms-Up Approach**
- **Section 3: How to use the DoD Model to Build a Bottoms-Up CPIF Position**
- **Section 4: Negotiation Tips**
- **Section 5: Multiple Incentives**
Section 1

Basics of CPIF Contracts
• **Type of Cost-Reimbursement contract**
  
  - Provides for an initially negotiated fee to be adjusted later by formula based on relationship of total allowable costs to total negotiated target cost
  
  - Appropriate for research and development, major system development, prototype development and testing, noncommercial services, or low rate initial production contracts
    
    - **Uncertainties of performance are so great a fixed-price effort is not appropriate**
  
  - Uses fee sharing formula to motivate contractor to control costs
  
  - **Final price is NOT subject to a price ceiling**
Basics of CPIF Contracts

- Reasons to consider CPIF
  - Incentivizes cost control
    - All incentive contracts must incentivize cost
    - Can also incentivize contractor’s performance or delivery
  - Allows for both parties to share cost risk while providing opportunity for increased profitability
    - Helps in negotiations when Government and contractor disagree on cost and/or fee
    - Fee adjustment provides an incentive over a range of variations from target cost
  - As with all cost type contracts, getting actual cost insight enables the Government to more accurately estimate future costs
Basics of CPIF Contracts

• Circumstances when CPIF is not appropriate
  ▪ Commercial items
  ▪ Firm requirements
    ▪ If the Government has the need for a specific item to be delivered, then CPIF will likely not be appropriate
  ▪ Not enough risk to justify usage
    ▪ If the Government can accurately estimate the cost of the acquisition, then CPIF will likely not be appropriate
  ▪ Contractor does not have an adequate accounting system
    ▪ Contractor must be able to track actual costs
Spectrum of Risk vs Contract Type

<table>
<thead>
<tr>
<th>Research</th>
<th>Development</th>
<th>Production/Sustainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPFF / CPAF</td>
<td>CPAF / CPIF</td>
<td>FPAF / FPIF/ FFP</td>
</tr>
<tr>
<td>TD</td>
<td>SDD</td>
<td>LRIP / Production</td>
</tr>
<tr>
<td>Higher risk, less-defined requirements</td>
<td>Lower Risk, well-defined requirements</td>
<td>Follow-on Production/OS</td>
</tr>
</tbody>
</table>

Greater Performance Risk = Government Assumes More Cost Risk

- TD: Technical Development
- SDD: System Development and Demonstration
- LRIP: Low Rate Initial Production
- OS: Operational Sustainment
Goodness of CPIF from Government Point of View

- As cost decreases, price to Government decreases
- Contractor is incentivized via the sharing arrangement to manage cost more closely
  - Decreased costs result in additional earned fee
Contractor can increase fee dollars and fee percentage by reducing cost below target cost down to the max fee cost position.

Contractor is protected from overruns: Government will reimburse all allowable costs and pay at least the min fee amount.

- All cost-reimbursement contracts are "best efforts": no guarantee of performance.
CPIF Geometry

- Target Cost *
- Target Fee*
- Target Price*
- Maximum (Max) Fee Cost Position
- Max Fee*
- Minimum (Min) Fee Cost Position
- Min Fee*
- Share Ratios*
- Range of Incentive Effectiveness

* The Govt. and contractor must agree to these elements as they are placed on the contract. Min/Max Fee are expressed as a % of target cost on the contract.
CPIF – Target Cost
CPIF – Target Cost

Target cost is built from:

- Technical Evaluation
- Defense Contract Audit Agency (DCAA) Audit Report
- Defense Contract Management Agency (DCMA) Forward Pricing Rate Recommendation (FPPR) or Forward Pricing Rate Agreement (FPRA)
- Contracting Officer Analysis

The analyst should let the facts of the procurement determine the target cost
CPIF – Target Fee

- The Target Fee dollars should come from the Weighted Guidelines method
CPIF – Target Price

- **Target Cost + Target Fee = Target Price**

![Diagram showing the relationship between target cost, target fee, max fee, min fee, max fee cost position, target cost, and min fee cost position.](image)
Max Fee cost is built from:
- Technical Evaluation
- DCAA Audit Report
- DCMA FPRR or FPRA
- Contracting Officer Analysis

Represents the Government’s optimistic cost position

This value will not be placed on the contract—it is derived as a means to establish an objective or negotiation incentive.
CPIF – Max Fee

- The Max Fee dollars should come from Contracting Officer (CO) judgment
  - However, CO should consult with program manager

- For purposes of the Incentive Fee clause (52.216-10), Max Fee is expressed as a percentage of target cost
  - However, to develop a reasonable CPIF arrangement, need to consider Max Fee in terms of dollar amount and as a percent of max fee cost position

- If a high Max Fee is negotiated, the contract shall also provide for a low Min Fee (FAR 16.405-1(b)(3))
CPIF – Min Fee Cost

• **Min Fee cost is built from:**
  - Technical Evaluation
  - DCAA Audit Report
  - DCMA FPRR or FPRA
  - Contracting Officer Analysis
  - Contractor proposed positions if necessary/appropriate

• **Represents the Government’s pessimistic cost position**

• **This value will not be placed on the contract—it is derived as a means to establish an objective or negotiation incentive**
CPIF – Min Fee

• The Min Fee dollars should come from CO judgment
  ▪ However, CO should consult with program manager

• For purposes of the Incentive Fee clause (52.216-10), Min Fee is expressed as a percentage of target cost
  ▪ However, to develop a reasonable CPIF arrangement, need to consider Min Fee in terms of dollar amount and as a percent of min fee cost position
CPIF – Share Ratios

- The Share Ratios dictate how much each party will share in overruns and underruns

- The convention is to show the Government share first
  - A 70/30 share ratio means the Government share is 70% (Govt. plus Contractor share must equal 100%)
  - An unsplit share ratio occurs when the overrun and underrun share ratios are the same
  - A split share ratio occurs when the overrun and underrun share ratios are different
  - Share ratios create the slope of the CPIF line from the Max Fee position to the Min Fee position
    - The lower the Government share, the steeper the line will be

Target Cost $516,000,000
Target Fee $41,200,000
Target Fee Rate 8.00%
Target Price $557,200,000
Max Fee $53,584,058
Max Fee Rate 10.40%
Min Fee $25,720,000
Min Fee Rate 4.99%
Gov Underrun Share 80.00%
Gov Overrun Share 85.00%
CPIF – Share Ratios

• **Terms:**
  - PC = Pessimistic Cost or Min Fee Cost Position
  - Gov’t Share = 1 - Contractor’s Share
  - OC = Optimistic Cost or Max Fee Cost Position

**Contractor’s Overrun Share equals:**

\[
\frac{\text{Target Fee} - \text{Fee at PC}}{\text{Target Cost} - \text{PC}}
\]

- Multiply by negative 1 to get the positive value

**Contractor’s Underrun Share equals:**

\[
\frac{\text{Target Fee} - \text{Fee at OC}}{\text{Target Cost} - \text{OC}}
\]

- Multiply by negative 1 to get the positive value
Which of these graphs shows a CPIF Line?
Steps for Calculating CPIF Final Price

Step 1: Determine the contract final costs
- Contractor submits completion invoice or voucher
  - Need final indirect rates or quick closeout procedure
  - Obtain Audit assistance if necessary
  - Determination of final allowable costs

Step 2: Determine if final cost is less than or equal to max fee cost position
- If the final cost is less than or equal to max fee cost position, then add max fee to final cost to derive final price
  - Done! No need to proceed to Step 3
- If the final cost is NOT less than or equal to max fee cost position then go to Step 3

- Max Fee Cost position is not a contractual element but can be derived from elements placed on contract.
- Formula: \( \text{Target Fee} - \text{Max Fee} + \text{Target Cost} \)
Steps for Calculating CPIF Final Price

**Step 3: Determine if final cost is greater than or equal to min fee cost position**

- If the final cost is greater than or equal to min fee cost position, then add min fee to final cost to derive final price
  - **Done! No need to proceed to Step 4**
- If the final cost is NOT greater than or equal to min fee cost position then go to Step 4

- Min Fee Cost position is not a contractual element but can be derived from elements placed on contract.
- Formula:  \( \text{Target Fee-Min Fee} \)  + Target Cost
  
  Contractor Over Run Share
Step 4: Calculate the Cost Underrun or Overrun

Underrun (Overrun) = Target Cost – Final Cost

Note: Overruns are negative amounts
Step 5: Calculate the Contractor Share of the Underrun or (Overrun)

Contractor’s (Ktr) Share (Fee Adjustment) = Ktr’s Share Ratio x Underrun (Overrun)

Notes:
The Contractor’s share of the underrun (overrun) is added to the target fee to calculate the final, earned fee
If there is an overrun, the fee adjustment will be a negative amount (a reduction to target fee)
Step 6: Adjust Contractor Fee

Final Fee = Target Fee + Fee Adjustment

Step 7: Determine Final Contract Price

Final Price = Final Cost + Final Fee
Given the following information, calculate final contract price when actual cost is $10,500,000:

- Target Cost = $10,000,000
- Target Fee = $800,000
- Max Fee (max fee %* target cost) = $1,200,000 (12%)
- Min Fee (min fee % * target cost)= $500,000 (5%)
- Max Fee Cost Position = $9,000,000
- Min Fee Cost Position = $11,000,000
- Over-Share Ratio = 70/30
- Under-Share Ratio = 60/40

- Max Fee Cost Position: Target Fee - Max Fee + Target Cost
  Contractor Under Run Share
- Min Fee Cost Position: Target Fee - Min Fee + Target Cost
  Contractor Over Run Share
Problem #1

$10,000,000(TC) - $10,500,000(AC) = ($500,000)

($500,000) * 30%(Ktr Share) = ($150,000)

$800,000(TF) + ($150,000) = $650,000

$10,500,000(AC) + $650,000 = $11,150,000

TC = Target Cost
AC = Actual Cost
TF = Target Fee
Given the following information, calculate final contract price when actual cost is $8,500,000:

- Target Cost = $10,000,000
- Target Fee = $800,000
- Max Fee (max fee %* target cost) = $1,200,000 (12%)
- Min Fee (min fee % * target cost) = $500,000 (5%)
- Max Fee Cost Position = $9,000,000
- Min Fee Cost Position = $11,000,000
- Over-Share Ratio = 70/30
- Under-Share Ratio = 60/40
Problem #2

Actual cost is less than the max fee cost position of $9,000,000. Therefore, to derive the final cost, one must add max fee to the actual cost

$8,500,000 (AC) + $1,200,000 (max fee) = $9,700,000
Question Slide: Problem #3

Given the following information, calculate final contract price when actual cost is $11,100,000:

- Target Cost = $10,000,000
- Target Fee = $800,000
- Max Fee (max fee % * target cost) = $1,200,000 (12%)
- Min Fee (min fee % * target cost) = $500,000 (5%)
- Max Fee Cost Position = $9,000,000
- Min Fee Cost Position = $11,000,000
- Over-Share Ratio = 70/30
- Under-Share Ratio = 60/40
Problem #3

Actual cost is greater than the min fee cost position of $11,000,000. Therefore, to derive the final cost, one must add min fee to the actual cost

$11,100,000 (AC) + $500,000 (min fee) = $11,600,000
Section 2

How to Build a CPIF Incentive Arrangement using the Bottoms-Up Approach
CPIF Geometry Bottoms-Up Approach

- Preferred alternative to randomly choosing share ratios or fee positions that may not reflect the true cost risk
  - Thoughtful process to create a defendable and supportable CPIF position

- Requires an assessment of the min fee cost position (pessimistic cost) and max fee cost position (optimistic cost) and associated reasonable fee rates
  - Enables negotiation based on merits of the analysis as opposed to randomly negotiating CPIF share lines and min/max fee values
1. Develop target cost position
2. Develop target fee position
3. Develop max fee cost position
4. Develop max fee position
5. Develop min fee cost position
6. Develop min fee position
7. Derive the share ratios
8. Derive Range of Incentive Effectiveness (RIE)
• **Target cost is built from:**
  - Technical Evaluation
  - DCAA Audit Report
  - DCMA FPRR or FPRA
  - Contracting Officer Analysis

• **The analyst should let the facts of the procurement determine the target cost**

• **Considered the most likely outcome presuming reasonable contractor efficiency and management control**
• The Target Fee dollars should come from the Weighted Guidelines method
• Min Fee cost position is the pessimistic cost position

• Min fee cost is built from:
  ▪ Technical Evaluation
  ▪ DCAA Audit Report
  ▪ DCMA FPRR or FPRA
  ▪ Contracting Officer Analysis

• The analyst should let the facts of the procurement determine the min fee cost
CPIF Bottoms Up Approach – Develop Min Fee Cost/Pessimistic Position

- **Material/Subcontracts**
  - Already-negotiated FFP vendors
    - **Pessimistic position would likely be the negotiated amount**
  - Subcontractors’ proposed values could be used
  - **Risk issues:**
    - Diminishing Manufacturing Sources (DMS) issues – what does history show? Consider whether DMS issues are likely on your effort; if likely, are they covered elsewhere?
    - Late delivery – what does history show?
    - Quality issues – what does history show?
      - Expect prime to hold vendor responsible to minimize cost to Government
    - **Vendor default** – highly unlikely

- **Rates/Factors**
  - Risk issue: what is the likelihood that actual rates will exceed the rates considered negotiated on this effort?
    - **i.e., FPRR or FPRA**
  - What does history show?
    - Look at history of forecasted rates 2-3 years out
    - How do the actual rates compare with the FPRP/FPRR/FPRA for the same time frame?
  - Contact DCMA for guidance in this area
CPIF Bottoms Up Approach – Develop Min Fee Cost/Pessimistic Position

- **Labor Hours**
  - Risk issue: tasks will take more hours than expected in the target position
    - Does technical evaluation provide a range? If so, consider using the high end of the range to build the min fee cost position
    - How challenging is the target cost based on history, if any history is available?

- **Direct Labor Rates**
  - Risk issue: actual rates paid to employees will exceed the considered negotiated rates on this effort – generally low risk
  - What does history show?
    - Look at history of forecasted rates 2-3 years out
      How do the actual rates compare with the FPRP/FPRR/FPRA for the same time frame?
  - Contact DCMA for guidance in this area

- **Schedule Risk**
  - Schedule slip would primarily affect prime contractor’s internal cost
  - Impact of a schedule slip will not be prime headcount (standing army) X months slip
    - Contractor will not have people sitting around
CPIF Bottoms Up Approach – Determine Min Fee

• Determine a reasonable fee dollar amount to apply to the min fee cost/pessimistic position

• The min fee is a judgment call: How much fee should the Contractor earn when they overrun to the min fee cost position?
  - Once you know the min fee amount, for purposes of the Incentive Fee clause (52.216-10), min fee is expressed as a percentage of target cost
  - Need to have a discussion with the Program Manager about what fee amount is appropriate if the contractor overruns to the min fee cost position
  - How successful is the program at this cost point?
    - Did they deliver the requirement reasonably within schedule? Is the PM satisfied?
    - Consider how much of the contractor’s cost risk is covered by the pessimistic cost position
    - Remember this is still a cost reimbursable contract type
      Best effort: no guarantee of achieving the technical objective at any cost point
• **Max Fee cost position is the optimistic cost position**

• **Max fee cost is built from:**
  - Technical Evaluation
  - DCAA Audit Report
  - DCMA FPRR or FPRA
  - Contracting Officer Analysis

• **The analyst should let the facts of the procurement determine the max fee cost**
CPIF Bottoms Up Approach – Develop Max Fee Cost/Optimistic Position

- **Material/Subcontracts**
  - Already-negotiated FFP vendors
    - Optimistic position would likely be the negotiated amount
  - Subcontractor proposals
    - Should be the Government’s optimistic evaluation of the subcontractor proposals
      - A position that the subcontractor would have to work efficiently to achieve

- **Indirect Rates/Factors**
  - Look through actuals to see if realized rates/factors have historically been lower than the FPRR
    - Look at history of forecasted rates 2-3 years out
    - How do the actual rates compare with the FPRP/FPRR/FPRA for the same time frame?
  - Contact DCMA for guidance in this area
CPIF Bottoms Up Approach – Develop Max Fee Cost/Optimistic Position

• **Labor Hours**
  - Use the optimistic position in the technical evaluation
  - Remove unsupported labor hours
  - Use learning curves that are optimistic
  - Represents a reasonably best case scenario – one that could happen, not pie-in-the-sky

• **Direct Labor Rates**
  - Look through actuals to see if realized rates have historically been lower than the FPRR
    - Look at history of forecasted rates 2-3 years out
    - How do the actual rates compare with the FPRP/FPRR/FPRA for the same time frame?
  - Contact DCMA for guidance in this area
  - Generally low risk

• **Schedule Considerations**
  - Is there a chance contractor will deliver any deliverables early?
    - If the Contractor does deliver early, will there be reduced labor hours based on a shorter period of performance?
CPIF Bottoms Up Approach – Determine Max Fee

- Determine a reasonable fee dollar amount to apply to the max fee cost/optimistic position

- The max fee is a judgment call: How much fee should the Contractor earn when they underrun to the max fee cost position?
  - Once you know the max fee amount, for purposes of FAR 52.216-10, max fee is expressed as a percentage of target cost
  - Need to have a discussion with the Program Manager about what fee amount would be appropriate if the Contractor achieves the max fee cost position
    - Consider how much we should reward the contractor to reach this cost position
      How successful is the program at this cost point?
    - Remember this is still a cost reimbursable contract type
      Best effort: no guarantee of achieving the technical objective at any cost point
CPIF Bottoms Up Approach – Derive Share Ratios

- **Terms:**
  - PC = Pessimistic Cost or Min Fee Cost Position
  - OC = Optimistic Cost or Max Fee Cost Position

- When building the CPIF geometry using the Bottoms Up Approach, the overrun/underrun share ratios will be calculated once the target cost, target fee, min fee cost (pessimistic cost), min fee, max fee cost (optimistic cost), and max fee are determined.

- **Contractor’s Overrun share equals:**

  \[
  \frac{\text{Target Fee} - \text{Fee at PC}}{\text{Target Cost} - \text{PC}}
  \]

- **Contractor’s Underrun share equals:**

  \[
  \frac{\text{Target Fee} - \text{Fee at OC}}{\text{Target Cost} - \text{OC}}
  \]

- Multiply by negative 1 to get the positive values for overrun/underrun shares.
CPIF Bottoms Up Approach – Derive RIE

- Range of Incentive Effectiveness
• **Range of Incentive Effectiveness (RIE)**

  - Cost incentive contracts provide cost incentives to the contractor over a limited range of the contract costs
    - Incentives operate between the max fee cost position and the min fee cost position
  
  - The cost range across which the contractor and Gov’t share cost risks is called the RIE
  
  - Due to the static nature of the min and max fees, all cost risk shifts to the Gov’t outside the RIE
    - At cost points below the max fee cost position and above the min fee cost position, the arrangement is, in effect, a cost-plus-fixed-fee
  
  - The RIE should reflect an evaluation of what the actual contract costs may become
Section 3

How to use the DoD CPIF Tool to build a CPIF position

Link to DoD CPIF Tool
DoD CPIF Tool – Build-Up Analysis

- Introduction tab provides details on how to use the model
- Comments are placed throughout model to help guide user
  - Explains how to derive the number to input
  - Provides guidance on how to use the model
- Input data only into the light green cells

Information is automatically calculated in the light gray cells

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Max Fee Cost</th>
<th>Target Cost</th>
<th>Min Fee Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material/Interdivisional Transfer</td>
<td>$264,000,000</td>
<td>$300,000,000</td>
<td>$360,000,000</td>
</tr>
<tr>
<td>Material Overhead</td>
<td>$8,800,000</td>
<td>$10,000,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$454,080,000</td>
<td>$516,000,000</td>
<td>$619,200,000</td>
</tr>
<tr>
<td>Fee Dollars</td>
<td>$53,584,058</td>
<td>$41,200,000</td>
<td>$25,720,000</td>
</tr>
<tr>
<td>Fee Rate</td>
<td>10.40%</td>
<td>8.00%</td>
<td>4.99%</td>
</tr>
<tr>
<td>Total Price</td>
<td>$507,664,058</td>
<td>$557,200,000</td>
<td>$644,920,000</td>
</tr>
</tbody>
</table>
DoD CPIF Tool – Build-Up Analysis Step 1

- Input the target cost (objective position) for each cost element as shown below into cells C4 through C14. These numbers will come from the technical evaluation, the DCAA Audit Report, DCMA FPRAs/FPRRs, PCO judgment, or other similar artifacts.

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Target Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material/Interdivisional Transfer</td>
<td>$300,000,000</td>
</tr>
<tr>
<td>Material Overhead</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Engineering</td>
<td>$15,000,000</td>
</tr>
<tr>
<td>Engineering Overhead</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>Manufacturing Overhead</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Other Labor</td>
<td>$10,000,000</td>
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<tr>
<td>Other Labor Overhead</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>G &amp; A Expense</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>Cost of Money</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

Total Cost: $516,000,000

Example: Material position of $300M was based on DCAA audit results. Some of the questioned costs were due to historical negotiation decrements for certain suppliers.
• Input the target fee dollar amount into cell C18. The amount should come from the DD 1547 Weighted Guidelines

<table>
<thead>
<tr>
<th>Fee Dollars</th>
<th>$ 41,200,000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fee Rate</th>
<th>8.00%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Price</th>
<th>$ 557,200,000</th>
</tr>
</thead>
</table>

• The model automatically generates target fee rate at cell C20

• The model automatically generates target price at cell C22
DoD CPIF Tool – Build-Up Analysis Step 3

• Input the min fee cost position (pessimistic position) for each cost element into cells D4-D14 to derive the total min fee cost position.

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Target Cost</th>
<th>Min Fee Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material/Interdivisional Transfer</td>
<td>$300,000,000</td>
<td>$360,000,000</td>
</tr>
<tr>
<td>Material Overhead</td>
<td>$10,000,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Engineering</td>
<td>$15,000,000</td>
<td>$18,000,000</td>
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<tr>
<td>Engineering Overhead</td>
<td>$40,000,000</td>
<td>$48,000,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$25,000,000</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Manufacturing Overhead</td>
<td>$30,000,000</td>
<td>$36,000,000</td>
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<tr>
<td>Other Labor</td>
<td>$10,000,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Other Labor Overhead</td>
<td>$30,000,000</td>
<td>$36,000,000</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$5,000,000</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>G &amp; A Expense</td>
<td>$50,000,000</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>Cost of Money</td>
<td>$1,000,000</td>
<td>$1,200,000</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$516,000,000</strong></td>
<td><strong>$619,200,000</strong></td>
</tr>
</tbody>
</table>
• Input the min fee dollar amount in Cell D18. This is a judgment call. How much fee should the contractor earn when they overrun to the min fee cost position? Discuss with Program Management

<table>
<thead>
<tr>
<th>Fee Dollars</th>
<th>$ 25,720,000</th>
</tr>
</thead>
</table>

• Completion of this step will automatically generate the min fee rate into Cell D20

<table>
<thead>
<tr>
<th>Fee Rate</th>
<th>4.99%</th>
</tr>
</thead>
</table>

• Note that the rate shown here reflects min fee dollars as a percent of target cost
  ▪ This rate will be used in the Incentive Fee clause, 52.216-10
**DoD CPIF Tool – Build-Up Analysis Step 5**

- Input the max fee cost position (optimistic position) for each cost element into cells B4-B14 to derive the total max fee cost position.

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Max Fee Cost</th>
<th>Target Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material/Interdivisional Transfer</td>
<td>$264,000,000</td>
<td>$300,000,000</td>
</tr>
<tr>
<td>Material Overhead</td>
<td>$8,800,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Engineering</td>
<td>$13,200,000</td>
<td>$15,000,000</td>
</tr>
<tr>
<td>Engineering Overhead</td>
<td>$35,200,000</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$22,000,000</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>Manufacturing Overhead</td>
<td>$26,400,000</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Other Labor</td>
<td>$8,800,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Other Labor Overhead</td>
<td>$26,400,000</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$4,400,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>G &amp; A Expense</td>
<td>$44,000,000</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>Cost of Money</td>
<td>$880,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$454,080,000</strong></td>
<td><strong>$516,000,000</strong></td>
</tr>
</tbody>
</table>
Input the max fee dollar amount in Cell B18. This is a judgment call. How much fee should the contractor earn when they underrun to the max fee cost position? Discuss with Program Management.

- Completion of this step will automatically generate the max fee rate into Cell B20.

Fee Dollars | $ 53,584,058

Fee Rate | 10.40%

Note that the rate shown here reflects max fee dollars as a percent of target cost.
- This rate will be used in the Incentive Fee clause, 52.216-10.
• Completion of the previous steps will automatically generate the Government's and the Contractor's overrun and underrun share ratios

• The share ratios can be found in Cells C26, C27, D26, and D27

<table>
<thead>
<tr>
<th></th>
<th>Gov</th>
<th>KTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underrun</td>
<td>80.00%</td>
<td>20.00%</td>
</tr>
<tr>
<td>Overrun</td>
<td>85.00%</td>
<td>15.00%</td>
</tr>
</tbody>
</table>

• NOTE: If the share ratios show a non-whole number (such as 45.67%), then adjust the fee dollars or fee cost position to make the share ratios look more traditional
  ▪ Some clearance officials prefer to see share ratios that are divisible by 5
  ▪ Increasing the min fee percentage/amount decreases the contractor’s overrun share ratio
  ▪ Increasing the max fee percentage/amount increases the contractor’s overrun share ratio
The model will automatically create a graph of the inputs.
Section 4

Negotiation Tips
CPIF – Negotiations-Contract Geometry is the deal

• **Be sure to graph every offer (both Gov’t and Contractor’s)**
  - Make sure the CPIF line looks correct

• **Make sure RIE is wide enough to cover risks and influence contractor behavior over an appropriate range of cost outcomes**

• **Understand the geometry (share lines, min/max fee) is what creates the incentive**

• **The geometry can be a useful tool in achieving settlement**
  - At any point along a constant share line (same over run and under run shares) if financially equal as long as the min and max fee $ are held constant
• Do not negotiate any single point/CPIF element without negotiating all of the elements

• You must negotiate the parameters that go on the contract:
  - Target Cost
  - Target Fee
  - Target Price
  - Share Ratios
  - Min Fee %
  - Max Fee %
CPIF – Multiple Incentives

• Use of multiple incentives under a CPIF contract type is appropriate when
  ▪ Expectation of achieving acceptable performance is good, but improvement over that level is desired, and
  ▪ Technical and cost uncertainties are excessive for use of fixed-price incentive arrangements

• A properly structured multiple incentive arrangement should:
  ▪ Motivate the contractor to strive for outstanding results in all incentive areas
  ▪ Compel tradeoff decisions among the incentive areas, consistent with the Government’s overall objectives for the acquisition
    ▪ NOTE: Incentive arrangement should not allow contractor to chase performance or schedule fee by overrunning cost

• All multiple incentive contracts must include a cost incentive (or constraint) – FAR 16.402-1(a)

• The cost incentive MUST operate to preclude rewarding a contractor for superior technical performance or delivery results when the COST of those results outweighs their VALUE to the Government
• **Ensure that target cost is based on a specified performance level**

• **Balanced incentive structure**
  - Identify alternative technical levels of performance and the relative fee value for each alternative
    - This communicates the value to the Government of incremental performance improvements
    - For example—the threshold is 95% aircraft availability but the Government is willing to pay $X extra for 98% and the extra 3% of availability is worth the extra $ paid
  - Identify alternative schedule outcomes and the relative fee value or fee penalty for each alternative
    - Contract delivery date is 31 Aug., the Government is willing to pay $X more for early delivery—(this should not be an all or nothing date)

• **Fee level for any combination of achievements should be in direct relationship to the value to the Government for that permutation of cost and performance outcomes**
• Ensure CPIF contract type is appropriate for your procurement

• Build CPIF position through a Bottoms-Up approach

• Use DoD CPIF Tool

• Do not negotiate any single point/CPIF element without negotiating all of the elements

• Be thoughtful when constructing multiple incentive arrangements

[Link to DOD CPIF Tool]
Backup
FAR 52-216.10 Incentive Fee Clause:

(e) Fee payable.

(1) The fee payable under this contract shall be the target fee increased by _____ [Contracting Officer insert Contractor’s participation] cents for every dollar that the total allowable cost is less than the target cost or decreased by ______ [Contracting Officer insert Contractor’s participation] cents for every dollar that the total allowable cost exceeds the target cost. In no event shall the fee be greater than __________ [Contracting Officer insert percentage] percent or less than ________________ [Contracting Officer insert percentage] percent of the target cost.

Target Cost and Target Fee and Target Price are not captured in the clause but are captured in Section B of the contract.