## 1. CARD TABLE PREPARATION

a.  The Cost Analysis Requirements Document (CARD) Tables describe the key technical, programmatic, and operational characteristics of an acquisition program using succinct tabular entries.  The CARD Tables amplify the CARD Narrative to provide the essential information necessary to support the preparation of life-cycle cost estimates.

b.  To accomplish this, CARD Tables have 18 tabular sections broken into four categories.
   i.   Cost drivers by WBS element
   ii.  Program Quantities
   iii. Detailed Program Lists
   iv.  Program Context

c.  The initial CARD Tables must be prepared to support the first Milestone Review after the Materiel Development Decision (MDD).  Commodity specific CARD Tables are available from http://cade.osd.mil/policy/card.

d.  Following the initial review, the CARD Tables must be updated annually to reflect both the most recent President's Budget and the anticipated Program Objective Memorandum (POM) and submitted to the appropriate Service Cost Agency and DCAPE.   The CARD Tables that provide a detailed description of the acquisition program are used to prepare the ICE, POE, CCE, CCP, and other cost estimates, as required.  CARD Tables should make liberal reference to other program documents (e.g., the Acquisition Strategy, Test and Evaluation Master Plan, or the Systems Engineering Plan) using the Source field on each Table.  The CARD Tables must use/reference source documents that are current, authoritative, and provide the best available definition of approved program content.  The preparation of the CARD Tables should be synchronized with the preparation of the source documents, so that the final CARD Tables are consistent with other final program documents.  The CARD Tables must also be consistent with any contractual solicitations, such as an RFP or any related document (e.g., System Requirements Document).

e.  The CARD Tables augment the content of CARD narrative document.   The CARD Tables closely, but not totally, align to the sections and sub-sections of the CARD narrative. The table below shows a cross-walk between the individual CARD Tables and the CARD narrative.

| CARD Narrative (Document) vs CARD Table (Excel Tabs) Cross-Walk | | |
|---|---|---|
| Table Name | Table Contents | Tie-in to CARD Narrative / Instructions |
| PMP Hardware Technical | Physical, performance, and configuration cost drivers | This table is augmented by the narrative contained in the Technical and Physical Description Section of the CARD. Additional context is contained in the following subsections of the Program and System Description Section: System Performance Parameters and Characteristics; Design Description, and Critical Technologies. |
| Non-hardware Technical | Cost drivers for non-PMP cost elements | This table is augmented by the narrative contained in the following subsections of the Program and System Description Section: Test and Evaluation; Facilities Requirements, |
| O&S | Operating and support cost drivers | This table is augmented by the narrative contained in the System Operations and Support Concept Section of the CARD. |
| Software Development | Software development cost drivers | This table is augmented by the narrative contained in the Software Description and Sizing Information Section of the CARD. |
| Software Maintenance | Software maintenance cost drivers | This table is augmented by the narrative contained in the Software Description and Sizing Information Section of the CARD. |
| Acquisition Quantities, Fielding, and O&S Time Phased (Quantity and O&S Time Phased) | Acquisition quantities by year | This table is augmented by the narrative contained in the following subsections of the Program and System Description Section: Time-Phased System Quantity Requirements. |
| Configuration | The composition of configured end items | This table is augmented by the narrative contained in the Technical and Physical Description Section of the CARD. |
| Manpower Time Phased | Annual headcounts | This table is augmented by the narrative contained in the System Operations and Support Concept Section of the CARD. |
| LRU Level | Line Replaceable Unit (LRU) data | This table is augmented by the narrative contained in the Technical and Physical Description Section of the CARD. Additional context is contained in the following subsections of the System Operations and Support Concept Section: Maintenance. |
| Part Level | Bill Of Material (BOM) data | This table is augmented by the narrative contained in the Technical and Physical Description Section of the CARD. |
| GFE | Government Furnished Equipment | This table is augmented by the narrative contained in the Government-Furnished Equipment and Property Section of the CARD. |
| Program | Program Description | |
| Milestone | Program milestone dates | This table is augmented by the narrative contained in the following subsections of the Program and System Description Section: Program Milestone Schedule. |
| Acquisition | Phase, Lot, and Contract descriptions for Investment & O&S Phases | This table is augmented by the narrative contained in the following subsections of the Program and System Description Section: Acquisition Strategy. Additional context may be also contained in the Disposal Section. |
| Roles | Primary suppliers and performers | This table is augmented by the narrative contained in the following subsections of the Program and System Description Section: Acquisition Strategy; Government-Furnished Equipment and Property. |
| Budget Plan | Planned Budget | This table is augmented by the narrative pertaining funding availability and program stability contained in the Assessment of Program Risks and Risk Mitigation Measures of the CARD. |
| WBS Definitions | Definitions of WBS elements | |
| Metadata | Describes the CARD submission and contents of this file | The CARD PREPARATION sections Paragraphs C & D discuss submission frequencies. |

2. <u>CARD TABLE CONTENT</u>

    a.  The CARD Tables consist of tabular data in pre-formatted spreadsheet files.

    b.  Level of Detail

        i.  While the Tables are structured to record the essential data on mature programs, it is recognized that the level of detail and certainty provided in the CARD Tables will depend on the maturity of the program.  Programs at Milestone A typically have the least definition.  Similarly, programs at Milestone B are less well-defined than programs at Milestone C or at Full Rate Production (FRP).  Instead of tailoring the CARD Tables to reflect lack of details/uncertainty, the CARD Tables are designed to handle uncertainty and characterize the maturity of inputs.

        ii.  For uncertainties in program attributes, nominal assumptions should be specified for cost-estimating purposes.  For example, if the future maintenance concepts are not yet determined, it would be necessary for the CARD (both narrative and Tables) to provide nominal assumptions about the maintenance concept.

        iii.  For uncertainties in numerical data, ranges that bound the likely values (e.g., low and high values) are accommodated by the Table design. Expressing parameter values as a value-plus-margin is also accommodated by the Table design.

        iv.  For uncertainties in design solutions or contractor down-select, the Tables are designed to convey multiple points of view or alternate reference designs. Expressing specifications as both Objective and Threshold values is also accommodated.

        v.  If the Government Reference Architecture or contractor solution does not provide data at the level required, it is acceptable to annotate a cell as "TBD".  However, assignment of "TBD" values must be reviewed with the DoD Component cost agencies and CAPE (as applicable) to determine if  the uncertainties in numerical and schedule data may be better represented by distributions or ranges which bound realistic values to facilitate costing of the program.

        vi.  Most data items have fields for Source and Notes.  Use the Source cells to convey where the data was obtained and "make liberal references to other program documents." Enter full document title and date or enter the name of the Subject Matter Expert and Office Symbol. Use the Notes column to provide any additional information that is necessary to fully understand any row entry.

        vii.  It is acceptable to populate cells / fields of parameters that are not used by the acquisition program with NA for Not Applicable. For the common worksheets, if a field is not applicable to the program, fill the cell with a "NA" to represent that a conscious review of the cell was made by the program office and the cell is Non-

Applicable. When doing so, hide the row. If the parameter is expected to be used to describe the program but the values are unknown at this time, it is acceptable to populate the cell / field with TBD for To Be Determined. The use of TBD should be minimized, however; CARD reviews will assess TBDs for appropriateness and mitigate them if required for cost estimating purposes.

c. CARD Table Mechanics

    i. Leave column A blank. This column is reserved for future use.

    ii. When showing levels of indenture, use Excel's Indent function - do not enter leading spaces in the cell.

    iii. Do not delete rows. As it will be easier in subsequent updates to unhide a row rather than insert a new row.

    iv. Do not leave a cell blank since it will appear to be an item not-yet-examined and waiting to be filled for this version of the CARD.

    v. Tables may be copied and repeated as needed.  Use cell B3 to explicitly name the new sheet and rename the new tab to readily identify it and avoid confusion.

d. CARD Table Inputs (by Tab).

    i. <u>PMP Hardware Technical Table</u>.  This Table provides system physical, performance and configuration values that are cost drivers in estimating methodologies such as CERs.  The values are also useful in identifying analogous systems and scaling their cost.  The parameters include including physical design attributes and may also include key performance parameters established through the Joint Capabilities Integration and Development System (JCIDS) and documented in an approved capabilities needs document (Capability Development Document or Capability Production Document). The rows are organized by WBS with applicable parameters listed below each element name. The Parameter Name, Unit of Measure, Unit Qualifier, and Definition are prepopulated. Tailor the WBS to reflect program specifics.

        (a.) Value:  Enter parameter values as a single value in this column.

        (b.) Low, High, Margin:  If needed, hit the Ungroup button above to see Uncertainty columns.  If parameter value is uncertain, and cannot be expressed as a single value, use the Low and High columns to enter a range. (This is not meant for full probabilistic expression of parameter uncertainty. But if a probabilistic expression is needed, enter the most-likely value in the Value column, the bounds in the Low and High column, and the confidence level in the Notes column.) Alternatively parameter names such as "Weight – Growth Allowance" may be used to identify margin.

(c.) Objective, Threshold:   If needed, hit the Ungroup button above to see these columns.   Enter Requirements Specification Objective and Threshold.

(d.) Estimate or Actual: Identify if the parameter value is an actual value or an estimated value.

(e.) Source:  Where did the value come from (cite document name and date, SME name and office symbol, etc.)?

(f.) Notes:  Notes should include the following:
1. Any information to help understand any differences from the source data and the definition.
2. For example while the Power requirements for electronics should be the steady state value, the notes might also include start power.
3. Cite analogous system in the notes if applicable.

(g.) Alternate (e.g. Second, Third etc.)Reference Designs (e.g. Independent Review Team, Contractor A, Contractor B, etc.): If these columns are expanded (using the ungroup button) and used to present an alternative design solution, ensure each design is labelled in the first column heading cell.

If new additional parameters are needed simply insert a row and provide the Parameter Name, Unit of Measure, Definition, and enter "New" in the VocabID column.

Some of the parameters are repeatable and named "1…n" which can be copied, inserted, and renamed as many times as necessary.

The PMP Hardware Technical Table may be broken into a more manageable set of Tables if desired (e.g. Aircraft, Engine, Avionics, C4I Electronics).  The standard commodity Tables have done so for select subsystems.  Maintain the same column arrangement for each PMP table.

ii.  <u>Non-Hardware Technical</u>.  This Table provides cost drivers for non-PMP WBS cost elements.  Common element cost drivers enable direct parametric estimation in lieu of factoring estimated cost off of PMP cost. The column arrangement and instructions are the same as for the PMP Hardware Technical Table.

iii.  <u>O&S</u>.  This Table covers Operating and Support parameters necessary to estimate the cost of maintenance and other O&S costs. It identifies how the system will be employed and organized in peacetime, contingency, and wartime situations.  The column arrangement and instructions are very similar as for the PMP Hardware Technical Table. This Table is similar in structure to the other technical data Tables. It is not time-phased. The essential parts time-phased parts of O&S are on the Quantity Table and the Manpower Table. This Table is for static values or constants.

iv.  <u>Software Development</u>.  This Table includes software development cost drivers. Software is an integral part of all systems today, and exists at many levels within the system.  Software sizing and descriptors are necessary for robust software development cost estimates.

The Software Development Table should to be replicated for each Software Work Breakdown Structure (WBS) element.  In cells C5 and C6 enter the WBS/CRS element and name.

Unlike the other CARD Tables, software rows and columns are transposed. Unique attributes in each software release and CSCI are described in columns, not rows. Insert columns for additional CSCIs, as needed, and label the columns. Enter values per row Parameter Name and Definition.  If CSCI-level data is not available, then use the CSCI columns to present the values for the entire release.

The cell shading on the Software Development Table helps to distinguish if inputs are required by Release or by CSCI.  White cells under the Release column pertain to Release-level parameters only.  White cells under the CSCI column pertain to CSCI only.

For CSCIs being developed incrementally, it will be necessary to display the sizing information for each Increment or Build.  For CSCIs being developed using the Agile concept, it will be necessary to display sizing information (e.g., story points, themes, user stories), schedule, and productivity (e.g., burn-down, backlog) for each Sprint.  This Table also includes schedule milestone information regarding both the CSCI builds, and the dependencies between the CSCIs and related hardware.

Prior to MS B, the CARD likely includes planning data from a reference system or from an analogous system, as opposed to actual data on the system being developed.  The Software Development Table accommodates these types of inputs in support of early cost estimates.  Later, when the system is being developed, this Table allows the program to collect the software actuals.

The Work Breakdown Structure on the PMP Hardware Technical Table includes a subset of the Software Development Table technical data fields for software components.  These fields can be used as an initial location for pre-MS B reference system or analogous system data, or as the final technical data for very small software end items rather than using a Software Development Table. However, all software items from the PMP HW Technical Table should have a corresponding Software Development Table to capture the actual data for the software being developed on-contract.

A Software Resources Data Report (SRDR) is required from the development vendor and subcontractors for all MDAP and MAIS programs if the cost of the software effort exceeds $20M in Then Year dollars.  The SRDR requirement

might also be applied to high risk or high technical interest programs for efforts less than $20M. If software development information has already been reported in a submitted SRDR, it need not be duplicated. However, do provide a reference to the specific SRDR submission containing the pertinent data. Detailed software specific instructions can be found in the Software Resources Data Reporting (SRDR), Software Development Data Item Description (DI-MGMT-82035).

v. <u>Software Maintenance</u>. This Table includes software maintenance cost drivers. Software parameters are necessary for robust software maintenance cost estimates. Detailed software specific instructions can be found in the Software Resources Data Reporting (SRDR), Software Maintenance Data Item Description (DI-MGMT-82035). The Software Resources Data Report (SRDR) Maintenance is not a management report. General Instructions are similar to the Software Development Table. If this section's information has already been reported in a submitted Software Resources Data Report (SRDR), it need not be duplicated. However, do provide a reference to the specific SRDR submission containing the pertinent data.

vi. <u>Acquisition Quantities, Fielding, and O&S Time-Phased Table</u>. This Table identifies the quantities of systems to be developed, procured, and deployed. Quantity is a critical cost driver necessary to calculate total cost and unit cost metrics such as PAUC and APUC. Also, cumulative quantity information is necessary for O&S cost calculations. Any systems associated with backup inventory or attrition reserve will be identified separately. If possible, any system quantities associated with known foreign military sales should be identified and displayed separately including historical FMS sales for legacy system(s). For systems that routinely deploy, this section will also describe the anticipated deployment approach of the system in terms of number of sites and nominal operating locations.

    (a.) Column instructions:
        1. Annual quantity requirements are shown by column. Replace each column heading "YR (1…n)" with actual fiscal year beginning at the earliest year quantity data is applicable. List all program years. Avoid using "Prior "and "To-complete" columns - be explicit. Note early years may be known and future years forecasted so designate each column as Estimate or Actual.
        2. Long Lead Requirements: For procurement quantities, enter text describing long lead requirements. Long lead may be expressed either as a percent of funds or by listing specific items that must be purchased early. Otherwise leave blank.
        3. Unit of Measure and Unit Qualifier: Unit of Measure is "Quantity" and Unit Qualifier is Aircraft, Engines, AURs, Radars, Silos, Sites, Vehicles, Hulls, etc.
    (b.) Row instructions: The Table rows are organized by overarching type of quantity type further divided by major end item. In addition to Prime

Mission Product end items, provide quantities for support equipment and training devices as appropriate. Enter the recognized name of each item to include its configuration or variant name or designation. The same recognized end item name should be used on the Configuration Table.

1. Prototype Quantity: Enter annual quantities here. For incrementally-funded items convey the year in which the forecasted obligations are made. Include engineering units and test articles.
2. Procurement Quantity: Enter annual quantities here. For procurement-funded items convey the year in which the quantities will be procured in accordance with full funding policy. Include non-PMP items also.
3. Concurrent Production Quantity: Enter annual concurrent production quantities here. Concurrent production represents units produced by the contractor for other parties such as Foreign Military Sales or any other customer.
4. Number of Deliveries: Enter annual quantity installed or delivered here. This is pertinent for modeling fielding event costs or install costs.
5. Inventory or Fielded Density (by Item): Enter the cumulative quantities, both refurbished prototype and procurement units, delivered and supported here. This is pertinent for modeling annual O&S costs. Show ramp-down as items leave service at end of their useful life.
6. Inventory/Fielded Density (by Location): Enter the cumulative quantities, both refurbished prototype and procurement units, delivered and supported by location here. This is pertinent for modeling annual O&S costs that are location-sensitive. Show ramp-down as items leave service at end of their useful life.
7. Operational Activity: Enter annual activity or Operations Tempo by annual miles or hours as appropriate. Expand by Location or End Item as needed. If an alternative metric (other than annual miles or hours) is appropriate for the system, use it. Some alternative metric examples are also shown on the Table
8. Number of Disposals: Enter annual quantity of items leaving service at end of useful life. This is pertinent for modeling demilitarization and disposal costs as well as density ramp-down.
9. Number of Overhauls or Scheduled Depot Maintenance: Enter annual quantity of overhauls or any other scheduled Depot activity here. This is pertinent for modeling Depot costs.
10. Number of Hardware Modification Kit Procurement: Enter annual quantity of kits purchased for modification events here. This is pertinent for modeling Mods costs.
11. Number of Hardware Modification Installs: Enter annual quantity of modification installs here. This is pertinent for modeling Mods costs.

12. Number of NDI Refresh Events: Enter annual quantity of NDA refresh events here. This is pertinent for modeling refresh cycle costs.
13. Number of Training Events: Enter annual classes and other events here. This is pertinent for modeling Training costs.
14. Number of Base Activation: Enter quantity of sites activated here. Entries often will simply be 1 if each site is explicitly named by row. This is pertinent for modeling base activation costs and to begin location-specific costs.

vii. <u>Configuration</u>. This Table identifies the composition of configured end items. Mapping subsystems/component quantity-next-higher-assemblies to end item quantities provides understanding of total quantity necessary for proper rate/learning curve analysis. Values entered will be the ship-set quantity per end item. The rows are WBS items which may be further divided into subsystem or specific parts if needed (enter their name in the Lower-level Assembly or Part column). The columns represent end-item configurations. Each named column should correspond to the end-items named in the Acquisition Quantities Time-Phased Table. The column names shown in the empty Table are examples only – customize columns to suit the program being described. Maintain the same naming scheme as the time-phase quantity table.

viii. <u>Manpower Time Phased.</u> This Table provides annual headcounts (by phase & major function) necessary to support staff-loading methodology. Depict the entire staffing stream and avoid Prior To or To-Complete columns. Use the drop-down menu in the Estimate or Actual row to identify quantities as planned or actual. It is recommended to calculate the staffing requirements using Full-Time Equivalent (FTE) as the Unit of Measure for the Manpower Time-Phased table. The Constant per System Value column can be populated to capture staffing requirements on a per system basis instead of time-phasing the total. When doing so, confirm these constants yield unambiguous results when multiplied by the applicable time-phased contents of the Time-phase Quantity Table (e.g. Density). Insert rows to capture contractor staffing if needed. All entries should be Full Time Equivalents (FTEs)

(a.) Column Instructions:
1. YR 1 to YR n: Rename columns in row 5 for all the program's fiscal years. List all program years. Avoid using Prior and To-complete columns - be explicit. In row 6 designate each column as Estimate or Actual. Enter annual values for FTEs in the rows below.
2. Unit of Measure: The default Unit of Measure is Full Time Equivalents (FTE). If otherwise enter the unit of measure.

(b.) Row Instructions:

1. For the Acquisition phase, describe the System Program Office Staff divided into Government Civilian and Military) personnel and Support Contractor personnel. Enter a summary of these personnel in rows 8 – 24. If a detailed breakout by function is desirable ungroup the row 26-122 and enter functional headcounts below each summary category child element.

2. Beginning with row 126, enter the personnel requirements for other Government agencies supporting the program. The organizations described should be consistent with those described in the Acquisition Table and the Budget Plan Table.

3. Beginning with row 146, enter O&S phase personnel requirements for the broad categories of Operate, Maintain, Support, and Train. In the Item Name columns enter category of manpower. Use headings in bold and indent using wherever it is useful. Use children to describe Grade to the extent needed. (Use Excel's Indent function - do not enter leading spaces in the cell). Repeat the Table by major organization, command, location, or theater as needed.

4. In addition to the direct O&S categories of Operate, Maintain, Support, and Train, enter personnel requirements for Systems Engineering, Program Management, and continuing Software efforts throughout the remainder of the life cycle.

ix. <u>LRU Level</u>. This Table arrangement is suitable for any listing of Line Replaceable Units. This level of detail is necessary for bottom-up estimates, maintenance estimating, and performing component analysis. The Table is oriented to show parts by row with part numbers/names in the fifth/sixth column. Use the first two columns to show WBS elements as needed for organization. Use the second two Tables to show Work Unit Code (WUC) as needed for organization. Column instructions:

    (a.) LRU /Part Number: Enter recognizable identifier.

    (b.) LRU /Part Name: Enter recognizable name of item.

    (c.) Vendor Name: Enter the manufacturer or supplier name.

    (d.) Use this table to further describe Level of Repair Analysis (LORA) information for each LRU.

        1. MTBF - Design Controllable: Enter Mean Time Between Failure

        2. MTBF – Induced: Enter Mean Time Between Induced Failures

        3. MTBF – Combined: Enter Mean Time Between Failures

        4. LRU Condemnation Rate : Enter scrap rate.

        5. Level of Repair (O, I, or D): If LORA has taken place enter values for Maintenance data. Else Omit.

        6. Owning Organization: Who owns the support tail? Cite if responsibility of supporting this item belongs to this program. If not, cite the organization responsible.

    (e.) Use this Table to further describe repair information for each LRU.

1. Unit cost – enter a reference cost from which repair cost is computed
2. Unit Cost Basis – enter what the reference unit cost represents (e.g. first unit cost)
3. Repair Cost – enter estimated repair cost
4. Repair Cost Basis – enter methodology
5. Cost Units – enter year dollars and scale (e.g. thousands)

x. <u>Part Level</u>. This Table arrangement is suitable for any listing of parts or equipment such as Bill of Material (BOM), a spares package, or support equipment. This level of detail is necessary for bottoms-up estimates, maintenance estimating, and performing component analysis. The Table is oriented to show parts by row with part number/names in the third/fourth column. Use the first two columns to show WBS elements as needed for organization. If a full indentured BOM is available then it may be submitted in place of this tab. Column instructions:

    (a.) Vendor Name: Enter the manufacturer or supplier name.
    (b.) Developed/NDI/ COTS/GOTS: designated the part as non-developed or developed item.
    (c.) Quantity: Enter the quantity per WBS item.
    (d.) Unit of Measure: Enter units as appropriate.
    (e.) Warranty Period: If part includes a warranty, cite its duration.
    (f.) Warranty Period Unit of Measure: Enter a time measure to go along with warranty period such as years, months, miles, etc.
    (g.) If the Table is being used to convey a priced bill of materials, enter values for these columns. Else omit.
        1. Nonrecurring Price
        2. Unit Price
        3. Price Total
        4. Warranty Price
        5. Warranty Unit Price
        6. Estimate or Negotiated
        7. Competitively Sourced (Y/N)
        8. Contract Type
        9. SBIR (Y/N)
    (h.) If tiered pricing is applicable, repeat these three columns as needed to convey completely. Tiered pricing is expressed in "stepladder" fashion with price dependent on a lot quantity range.
        1. Stepladder Low Quantity: the step's lower range of quantity
        2. Stepladder High Quantity: the step's upper range of quantity
        3. Stepladder Price: the step' unit price.

xi. <u>GFE</u>. This Table arrangement is suitable for a listing of Government Furnished Equipment. This level of detail is necessary for identifying items that incur no contract cost. The Table is oriented to show parts by row with part number/names

in the third/fourth column. Use the first two columns to show WBS elements as needed for organization. Column instructions:

> (a.) Vendor Name: Enter the manufacturer or supplier name.
> (b.) Developed/NDI/ COTS/GOTS: designated the part as non-developed or developed item.
> (c.) Quantity: Enter the quantity per WBS item.
> (d.) Unit of Measure: Enter units as appropriate.
> (e.) Warranty Period: If part includes a warranty, cite its duration.
> (f.) Warranty Period Unit of Measure: Enter a time measure to go along with warranty period such as years, months, miles, etc.

xii. <u>Program Table</u>. This Table provides summary level program descriptors. For a new program, it sets up the program's DAMIR and DCARC descriptors. For an ongoing program it should align with DAMIR and DCARC descriptors. Column instructions:

> (a.) Value: Enter parameter values as text.

xiii. <u>Milestone Table</u>. This Table provides program milestone dates needed to time-phase and inflate the estimate as well as provide durations needed to estimate time-sensitive costs. A row is provided for each milestone and may be further tailored by inserting additional rows to convey additional program pertinent milestone dates. Column instructions:

> (a.) Parameter Name: To the extent possible use standard recognized milestone names. When any parameter calls for additional detail, insert rows underneath and indent sub-names as needed.
> (b.) Subprogram: If a milestone pertains to a particular subprogram, replicate the row and name the subprogram as needed.
> (c.) Value: Enter parameter values as a single date value.
> (d.) Estimate or Actual: Identify if the parameter value is an actual value or an estimated value.
> (e.) For additional columns to express alternative points of view, hit the Ungroup button near the top of the spreadsheet. When expanded, take care to label each alternative in the first column heading cell.

xiv. <u>Acquisition Table</u>. This Table provides an overview of each program Phase to include contracting strategy, competition, and individual contract and lot information. Start/End dates are needed to estimate time-sensitive costs. Contract information is necessary to frame estimated contract costs and to subsequently link to contractor-submitted cost reports. Acquisition phases appear in the first column of the Table, and descriptive parameters of the acquisition effort appear in the header row. The Table is arranged with rows for each phase and parameters by column. The major rows Materiel Solution Analysis, Technology Maturation and Risk Reduction, Engineering and Manufacturing

Development, Production and Deployment, Sustainment, and Disposal row headings shown are an example only.. These rows may be tailored as needed to align with the program plan. Tailor phase names as needed. For each phase enter the following in the Phase Level Description.

(a.) Contracting Strategy
(b.) Competition Approach
(c.) Withhold Rate
(d.) Additional Information

For each performer within the phase, name the major contracts and Government Agencies in the program. In the columns enter the following:

(e.) Contractor Name; Agency Name
(f.) Contract Number; Subcontract Number; MIPR Number
(g.) Award Date; Begin Date
(h.) End Date
(i.) Option Number
(j.) Contract Fee
(k.) DAMIR/DAES Effort Number
(l.) Warranty Included (Y/N)
(m.) Warranty Type
(n.) Capital Investment (Y/N)
(o.) Capital Investment Description
(p.) Production Rate - Planned Minimum Sustaining
(q.) Production Rate - Planned 1-8-5
(r.) Production Rate - Planned Maximum
(s.) Multiyear Production (Y/N)
(t.) Concurrent Production (Y/N)

xv. <u>Roles.</u> This Table contains the program Work Breakdown Structure in three columns: WBS Number, WBS Element (name), and WBS Definition. This Table identifies the primary suppliers and performers. This is necessary to calculate contract loads by vendor tier. The rows are organized by program WBS. Column instructions:

(a.) Government Role: Specify Government's Role by WBS Element (e.g. GFE, Depot Activation). On a typical developmental program this column will likely be blank for the PMP elements given that the Prime contractor will deliver the capability. For common elements this information will augment the Government Agency information on the Acquisition Table.

(b.) Prime Contractor: Specify Prime Contractor Name by WBS Element.

(c.) Secondary Subcontractor/Supplier/Third Party: Specify Subcontractor/ Supplier/ 3rd Party by name.

(d.) Tertiary Subcontractor/Supplier/Third Party: Specify Subcontractor/ Supplier/3rd Party by name.

(e.) Notes: Elaborate on specific role or contracting arrangement in the Notes column if needed.

xvi.   <u>WBS_CRS Definition.</u> This Table contains the program Work Breakdown Structure in three columns: WBS Number, WBS Element (name), and WBS Definition.

xvii.  <u>Budget Plan</u>.  This Table provides a reference point for affordability analysis – comparing the estimating outcomes of the program as described in this CARD against  known budget values.  . In the Source column cite POM or Presidents Budget, etc. If Program Element codes are known, then cite those as well.  Enter a quantity for the dollars on this Table when useful to do so.  This is NOT this CARD's quantity but serves only to anchor and provide context for the budget dollars on this Table. Tailor categories underneath each PE Code to depict how the budget is planned to be allocated across various contracts or services.

xviii. <u>Metadata</u>. This Table provides administrative and program information on the overall CARD Table submission such as dates, author, and contact info.  This is necessary to keep up with multiple versions of a CARD Table and/or contact authors.  Enter data useful for tracking, storing, and later retrieving this CARD.

e.   Tracking to prior CARD Tables.  By maintaining the same CARD Table structure/format and updating the Metadata section information throughout the program lifecycle, changes to the CARD Table will be readily discernable.