Earned Value Measures

Prerequisite QRGs:
Reference QRG.105 Earned Value Mode 1

What do Earned Value Measures (On Schedule & On Budget) mean to GSA?
This performance measure encompasses all active new construction (BA51), repair and alteration (BA55), and reimbursable (BA80) projects with prospectus-level and above contracts. All construction contract types are measured including design/build, access roads, bridge construction, demolition, and abatement contracts. Projects with multiple contracts that are each below prospectus level are not included in this measure. If a region wishes to remove a contract from the measure, the project team must submit an explanation to the Central Office Measures Lead who will render a decision. The adjudication committee will render a decision at its monthly meeting.

The Contract Classification, Contractor Type, EV Mode, NTP/Start and Finish Dates are required fields before a Contract document enters a SOV workflow state and can be EV Measurable. Modifications require NTP/Start & Finish Dates. If a MOD is requested for Adjudication in the Pending Adjudication workflow state, the 'Request Adjudication' Lookup is required. If a MOD is Adjudicated in the Adjudicated workflow state, the 'Is Adjudicated' Lookup is required. It is important to enter the 'Adjudicated Changed Days' if the MOD extends the Contract Finish Date.

Who Will Use This?
✓ GSA Project Manager & Staff
✓ EXT CMa
✓ GSA Contracting Officer & Staff
✓ GSA Contracting Officer Rep
✓ ePM Regional System Administrator
✓ GSA EV Measures Manager
As Contracts and Modifications are presented within the Spend Plan of the Earned Value utility, the end user is presented with an icon in the toolbar to select ‘EV Measures’. The ‘View’ chart icon launches the EV Measures dialog window containing the following supported data to view measurable performance:

1. A chart showing the current cumulative Projection and Actual Work In place (WIP) amounts by month.

2. A chart showing the Contract Performance with respect to baseline schedule and current projection.

3. A chart showing the Contract Performance with respect to current Adjudicated Modification contract status.

4. Indicators displaying the ‘On Schedule’ and ‘On Budget’ performance of a schedule.

5. Contingency for the contract.
EV Measure Chart Samples

Reference screenshots of EV Measure tabs:

- **Approved Baseline**: S-curve of the most recent approved baseline performed by Central Office “Measures Manager” with the Planned Substantial Completion Date identified.
- **Current Projection**: S-curves calculated and spread between the Start & Finish dates of Obligations. Calculations vary based on the value of the 3 level “EV MODE 1” Lookup on the Main page (or updated projection plan).
- **Actuals (All WIP)**: Approved Invoices for Base Contract + All Mods
- **Approved Baseline:** A Baseline is set by the Measures Manager in Central Office once the Spend Plan has been saved by the project team. Additionally, the Measures Manager has the ability to edit the Planned Substantial Completion Date.

- **Incremental Contingency:** (Yellow)

- **Full Contingency:** (Red)

- **Actuals (incl. Adj. Changes):** Approved Invoices for Base Contract + All Adjudicated MODs included with each Invoice.

- **Approved Budget:** The Original Contract Award Amount + Adj Mods.

- **Approved Budget + (XX%):** The Original Contract Award Amount + Adj Mods + Contingency % entered by end user with saved Spend Plan

- **Current Contract Amount:** The Original Contract Value + All Modifications
**EV Measures: On Budget & On Schedule**

**On Schedule:**
- If Actual (Incl Adj Changes) is above Incremental Contingency (Yellow Line), then = Green
- If Actual (Incl Adj Changes) is between Incremental Contingency (Yellow Line) and Full Contingency (Red Line), then = Yellow
- If Actual (Incl Adj Changes) is below Full Contingency (Red Line), then = Red
- Has there been any invoice in last 90 days? If no invoice, then = Red
- Where does the Estimated Substantial Completion Date fall.
  - If Left of Adjudicated + 10% Contingency (Red Line), then = Green
  - If Right of Adjudicated + 10% Contingency (Red Line), then = Red

**On Budget:**
- If Base Contract + All mods is within a GSA set percentage rule of base contract + adj mods + contingency, then
  - If less than 50% of Full Contingency, then = Green
  - If greater than 50% but less than Full Contingency, then = Yellow
  - If greater than Full Contingency, then = Red
- Has there been any invoice in last 45 days? If no invoice, then = Yellow
- Has there been any invoice in last 63 days? If no invoice, then = Red
EV Measures: Contingency

**Setting Contingency Percent:** The Contingency % and Planned Completion Date is editable when the Measures Manager user elects to ‘Save’ the Spend Plan.

**Contingency:**
Entered by the Measures Manager in the baselining section of the Save Spend Plan as “Contingency”

**NOTE:** Full Contingency (Red Horizontal Line) is displayed by the following formula

\[
\text{Full Contingency} = (\text{Base Contract} + \text{Adjudicated Mods}) \times \text{Contingency % entered by Measures Manager}
\]

**Available Contingency:**

\[
\text{Available Contingency} = (\text{Contract Amount} + \text{Adjudicated Mods} + \text{Allowed Contingency}) - (\text{Contract Amount} + \text{All Mods amounts}).
\]
EV Measures: Current Projection Measure Tab

**Baselining**: A Baseline is set by the Measures Manager in Central Office once the Spend Plan has been saved by the project team. Additionally, the Measures Manager has the ability to edit the Planned Substantial Completion Date.

- **Red Horizontal Line**: \( (\text{Base Contract} + \text{Adjudicated Mods}) \times \text{Contingency} \% \text{ entered by Measures Manager} \)
- **Green Horizontal Line**: Approved Base Contract + Adjudicated MODs
- **Red Vertical Line**: Approved Base Contract Finish Date + Adjudicated Time + 10% Contingency
- **Green Vertical Line**: Approved Base Contract Finish Date + Adjudicated Finish Final Date (with "Adjudicated Changed Days" extensions)
- **Approved Baseline**: S-curve of the most recent approved baseline performed by Central Office “Measures Manager” with the Planned Substantial Completion Date identified. Note: Approved Base line is stacked over projection on this chart.
- **Current Projection**: S-curves calculated and spread between the Start & Finish dates of Obligations. Calculations vary based on the value of the 3 level “EV MODE 1” Lookup on the Main page (or updated projection plan).
- **Actuals (All WIP)**: Approved Invoices for Base Contract + All Mods
EV Measures: On Schedule Measure Tab Details

**Approved Baseline:** A Baseline is set by the Measures Manager in Central Office once the Spend Plan has been saved by the project team. Additionally, the Measures Manager has the ability to edit the Planned Substantial Completion Date.

**Actuals (incl. Adj. Changes):** Approved Invoices for Base Contract + All Adjudicated MODs included with each Invoice.
**EV Measures: On Budget Measure Tab**

- **Approved Budget**: The Original Contract Award Amount + Adj Mods.

- **Approved Budget + (XX%)**: The Original Contract Award Amount + Adj Mods + Contingency % entered by end user with saved Spend Plan

- **Current Contract Amount**: The Original Contract Value + All Modifications
Tips

✓ Reference QRG.105 Earned Value – Mode 1

✓ Use the “Save Spend Plan” to baseline and save projection data sets so ‘EV Measures’ charts can be viewed in respective to various data sets

✓ Invoices in Pending workflow state will not appear as Actual (WIP) in the ‘EV Measures’ charts

✓ Roles are only permissible to the Measures Manager for any baselining activities and Planned Substantial Completion Date data entries.

✓ Spend Plan Projections and EV Measures are not accessible through the UI. Cognos reports and the Earned Value utility will provide these details.

✓ Actual (WIP) are charted based on the Billing End Date required field, not the end of the cost period.

✓ All Adjudicated Modifications are identified with the Is Adjudicated Lookup at the Contract Cost Allocation Line Item grid.
  o When a Modification is extending the Contract Finish Date, the “This Changed Days” field on the Main page of the ePM document must be specified.
  o When Modifications to be Adjudicated are extending the Contract Finish Date, the “This Changed Days” field on the Main page AND the “Adjudication Changed Days” field on the Schedule of Values page of the ePM document must be specified.

✓ Contracts must specify the following in order for them to function with the EV utility:
  o “02: Contract” for the Contract Classification,
  o EV Mode 1 Lookup specified, and
  o Start/Finish Dates identified
Error Handling:

If the EV utility times out and an attempt to save the spend plan or baseline occurs, a user may experience this error.