

Earned Value Measures

Prerequisite QRGs:

Reference QRG.105 Earned Value Mode 1

Who Will Use This?

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 ARRA (BA01, BA02 and BA03) projects with prospectus-level and above contracts. All 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 adjudication committee. The adjudication committee will render a decision at its monthly meeting. The Contract Classification, Contractor Type, EV Mode, NTP/Start & 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 at Pending Adjudication workflow state, the 'Request Adjudication' Lookup is required. If a MOD is Adjudicated at the Adjudicated workflow state, the 'Is Adjudicated' Lookup is required and it is important to enter the 'Adjudicated Changed Days' if MOD extends the Contract Finish Date.

- ✓ GSA Project Manager & Staff
- ✓ EXT Project Manager
- ✓ EXT Architect/Engineer & Staff
- ✓ EXT CMA
- ✓ EXT General Contractor, CMc
- ✓ GSA Contracting Officer & Staff
- ✓ GSA Contracting Officer Rep
- ✓ Regional Administrator
- ✓ GSA EV Measures Administrator



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'.

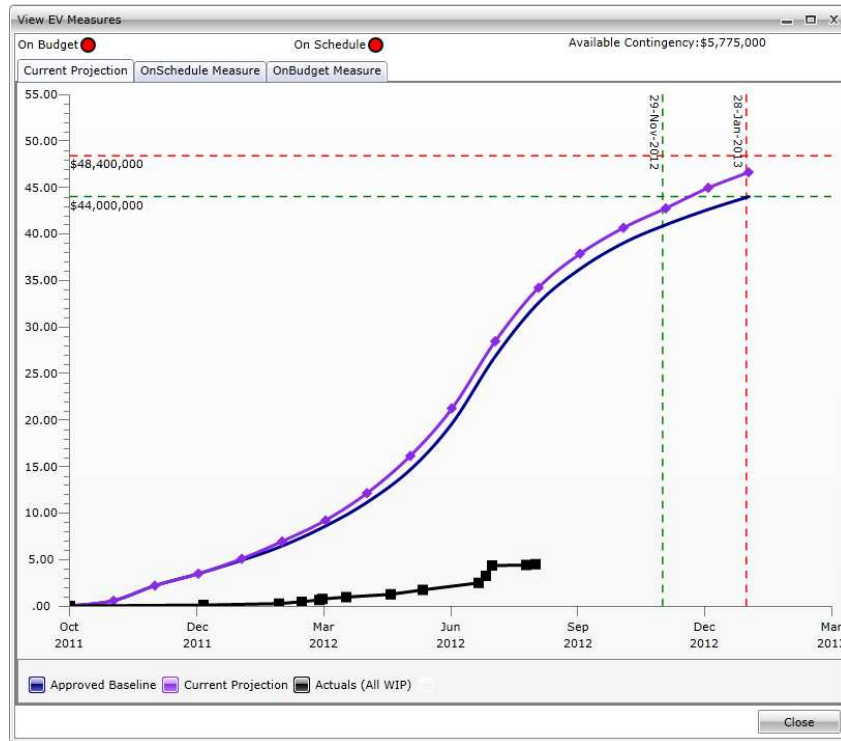
The 'View' chart icon launches the EV Measures dialog window containing the following supported data to view measurable performance:

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

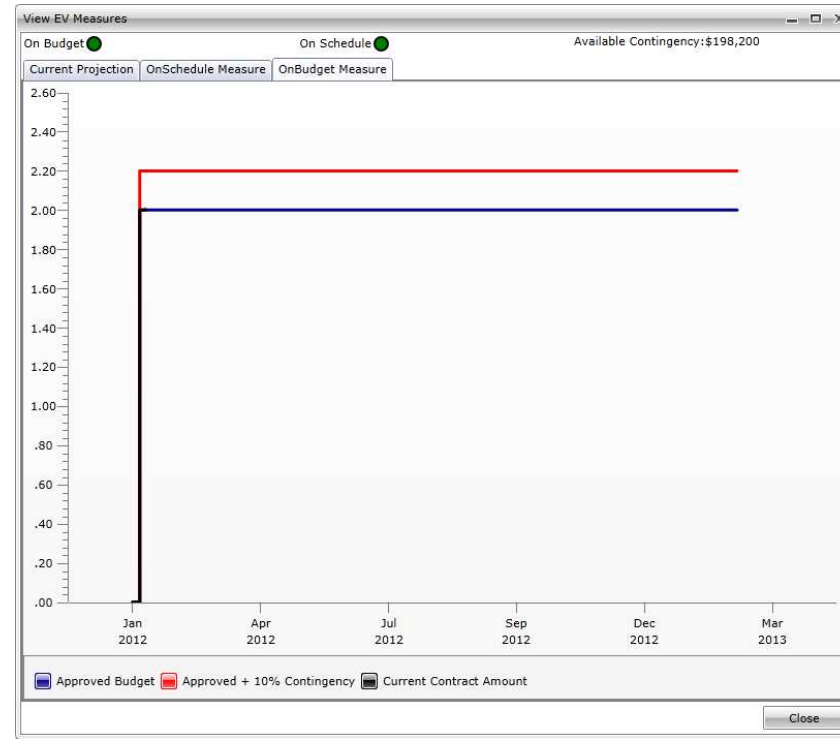
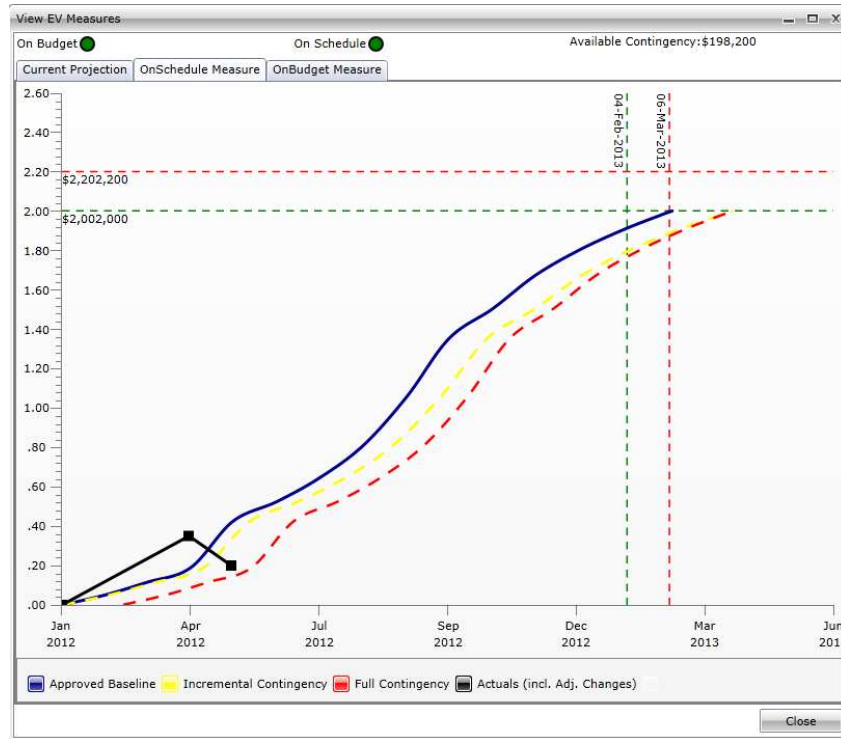
Reference screenshots of EV Measure tabs:





ePM Quick Reference Guide #106

EV Measure Chart Samples, cont.





EV Measures: On Budget & On Schedule



On Schedule:

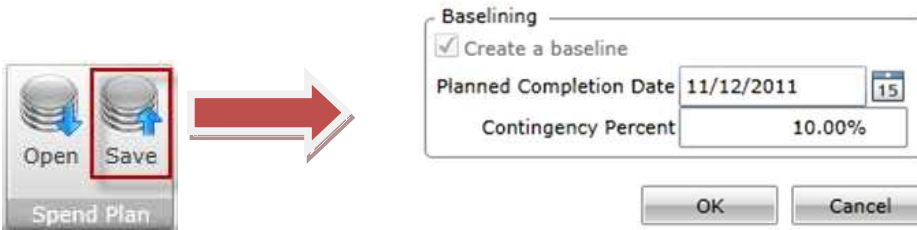
- If Actual (Incl Adj Changes) is above Incremental Contingency (Yellow Line), then = Green
- If Actual (Incl Adj Changes) is between Incremental Contingency (Yellow Line) and Full Contingency (Red Line), then = Yellow
- If Actual (Incl Adj Changes) is below Full Contingency (Red Line), then = Red
- 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:

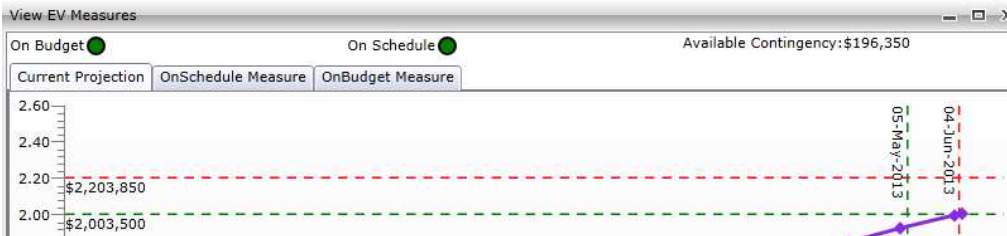
- If Base Contract + All mods is within a GSA set percentage rule of base contract + adj mods + contingency, then
 - If less than 50% of Full Contingency, then = Green
 - If greater than 50% but less than Full Contingency, then = Yellow
 - If greater than Full Contingency, then = Red
 - Has there been any invoice in last 90 days? If no invoice, then = Red



EV Measures: Contingency

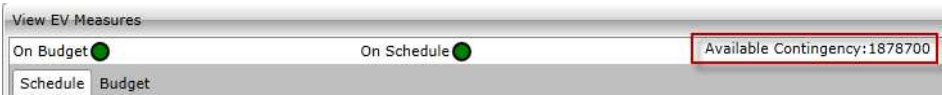


Setting Contingency Percent: The Contingency % and Planned Completion Date is editable when the Measures Administrator user elects to 'Save' the Spend Plan.



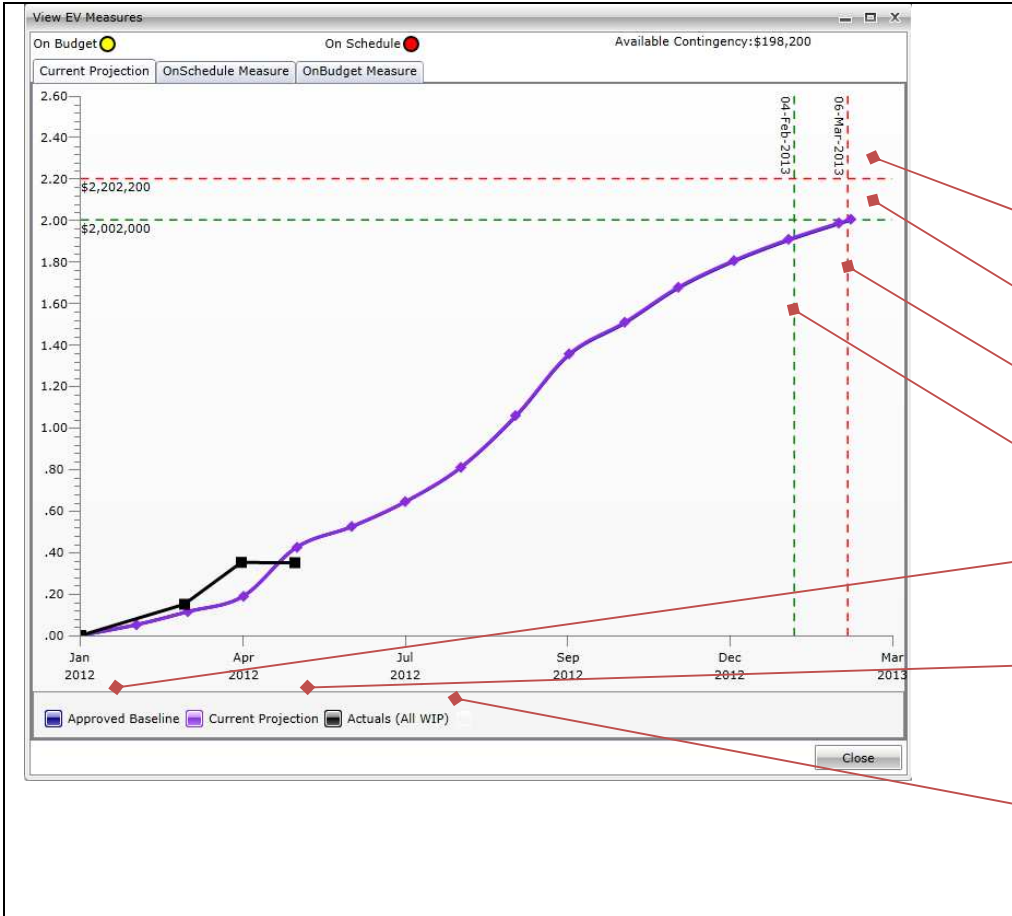
Contingency: Entered by the Measures Administrator in the baselining section of the Save Spend Plan as "Contingency"

NOTE: Full Contingency (Red Horizontal Line) is displayed by the following formula
 [(Base Contract + Adjudicated Mods) * Contingency % entered by Measures Manager]



Available Contingency:
 [Contract Amount + Adjudicated Mods + Allowed Contingency – (Contract amount + All Mods amounts)].

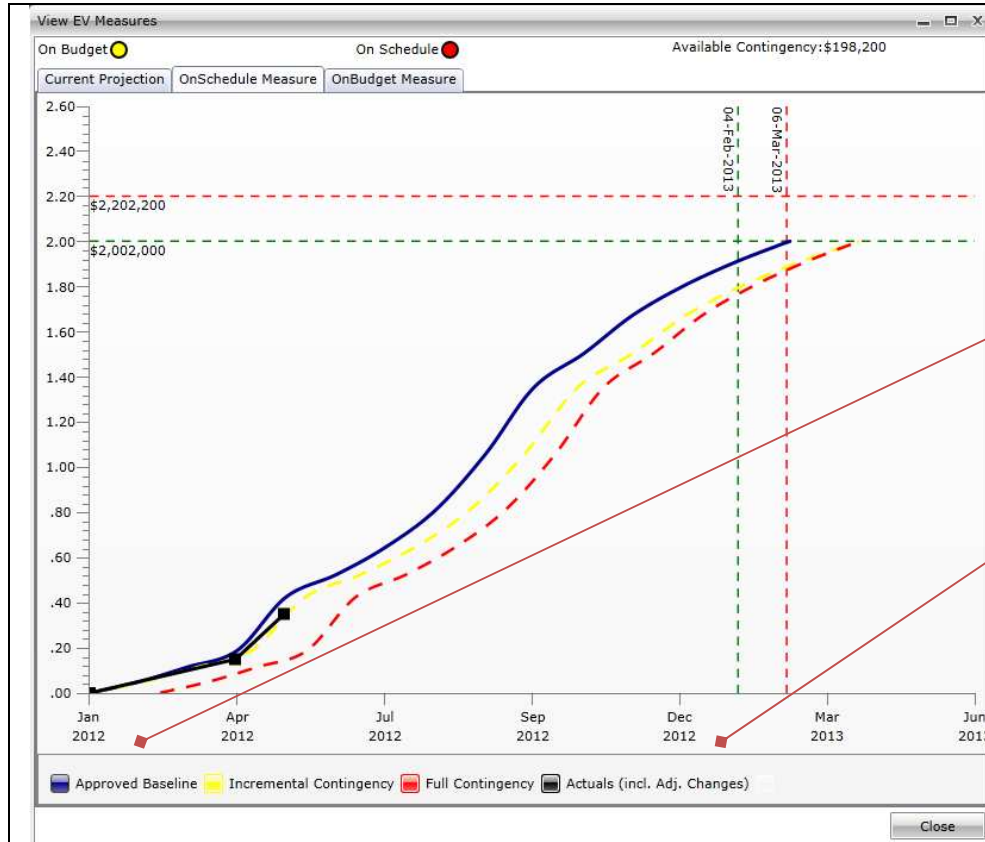
EV Measures: Current Projection Measure Tab



- Baselining:** A Baseline is performed when Saving the Spend Plan action is taken and with one whom has security roles to conduct that action. Baselining is performed by the “Measures Administrator” at the Central Office of GSA. Additionally, the Measures Administrator has the ability to edit the Planned Substantial Completion Date.
- Red Horizontal Line:** [(Base Contract + Adjudicated Mods) * Contingency % 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 Administrator” 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



EV Measures: On Schedule Measure Tab Details



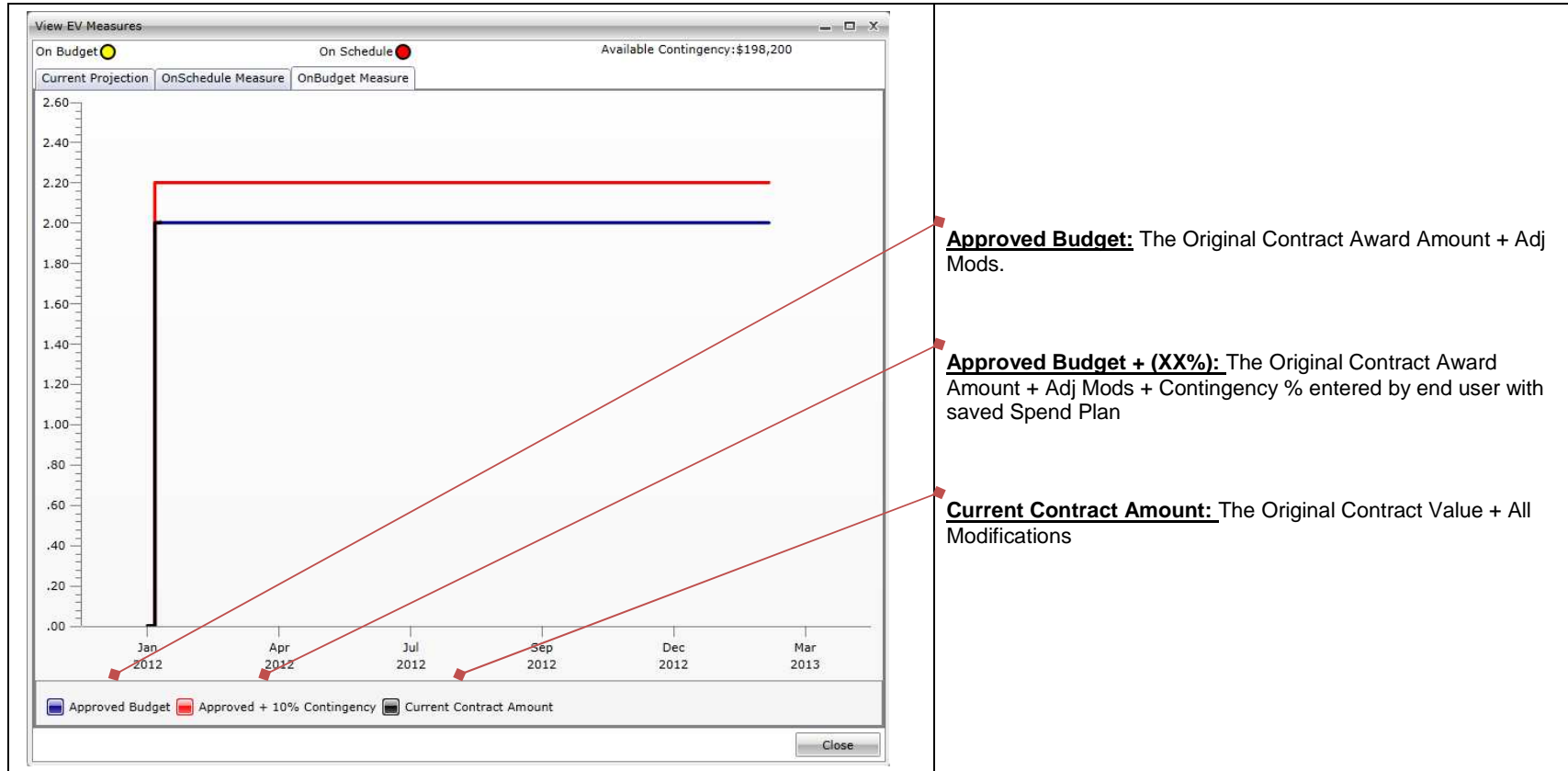
Approved Baseline: A Baseline is performed when Saving the Spend Plan action is taken and with one who has security roles to conduct that action. Baseline is performed by the "Measures Administrator" at the Central Office of GSA. Additionally, the Measures Administrator has the ability to edit the Planned Substantial Completion Date.

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

Contingency: See "Contingency" rules in the "EV Measures: Contingency" section of this document for Full and Incremental Contingency calculation rules



EV Measures: On Budget Measure Tab



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 Administrator for any baselining activities and Planned Substantial Completion Date data entries.

- ✓ Spend Plan Projections and EV Measures are not accessible through the UI. Business Intelligence 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 the Contract Cost Allocation Line Item grid.
 - 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.
 - 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:
 - “02: Contract” for the Contract Classification,
 - **EV Mode 1** Lookup specified,
 - Start/Finish Dates identified



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An Error Occurred
Message Details
System.Reflection.TargetInvocationException:
[Async_ExceptionOccurred]
Arguments:
Debugging resource strings are unavailable. Often the key and
arguments provide sufficient information to diagnose the
problem. See http://go.microsoft.com/fwlink/?
linkid=106663&Version=4.0.60531.0&File=System.dll&Key=A
sync_ExceptionOccurred --->
System.ServiceModel.FaultException: Server side Error
Occurred:
System.NullReferenceException: Object reference not set to
an instance of an object.
at
MeridianSystems.Solutions.Proliance.ServiceActivator.Foundati
onTypes.AccountAddress..ctor(String Address) in E:\Tahoe
\Solutions\Proliance\ServiceActivator\trunk
\net20\FoundationTypes\AccountAddress.vb:line 134
at GSA.EV.Web.EarnedValueService.ListAccessibleContracts
() in C:\Tahoe\Solutions\Proliance\GSA\GSA.EV\GSA.EV.Web
\Services\EarnedValueService.svc.vb:line 497
    
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Error Handling:

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