



## Agenda

- Introduction
- Respond to general questions
- Group Discussion
- Earned Value Management Presentation
- Respond to more questions
- More Group discussion



## Jim Vaughan MA, PMP

- Past President PMI Chicagoland
- Past President UIC EAA
- Former Business Consultant
- #Retired
  
- Adjunct Instructor DePaul University
  - Project Management Certificate Program



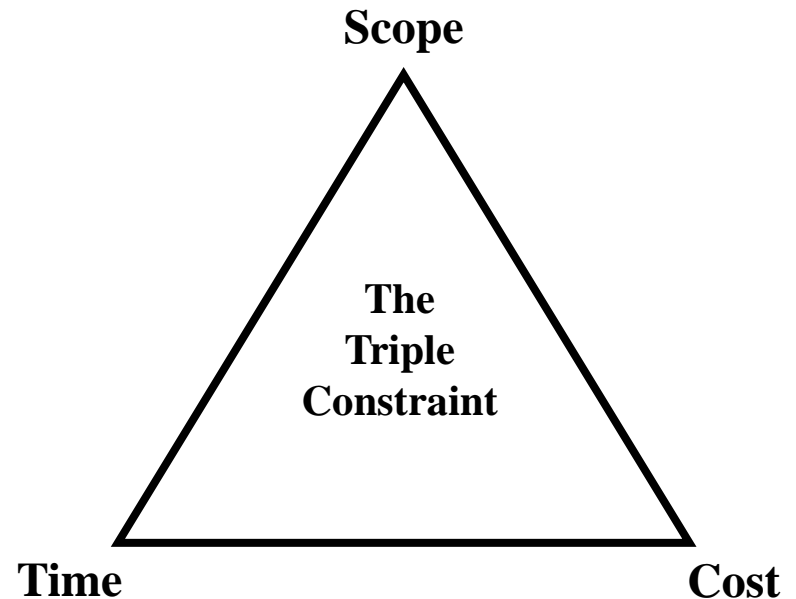
## What Do Project Managers Need to Know?

- Most project managers know where their project is at
- Many know where their project has been
- What they don't know is where their project is headed

■ Managing a project is a balancing act between

- Scope
- Time
- Cost

■ There are many tools to measure each of these individually





## Earned Value Management

- Earned Value Management (EVM) is a technique that presents time cost and scope on a single chart
- EVM is a project management best practice
- EVM charts are easy to read
- EVM charts raise questions to be investigated
- EVM provides early visibility into future project performance
  - Allows for corrective action or tradeoff decisions



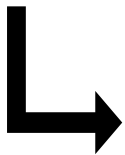
## There is lot's of data!

<b>PV</b>	<b>Planned Value</b>	
<b>EV</b>	<b>Earned Value</b>	
<b>AC</b>	<b>Actual Cost</b>	
<b>SV</b>	<b>Schedule Variance</b>	<b>SV = EV – PV</b>
<b>SPI</b>	<b>Schedule Performance Index</b>	<b>SPI = EV/PV</b>
<b>CV</b>	<b>Cost Variance</b>	<b>CV = EV – AC</b>
<b>CPI</b>	<b>Cost Performance Index</b>	<b>CPI = EV/AC</b>
<b>EAC</b>	<b>Estimate at Completion</b>	<b>EAC = BAC/CPI</b> <b>EAC = AC + (BAC – EV)</b> <b>EAC = AC + [(BAC – EV)/(SPI x CPI)]</b> <b>EAC = AC + ETC</b>
<b>ETC</b>	<b>Estimate to Complete</b>	<b>ETC = EAC – AC</b> <b>ETC = new estimate</b>
<b>VAC</b>	<b>Variance at Completion</b>	<b>VAC = BAC – EAC</b>
<b>TCPI</b>	<b>To Complete Performance Index</b>	<b>TCPI = (BAC – EV) / (BAC – AC)</b> <b>TCPI = (BAC – EV) / (EAC – AC)</b>

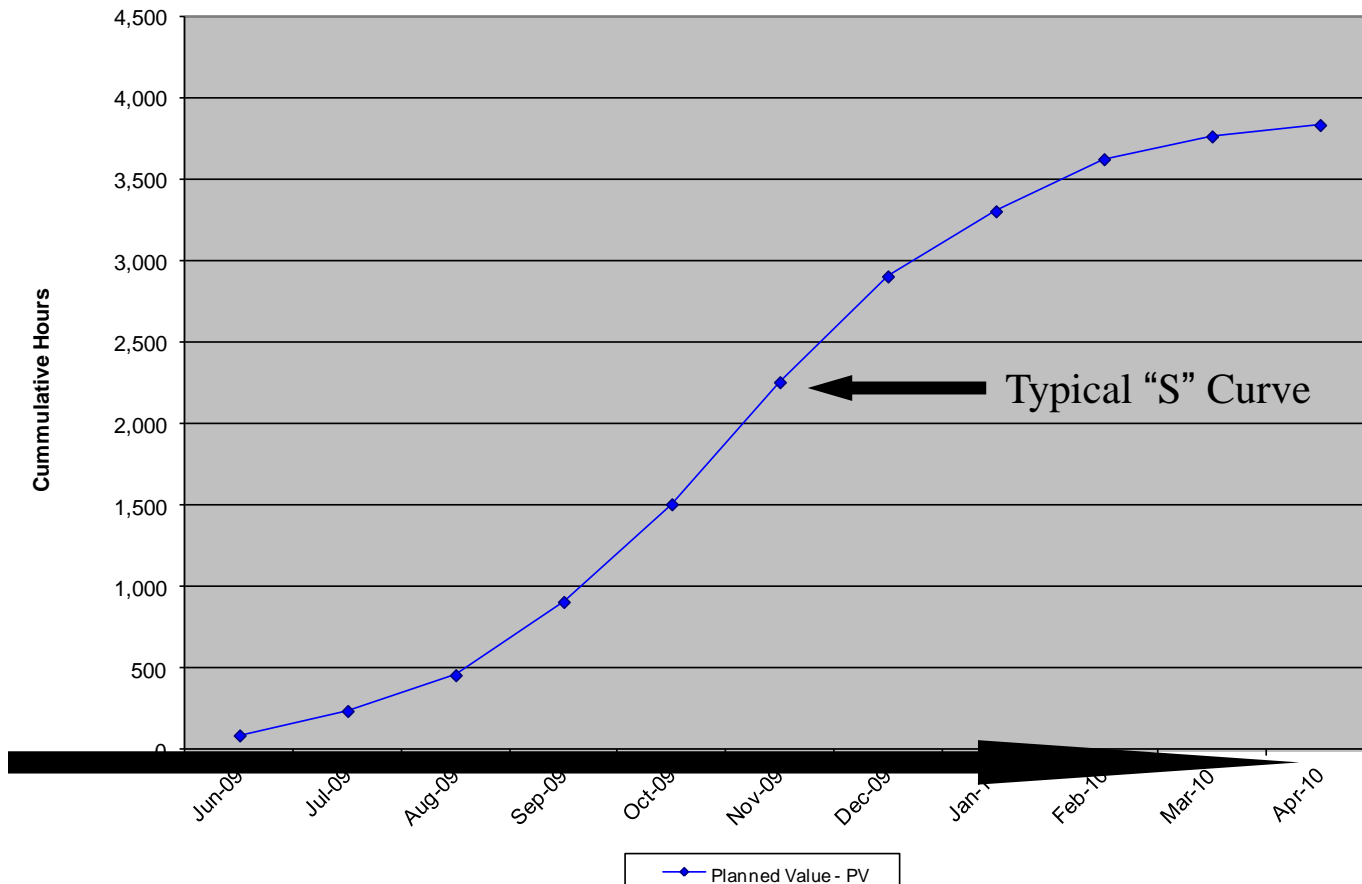


## Planned Value

Value based on planned staff hours

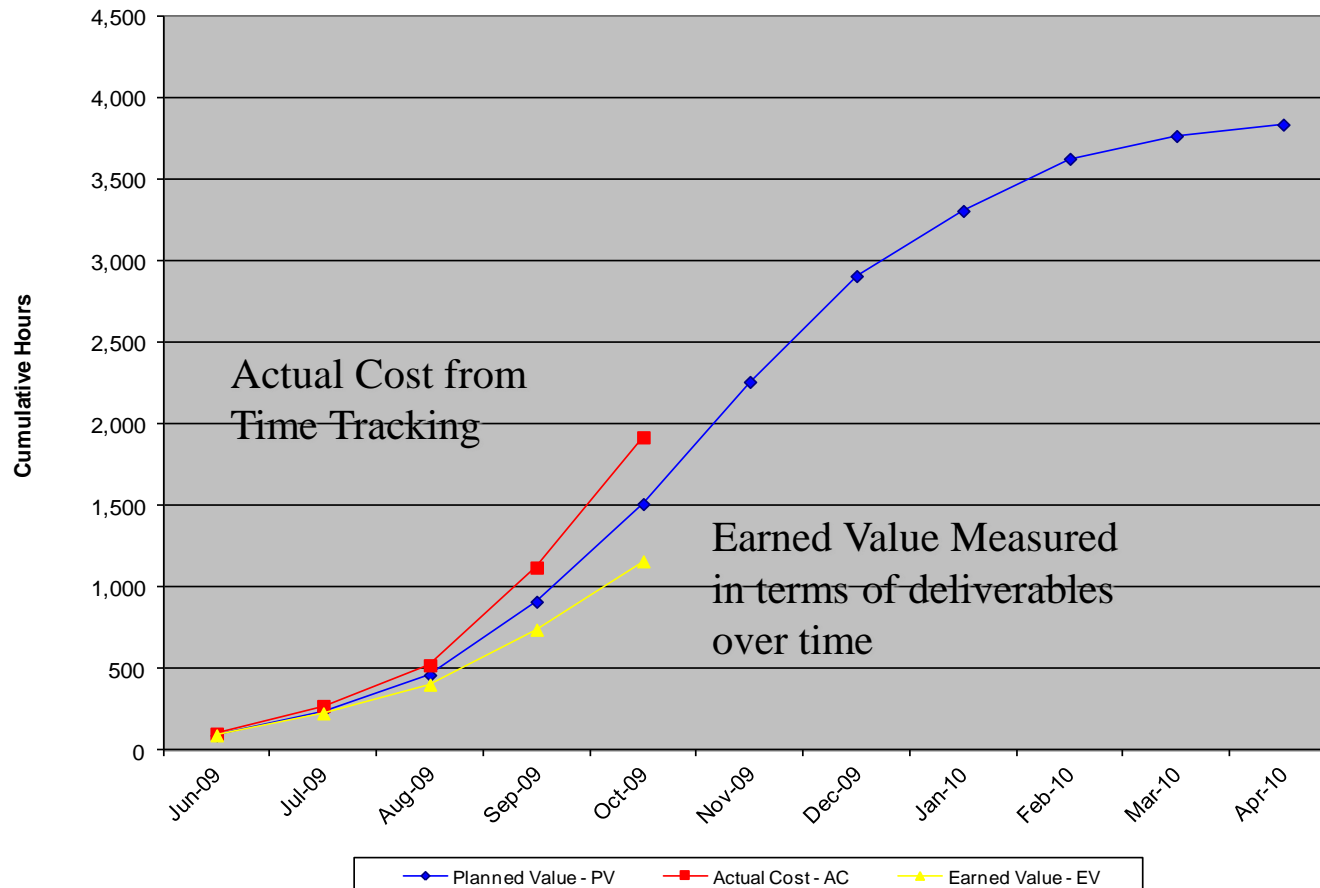


Measured against the project timeline



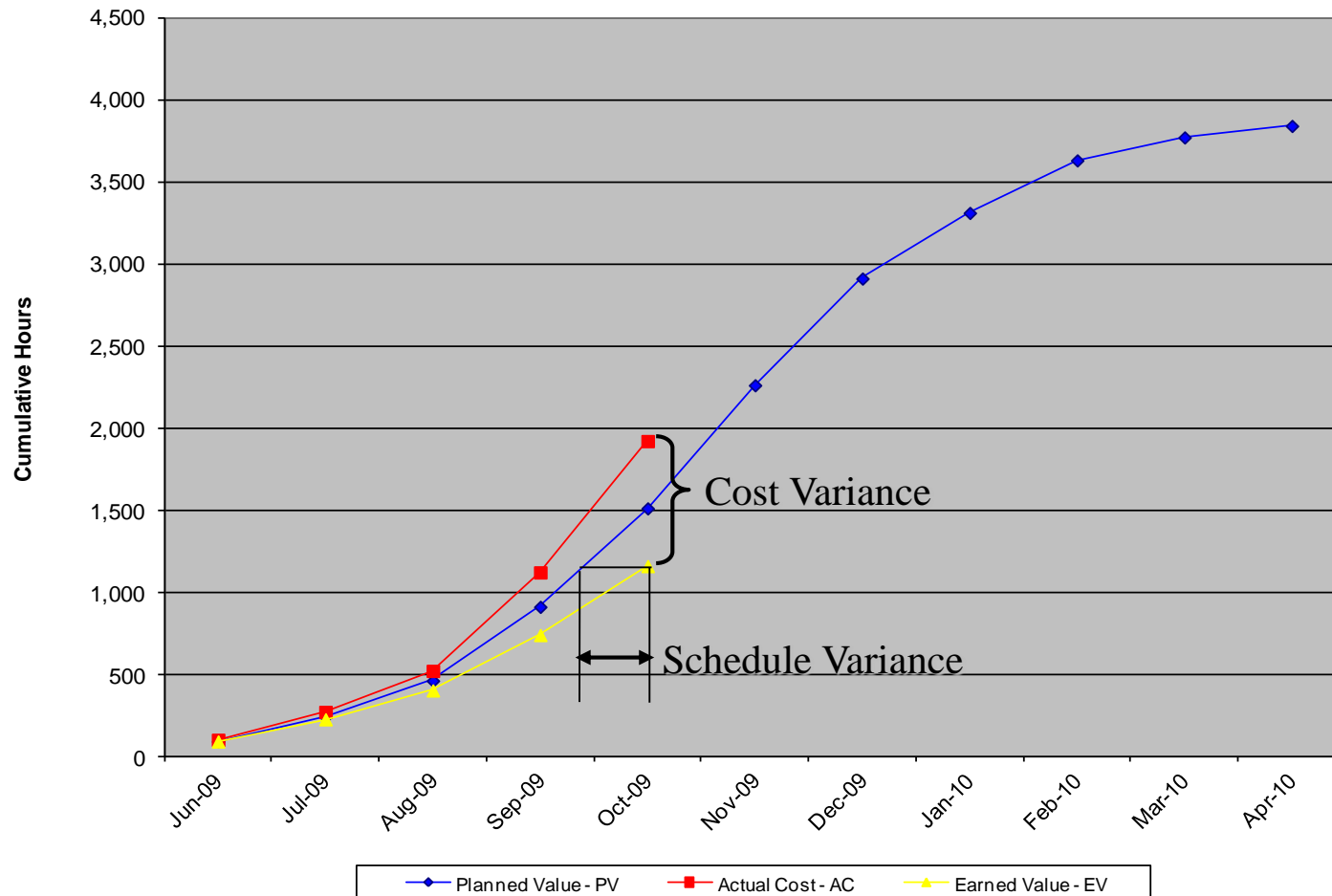


## Actual Cost and Planned Value





## What the Chart Tells Us



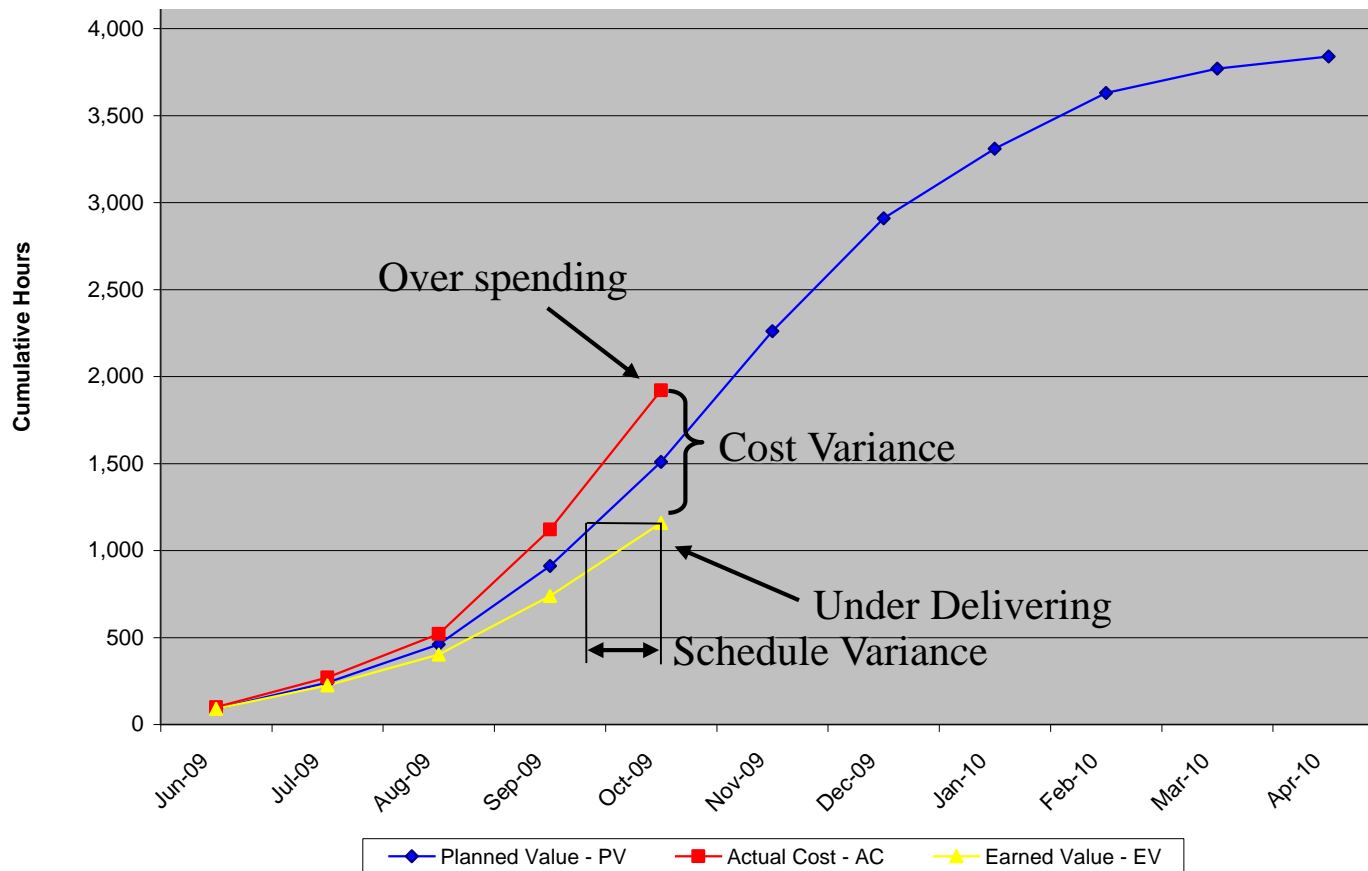




**A simplified model of**  
**Deliverables based Earned Value Management**

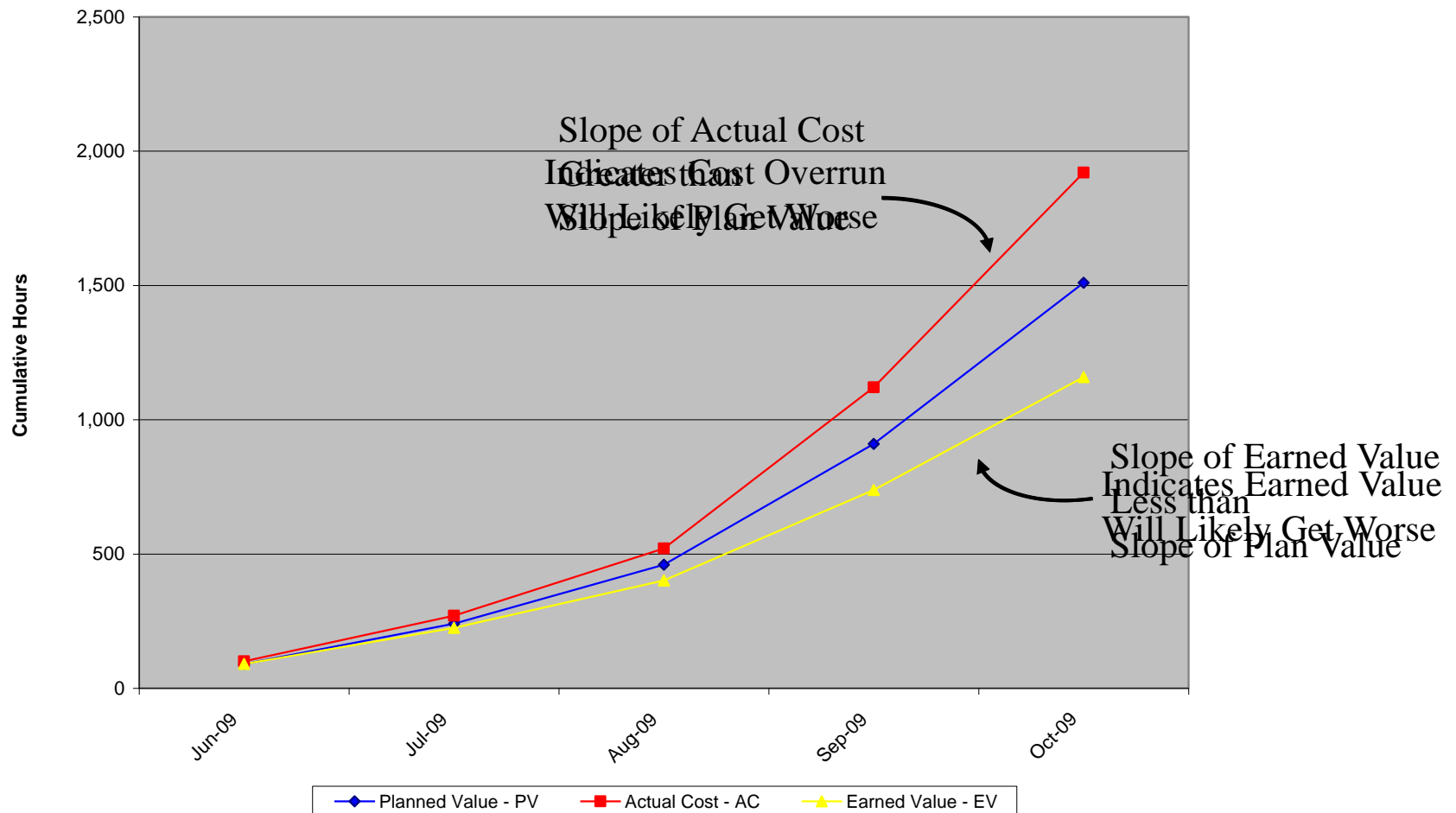


## Interpreting the Charts





## Interpreting the Charts





## When interpreting EVM charts

### Don't

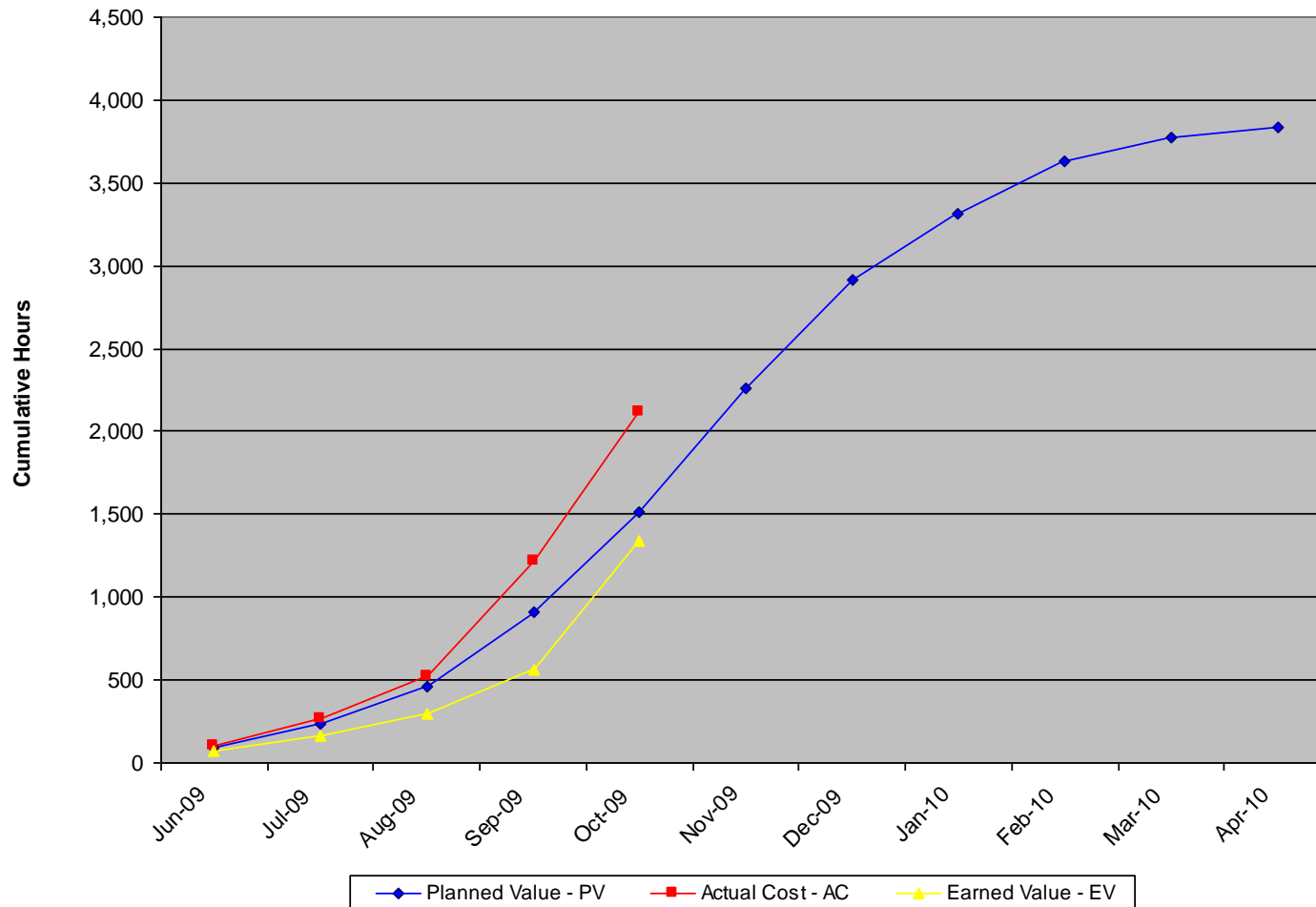
- Just look at the raw data
- Just look at variances
- Just look at current data
- Assume things will get better
- Think you have all the answers

### Do

- Chart your data
- Look at slopes
- Look at data over time
- Assume things will stay the same
- Know that you don't know it all

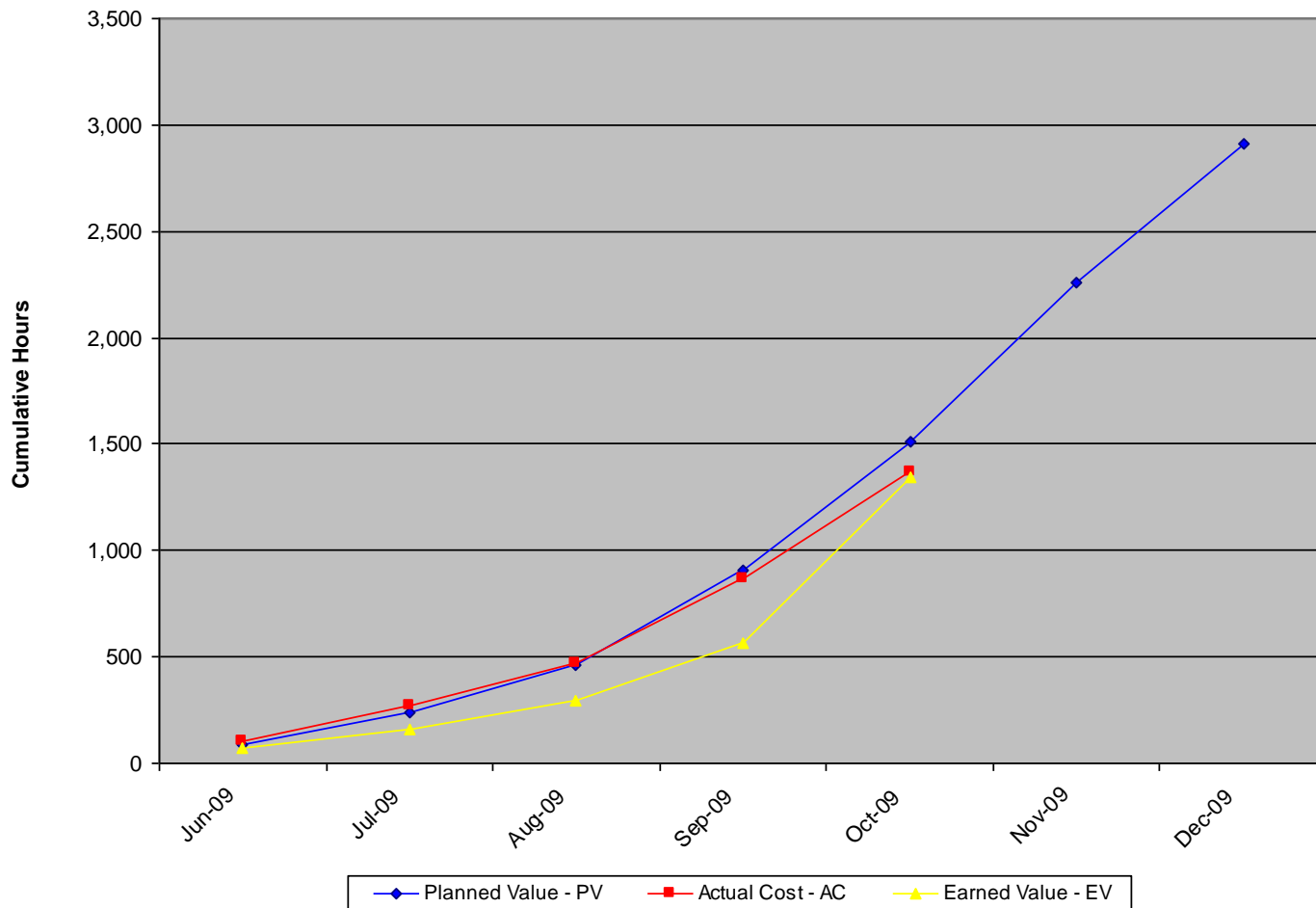


## Interpreting the Charts



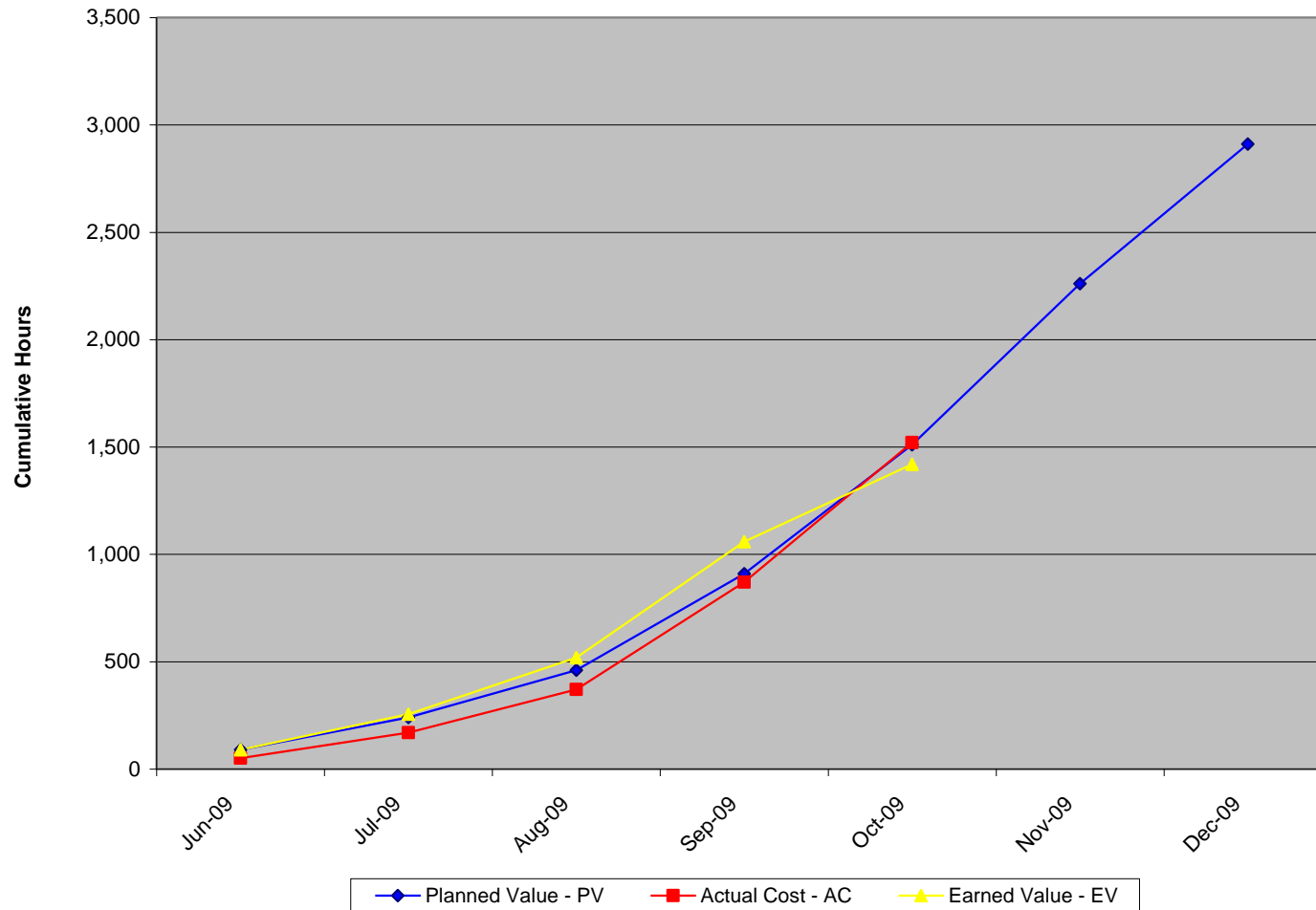


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