Measurement Information Specification
Feasibility of Plans
Version 3.0

Information Need Description	
Information Need	
Questions Addressed	
Information Category	Schedule and Progress Resources and Cost Product Size and Stability
Description	

Measurable Concept	
Measurable Concept	Milestone Performance Personnel Work Unit Progress Functional Size and Stability

Entities and Attributes	
Relevant Entities	
Attributes	

Base Measure Specification	
Base Measures	Milestone Dates Effort Component Status (Code and Unit Test) Requirements
Measurement Methods	
Type of Method	
Scale	
Type of Scale	
Unit of Measurement	
Categorization	
Typical Aggregation Structure	
Typically Collected for Each	
Count Actuals Based on	

Derived Measure Specification	
Derived Measure	
Measurement Function	

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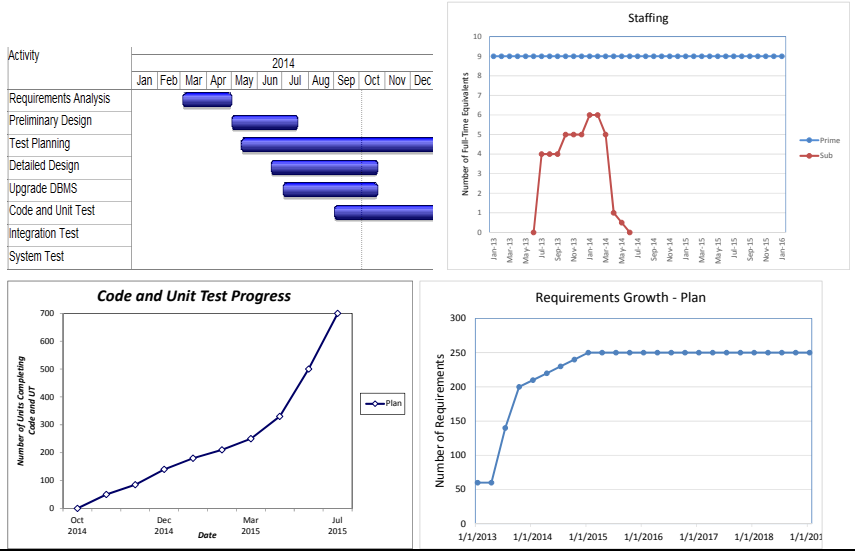
Indicator Specification	
Analysis guidance and examples	Because schedule, effort, and functionality are interrelated, assumptions and plans that are associated with these attributes must be evaluated together, not just individually. For example, the question of whether or not a given schedule is feasible cannot be answered without considering the product size and the planned effort. Figures 5-48a through 5-48d represent plans from the same project that should be examined together to evaluate feasibility. Figure 5-48a charts the planned milestone dates for major project activities. Figure 5-48b plots the planned staffing level over time for both the prime and the subcontractor. Note the flat staffing profile for the prime contractor. In general, a more effective staffing profile would reflect a gradual buildup during requirements analysis and the early stages of design. Figure 5-48c shows the planned work unit progress for code and unit test. Note the rapid buildup toward the end of this activity. An explanation and justification for this assumed rapid progress is needed. Figure 5-48d tracks planned growth in requirements. The assumption is that there will be a steep growth followed by absolute stability. The assumption of zero requirements growth must be questioned. In addition to analyzing the feasibility of these four individual plans, comparing these plans yields valuable insight into overall feasibility. A review of the staffing plan identifies even more risk in the planned code and unit test progress. Note that the subcontractor provides staff only through May 1999, when code and unit test for their units is completed. The subcontractor will be unavailable to address any problems and defects found during integration and test. Note also that a rapid increase in code and unit test progress is planned after May 1999. At this time, the subcontractor is gone and the prime staffing remains constant. By comparing the planned milestone dates with the planned requirements growth, another inconsistency is revealed. According to the milestone dates, requirement analysis will be completed by May 1998. However, the project plans assume continual requirements growth after this point. 
Analysis Model	
Decision Criteria	

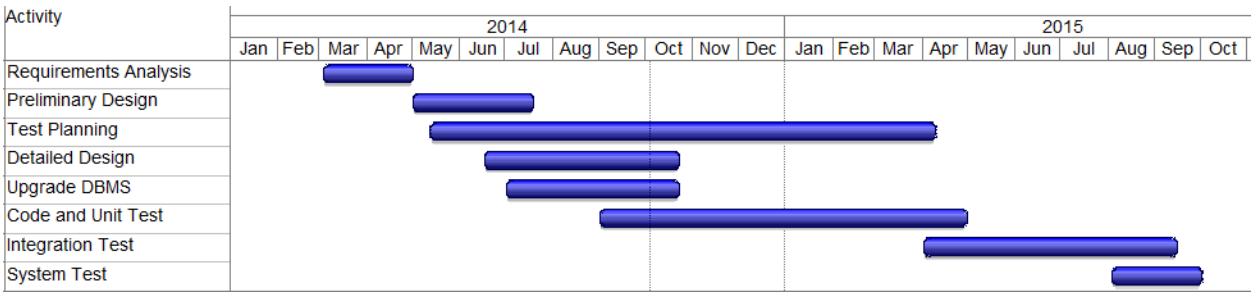
Indicator Interpretation	

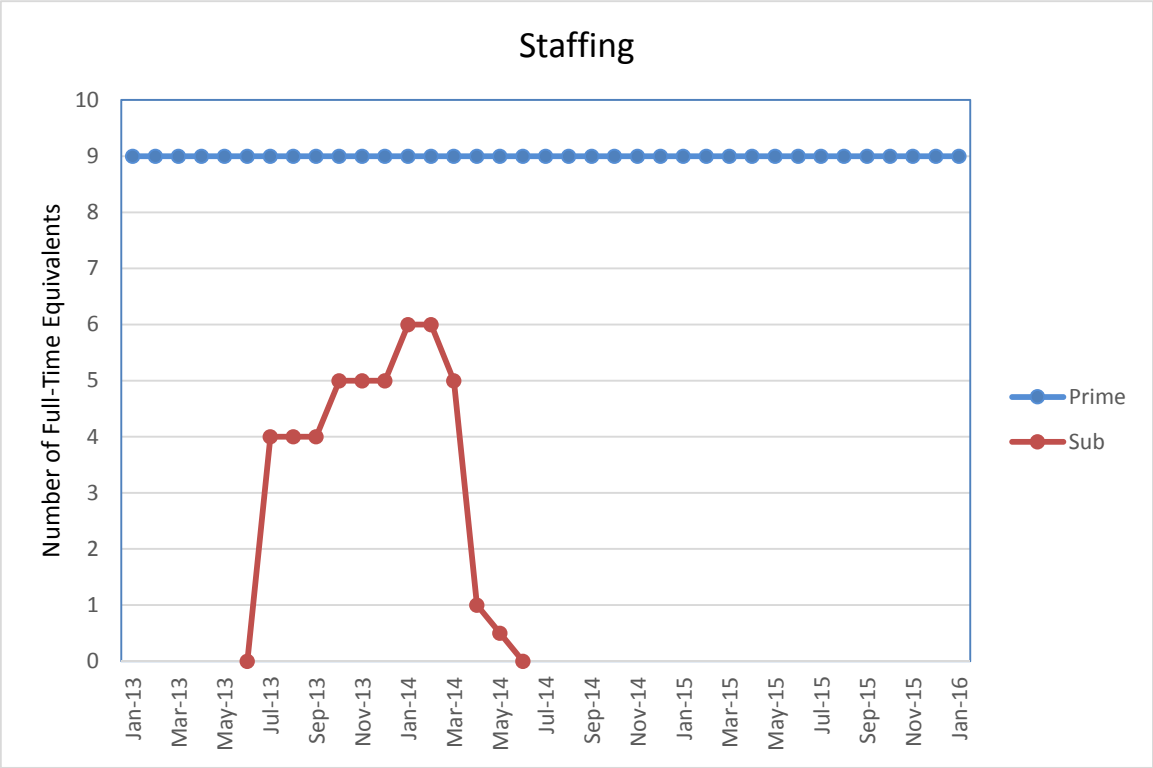
Data Collection Procedure (for each Base Measure) ***Complete this section for each base measure listed on the previous page.***	
Frequency of Data Collection	
Responsible Individual	
Phase or Activity in which Collected	
Tools Used in Data Collection	
Verification and Validation	
Repository for Collected Data	

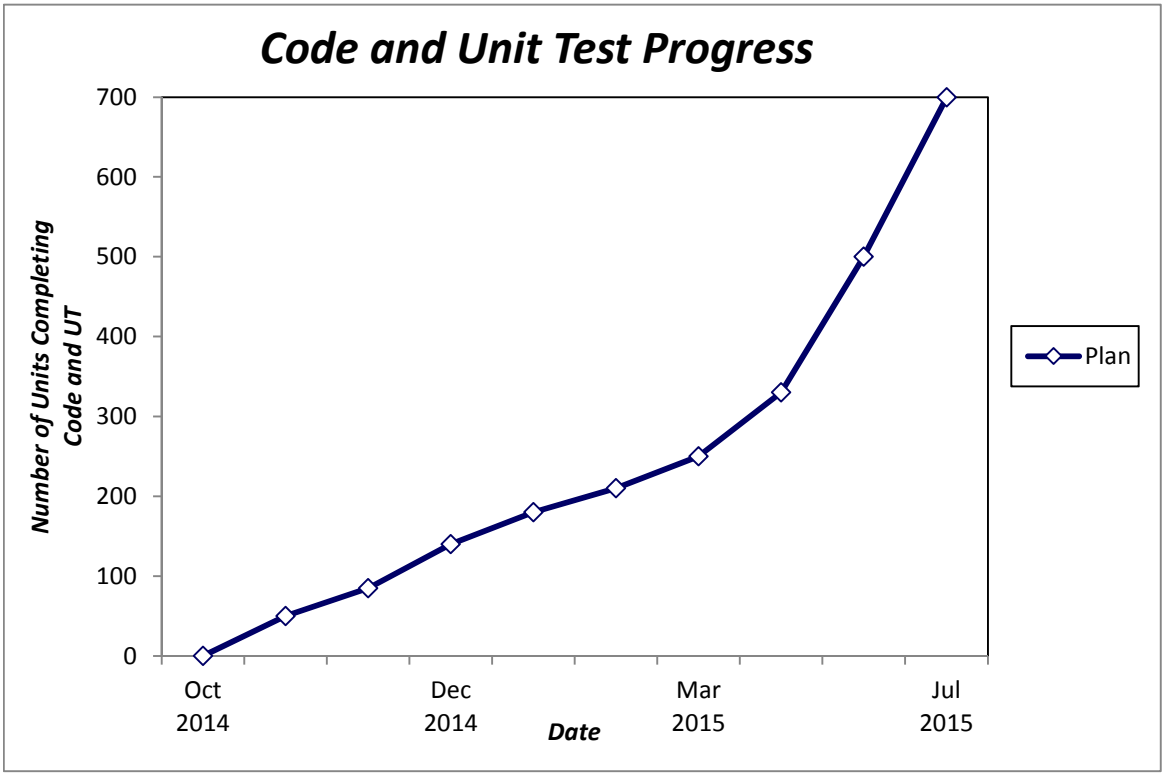
Data Analysis Procedure (for each Indicator)	
Frequency of Data Reporting	
Responsible Individual	
Phase or Activity in which Analyzed	
Source of Data for Analysis	
Tools Used in Analysis	
Review, Report, or User	

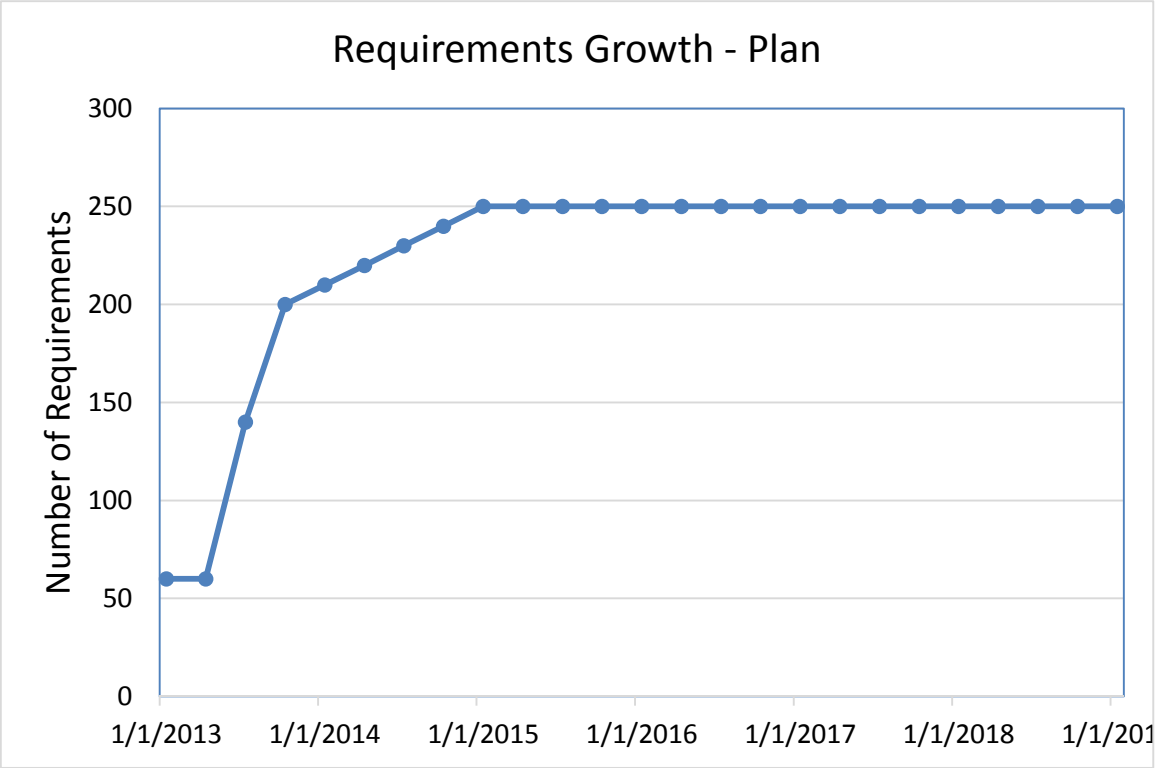
Additional Information	
Additional Analysis Guidance	**Additional Analysis** The next step is to refine the plans for schedule, effort, and requirements growth to develop a strategy that is realistic and internally consistent. **Lessons Learned** Once the project is underway, changes in any of the plans will likely require modification of other plans. For example, if requirements growth continues past October 1998, the other three measures must be replanned
Implementation Considerations	
Project Application	Applies to most types of projects
Process integration	
Usually Applied During	
Alternatives Include	

Planned Schedule




Staffing
Number of Full-Time Equivalents
10
9
8
7
6
5
4
3
2
1
0
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15
May-15
Jul-15
Sep-15
Nov-15
Jan-16
Prime
Sub


Code and Unit Test Progress
Number of Units Completing Code and UT
700
600
500
400
300
200
100
0
Oct 2014
Dec 2014
Mar 2015
Jul 2015
Date
Plan


Requirements Growth - Plan
Number of Requirements
300
250
200
150
100
50
0
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/201