

Maintenance Metrics (Page 1 of 2)

	Information Categories	Measurable Concepts	Measures Indicators	Description	
Maintenance Improvement Results	Project (by release)	Cost	Estimated/actual cost	Estimated and actual cost in \$ by release separated by year into the following categories: (1) labor costs (\$), (2) license costs (\$), (3) travel costs (\$), (4) Other Direct Costs (\$), (5) indirect costs (\$), and (6) profit (\$), as applicable.	
		Effort	Estimated/actual hours	Estimated and actual number of labor hours separated by year into the following categories: (1) requirements changes, (2) defect repairs, (3) sustaining engineering including user, help desk, training and facility support, (4) test preparation, (5) test dry runs, (6) regression test conduct, (7) FQT conduct, (8) interoperability test conduct, (9) Quality Assurance (QA), (10) Configuration Management (CM), (11) systems administration, and (12) information assurance.	
		Schedule	Planned/actual schedule	Schedule including planned and actual start and delivery date for the release.	
		Product size	Planned/actual size	Planned/actual size in ESLOC by release separated into the following categories: (1) new lines (added), (2) reused lines (old), (3) modified lines (changed), (4) deleted lines, and (5) auto-generated lines.	
		Team size	Planned/actual team size	Planned/actual average and peak size in numbers of Full Time Equivalents (FTEs).	
		Contractors used	Percent utilization	Planned/actual contractor usage by percent of total effort measured in terms of labor-hours expended separated into (1) government % and (2) contractor %.	
		Languages used	Percent utilization	Language usage by percent of total usage.	
		Volume of enhancements	No. requirements changes	Requirements (total)	Number of requirements by release separated into the following categories: (1) requirements added, (2) requirements deleted, (3) requirements deferred, and (4) total number of requirements including existing.
		Effort	Effort/requirements change		Directly chargeable labor hours expended total and per requirements change request to implement changes.
		Requirements backlog	Number of changes deferred		Number of requirements changes at start and end of release separated into the following categories: (1) requirements deferred and (2) requirements dropped.

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	Test effort	Number of tests planned/actual	Number of tests planned and actual for the release for qualifying changes made separated into the following categories: (1) regression tests, (2) FQT's, and (3) interoperability tests.
	Test effectiveness	Percentage automation	Planned/actual percentage of the tests automated separated into (1) regression test %, (2) FQT % and (3) interoperability test %.
Volume of repairs	No. of defects repaired	Defects (total)	Number of defects by release separated into the following categories: (1) Category 1 (catastrophic), Category 2 (critical), Category 3 (serious), Category 4 (annoyance, and Category 5 (minimal).
	No. latent defects	Latent defects	Number of latent defects by release separated into the following categories: (1) number existing prior to release, (2) number planned to be fixed in this release, (3) number actually fixed, (4) number new defects found in the release, (5) new defects fixed, and (6) number latent and new defects deferred.
	Effort	Effort/defect	Directly chargeable labor hours expended total and per defect to find and fix defects by defect category.
	Defect backlog	Actual number of defects remaining	Number of defects at start and end of release separated into the following categories: Category 1 (catastrophic), Category 2 (critical), Category 3 (serious), Category 4 (annoyance, and Category 5 (minimal).
	Test effort	Number of tests planned/actual	Number of tests planned and actual for the release for qualifying repairs made separated into the following categories: (1) regression tests, (2) FQT's, and (3) interoperability tests.
	Test effectiveness	Percentage automation	Planned/actual percentage of the tests automated separated into (1) regression test %, (2) FQT % and (3) interoperability test %.
Information assurance (IA)	IA effort	Effort/task	Planned and actual directly chargeable labor hours plus any contract charges in (\$) per release for the conduct of IAVAs and DIACAP.