COCOMO II - Constructive Cost Model

Monte Carlo Risk Off
Auto Calculate Off

Software Size Sizing Method Function Points

Unadjusted Function Points 340 Language Java

Software Scale Drivers

Precedentedness	High	Architecture / Risk Resolution	High	Process Maturity	Very High
Development Flexibility	Very High	Team Cohesion	Very High		

Software Cost Drivers

Product

Required Software Reliability	Very High
Data Base Size	Nominal
Product Complexity	High
Developed for Reusability	Low
Documentation Match to Lifecycle Needs	Very High

Personnel

Analyst Capability	Very High
Programmer Capability	High
Personnel Continuity	Very High
Application Experience	High
Platform Experience	High
Language and Toolset Experience	High

Platform

Time Constraint	High
Storage Constraint	Nominal
Platform Volatility	Nominal

Project

Use of Software Tools	Nominal
Multisite Development	Low
Required Development Schedule	High

Maintenance Off

Software Labor Rates

Cost per Person-Month (Dollars) 5000

Calculate

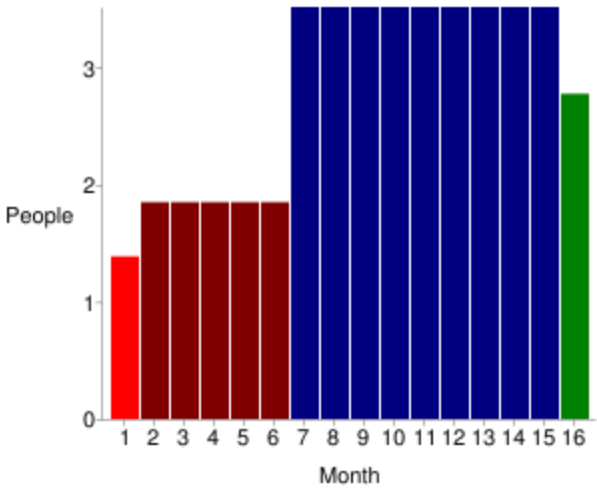
Results

Software Development (Elaboration and Construction)

Effort = 42.0 Person-months
Schedule = 14.5 Months
Cost = $209917

Total Equivalent Size = 18020 SLOC
Effort Adjustment Factor (EAF) = 0.79

Staffing Profile



Acquisition Phase Distribution

Phase	Effort (Person-months)	Schedule (Months)	Average Staff	Cost (Dollars)
Inception	2.5	1.8	1.4	$12595
Elaboration	10.1	5.4	1.8	$50380
Construction	31.9	9.1	3.5	$159538
Transition	5.0	1.8	2.8	$25190

Software Effort Distribution for RUP/MBASE (Person-Months)

Phase/Activity	Inception	Elaboration	Construction	Transition
Management	0.4	1.2	3.2	0.7
Environment/CM	0.3	0.8	1.6	0.3
Requirements	1.0	1.8	2.6	0.2
Design	0.5	3.6	5.1	0.2

Implementation	0.2	1.3	10.8	1.0
Assessment	0.2	1.0	7.7	1.2
Deployment	0.1	0.3	1.0	1.5

Your output file is at http://softwarecost.org/tools/COCOMO/data/COCOMO_October_5_2023_06_49_17_774493.txt

Created by Ray Madachy at the Naval Postgraduate School. For more information contact him at rjmadach@nps.edu.

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Monte Carlo Risk Off
Auto Calculate Off

Software Size Sizing Method Source Lines of Code

	SLOC	% Design Modified	% Code Modified	% Integration Required	Assessment and Assimilation (0% - 8%)	Software Understanding (0% - 50%)	Unfamiliarity (0-1)
New	40000						
Reused	30000	0	0	7	8		
Modified	78908	88	97	8	8	45	1

Software Scale Drivers

Precedentedness	High	Architecture / Risk Resolution	High	Process Maturity	Very High
Development Flexibility	Very High	Team Cohesion	Very High		

Software Cost Drivers

Product		Personnel		Platform	
Required Software Reliability	Very High	Analyst Capability	Very High	Time Constraint	High
Data Base Size	Nominal	Programmer Capability	High	Storage Constraint	High
Product Complexity	High	Personnel Continuity	High	Platform Volatility	Nominal
Developed for Reusability	Low	Application Experience	High	**Project**	
Documentation Match to Lifecycle Needs	Very High	Platform Experience	High	Use of Software Tools	High
		Language and Toolset Experience	High	Multisite Development	Low
				Required Development Schedule	High

Maintenance Off

Software Labor Rates

Cost per Person-Month (Dollars) 65000$

Calculate

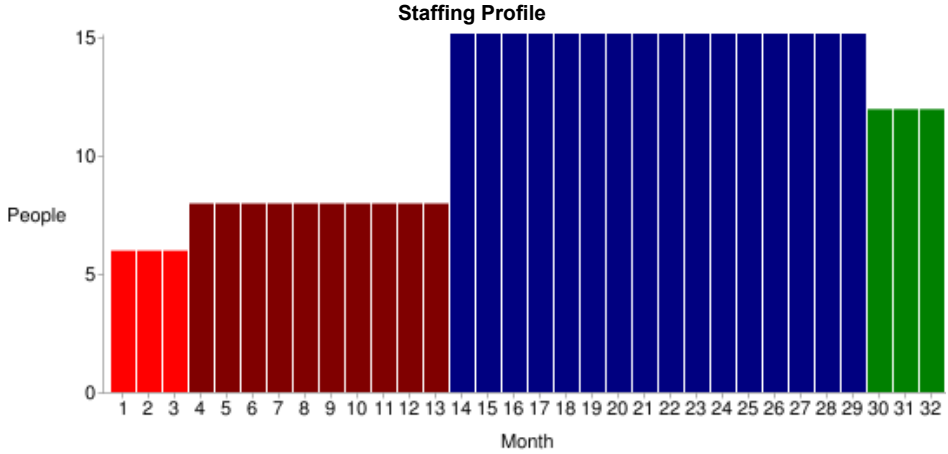
Results

Software Development (Elaboration and Construction)

Effort = 336.2 Person-months
Schedule = 27.0 Months
Cost = $21852418

Total Equivalent Size = 137482 SLOC
Effort Adjustment Factor (EAF) = 0.83

Staffing Profile



Acquisition Phase Distribution

Phase	Effort (Person-months)	Schedule (Months)	Average Staff	Cost (Dollars)
Inception	20.2	3.4	6.0	$1311145
Elaboration	80.7	10.1	8.0	$5244580
Construction	255.5	16.9	15.1	$16607838
Transition	40.3	3.4	12.0	$2622290

Software Effort Distribution for RUP/MBASE (Person-Months)

Phase/Activity	Inception	Elaboration	Construction	Transition
Management	2.8	9.7	25.6	5.6
Environment/CM	2.0	6.5	12.8	2.0
Requirements	7.7	14.5	20.4	1.6
Design	3.8	29.0	40.9	1.6
Implementation	1.6	10.5	86.9	7.7
Assessment	1.6	8.1	61.3	9.7

Deployment	0.6	2.4	7.7	12.1

Your output file is at http://softwarecost.org/tools/COCOMO/data/COCOMO_October_5_2023_07_20_20_306215.txt

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