National Park Service

EXPERIENCE
YOUR
AMERICA

CAPITAL ASSET PLANS

Part 2: Writing the Plan

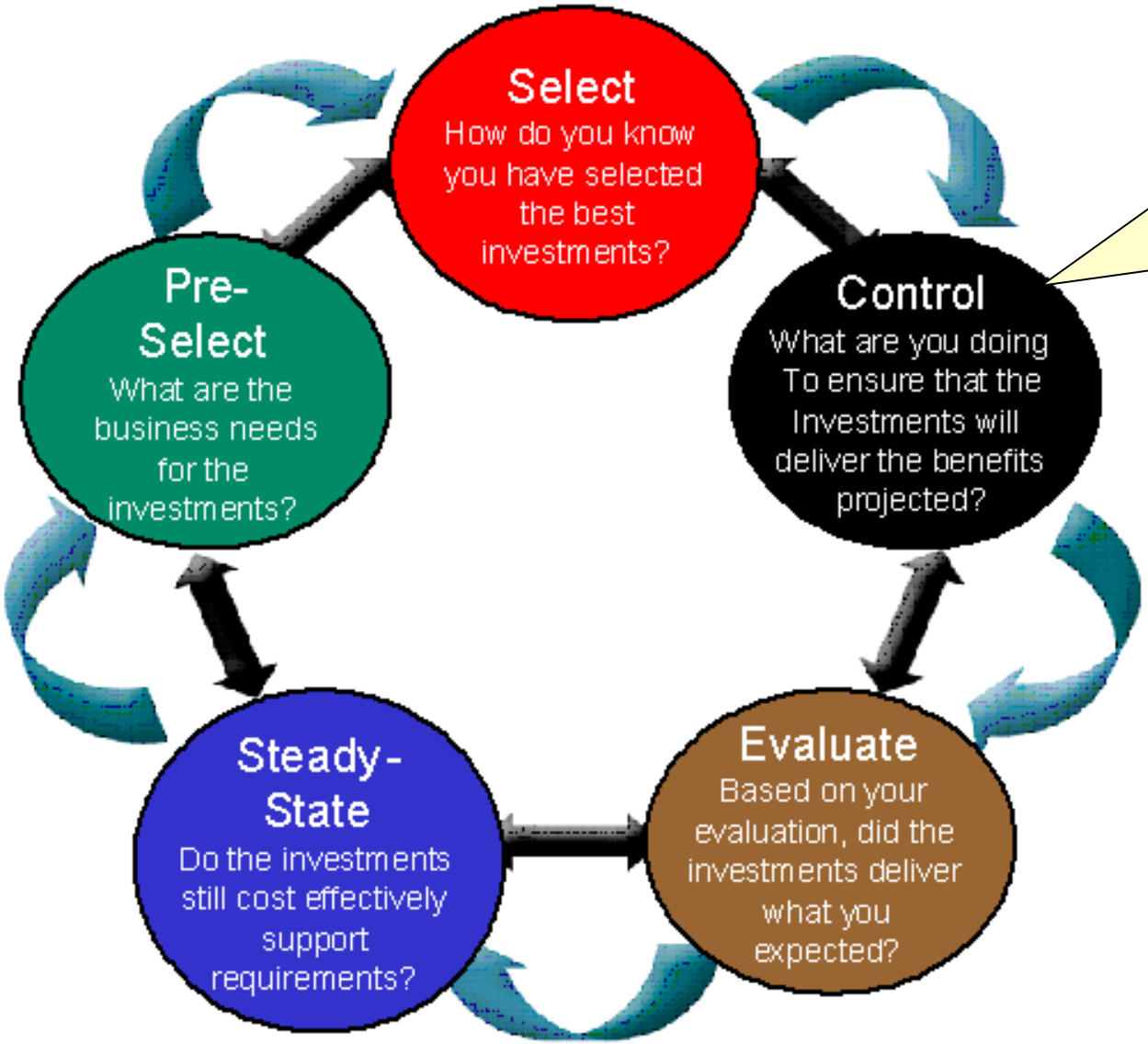
AGENDA

The Capital Asset Plan and Business Case

- The Big Picture
- Definition & impetus
- Schedule
- Scoring Implications
- *How to write a good one*
  - *Types of input required*
  - *Scoring the plan*
- Variances
  - *Consequences*
  - Earned value and other calculations
- *Questions*

Why a Capital Asset Plan?

Recall the Capital Planning and Investment Control Guide?



Pre-Design through Construction

(Requires a Capital Asset Plan)

What projects need a CAP?

- Every one $2,000,000 (total cost) and over

TO SEND YOUR CAPITAL ASSET PLAN

<u>THROUGH YOUR REGIONAL COORDINATOR</u>

TO THE WASO CONSTRUCTION PROGRAM MANAGEMENT OFFICE

What will they do with it?

For New Ones:

- Review for content
- Send some to back to Region to maintain
  - Projects $2 up to $10M ($ includes pre-design & design)
- Send big ones to NPS Investment Review Board
  - Projects $10M and over ($8.5M gross construction)
  - Phased projects
  - As requested by OMB
- Sends to Associate Director, Park Planning, Facilities, and Lands
- Sends to NPS Director
- Sends on to DOI Boards for evaluation

The CPIC Section “Control,” Phase 4

Covers pre-design through construction:

- Update the CAP on a quarterly basis
- Use a management technique called Earned Value
  - Plan, budget, and schedule all work in time-phased "planned value" increments constituting a cost and schedule measurement baseline
  - Demonstrate that the project is on schedule and within budget by comparing what is scheduled with what has been achieved
  - Explain any variances
  - Propose a remedy to regain schedule or budget

What, again, are Capital Assets?

- Land, structures, equipment, intellectual property (software), and information technology that are used by the Federal government and that have an estimated useful life of two years or more.
- Not as obtained for resale or physical consumption, such as operating materials or supplies
- May be acquired by: purchase, construction, or manufacture; by lease; or by exchange

What is a Capital Asset Plan? (Formerly Exhibit 300)

A Format That Will:

- Assist OMB during budget review and in its required reports to Congress
- Outline funding, schedule, background, and performance requirements of a project
- Insure business cases for investments are made and tied to
  - Mission statements
  - Long term goals and objectives
  - Annual performance plans
- Respond to the Government Performance And Results Act Of 1993

What does a Capital Asset Plan cover?

Information That Shows:

- A direct connection to the NPS strategic plan
- A positive return on investment for the alternative selected
- Sound acquisition (program and procurement) planning
- Comprehensive risk mitigation and management planning
- Realistic cost and schedule goals and measurable performance benefits

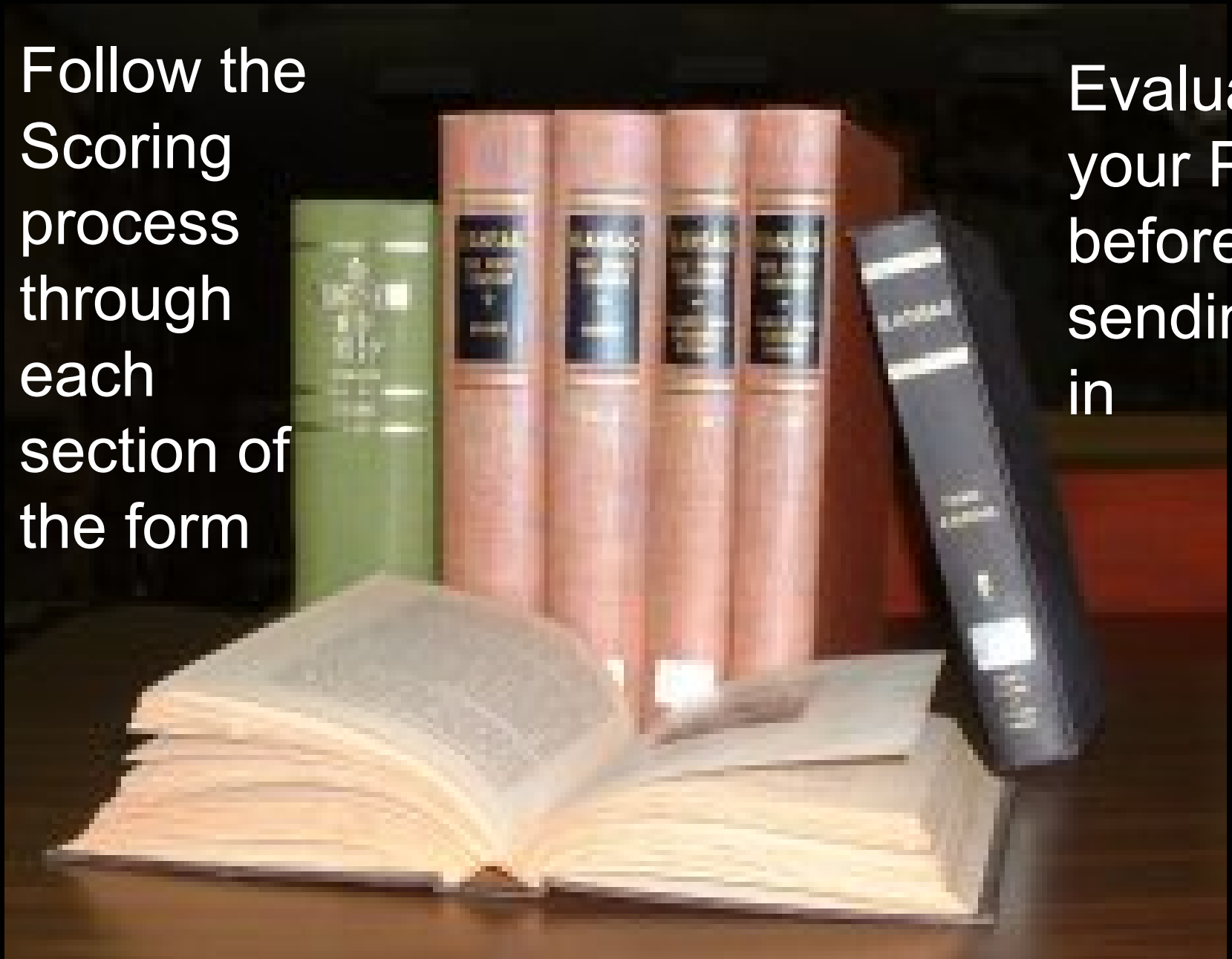
Are Capital Asset Plans Important?

VERY IMPORTANT

- Good ones lead to project funding
- Poor or missing plans result in project funding being recommended against
- DOI scores the plans over $10 million:
  - 5, and meeting program requirements, recommended for funding
  - 4, recommended for funding but agency must improve areas identified as needing work
  - 3, can move easily to 4 or to 2
  - 2 and below, not recommended for funding

What are guidelines for a good plan?

Follow the Scoring process through each section of the form



Evaluate your Plan before sending it in

How does DOI figure the overall score?

Total score for Business Case

	Score	Definition
5	33-40	Strongly documented business case (BC)
4	25-32	Very few weak points within the BC but still needs strengthening.
3	17-24	Much work remains to solidify and quantify BC. BC has the opportunity to either improve or degrade very quickly.
2	9-16	Significant gaps in the required categories of the BC
1	0 - 8	Inadequate in every category of the required BC

Date of Exhibit – March 4, 2003

Part I: Capital Asset Plan and Business Case (All Assets)

Agency	Department of Interior
Bureau	National Park Service
Account Title	Construction
Account Identification Code	MACA Package 187 – PWIS 003703
Program Activity	Line Item
Name of Project	Mitigate Pollution of Cave
Unique Project Identifier. (IT only)(See section 53.1)	N/A
Project Initiation Date	August 2000
Project Planned Completion Date - June 2004	

This Project is:	Initial Concept		Planning		Full Acquisition	x	Steady State		Mixed Life Cycle	

Project/useful segment is funded:	Incrementally		Fully	X
Was this project approved by OMB for previous Year Budget Cycle?	Yes	X	No	
Did the Executive/Investment Review Committee approve funding for This project this year?	Yes	X	No	
Did the CFO review the cost goal?	Yes	X	No	
Did the Procurement Executive review the acquisition strategy?	Yes	X	No	
Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?	Yes	X	No	
Does the project support homeland security goals and objectives, i.e., 1) improve border and transportation security, 2) combat bio-terrorism, 3) enhance first responder programs, 4) improve information sharing to decrease response times for actions and improve the quality of decision making?	Yes		No	x
Is this project information technology? (See Section 53 for definition)	Yes		No	X

I.A. SUMMARY OF SPENDING FOR PROJECT STAGES (In Millions)

EXISTING 300	PY-1 and Earlier	PY 2001	CY 2002	BY 2003	BY+1 2004	BY+2 2005	BY+3 2006	BY+4& Beyond	Total
Planning:									
Budget Authority	.124	.126							.250
Outlays	.124	.126							.250
Full Acquisition :									
Budget Authority	1.009			.555					1.564
Outlays	1.009			.555					1.564
Total, sum of stages									
Budget Authority	1.133	.126		.555					1.814
Outlays	1.133	.126		.555					1.814
Maintenance									
Budget Authority									
Outlays									
Total, All Stages									
Budget Authority	1.133	.126		.555					1.814

Page 1 of 10

SUMMARY OF SPENDING

Money In equals Money Out.

When will you get the money?

When will the money be expended?

EXHIBIT 300 Date: 08/22/2003 CAPITAL ASSET P

SUMMARY OF SPENDING FOR PROJECT STAGES
(In Millions)
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	2001 and Earlier	2002	2003	2004	2005	2006	2007	2008 & Beyond	Total
Planning (Pre-design):									
Budget Authority		0.176	0.362	0.060					0.598
Planned Expenditure		0.176	0.362	0.060					0.598
Planning (Design):									
Budget Authority				0.865					0.865
Planned Expenditure				0.765	0.100				0.865
Acquisition (Construction & contingency):									
Budget Authority					9.370				9.370
Planned expenditure					4.800	4.570			9.370
Acquisition (Construction management):									
Budget Authority					0.681				0.681
Planned Expenditure					0.340	0.341			0.681
Total, Sum of All Stages:									
Budget Authority		0.176	0.362	0.925	10.051	0.000			11.514
Planned Expenditure		0.176	0.362	0.825	5.240	4.911			11.514
Maintenance:	See life-cycle cost analysis in 1.E. 2.								
Budget Authority									
Planned Expenditure									
Government FTE Costs	N/A								

Note: Government FTE Costs shall include government personnel considered direct and indirect labor in suppor

Refer to Life cycle analysis

We have a macro that will add the columns for you both horizontally and vertically. **Be sure to do the totals**.

When can you change the Summary of Spending?

EXHIBIT 300 Date: 08/22/2003 CAPITAL ASSET PLAN AND BUSINESS CASE

SUMMARY OF SPENDING FOR PROJECT STAGES
(In Millions)
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

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Maintenance:	See life-cycle cost analysis in I.E. 2.								
Budget Authority									
Planned Expenditure									
Government FTE Costs	N/A								

Note: Government FTE Costs shall include government personnel considered direct and indirect labor in support of

CHOOSE ONE:

- ❑ Never
- ❑ When it gets out of date
- ❑ When you change the baseline
- ❑ After OMB approves a new baseline

When can you change the Summary of Spending?

- After OMB approves a new baseline

ONLY

EXHIBIT 300 Date: 08/22/2003 CAPITAL ASSET PLAN AND BUSINESS CASE

SUMMARY OF SPENDING FOR PROJECT STAGES
(In Millions)
(Estimates for BY+1 and beyond are for planning purposes only
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Maintenance:	See life-cycle cost analysis in 1.E. 2.								
Budget Authority									
Planned Expenditure									
Government FTE Costs	N/A								

Note: Government FTE Costs shall include government personnel considered direct and indirect labor in support of

Score the Justification Section (I.B.)

Supports the President's Management Agenda Items (AI)

(Found in Multiple Sections)

EXHIBIT 300 Date: CAPITAL ASSET PLAN AND BUSINESS CASE

I. B. Justification (All Assets)

1. How does this investment support your agency's mission and strategic goals and objectives? (Resource Protection, Resource Use, Recreation, Serving Communities, Management)
2. How does it support the strategic goals from the President's Management Agenda? (Human Capital, Competitive Sourcing, Financial Performance, E-Government, Budget and Performance Integration)
3. Are there any alternative sources in the public or private sectors that could perform this function?
4. If so, explain why your agency did not select one of these alternatives. (A strong justification is required if a viable alternative is discarded.)
5. Who are the customers for this project? (Who are they? What are their wants and needs relative to this project? How strong is user support for this project? What is their involvement in this project? What is their continued involvement throughout this project's life cycle?)
6. Who are the stakeholders of this project? (Stakeholders are individuals who can influence the outcome of this project. Document any coordination with State, Local, and/or Tribal governments.)
7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative. (Identify whether you are the lead or managing partner and document all partners and impacted agencies and organizations.)

7a. If this is a multi-agency initiative, discuss the partnering strategies you are implementing with the participating agencies and organizations.

8. How will this investment reduce costs or improve efficiencies?
9. List all other assets that interface with this asset_____. Have these assets been reengineered as part of this project? Yes____, No____.

Scoring

collaborative

5	This is a collaborative project that includes multiple agencies, state, local, or tribal governments, and the project is governed by citizen needs. Project fully supports the "Plan for Citizen-Centered Governance", Customer Value, Accountability, Modernization, and Integration.
4	This is a collaborative project that includes one or more agencies, state, local, or tribal governments or organizations, though work remains to solidify these relationships. Project also supports the "Plan for Citizen-Centered Governance", Customer Value, Accountability, Modernization, and Integration.
3	This is not a collaborative project though it could be and much work remains to strengthen the ties to the President's Management Agenda; or the project is a stand alone project that fully supports the President's Management Agenda.
2	This is not a collaborative project and it is difficult to ascertain support for the AI.
1	There does not seem to be any link to the AI.

What does project description cover?

This is an opportunity to really describe your project. <u>More than one or two lines</u>.

I. A. Project Description

1. Provide a brief description of this project and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.

Stabilize Fort Washington is a two (2) phased project designed to address and arrest those urgent problems currently contributing to the short and long term deterioration of this historic resource. Phase 1 will address and correct problems affecting the stability of the fort's walls, and proper functioning of the supporting drainage systems, and Phase 2 will address and correct those problems currently affecting the stability of supporting earthen terraces, slopes, structural buildings and features. Vegetation currently destroying the structure and affecting the successful implementation of work will also be removed in both phases.

Since the completion of its construction, this 1824 fort has been subjected to abuse from daily use and neglect from periods of non-occupation, problems from the malfunctioning man-made and natural drainage systems, problems from the weather, and the use of inappropriate materials for repairs. The fort received repairs in the 1960's, 1980's, and the 1970's. However, these repairs have since failed and damaged the resource to the point where many repairs must be redone or major areas of fabric replaced.

In the 1970's the Northwest Demi-Bastion of the fort was repointed with a harsh mixture of Portland cement. This wall later failed in 1999 after water trapped by the Portland cement and soil behind the wall froze and could not escape, during freezing cycles. Consequently pressures from the expansion of the trapped water and earth pushed against the wall and forced it to collapse. Currently this area is undergoing emergency repairs to correct the collapse and prevent adjacent brick from falling. In addition other walls of the superior slope, the surface of the terreplein, and the surface and subsurface drainage systems in this area have also failed and water is rapidly collecting in the Guardhouse, casemates, and other areas beneath.

Moreover the fort remains in poor condition. There are critical structural problems at the 1. East Esplanade Wall, 2. Soldier's Barracks Floor Joists, 3. Gatehouse Stonework, 4. Officers Quarters roof and interior, 5. Enlisted Barracks Interior, and the 6. Powder magazine roof. Also there are drainage problems at the 1. Main Gate, 2. Northwest and Southwest Demi-Bastions, 3. North and South Parade Grounds, 4. South Powder Magazine Yard, and the 5. South exterior surface drainage. In addition much vegetation removal and slope stabilization is required at the north and south ends of the fort to stop damage and deterioration of the fabric.

Because of past and present problems, and the potential future failures at the fort, planned undertakings must be urgently implemented to stabilize and stop deterioration of historic fabric. When implemented these undertakings will assure the preservation of the fort for public use and enjoyment. All undertakings will be implemented in accordance with the Secretary of the Interior Standards for Historic Preservation.

2. What assumptions are made about this project and why? Fort Washington is a historic preservation project with urgent problems (structural, drainage, and vegetation) threatening its stability. If the structure is left untreated in its current environment it will continue to deteriorate. Therefore preservation treatment must be administered as soon as possible to preserve the project for future generations.

3. Provide any other supporting information derived from research, interviews, and other documentation.

Currently construction is underway at Fort Washington to repair a brick wall that collapsed after the 1999 winter season. Field investigations and research show that the wall collapsed after its mortar joints were weakened by numerous freeze/thaw cycles resulting from the expansion of stagnant water within and around the wall. The mortar was of Portland cement which prohibited the water from seeping out of the wall, and relieving pressure build-ups. Conditions of this type are prevalent throughout the site and has caused alarm to the design team.

What are Performance Goals (PG)?

Performance Goals (PG)
(Part I, Section I.C)

NOT the basic elements of a project manager's job, such as "Construction contract will be awarded on time and within budget . . . "

A goal might be, "Reduce high speed vehicle pursuits"

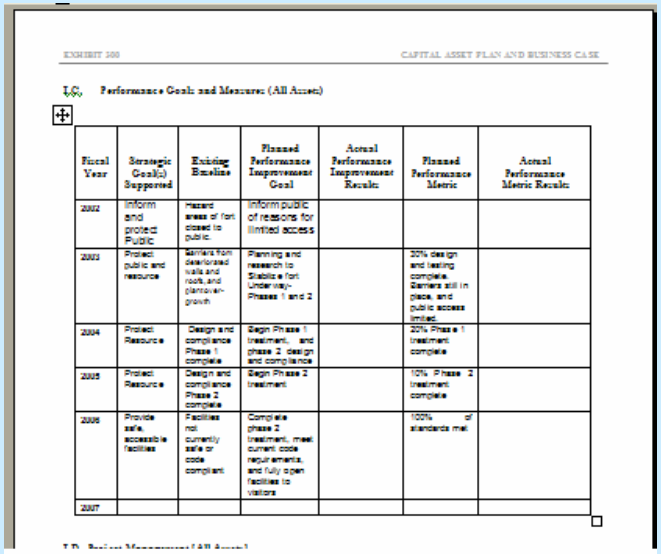


EXHIBIT 300 CAPITAL ASSET PLAN AND BUSINESS CASE

I.C. Performance Goals and Measures: (All Assets)

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2002	Inform and protect Public	Hazard areas of fort closed to public.	Inform public of reasons for limited access			
2003	Protect public and resource	Barriers from deteriorated walls and roots, and plantover-growth	Planning and research to Stabilize fort Underway- Phases 1 and 2		20% design and testing complete. Barriers still in place, and public access limited.	
2004	Protect Resource	Design and compliance Phase 1 complete	Begin Phase 1 treatment, and phase 2 design and compliance		20% Phase 1 treatment complete	
2005	Protect Resource	Design and compliance Phase 2 complete	Begin Phase 2 treatment		10% Phase 2 treatment complete	
2006	Provide safe, accessible facilities	Facilities not currently safe or code compliant	Complete phase 2 treatment, meet current code requirements, and fully open facilities to visitors		100% of standards met	
2007						

Scoring

5	Performance Goals are provided for the project, are linked to the annual performance plan, the project discusses the agency mission and strategic goals, and cost, schedule and performance measures are provided.
4	Performance Goals are provided for the project, are linked to the annual performance plan, the project discusses the agency mission and strategic goals, and performance measures are provided yet work remains to strengthen the PG.
3	Performance Goals exist but linkage to the agency mission and strategic goals is weak and performance measures need improvement.
2	Performance Goals are in their initial stages and are not appropriate for the type of project. Much work remains to strengthen the PG.
1	There is no evidence of PG for this project.

What is Project Management (PM)?

Project Management (PM)
(Part I, Sections I.D and I.H)

Name names, give personnel background and experience

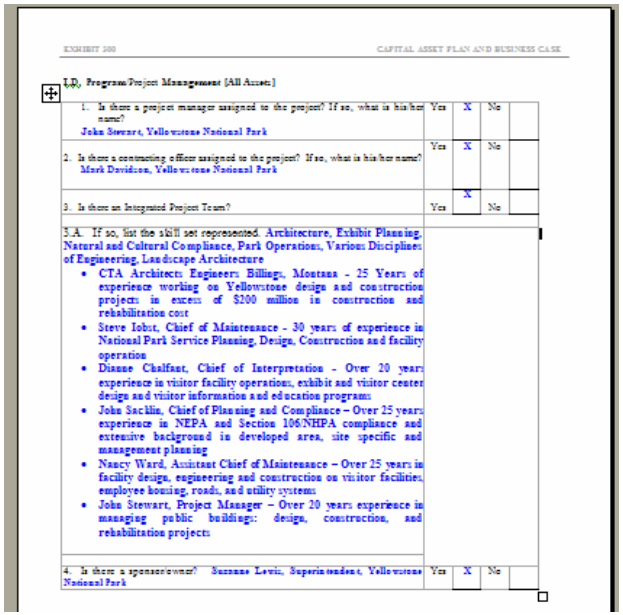


EXHIBIT 300 CAPITAL ASSET PLAN AND BUSINESS CASE

I.D. Program/Project Management [All Assets]

1. Is there a project manager assigned to the project? If so, what is his/her name? John Stewart, Yellowstone National Park	Yes	X	No	
2. Is there a contracting officer assigned to the project? If so, what is his/her name? Mark Davidson, Yellowstone National Park	Yes	X	No	
3. Is there an Integrated Project Team?	Yes	X	No	
3.A. If so, list the skill set represented. Architecture, Exhibit Planning, Natural and Cultural Compliance, Park Operations, Various Disciplines of Engineering, Landscape Architecture • CTA Architects Engineers Billings, Montana - 25 Years of experience working on Yellowstone design and construction projects in excess of $200 million in construction and rehabilitation cost • Steve Iobst, Chief of Maintenance - 30 years of experience in National Park Service Planning, Design, Construction and facility operation • Dianne Chalfant, Chief of Interpretation - Over 20 years experience in visitor facility operations, exhibit and visitor center design and visitor information and education programs • John Sacklin, Chief of Planning and Compliance – Over 25 years experience in NEPA and Section 106/NHPA compliance and extensive background in developed area, site specific and management planning • Nancy Ward, Assistant Chief of Maintenance – Over 25 years in facility design, engineering and construction on visitor facilities, employee housing, roads, and utility systems • John Stewart, Project Manager – Over 20 years experience in managing public buildings: design, construction, and rehabilitation projects				
4. Is there a sponsor/owner? Suzanne Lewis, Superintendent, Yellowstone National Park	Yes	X	No	

Scoring

5	Project plan is very comprehensive and resources are in place to manage it. The project plan shows a strong link between sequencing of planning, design and construction activities
4	Project plan has some weak points in the area of PM and agency is working to strengthen PM for project organization, lines of authority, and responsibilities of all parties.
3	Much work remains in order for PM plan to manage the risks for this project.
2	There is some understanding of PM for this project but it is very rudimentary.
1	There is no evidence of PM.

How important is the Alternatives Analysis?

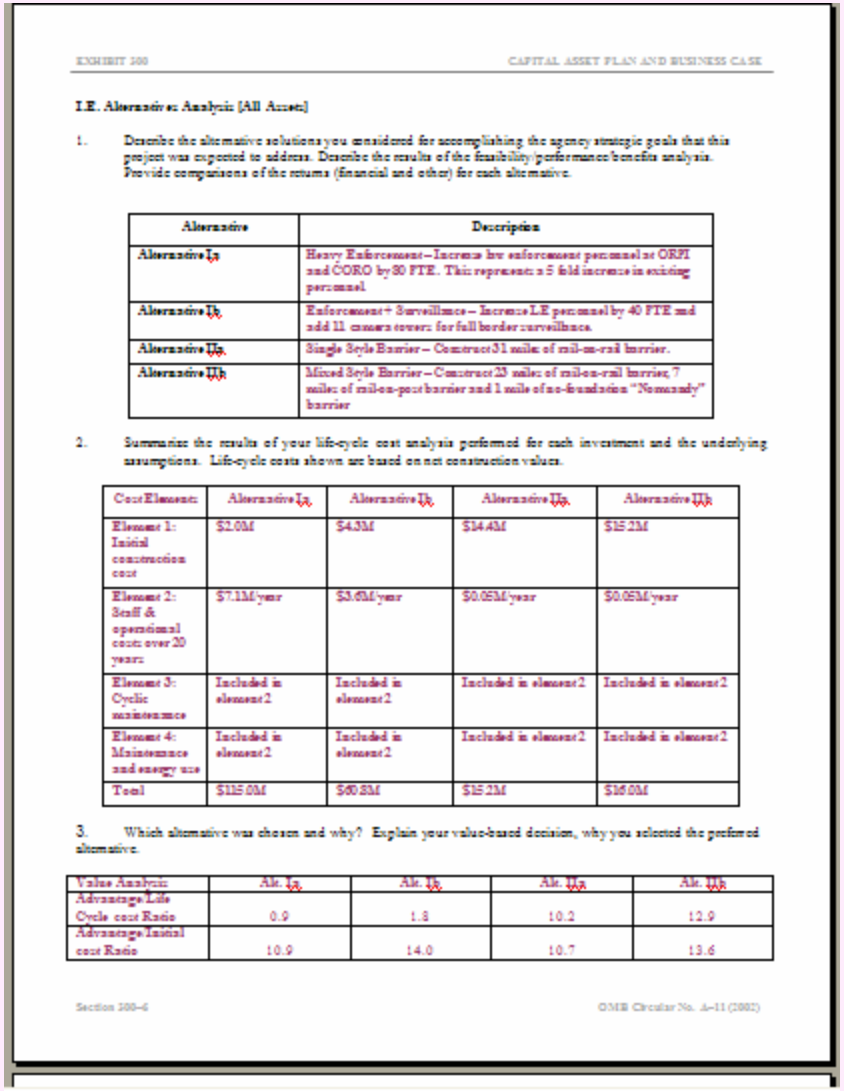


EXHIBIT 300 CAPITAL ASSET PLAN AND BUSINESS CASE

I.E. Alternatives Analysis [All Assets]

1. Describe the alternative solutions you considered for accomplishing the agency strategic goals that this project was expected to address. Describe the results of the feasibility/performance/benefits analysis. Provide comparisons of the returns (financial and other) for each alternative.

Alternative	Description
Alternative Ia	Heavy Enforcement – Increase Inv enforcement personnel at ORPI and CORO by 80 FTE. This represents a 5 fold increase in existing personnel.
Alternative Ib	Enforcement + Surveillance – Increase I.E personnel by 40 FTE and add 11 camera towers for full border surveillance.
Alternative IIa	Single Style Barrier – Construct 31 miles of rail-on-rail barrier.
Alternative IIb	Mixed Style Barrier – Construct 23 miles of rail-on-rail barrier, 7 miles of rail-on-post barrier and 1 mile of no-foundation "Normandy" barrier

2. Summarize the results of your life-cycle cost analysis performed for each investment and the underlying assumptions. Life-cycle costs shown are based on net construction values.

Cost Element:	Alternative Ia	Alternative Ib	Alternative IIa	Alternative IIb
Element 1: Initial construction cost	$2.0M	$4.3M	$14.4M	$15.2M
Element 2: Staff & operational costs over 20 years	$7.1M/year	$3.6M/year	$0.05M/year	$0.05M/year
Element 3: Cyclic maintenance	Included in element 2	Included in element 2	Included in element 2	Included in element 2
Element 4: Maintenance and energy use	Included in element 2	Included in element 2	Included in element 2	Included in element 2
Total	$115.0M	$60.8M	$15.2M	$16.0M

3. Which alternative was chosen and why? Explain your value-based decision, why you selected the preferred alternative.

Value Analysis:	Alt. Ia	Alt. Ib	Alt. IIa	Alt. IIb
Advantage/Life Cycle cost Ratio	0.9	1.8	10.2	12.9
Advantage/Initial cost Ratio	10.9	14.0	10.7	13.6

Section 300–6 OMB Circular No. A–11 (2002)

VERY important

Alternatives Analysis (AA)

(Part I, Section I.E)

5	AA includes three viable alternatives, alternatives were compared consistently, and alternative chosen provides benefits and reasons
4	AA includes three viable alternatives; work needs to continue, however, in terms of the alternative chosen and the accompanying analysis.
3	AA includes **less than three** alternatives and overall AA analysis needs strengthening.
2	AA includes weak AA information overall, and significant weaknesses exist.
1	There is no evidence that an AA was performed.

Scoring

What are Life cycle costs (LC)?

Life Cycle Costs Formulation (LC)
(Found in multiple Sections)

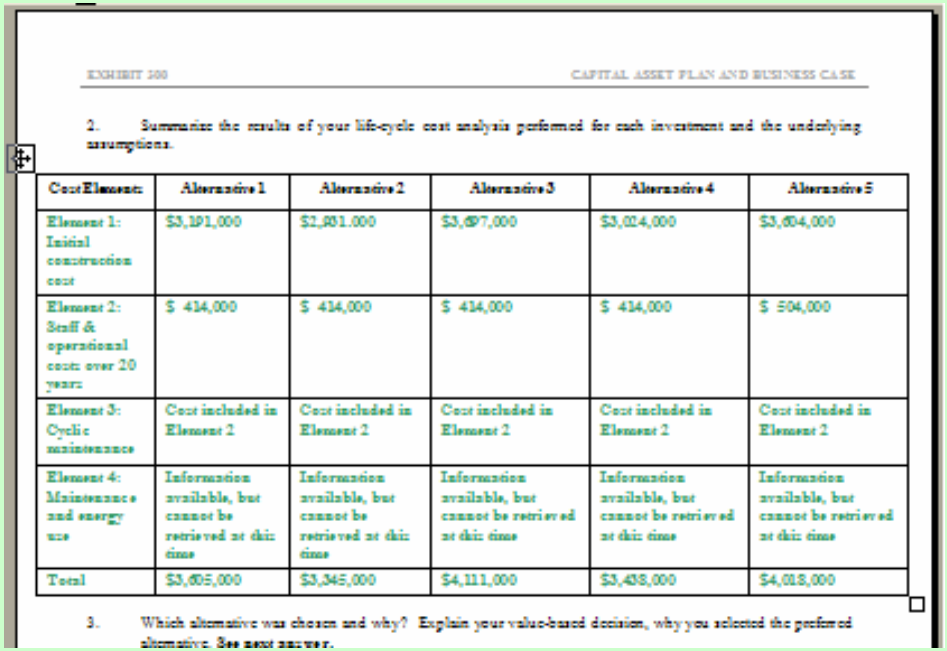


EXHIBIT 300 CAPITAL ASSET PLAN AND BUSINESS CASE

2. Summarize the results of your life-cycle cost analysis performed for each investment and the underlying assumptions.

Cost Elements:	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Element 1: Initial construction cost	$3,191,000	$2,801,000	$3,697,000	$3,024,000	$3,604,000
Element 2: Staff & operational costs over 20 years	$ 414,000	$ 414,000	$ 414,000	$ 414,000	$ 504,000
Element 3: Cyclic maintenance	Cost included in Element 2	Cost included in Element 2	Cost included in Element 2	Cost included in Element 2	Cost included in Element 2
Element 4: Maintenance and energy use	Information available, but cannot be retrieved at this time	Information available, but cannot be retrieved at this time	Information available, but cannot be retrieved at this time	Information available, but cannot be retrieved at this time	Information available, but cannot be retrieved at this time
Total	$3,605,000	$3,345,000	$4,111,000	$3,438,000	$4,018,000

3. Which alternative was chosen and why? Explain your value-based decision, why you selected the preferred alternative. See next answer.

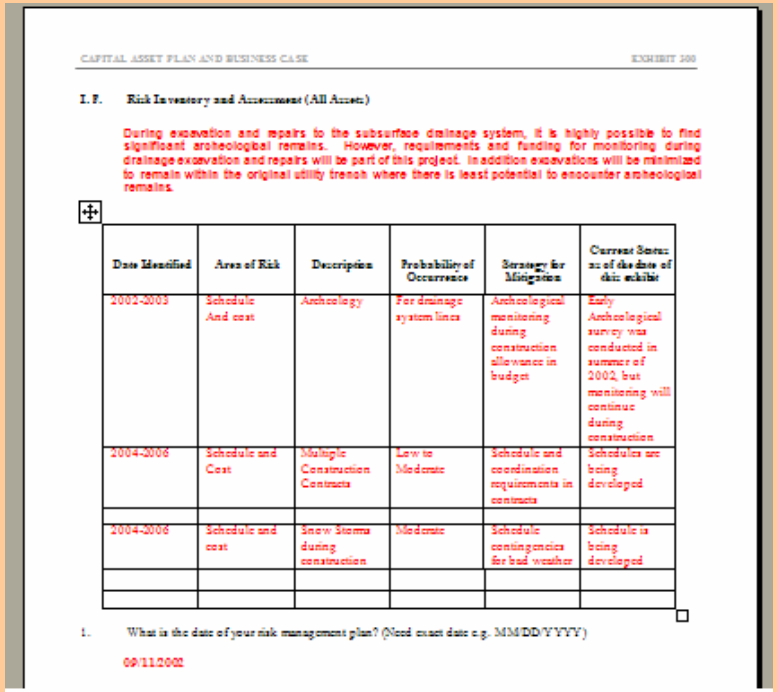
Scoring

5	Life Cycle costs are identified and included in the project decision making process. It appears that the project is planned well enough to come in on budget.
4	Life Cycle costs are identified and some of the issues are included in the risk assessment strategy but work remains in order to ensure that LC costs are accurately portrayed.
3	Life cycle costs are identified, but are not utilized in addressing risk assessment or alternatives analysis.
2	Life cycle costs seem to be included, however they are not utilized in addressing risk assessment or alternative analysis.
1	Life cycle costs are not utilized in addressing risk or alternative analysis.

What about Risk Management (RM)??

Risk Management (RM)
(Part I, Section I.F)

Risk is one of OMB's greatest concerns



CAPITAL ASSET PLAN AND BUSINESS CASE — EXHIBIT 300

I. F. Risk Inventory and Assessment (All Assets)

During excavation and repairs to the subsurface drainage system, it is highly possible to find significant archeological remains. However, requirements and funding for monitoring during drainage excavation and repairs will be part of this project. In addition excavations will be minimized to remain within the original utility trench where there is least potential to encounter archeological remains.

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status as of the date of this exhibit
2002-2003	Schedule And cost	Archeology	For drainage system lines	Archeological monitoring during construction allowance in budget	Early Archeological survey was conducted in summer of 2002, but monitoring will continue during construction
2004-2006	Schedule and Cost	Multiple Construction Contracts	Low to Moderate	Schedule and coordination requirements in contracts	Schedules are being developed
2004-2006	Schedule and cost	Snow Storms during construction	Moderate	Schedule contingencies for bad weather	Schedule is being developed

1. What is the date of your risk management plan? (Need exact date e.g. MM/DD/YYYY)

09/11/2002

Scoring

5	Risk Assessment was performed for all major project components and risk will be managed throughout the project.
4	Risk Assessment addresses most of the risk, but not all that should be addressed for this project.
3	Risk Assessment addresses some of the risk, but does not appear to address or manage the risk associated with the project.
2	Risk Assessment is minimal, and does not seem to be part of the project management.
1	There is no evidence of a Risk Assessment Plan or Strategy.

Any questions on Acquisition Strategy?

Acquisition Strategy (AS)
(Part I, Section I.G)

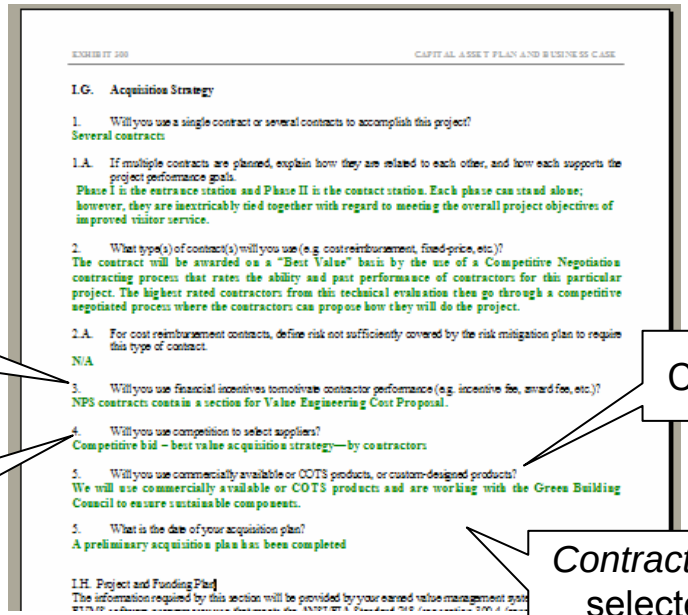


EXHIBIT 300 CAPITAL ASSET PLAN AND BUSINESS CASE

I.G. Acquisition Strategy

1. Will you use a single contract or several contracts to accomplish this project?
Several contracts

1.A. If multiple contracts are planned, explain how they are related to each other, and how each supports the project performance goals.
Phase I is the entrance station and Phase II is the contact station. Each phase can stand alone; however, they are inextricably tied together with regard to meeting the overall project objectives of improved visitor service.

2. What type(s) of contract(s) will you use (e.g. cost reimbursement, fixed-price, etc.)?
The contract will be awarded on a "Best Value" basis by the use of a Competitive Negotiation contracting process that rates the ability and past performance of contractors for this particular project. The highest rated contractors from this technical evaluation then go through a competitive negotiated process where the contractors can propose how they will do the project.

2.A. For cost reimbursement contracts, define risk not sufficiently covered by the risk mitigation plan to require this type of contract.
N/A

3. Will you use financial incentives to motivate contractor performance (e.g. incentive fee, award fee, etc.)?
NPS contracts contain a section for Value Engineering Cost Proposal.

4. Will you use competition to select suppliers?
Competitive bid – best value acquisition strategy—by contractors

5. Will you use commercially available or COTS products, or custom-designed products?
We will use commercially available or COTS products and are working with the Green Building Council to ensure sustainable components.

5. What is the date of your acquisition plan?
A preliminary acquisition plan has been completed

I.H. Project and Funding Plan
The information required by this section will be provided by your earned value management syste

Contractor financial incentives

Competition to select *suppliers?*

COTS

Contractors are selected by competition

Scoring

5	Strong Acquisition Strategy that mitigates risk to the federal government; contracts and statements of work (SOWs) are performance based. Implementation of the Acquisition Strategy is clearly defined.
4	Contracts and SOWs are performance based with very few weak points that agency is strengthening and implementation of the AS is clearly defined
3	Much work remains to solidify and quantify the AS.
2	Some parts of the AS are present but no clear implementation strategy..
1	There is no evidence of an AS.

Are you good at Project Management?

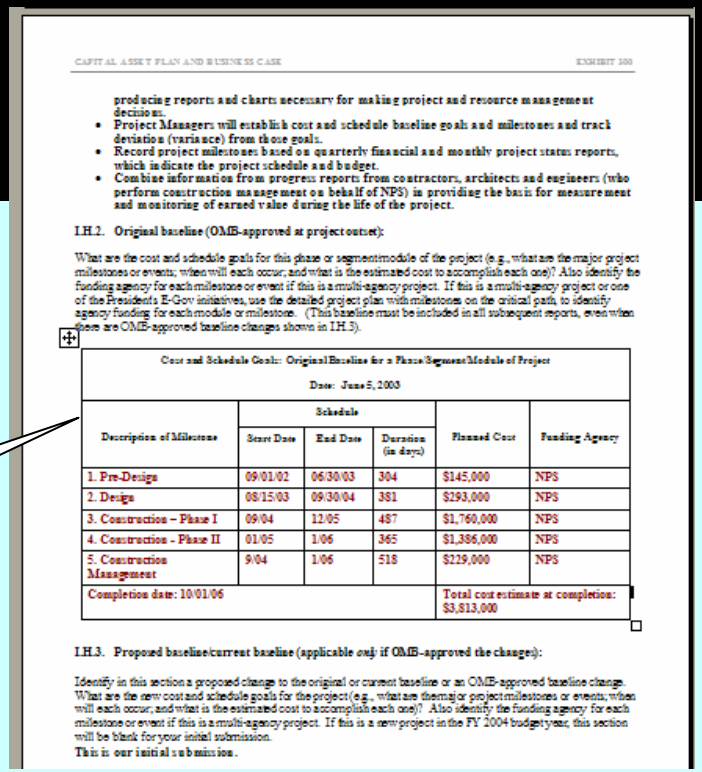
Scoring

Project Management (PM)
(Part I, Sections I.D and I.H)

5	Project plan is very comprehensive and resources are in place to manage it. The project plan shows a strong link between sequencing of planning, design and construction.
4	Project plan has some weak points in the area of PM and agency is working to strengthen PM for project organization, lines of authority, and responsibilities of all parties.
3	Much work remains in order for PM plan to manage the risks for this project.
2	There is some understanding of PM for this project but it is very rudimentary.
1	There is no evidence of PM.

What is a Performance Based Management System?

Performance Based Management System (PB)
(Part I, Section I.H)



CAPITAL ASSET PLAN AND BUSINESS CASE — EXHIBIT 300

producing reports and charts necessary for making project and resource management decisions.

- Project Managers will establish cost and schedule baseline goals and milestones and track deviation (variance) from those goals.
- Record project milestones based on quarterly financial and monthly project status reports, which indicate the project schedule and budget.
- Combine information from progress reports from contractors, architects and engineers (who perform construction management on behalf of NPS) in providing the basis for measurement and monitoring of earned value during the life of the project.

I.H.2. Original baseline (OMB-approved at project outset):

What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a multi-agency project or one of the President's E-Gov initiatives, use the detailed project plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project

Date: June 5, 2003

Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1. Pre-Design	09/01/02	06/30/03	304	$145,000	NPS
2. Design	08/15/03	09/30/04	381	$293,000	NPS
3. Construction – Phase I	09/04	12/05	487	$1,760,000	NPS
4. Construction - Phase II	01/05	1/06	365	$1,386,000	NPS
5. Construction Management	9/04	1/06	518	$229,000	NPS
Completion date: 10/01/06				Total cost estimate at completion: $3,813,000	

I.H.3. Proposed baseline/current baseline (applicable *only* if OMB-approved the changes):

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a new project in the FY 2004 budget year, this section will be blank for your initial submission.

This is our initial submission.

This is the Original Baseline

Scoring

5	The project will use an Earned Value Management System (EVMS) and project is earning or demonstrates it will earn the value as planned for costs, schedule, and performance goals.
4	The project references the use of an EVMS, however the supporting data does not indicate a full understanding of the EVMS concepts and application.
3	The project references the use of EVMS but the process within its agency is very new and not fully implemented or there are weaknesses for this individual project's EVMS information.
2	The project does not address the use of an EVMS and tracking and reporting of variances is unclear.
1	There is no evidence of PB.

Can you describe your Performance Based Management System?

I.H.1. Description of performance-based management system (PBMS):
Explain the methodology used by the agency to analyze and use the earned value performance data to manage performance. Describe the process you used to verify that the contractor's project management system follows the ANSI/EIA Standard 748-A. EVMS must be used on the system improvement aspects of the contract and operational analysis on the operations aspects. Using information consistent with the work breakdown structure (WBS), provide the information requested in all parts of this section.

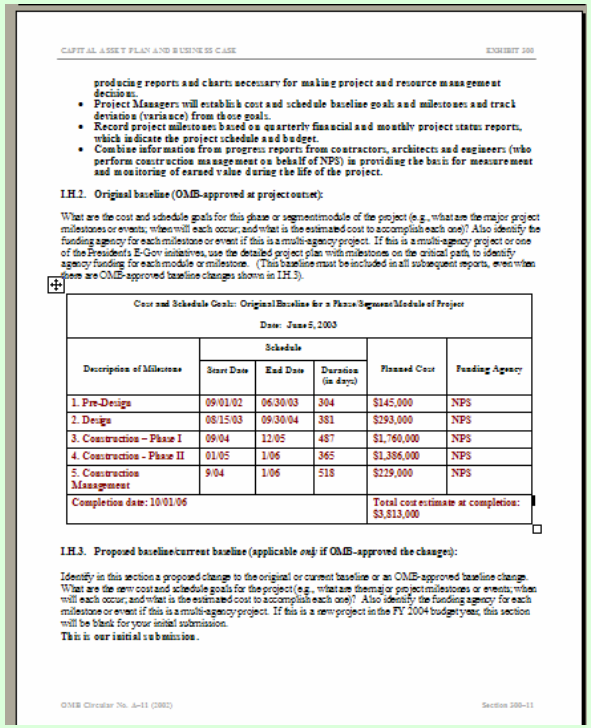
For most projects, you will be able to use the statement below:

Project Management will be accomplished as follows:
NPS has an automated Project Management System based on MicroSoft Project. This will:

- Report key milestone schedules and project progress for planning, design and construction.
- Import data from the Federal Finance System (FFS) to track cost data.
- Allow project managers to document and track interdependencies between tasks, costs, time and resources both within a single project and between projects requiring the same resources.
- Support integrating and aggregating data; scheduling status of reports; developing a historical database of cost and schedule information for a variety of project types; and producing reports and charts necessary for making project and resource management decisions.
- Allow Project Managers to establish cost and schedule baseline goals and milestones and track deviation (variance) from those goals.
- Record project milestones based on quarterly financial and monthly project status reports, which indicate the project schedule and budget.
- Combine information from progress reports from contractors, architects and engineers (who perform construction management on behalf of NPS) in providing the basis for measurement and monitoring of earned value during the life of the project.

I.H.2. Original baseline (OMB-approved at project outset):
What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the ma

How do I show the money in the Original Baseline?



CAPITAL ASSET PLAN AND BUSINESS CASE — EXHIBIT 300

producing reports and charts necessary for making project and resource management decisions.

- Project Managers will establish cost and schedule baseline goals and milestones and track deviation (variance) from those goals.
- Record project milestones based on quarterly financial and monthly project status reports, which indicate the project schedule and budget.
- Combine information from progress reports from contractors, architects and engineers (who perform construction management on behalf of NPS) in providing the basis for measurement and monitoring of earned value during the life of the project.

I.H.2. Original baseline (OMB-approved at project outset):

What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the major project milestones or events; when will each occur, and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a multi-agency project or one of the President's E-Gov initiatives, use the detailed project plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project

Date: June 5, 2003

Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1. Pre-Design	09/01/02	06/30/03	304	$145,000	NPS
2. Design	08/15/03	09/30/04	381	$293,000	NPS
3. Construction – Phase I	09/04	12/05	487	$1,760,000	NPS
4. Construction - Phase II	01/05	1/06	365	$1,386,000	NPS
5. Construction Management	9/04	1/06	518	$229,000	NPS
Completion date: 10/01/06				Total cost estimate at completion: $3,813,000	

I.H.3. Proposed baseline/current baseline (applicable *only* if OMB-approved the changes):

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the project (e.g., what are the major project milestones or events; when will each occur, and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a new project in the FY 2004 budget year, this section will be blank for your initial submission.

This is our initial submission.

OMB Circular No. A-11 (2002) — Section 300-11

- ♦PRE-DESIGN
- ♦DESIGN
- ♦CONSTRUCTION
- ♦CONSTRUCTION MANAGEMENT

Include contingency

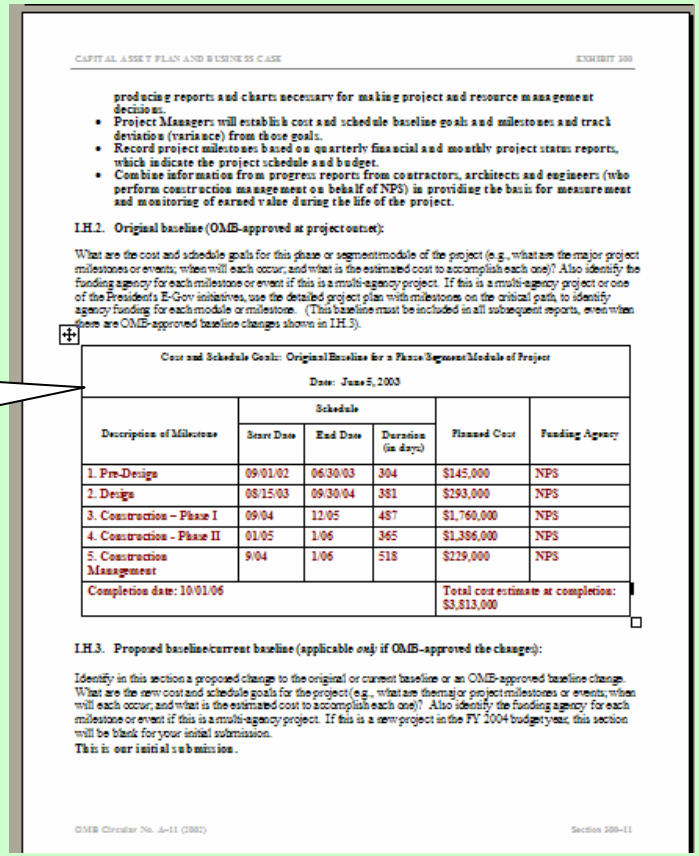
It's OK to add phases

Performance Based Management System (PB)
(Part I, Section I.H)

About the Original Baseline . . .

Performance Based Management System (PB)
(Part I, Section I.H)

This is the Original Baseline



CAPITAL ASSET PLAN AND BUSINESS CASE — EXHIBIT 300

producing reports and charts necessary for making project and resource management decisions.

- Project Managers will establish cost and schedule baseline goals and milestones and track deviation (variance) from those goals.
- Record project milestones based on quarterly financial and monthly project status reports, which indicate the project schedule and budget.
- Combine information from progress reports from contractors, architects and engineers (who perform construction management on behalf of NPS) in providing the basis for measurement and monitoring of earned value during the life of the project.

I.H.2. Original baseline (OMB-approved at project outset):

What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a multi-agency project or one of the President's E-Gov initiatives, use the detailed project plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project

Date: June 5, 2003

Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1. Pre-Design	09/01/02	06/30/03	304	$145,000	NPS
2. Design	08/15/03	09/30/04	381	$293,000	NPS
3. Construction – Phase I	09/04	12/05	487	$1,760,000	NPS
4. Construction - Phase II	01/05	1/06	365	$1,386,000	NPS
5. Construction Management	9/04	1/06	518	$229,000	NPS
Completion date: 10/01/06				Total cost estimate at completion: $3,813,000	

I.H.3. Proposed baseline/current baseline (applicable *only* if OMB-approved the change):

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the *new* cost and schedule goals for the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a *new* project in the FY 2004 budget year, this section will be blank for your initial submission.

This is our initial submission.

OMB Circular No. A-11 (2002) — Section 300–11

QUESTION:
Can the Original Baseline ever be changed?

About the Original Baseline . . .

QUESTION:
Can the Original Baseline ever be changed**?**
ANSWER:

NO

QUESTION: Is it a Big Deal to get a new baseline?

producing reports and charts necessary for making project and resource management decisions.

- **Project Managers will establish cost and schedule baseline goals and milestones and track deviation (variance) from those goals.**
- **Record project milestones based on quarterly financial and monthly project status reports, which indicate the project schedule and budget.**
- **Combine information from progress reports from contractors, architects and engineers (who perform construction management on behalf of NPS) in providing the basis for measurement and monitoring of earned value during the life of the project.**

I.H.2. Original baseline (OMB-approved at project outset):

What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a multi-agency project or one of the President's E-Gov initiatives, use the detailed project plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project Date: June 5, 2003					
Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1. Pre-Design	09/01/02	06/30/03	304	$145,000	NPS
2. Design	08/15/03	09/30/04	381	$293,000	NPS
3. Construction – Phase I	09/04	12/05	487	$1,760,000	NPS
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Completion date: 10/01/06				Total cost estimate at completion: $3,813,000	

I.H.3. Proposed baseline/current baseline (applicable *only* if OMB-approved the changes):

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a new project in the FY 2004 budget year, this section will be blank for your initial submission.

This is our initial submission.

Is it a Big Deal to get a new baseline?

YES.

A proposed baseline must be approved by OMB.

It might correct:

- Cost variance of 10%
- Schedule variance of 10%
- Funding changes
- Phasing

Give the date

Show it's proposed

I.G.3.B. Proposed Baseline Changes (Applicable *only* if OMB approves the

I.G.3.B. 1) What are the cost and schedule goals for this segment of phas project (e.g., what are the major project milestones or events; when will each occur; and s the estimated cost to mplish each one)? Also identify the funding agency for each mil ne or event if this is a multi-age project.

Cost and Schedule Goals: Proposed _X_ or Current___ Baseline
As of August 15, 2003

Description	Schedule Start Date	Schedule End Date	Duration Days	Planned Cost	Funding Agency
Planning	6/01	09/06	1450	$350,000.00	NPS
FY 2002					
Construction Phase 1	10/03	10/04	364	$ 2,281,000.00	NPS
Purchase Lumber	09/02	09/04	730	1,650,000.00	NPS
Construction Management	06/02	10/04	820	315,000.00	NPS
Contingency	10/03	10/04	364	393,000.00	NPS
Total Funded FY2002				4,639,000.00	NPS
FY 2003					
Construction Phase 2 (continuation)	10/03	10/04	364	843,000.00	NPS
Construction Management	10/03	10/04	364	67,000.00	NPS
Contingency	10/03	10/04	364	85,000.00	NPS
Total Funded FY2003				995,000.00	NPS
FY 2004 (COMPLETION)					
Construction Phase 3 (completion)	10/04	10/06	730	3,540,000.00	NPS
Construction Management	10/04	10/06	730	283,000.00	NPS
Contingency	10/04	10/06	730	354,000.00	NPS
Total to be Funded FY2004				4,177,000.00	NPS
Total Construction Cost				$ 9,811,000.00	
Total Project Cost				$ 10,161,000.00	

I.G.4 Actual Performance and Variance from OMB approved baseline (Original or Current):

Actual cost and schedule performance.

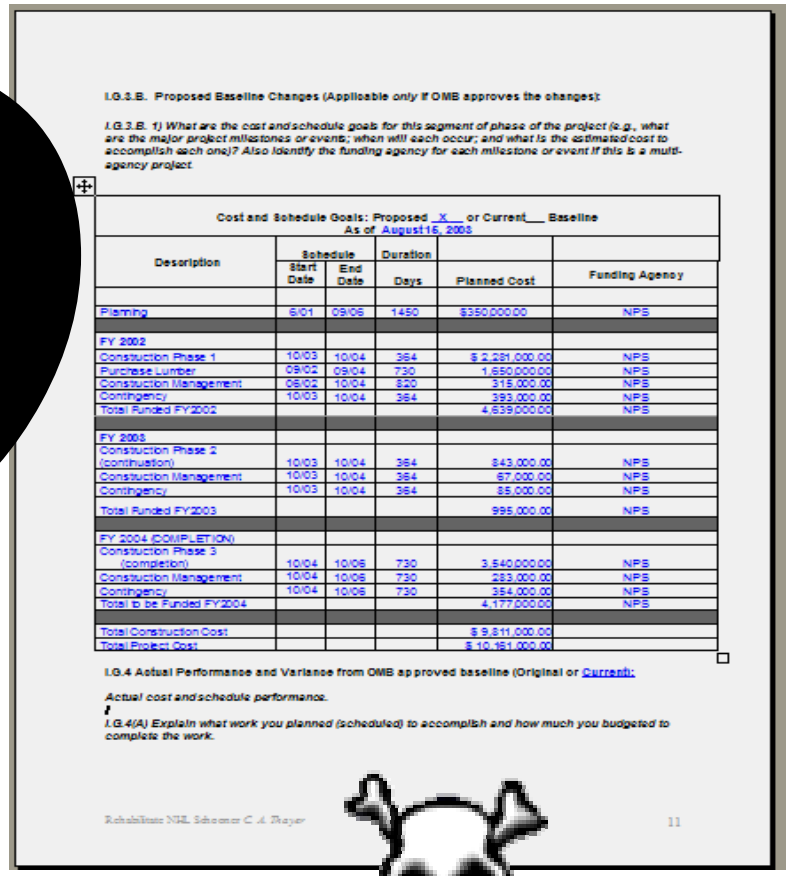
I.G.4(A) Explain what work you planned (scheduled) to accomplish and how much you budgeted to complete the work.

Rehabilitate NHL Schooner C. A. Thayer

11

Can I use a proposed baseline for calculating variances??

NO



I.G.3.B. Proposed Baseline Changes (Applicable *only* if OMB approves the changes):

I.G.3.B. 1) What are the cost and schedule goals for this segment of phase of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project.

Cost and Schedule Goals: Proposed _X_ or Current___ Baseline
As of August 16, 2003

Description	Schedule		Duration		
	Start Date	End Date	Days	Planned Cost	Funding Agency
Planning	6/01	09/06	1450	$350,000.00	NPS
FY 2002					
Construction Phase 1	10/03	10/04	364	$ 2,281,000.00	NPS
Purchase Lumber	09/02	09/04	730	1,650,000.00	NPS
Construction Management	08/02	10/04	820	315,000.00	NPS
Contingency	10/03	10/04	364	393,000.00	NPS
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Total to be Funded FY2004				4,177,000.00	NPS
Total Construction Cost				$ 9,811,000.00	
Total Project Cost				$ 10,161,000.00	

I.G.4 Actual Performance and Variance from OMB approved baseline (Original or Current):

Actual cost and schedule performance.

I.G.4(A) Explain what work you planned (scheduled) to accomplish and how much you budgeted to complete the work.

Rehabilitate NHL Schooner C. A. Thayer

11

Performance Based Management System (PB)
(Part I, Section I.H)

When does a proposed baseline become a current baseline?

When the proposed baseline is approved by OMB.

If NPS does not hear otherwise after 30 days, we may assume OMB approved the proposed baseline.

I.G.3.B. Proposed Baseline Changes (Applicable only if OMB approves the changes):

I.G.3.B. 1) What are the cost and schedule goals for this segment of phase of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project.

Cost and Schedule Goals: Proposed X or Current___ Baseline
As of August 15, 2003

Description	Schedule		Duration		
	Start Date	End Date	Days	Planned Cost	Funding Agency
Planning	6/01	09/06	1450	$350,000.00	NPS
FY 2002					
Construction Phase 1	10/03	10/04	364	$ 2,281,000.00	NPS
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Total Funded FY2002				4,639,000.00	NPS
FY 2003					
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Construction Management	10/03	10/04	364	67,000.00	NPS
Contingency	10/03	10/04	364	85,000.00	NPS
Total Funded FY2003				995,000.00	NPS
FY 2004 (COMPLETION)					
Construction Phase 3 (completion)	10/04	10/06	730	3,540,000.00	NPS
Construction Management	10/04	10/06	730	283,000.00	NPS
Contingency	10/04	10/06	730	354,000.00	NPS
Total to be Funded FY2004				4,177,000.00	NPS
Total Construction Cost				$ 9,811,000.00	
Total Project Cost				$ 10,161,000.00	

I.G.4 Actual Performance and Variance from OMB approved baseline (Original or Current):

Actual cost and schedule performance.

I.G.4(A) Explain what work you planned (scheduled) to accomplish and how much you budgeted to complete the work.

What do I do with a proposed baseline after it is approved?

- Record the approval date.
- Label it as "Current Baseline."
- Change the Summary of Spending.
- Change the completion date on first page, if required.
- Compute variances with new Current Baseline

I.G.S.A. CURRENT BASELINE Approved by OMB July 30, 2003

Cost and Schedule Goals: Proposed___ or Current_X_ Baseline
As of July 30, 2003

Description	Schedule Start Date	Schedule End Date	Duration Days	Planned Cost	Funding Agency
Planning	6/01	09/06	1450	$350,000.00	NPS
FY 2002					
Construction Phase 1	9/02	9/03	364	$ 2,281,000.00	NPS
Purchase Lumber	09/02	09/04	730	1,650,000.00	NPS
Construction Management	06/02	06/03	364	315,000.00	NPS
Contingency	06/02	06/03	364	393,000.00	NPS
Total Funded FY2002				4,639,000.00	NPS
FY 2003					
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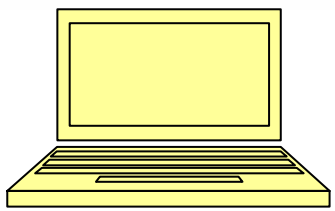
Construction Management	06/03	06/04	364	67,000.00	NPS
Contingency	06/03	06/04	364	85,000.00	NPS
Total Funded FY2003				995,000.00	NPS
FY 2004 (COMPLETION)					
Construction Phase 3 (completion)	10/04	09/05	364	3,540,000.00	NPS
Construction Management	10/04	09/05	364	283,000.00	NPS
Contingency	10/04	09/05	364	354,000.00	NPS
Total to be Funded FY2004				4,177,000.00	NPS
Total Construction Cost				$ 9,811,000.00	
Total Project Cost				$ 10,161,000.00	



What if I have to do *another* proposed baseline?

- Leave the Original Baseline in place (of course).
- Leave the Current Baseline in place for now
- Add the *new* proposed baseline (probably have to cut it into your form)
- Compute variances off the Current Baseline
- Wait for OMB approval
- You now have 3 baselines
  - Original
  - Current
  - Proposed

What happens when a second proposed baseline is approved???

- Leave the Original Baseline in place (as usual).
- Delete the now outdated Current Baseline
- Change the proposed baseline to the Current Baseline (give new approval date)
- Add a note to the form if necessary
- Compute variances off the *new* Current Baseline

How do you figure actual performance and variance from OMB-approved baseline??

YOU NEED TO KNOW:

- Total project cost from OMB-approved baseline
- Budgeted (planned) cost of work scheduled (BCWS)
- Budgeted (planned) cost of work performed (BCWP)
- Actual cost of work performed (ACWP)

- With this information, you can calculate variances.
- FIRST, you need to understand what Earned Value means and why you need to work with it.

Until next time . . .

WASO
Park Planning, Facilities, and Lands
Construction Program Management
http://construction.den.nps.gov