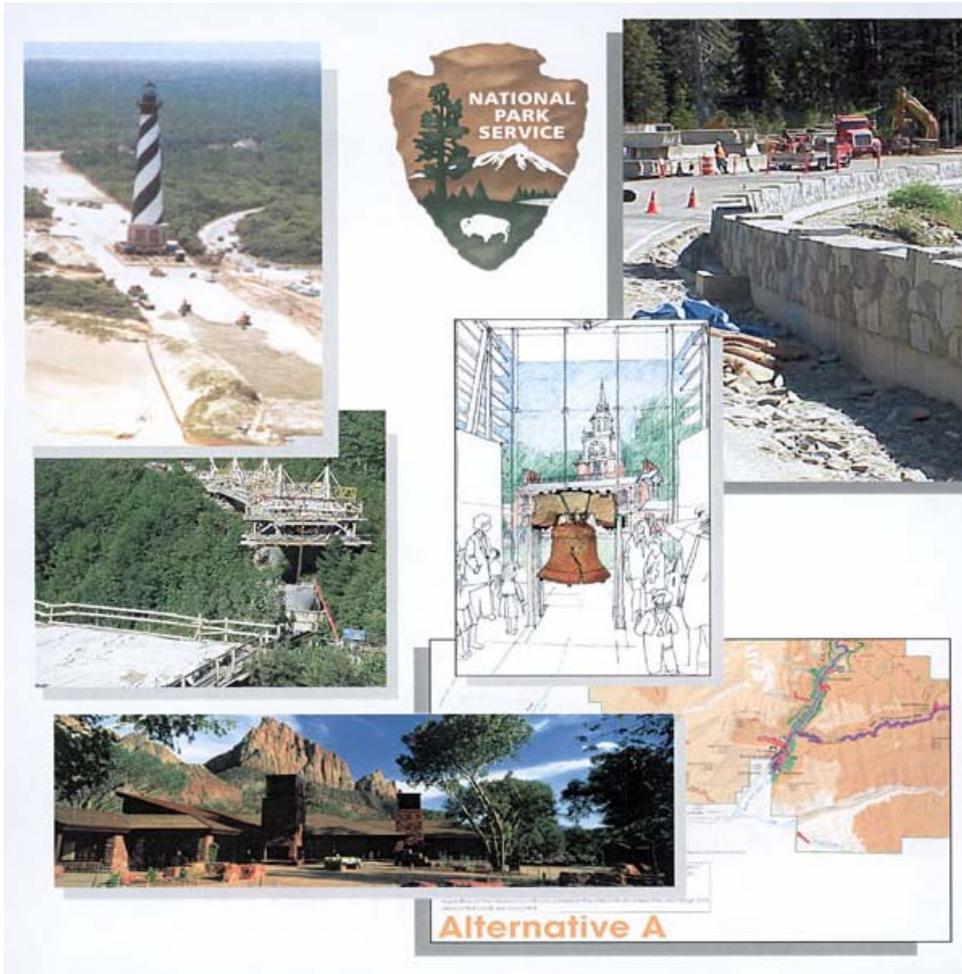


National Park Service



EXPERIENCE
YOUR
AMERICA



Leading Successful A/E Projects

Sam Whittington

Chief, Project Management

Denver Service Center
Planning, Design, and Construction Projects



Fundamental Concepts

- Passion/Leadership
- Emphasis on Client Satisfaction
- A Strong PM Organization
- Milestone/deliverable Management
- PM, Client, CO, AE Partnership/Team
- Identify and Address Key Project Risks
- Project Management Plan/Strategy



Survival Strategy

- Problem solving mentality
- Project team with shared vision, commitment, and capability
- Proactive project management
- Mitigate bear traps and rocks in the road
- Milestone management

A project manager prevents problems and seeks solutions to advance the project

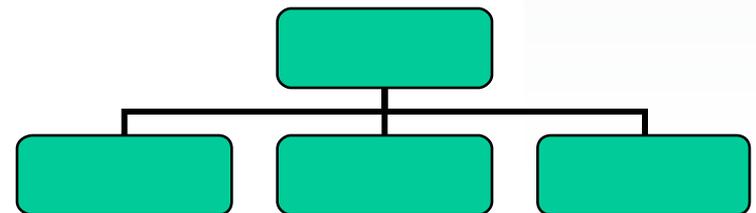
National Park Service



EXPERIENCE
YOUR
AMERICA

***Who* Will Do What? Roles & Responsibilities**

- Roles and responsibilities must be clearly defined and understood
- Accomplished during project agreement phase
- Avoid duplication of effort
- Single point of contact



National Park Service



EXPERIENCE
YOUR
AMERICA

The Project Team – Selection of the Core Team



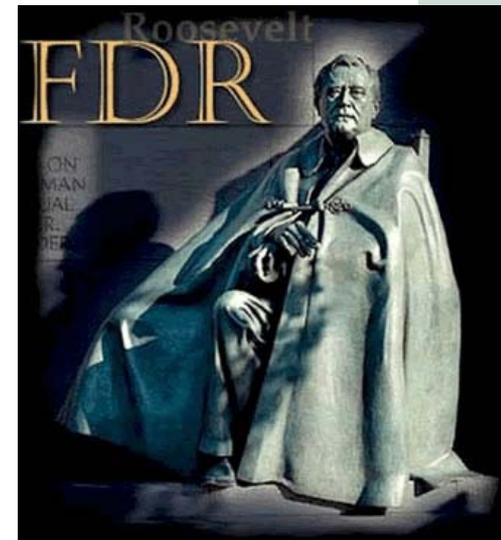
- Superintendent
- Project Manager
- Contracting Officer
- A/E Firm, lead individuals
- Possible partner representative

*Phil Jackson is
the role model*



Project Management Plan

- Create a shared vision
- Passion with precision
- Roles
- Schedule
- Budget
- Strategy



*Successful projects are planned
- And managed to the plan*

National Park Service



A/E Selection

- IDIQ
- IDIQ Multiple Award
- Individual Project

EXPERIENCE
YOUR
AMERICA

National Park Service



EXPERIENCE
YOUR
AMERICA

Role of the Project Manager

- COR
- Shares owners vision
- Central Point of communication
- Accountability
- Technical and process issues
- Team management and administration

National Park Service



EXPERIENCE
YOUR
AMERICA

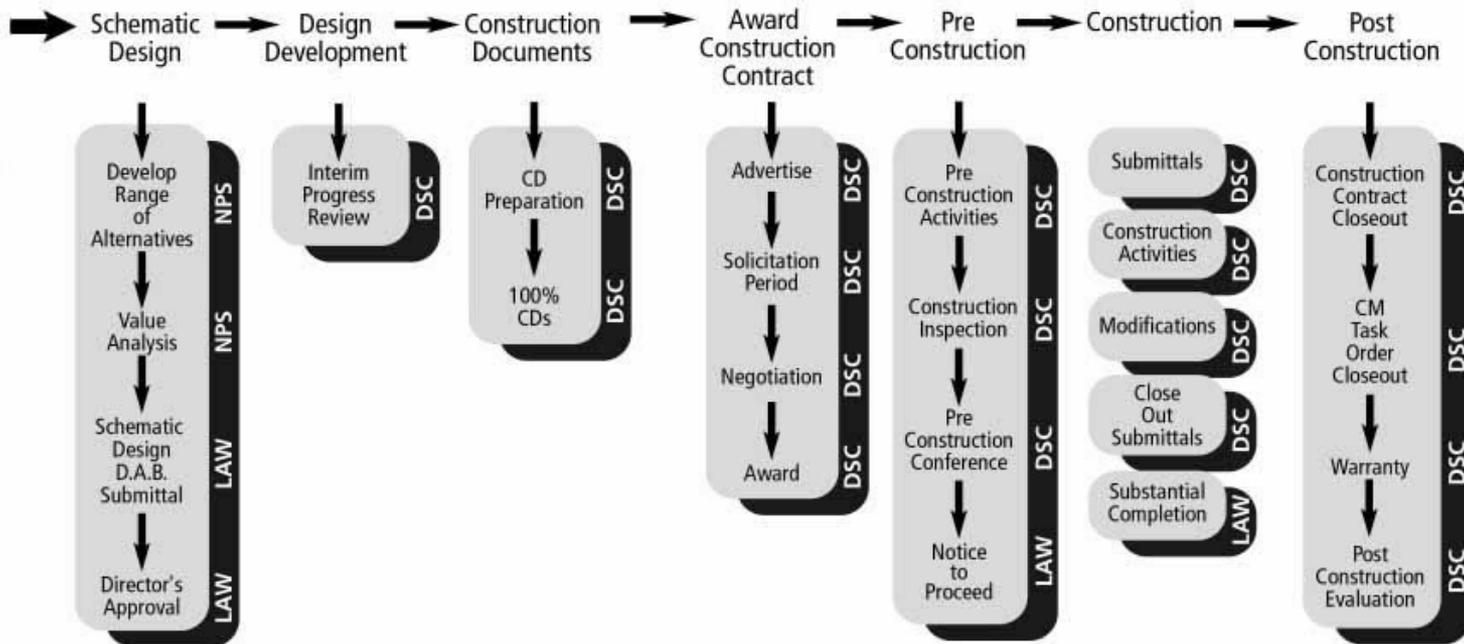
Be a Good A/E Client

- Passion for the project/champion
- Funding to match program
- A single point of contact and authority
- Commitment to decisions
- Timely reviews and decisions
- Regional and political point person
- Understand impacts of decisions
- Allow design ownership

*Good clients are key
to good projects*



Design & Construction Process



Stakeholder input is always required at Key Milestones

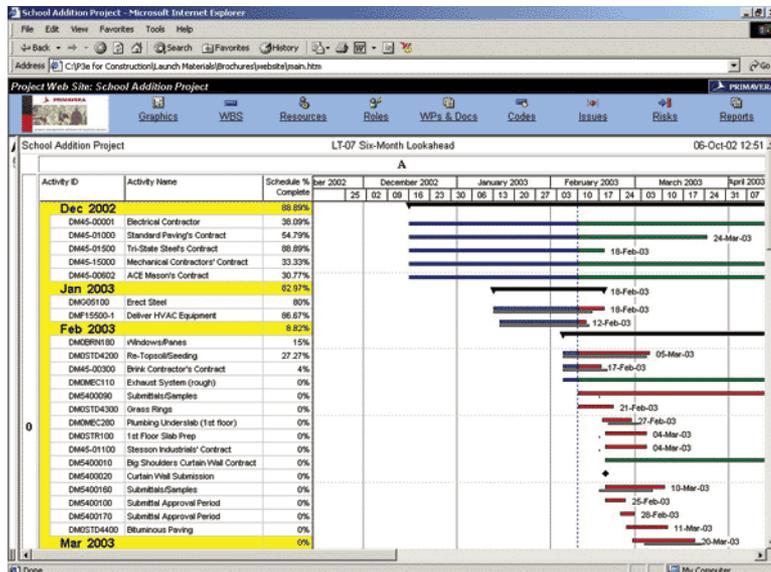
National Park Service



EXPERIENCE
YOUR
AMERICA

When will Products and Services be Produced

- Project Managers develop a schedule and manage to it
- Key milestones
- Critical path
- Coordination of multiple teams and task types
- Project schedule coordination with funding schedule



Benchmarking for Communication and Understanding

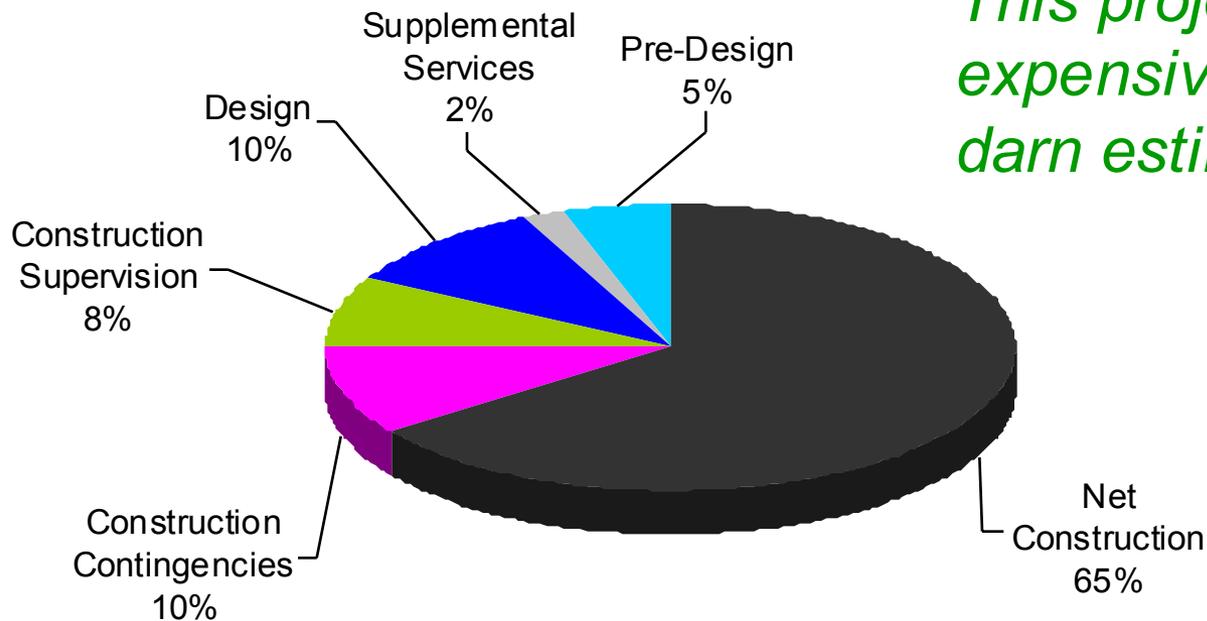
EXPERIENCE
YOUR
AMERICA

- Visit similar projects that are examples of great success.
- Review photographs or design documents
- Team consensus
- Builds on existing science and quality standards





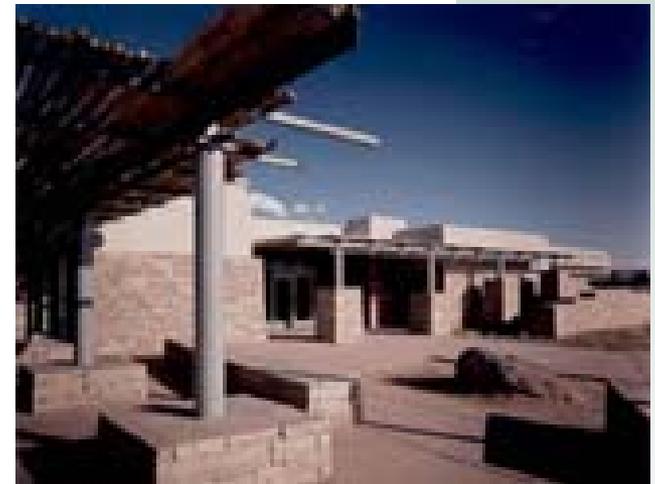
How Much? Cost Estimating VS Budget and Scope Control



This project is too expensive. That darn estimator

Bear Trap – The Architect Wishes to Make a Statement

- Team selection
 - A/E
 - PM & NPS technical team
- Programming milestone
 - Design objective
 - Image and look narrative
- Schematic design workshop
- Schematic design



*Image and look supportive of
NPS mission and compatible with
local site vernacular*



Bear Trap – PMIS Statement with Errors in Scope and Budget

- Identify problem as early as possible
PA & programming milestones
- Project team proactively attempts to have PMIS corrected prior to Greenbook
- Re-compete?
- Live with the scope and design to budget?

*Kellog/Tregoe Deviation
Chart lessons must not be
forgotten*



Bear Trap – Fed Bidding Process

- Low bid contractors
 - Best value
- A/E produces specs not suitable for Fed bidding
 - QA, IDIQ
- Bid protests
 - Experienced team in the process
 - Award promptly
- Restricted competition; 8A/HUB Zone
 - Agree on contract type early
 - Accept reality of increased cost
 - Proper match of scope and contract type

National Park Service



Bear Trap – Bid Bust

- Quality estimator w/fed experience
Phil Jackson
- A/E, estimator, and PM have proven track record of budget success
- Good competition/bid process
- Scope creep & estimator pressure
- Bid options, base bid safety factor
- Negotiation, CM & contingency, reprogramming, re-advertise, Firestone

EXPERIENCE
YOUR
AMERICA



Bear Trap – NEPA Behind Schedule

- Start at the beginning of pre-design
- Integrate NEPA with pre-design
- Identify funds early
- Do not overload park staff
- Production of CDs prior to NEPA completion is improper

A horse pulls better than it pushes

National Park Service



Bear Trap – Project Funding Process

- Compliance, construction and design funds controlled by 3 different offices
- DAF
- Construction contingency cumbersome
- PMIS/5 year plan >>>

EXPERIENCE
YOUR
AMERICA

National Park Service



Bear Trap – Project Funding Process Mitigation

- Project staff with experience with process
- Realistic schedule development and proactive project management (2 1/2 to 3 year process)
- Creative construction management and construction contracting
- PMIS review and updating by project team along with early advancement of projects

EXPERIENCE
YOUR
AMERICA

National Park Service



Bear Trap – Team is not Compatible

EXPERIENCE
YOUR
AMERICA

- Superintendent and PM
- PM and Project
- AE and Project
- Construction contractor superintendent is a dud
- Lead architect without ears

*Don't change
horses in mid-
stream*

Kellog/tregoe



Bear Trap – Operational Impacts

- Communication between the Superintendent and design team is crucial to reach consensus on necessary and allowed impacts.
- General requirements in the contract codify items like access, closures, and resource protection requirements.
 - *These requirements must be carefully considered by the Park and put into Division 1 – General Requirements of the Contract*

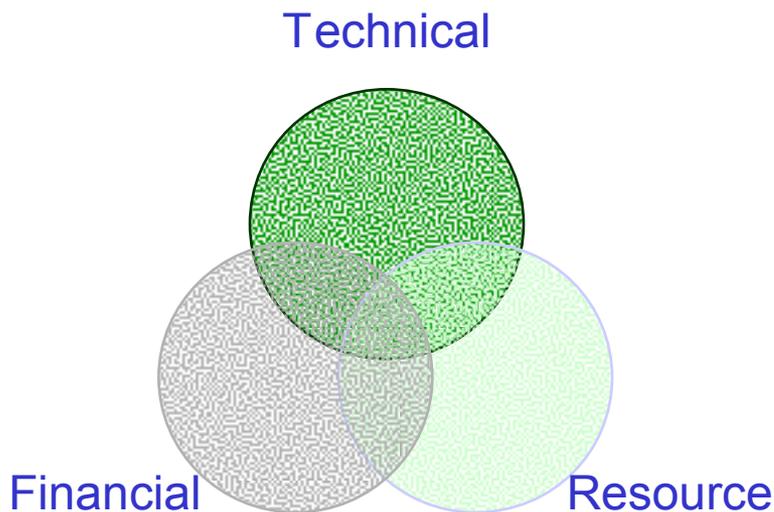
National Park Service



EXPERIENCE
YOUR
AMERICA

The final product is not a set of plans and specs

- Construction is a tough and messy business.
- Federal regulations, NPS process



The process is inherently difficult with many factors, many unknowns, varied opinions, and diverse goals.