Background Presentation

GRANT ACCELERATION PROGRAM (GAP)

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Grant Acceleration Program

Purpose:

To develop a program that was an extension to the normal funding process to give an applicant a fair reasonable fixed limit budget and thus reduce FEMA involvement in the construction process, and thus reduce FEMA and applicant administrative costs.

Prior Situation

- Cost estimates were meant to represent approximate project costs, with discrepancies to be settled after project completion on actual costs
- Actual: Estimates did not include (1) full overhead and profit, (2) general requirements, (3) contingencies. Results were that some approved estimates were for only about half of the total project costs.

Results

Subgrantees regularly appealed estimated amounts before embarking on construction



Result: Extensive delays and likelihood of unsatisfied clients leading to significant growth in costs and expectations of FEMA funding with no clear budget prior to start of construction.

Northridge Earthquake

Major earthquake in large metropolitan urban area

- RESULT: Many large and complex buildings damaged, each demanding sophisticated engineering analysis.
- RESULT: Many of the largest and most complex projects ever experienced.
- <u>PROSPECT:</u> FEMA involvement for years as construction commences; and disagreements over cost estimates, methods of repair, and codes and standards.

Standard DSR Cost Estimating prior to GAP

- "Contingencies precluded as per OMB A-87.
- Meeting with the Inspector General (IG) in 1996.
- Cost-estimating (as opposed to extraordinary event) contingencies may be treated differently.

VALUE OF GAP-CEF PROCESS TO FEDERAL TAX PAYER

Actual-cost based funding thought to be prudent and most economical, but for large-scale, locally controlled capital construction projects, the opposite proves to be the case.

REASONS:

- FEMA is 3rd-party payer with little budgetary decisionmaking control over the project.
- Cost-saving incentives rest with FEMA, rather than with the applicants, yet the applicants make the decisions in the field.
- Both the applicants and FEMA incur administrative costs because of the continuous monitoring required.
- NOTE: Advance of construction settlements is currently most frequent standard practice in Insurance Company settlements.

CEF Early development

Description of development process

- Establishment of "Reinvention Lab," later renamed "Grant Acceleration Program" with the "Cost Estimation Format."
- Interviews with R.S.Means on markup.
- First draft of CEF.
- Review and initial testing with FEMA projects.

COST ESTIMATING FORMAT (CEF)

OBJECTIVES

- Markup treated consistently.
- Cost Estimating work limited to work-intrades.
- Total Project Costs accurately included for All Projects



NOTE: CEF PERCENTAGE FACTORS ARE ONLY MEANT TO COVER MARKUP – NOT THE BARE COSTS FOR WORK-IN-TRADES.

Origins of GAP

- Applicant wanted a negotiated settlement
 - Known budget to work with
 - Less FEMA involvement
- Applicant with major damage
 - \$300+ million in project costs
 - 30+ buildings

To Make GAP Work

- A fair and reasonable cost estimate
 - Use industry standard cost estimating methodology
- Incentives within the Law for applicant to accept offer
 - Known budget
 - Reduced FEMA involvement
 - Applicants get to use any savings
- Voluntary entrance into GAP

Compare Pilot Implementations (1) Northridge Earthquake

Pre-GAP

- Sparse scopes of work
- No consistent cost estimating
- Previous PA program

GAP

- Started 3 years after event
- Time passed-advantages recognized
- 86 applicants accepted GAP offers
- 800 projects accepted under GAP

Compare Pilot Implementations (2) Nisqually Earthquake

- GAP established in Washington State
 - Detailed scope of work
 - Consistent cost estimating
 - Current PA program
 - -Started 4 months after event
 - Minimum advantages recognized
 - 12 potential applicants for GAP
 - -100 potential projects for GAP

Development

- Concept Refinement
- Outreach
 - DFO
 - State & LocalAgencies
 - FEMA
- Test Cases
- FEMA Approvals

<u>Timeline</u>

January 1997



April 1997

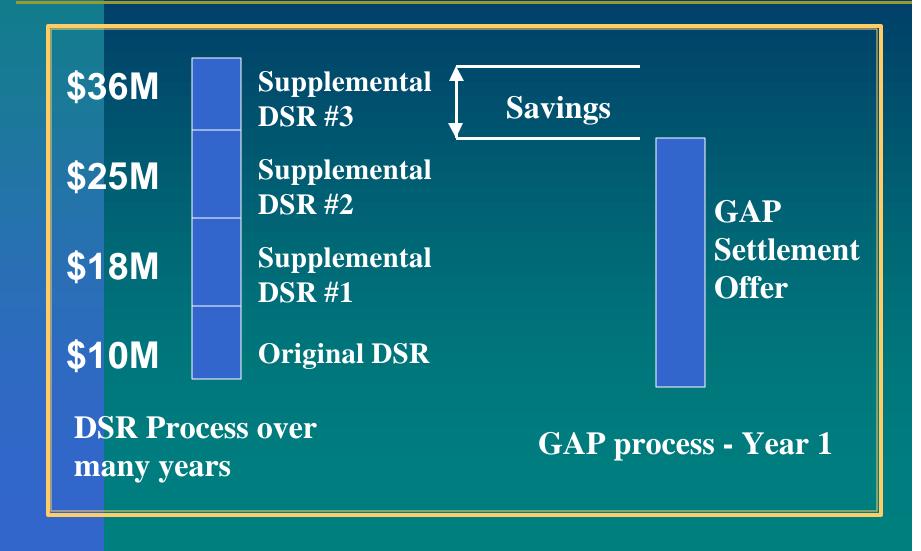
Test Case Phase

- Version 1.3 of CEF
- 24 test projects
 - Loma Prieta (6)
 - Northridge (14)
- Range of Building Projects
- Resulting Savings were Justification

Criteria

- Complete or Nearly Complete
- Category E
- Isolate Factors
- 2-4 Supplemental DSR's (Escalation)

GAP Concept



Test Case Results

Loma Prieta Cases

- Aggregate savings of \$20 M or 27% of DSR amounts
- Individual Savings from 7% to 24 %

Northridge Cases

- 5 of 8 completed projects had savings of \$15 M or 24% of DSR amounts
- 6 nearly complete projects overestimated by 36% before supplemental DSR's

Pilot 1 – Closeout to-date (146/800)

Status	Number of Projects	Percentage of Total Projects	Total GAP PW Amount	Total Closed Project Amount	Difference
Equal	35	24%	\$54,100,000	\$54,100,000	
Overrun	12	8%	\$3,424,000	\$3,982,000	\$558,000
Underrun	99	68%	\$36,853,000	\$23,635,000	(\$13,218,000)
Total	146	100%	\$94,377,000	\$81,717,000	(\$12,660,000)

Parallels with DMA 2000

- Grant Acceleration Program
 - Voluntary program
 - -Fair and reasonable cost estimate
 - Actual cost if not GAP
 - -Fixed estimate if GAP

Challenges

- Preconceived ideas
- Selling concept even though present estimates are close to actual costs
- Not enough advantages
- Not enough uses for underruns
- Documentation requirements not sufficiently reduced

Questions and Comments