

**2004 DOI Facilities  
and Asset Management Conference**  

---

**Condition Assessment Program Panel**



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Panel Objectives:

- Identify condition assessment progress
- Open your Bureau's "Toolbox"
- Share *and use* best practices

2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



**Bureau of Indian Affairs**

Margie Morin



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Bureau of Indian Affairs* *Office of Facilities Management and* *Construction*

- Condition Assessments
- Facility Condition Index (FCI)

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### *Bureau of Indian Affairs - OFMC:*

- ❑ 186 Schools – 17.918 Million SF
- ❑ 55 Law Enforcement Centers – 818K SF
- ❑ 1305 General Admin Facilities – 4.312 Million SF
  - Total of 23.048 SF

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Progress of BIA Condition Assessments*

- ❑ FY 2000 – Completed Level 1 – Bldg Assessments at 100%
- ❑ FY 2001 started 2<sup>nd</sup> cycle of condition assessments

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Progress – Condition Assessments FY 2004*

- Completed 2<sup>nd</sup> 100% assessment reviews at all BIA locations by May 2004
  - Validation Building Report (VBR)
  - Condition Assessments
  - ADA
  - Establish Gatekeeper
  - AutoCAD drawings – building/room/use
  - Site/Utilities drawings (Buildings, Pavements, Walkways, Roads, Parking Lots, Site Utility Lines other major structural components.
  - Digital Photo of all Buildings
  - Identify component renewal out to year 10

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Lessons Learned

- ❑ Coordination/Scheduling
- ❑ Narrowed definitions of Categories and Ranks
- ❑ Implement Procedures to reduce duplications
- ❑ Started the process for field to review/approve backlog condition assessment data before it goes into the production database
- ❑ Implemented a process where the Field can change category and ranks of existing backlog

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Lessons Learned Continued:*

- ❑ Remove the ability for the Field to view backlogs identified beyond 5 years for component renewals – this data is used for long term planning needs
- ❑ M-3 backlogs are typically backlogs identified for year 3-4 (short term component renewal) these backlogs are not available for funding unless the field changes the category and rank.

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Lessons Learned – Continued*

- ❑ Work with Division of Safety Management to improve the process in categorizing safety and handicapped deficiencies.

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### Condition Assessments - FCI

- ❑ Baseline FY 2001 – .26 (Poor)
  - ❑ 143 Schools in Poor Condition
  - ❑ 43 Schools in Good or Fair Condition
- ❑ Current FY 2004 - .1243
  - ❑ 82 Schools in Poor Condition
  - ❑ 104 Schools in Good or Fair Condition
- ❑ Improvement of 61 Schools from poor to good or fair

2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



***Bureau of Land Management***

Elliot Ng



# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### **BLM Condition Assessment Strategy:**

- Comprehensive Strategic Study (Jan 2003)
- Strategy for Comprehensive Baselines
  - Phase I - Rec/Adm Sites
  - Phase II - Roads/Trails
  - Phase III - Bridges/Dams
- Objectives
  - Validate Inventory
  - Assess Condition
  - Calculate FCI

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Title: Status of Rec/Adm Sites*

- ❑ 100% Contractual Effort
- ❑ More than expected and faster than planned '03
  - ❑ 777 sites instead of 500 sites
  - ❑ 6 months instead of 8 months
  - ❑ Idaho acceleration (100%); over 300 sites in 18 weeks
- ❑ Finish all Rec/Adm sites (over 2700) by CY 2004

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### *Title: Strategic Spin-offs from Rec/Adm Effort for Future Phases*

- On-site partnership
- Validates the value of “pilots”
- Protocol methodology
- Useful end-product
- Vehicle to address problems quickly
  - State coordinator’s role

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### *Title: Status of Roads/Trails and Bridges/Dams*

- Roads/Trails
  - Partnership Strategy/Redesign Effort
  - R & D for Statistical Sampling & “FCI”
  - Planning to start early ‘05 & complete Oct ‘07
- Bridges /Dams
  - Beginning gap analysis
  - Planning to start mid ‘05 & complete Oct ‘07

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### *Title: Challenges*

- Integration of current data with FAMS
- Dealing with deficiencies in the interim
  - Updating CRV & FCI
  - Tracking completed work
- Transition from paper to electronic
- BLM-performed follow-up
  - Training

2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



**Bureau of Reclamation**

Darrel Krause



# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### *Bureau of Reclamation – Asset Types and Numbers:*

- Dams/Dikes (470+)
- Power Facilities (80+)
- Associated (Water) Facilities (300+)
- Recreation Sites (300+)
- Buildings (1500+)

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### Current Replacement Value of Assets – Reserved Works

- Dams (\$36 B.)
- Power/Pumping Facilities (\$16 B.)
- Associated Facilities (\$9 B.)
- Recreation/F&W (\$3 B.)
- Buildings (\$1 B.)

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Condition Assessments – Water Facilities

- RO&M Program began in 1948 (70% asset value)
- 3 to 6 year field exam freq. by qualified team
- Promotes preventive maintenance philosophy
- Formal documented report w/recommendations
- Recommendations scheduled/tracked in a computerized database until completed
- Where applicable, included in MAXIMO

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### Condition Assessments – Power Facilities

- ❑ Power O&M Review Program also began in 1948 (25% of asset value)
- ❑ Also promotes PM philosophy
- ❑ 3 to 6 year frequency by qualified personnel
- ❑ Formal documented reports; recommendations tracked in computerized database and within MAXIMO at most power facility sites

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Condition Assessment Ratings

- ❑ **FRR (Facility Reliability Ratings)** – water and power facilities (*considers maintenance, operations, and management factors*)
- ❑ **FCI (Facility Condition Index)** – buildings and recreation sites (*considers maintenance only*)

# Reclamation's CA Program

- Consists of several facility-specific field review programs (dam safety, O&M, seismic safety, accessibility, life safety code, etc.)
- Continues to support Reclamation's primary mission to reliably deliver water and generate power



## Reclamation's CA Schedule

- Water and Power Facilities – continue with reviews/inspections on a generally 3-yr frequency (as has been done for 50+ years)
- Buildings and Recreation Sites – complete preliminary CAs in FY 04 for all reserved works (and compute initial FCI values).



# Reclamation's CA Schedule

- **Buildings and Recreation Sites**
  - In FY 05, begin 5-yr frequency CAs
  - Use developed checklists
  - Use in-house qualified staff
  - Track maintenance deficiencies in suitable database (in MAXIMO, if applicable)
  - Include in DM reporting
  - Update FCI values accordingly



2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



***US Fish and Wildlife Service***

Jennifer Beiro-Réveillé, AIA



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Program Initiatives:*

- ❑ Quality Assurance/Control Program
- ❑ Aligning with DOI Standards
- ❑ MAXIMO integration
- ❑ 5-Year Planning and Forecasting

Property Information:

DOI Standard Asset Code

Asset Num 10033311

IFWSNUM 626

Property Description Chicago Diversion Dam (Old RPI Number 312)

Code

Primary Facility Type

40160400

Levees Dikes

1.00 LN FT

Size

Construction Year	Acquisition Date	Corr Acquisition Date	Acq Type	Disposal Year	Disposal Type
1986	4/1/1986		Constructed	0	No Selection

Estimated Base Replacement Cost	Cost Guide	Base Cost	Estimating Method	CPI Factor	Calculated Current Year Replacement Cost
 \$1,000,000		1999	Actual Cost	112.13%	\$1,121,300

Monthly Lease Rate	Current Lease Effectuated	Lease Expires	Renewal Option	Predominant Construction Material
			YRS	Concrete

Mark for Deletion? No

Reason

Good

0.000

MMSPROJECT #1

MMSPROJECT #2

Facility Condition Assessment

Facility Condition Index

MMSPROJECT #3

MMSPROJECT #4

Comprehensive Condition Assessment:

Access Info

 [Detail](#)
 [Delete](#)
 [Move](#)
 [Copy](#)
 [Paste](#)
 [Print](#)
 [Filter](#)

	Type	Photo	CAD	Number	Floors	Size	Replacement V	FCI
Morrow Building	Building			E52	6	148,012	\$28,122,280	0.24
West Hall	Building			E40	4	114,797	\$22,223,905	0.18
School of Health	Building			E25	6	155,129	\$32,640,090	0.05
	Building			E32	3	15,514	\$2,171,960	0.3
	Building			234	5	27,480	\$4,671,600	0.07
	Building			E51	3	110,100	\$19,800,000	0.05
	Building			E60	3	33,587	\$6,045,660	0.61
Cleveland Building	Building			E534	4	94,352	\$17,366,429	0.12
North Garage	Building			E42	3	64,842	\$3,566,310	0.63
Services	Building			E23	5	101,468	\$18,264,240	0.05
Sex Building	Building			E38	7	66,607	\$11,989,260	0.11
Building	Building			E33	2	8,009	\$1,121,260	0.08
James Building	Building			E56	4	36,353	\$6,543,540	0.06
Race Building	Building			E18	6	102,551	\$18,459,180	0.14
Powder Building	Building			E17	6	82,831	\$17,394,510	0.2
President's House	Building			201	4	18,641	\$5,405,890	0.07
James Ford Building	Building			E19	7	148,402	\$26,712,360	0.18
Gar Building	Building			E15	5	115,634	\$22,464,217	0.05

[Assets](#)
[Funding](#)
[Projects](#)
[Reports](#)
[Import](#)
[Security](#)
[Configure](#)

Somerville Campus / School of BioEngineering / Alfred Morrow Building / Requirements












Name	Category	Prime System	Priority	Status	Cost
2 Hour Door	Building Code	D4090 - Other Fire Protec	5: Does Not Meet Current	Open	\$9,323
ACT Ceiling is Worn	Appearance	D0000 - Ceiling Finishes	3: Necessary - Not Yet C	In CMMS	\$9,063
ADA / Elevator Int. is Inaccessible	Accessibility	D1010 - Elevators and Lif	5: Does Not Meet Current	In CMMS	\$6,000
ADA Accessibility / 7th. Floor is Inaccessib	Accessibility	-1 - Unknown	5: Does Not Meet Current	In CMMS	\$14,779
ADA Public Phone	Accessibility	-1 - Unknown	5: Does Not Meet Current	In CMMS	\$1,500
Blocked Standpipes and Fire Hose Cabinet	Life Safety	D40 - Fire Protection	1: Currently Critical	In CMMS	\$1,415
Building Automation System	Functionality	D3060 - Controls and Inst	2: Potentially Critical	In Project	\$666,054
Clean and Rebalance Supply Air System	Functionality	D5000 - Heating/Cooling &	2: Potentially Critical	In CMMS	\$38,522
Communications Cable Protection	Integrity	D5030 - Communications	4: Functional Need	Open	\$26,134
Communications Cable Resupport	Building Code	D5030 - Communications	5: Does Not Meet Current	In CMMS	\$1,500
Dead end corridor, basement	Building Code	-1 - Unknown	5: Does Not Meet Current	In CMMS	\$5,000
Deteriorating Storm and Sanitary Pipe Joint	Functionality	D2030 - Sanitary Waste	2: Potentially Critical	In Project	\$42,415
Door Doesn't Swing in Direction of Egress	Building Code	C1020 - Interior Doors	5: Does Not Meet Current	In CMMS	\$1,591
Doors are Delaminated	Appearance	C1020 - Interior Doors	3: Necessary - Not Yet C	In CMMS	\$2,615
Egress (Stair) Doors Not Equipped w/ Prop	Building Code	C20 - Stairs	5: Does Not Meet Current	In Project	\$10,229
Egress from the Seventh Floor	Building Code	C20 - Stairs	5: Does Not Meet Current	In Project	\$53,865
Egressway from basement public area	Building Code	D4090 - Other Fire Protec	1: Currently Critical	Open	\$34,209
Electrical Equipment Accessibility	Building Code	D5010 - Electrical Service	1: Currently Critical	In Project	\$11,481
Electrical Equipment in Stair	Building Code	D5010 - Electrical Service	5: Does Not Meet Current	In CMMS	\$10,000
Electrical Equipment Working and Egress S	Building Code	D5010 - Electrical Service	5: Does Not Meet Current	Open	\$4,197
Electrical Substation Reconditioning	Integrity	D5010 - Electrical Service	2: Potentially Critical	In CMMS	\$28,317
Elevator Hoistway Ventilation	Building Code	D3042 - Exhaust Ventilati	2: Potentially Critical	In CMMS	\$7,487
Elevator Recall and Shutdown	Building Code	D5037 - Fire Alarm System	1: Currently Critical	In CMMS	\$29,788
Elevators Lack Firemans emergency servi	Building Code	D1010 - Elevators and Lif	1: Currently Critical	Open	\$12,670
Emergency Egress Illumination Study	Life Safety	D5092 - Emergency Light	1: Currently Critical	Open	\$14,600
Emergency System Segregation	Building Code	D5092 - Emergency Light	5: Does Not Meet Current	Open	\$98,968

**Categories**

- Imperial Unit Price
- Metric Unit Price
- General Maintenance
- Labor
- Assemblies
- Renewal Assemblies
- Equipment Rental
- Metric Equipment Rental

**Search**



Level 1	Level 2	Level 3	Level 4
01000000 General Requirements	15050000 Basic Materials & Methods	15106000 Glass Pipe & Fittings	15110100 Valves, Brass
02000000 Site Construction	<b>15100000 Building Services Piping</b>	15107000 Metal Pipe & Fittings	15110160 Valves, Bronze
03000000 Concrete	15200000 Process Piping	15108000 Plastic Pipe & Fittings	<b>15110200 Valves, Iron Body</b>
04000000 Masonry	15400000 Plumbing Fixtures & Equipment	<b>15110000 Valves</b>	15110300 Valves, Lined, Corrosion Resista
05000000 Metals	15500000 Heat Generation Equipment	15120000 Piping Specialties	15110400 Multipurpose Valves
06000000 Wood & Plastics	15600000 Refrigeration Equipment	15140000 Domestic Water Piping	15110500 Valves, Plastic
07000000 Thermal & Moisture Protection	15700000 Heating/Ventilating/Air Conditio	15155000 Drainage Specialties	15110600 Valves, Semi-Steel
08000000 Doors & Windows	15800000 Air Distribution	15180000 Heating And Cooling Piping	15110700 Valves, Steel
09000000 Finishes	15900000 HVAC Instrumentation & Contrc	15195000 Fuel Systems	15110800 Valves, Stainless Steel
10000000 Specialties	15950000 Testing/Adjusting/Balancing		
11000000 Equipment			
12000000 Furnishings			
13000000 Special Construction			
14000000 Conveying Systems			
<b>15000000 Mechanical</b>			
16000000 Electrical			

- 151102000116 Valves, angle, iron body, 125 lb flanged, 2" size
- 151102000118 Valves, angle, iron body, 125 lb flanged, 4" size
- 151102000120 Valves, angle, iron body, 125 lb flanged, 6" size**
- 151102000122 Valves, angle, iron body, 125 lb flanged, 8" size
- 151102000560 Valves, iron body, butterfly, lug type, pneumatic operator, 2" size
- 151102000570 Valves, iron body, butterfly, lug type, pneumatic operator, 3" size
- 151102000580 Valves, iron body, butterfly, lug type, pneumatic operator, 4" size
- 151102000590 Valves, iron body, butterfly, lug type, pneumatic operator, 6" size
- 151102000600 Valves, iron body, butterfly, lug type, pneumatic operator, 8" size
- 151102000610 Valves, iron body, butterfly, lug type, pneumatic operator, 10" size
- 151102000620 Valves, iron body, butterfly, lug type, pneumatic operator, 12" size
- 151102000630 Valves, iron body, butterfly, lug type, pneumatic operator, 14" size
- 151102000640 Valves, iron body, butterfly, lug type, pneumatic operator, 18" size

**Item Details**

Description: Valves, angle, iron body, 125 lb flanged, 6" size

CCI:NOMINAL US  
Resource:Standard

Code: 151102000120

Unit: Ea.

Each: \$2,731.12

Class: U

Bare Material: \$2,100.00

Bare Labor: \$278.88

Bare Equipment: \$0.00

Bare Total: \$2,378.88

 **New**
 **List**
 **Save**
 **Delete**
 **Print**
**Action Info**

Requirement Name: Repair Steam PRV

Name: Prime Action: Estimator: Type: Adjustment Factor: **Cost**

Estimated Cost: \$3,031

**Description**

It is recommended that the two high to medium pressure steam valves be replaced with associated "t's" and blowdown valves. Work to include new insulation as required. A cost correction factor has been added for added fittings.

**Comments****Audit Info**

Modified Date:

Modified By:

 **Means**
 **Non**
 **Remove**
**Line Items**

Cls	Code	Description	Qty	Unit	Each	Extended
U	022257400100	Dump charges, typical urban city, fees only, bldg constr materials	0.5	Ton	73.29	36.645
U	150822007360	Insulation, pipe covering, fbgls, all svce jkt, 2" wall, 1.25" IPS	10	L.F.	10.59	105.9
U	150822007380	Insulation, pipe covering, fbgls, all svce jkt, 2" wall, 2" IPS	10	L.F.	11.41	114.1
U	151076409805	Pipe, steel fittings, forged steel, 3000 lb., black, tee, 1-1/4"	1	Ea.	114.92	114.92

**Requirement Info**

Asset Name: Alfred Morrow Building

Name:

Category:

Prime System: D3050 - Terminal and Package Units

Inspector:

Status:

Priority:

Recommended Action Date:

Inspection Date:

Finish Date:

**Cost**

Estimated Cost: \$3,031

Actual Cost:

Version: \$0

**Details -- Web Page Dialog**

**Photo**

Caption: Mechanical - PRV

Date: 4/7/1998

Primary Photo:

Comments:



**Description**

**Comments**

**Links**

Assemblies

Rooms

Photos

Mechanical - PRV

**Custom**

Capital vs. Expense:

**Audit Info**

Modified Date: 2003-09-22 16:48:30

Modified By:

- Assets
- Assemblies
- Rooms
- Requirements
- Actions
- Browser
- Browser
- Browser
- Models
- Estimator



REGION:

CAMPUS:

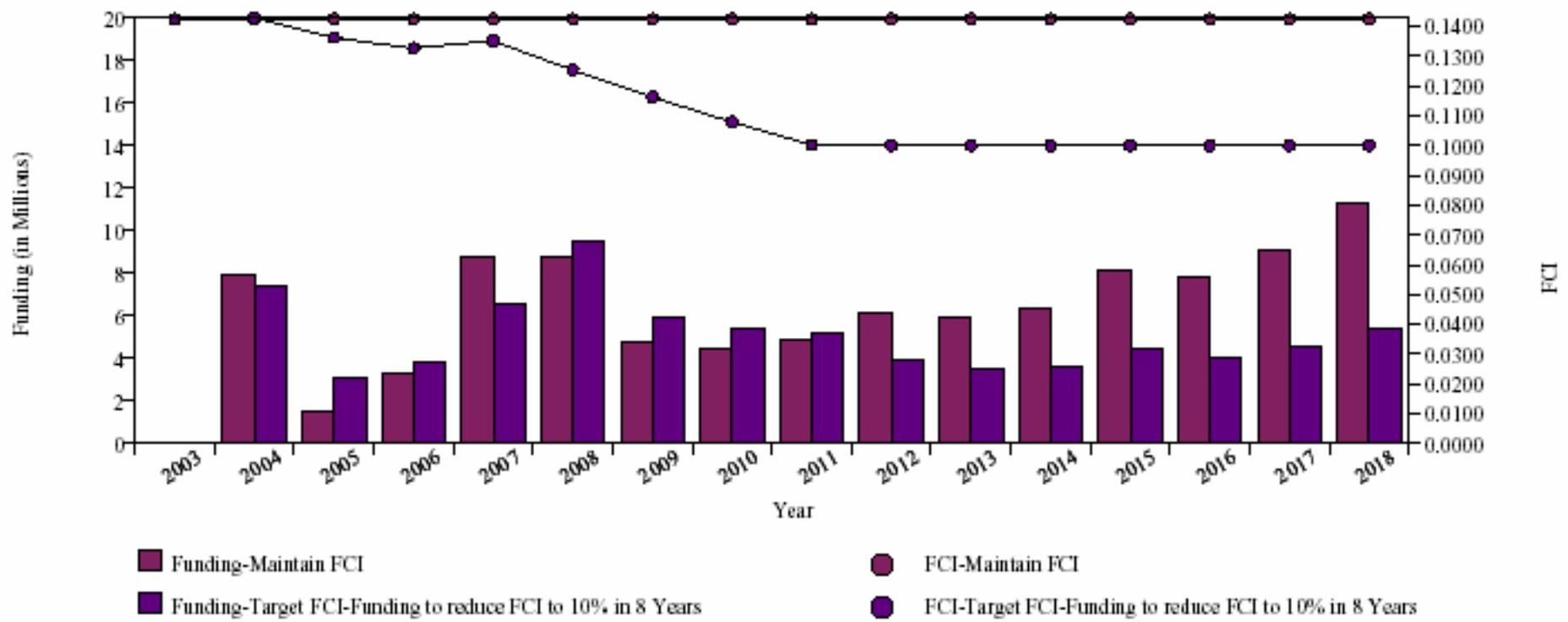
ASSET NAME:

All Assets

Category - Priority	1: Currently Critical	2: Potentially Critical	3: Necessary - Not Yet Critical	4: Functional Need	5: Does Not Meet Current Codes / Standards	Total
Accessibility	\$1,936,804	\$0	\$12,605	\$51,670	\$1,364,876	\$3,365,955
Air and Water Quality	\$13,400	\$25,739	\$0	\$0	\$0	\$39,139
Appearance	\$17,747	\$97,380	\$1,180,000	\$81,378	\$0	\$1,376,505
Building Code	\$1,659,624	\$1,457,989	\$98,044	\$130,443	\$6,794,393	\$10,140,493
Energy	\$0	\$217,562	\$22,016	\$3,626,837	\$0	\$3,866,415
Environmental	\$5,530	\$0	\$67,830	\$0	\$1,896,721	\$1,970,081
Functionality	\$6,252,922	\$15,148,663	\$4,240,427	\$6,658,691	\$79,609	\$32,380,312
Integrity	\$4,637,428	\$5,689,719	\$887,549	\$245,170	\$10,416	\$11,470,282
Life Safety	\$2,902,126	\$3,023	\$16,624	\$147,143	\$395,285	\$3,464,201
Occupational Health Safety - Program	\$0	\$0	\$0	\$0	\$0	\$0
Occupational Health and Safety - Recordk	\$0	\$1,500	\$0	\$0	\$0	\$1,500
Unknown	\$0	\$0	\$0	\$32,400	\$0	\$32,400
<b>Total</b>	<b>\$17,425,581</b>	<b>\$22,641,575</b>	<b>\$6,525,095</b>	<b>\$10,973,732</b>	<b>\$10,541,300</b>	<b>\$68,107,283</b>



# Funding/FCI Report



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *FWS Challenges:*

- Completing Pilot of COTS Application
- Responding to Audit Findings
- Aligning with DOI Standards
- Anticipating FBMS and a Single Maximo Platform

***Thank You!***

2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



**U.S. Geological Survey**

Rob Eng



# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### U.S. Geological Survey

- ❑ 41 Installations
  - ❑ 250+ Buildings
  - ❑ 9 Research Vessels
- ❑ Usage based on SF – 1.5 M SF
  - ❑ R&D – 56%
  - ❑ Office – 19%
  - ❑ Storage – 12%
  - ❑ Service – 8%
  - ❑ Housing – 4%

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### USGS Approach

- Utilize a contractor
- National program level
  - Monitor budget and schedules
  - Coordinate with region on CAs to be performed
- Delegate initiation, coordination, and tracking to the Regional level
  - Request cost proposals
  - Coordinate with center and CA contractor

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### CA Deliverables

- Hard Copy and Electronic Format
  - Executive Summary
  - Individual Structures
    - Summary, Replacement Cost Estimates, System Narratives, Deficiencies, Plans and Photos
- RVS
- Accessibility - ADA
- Energy Summary

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *USGS Progress*

- ❑ Completed the DOI requirements ahead of schedule
- ❑ Concentrated on Research Vessels in FY03
- ❑ \$51M in deficiencies

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### CA Costs

- ❑ USGS has spent a total of \$983K on 41 facilities
  - ❑ Average of \$24.6K per facility
  - ❑ 55 cents per SF
  
- ❑ Cost saving measures

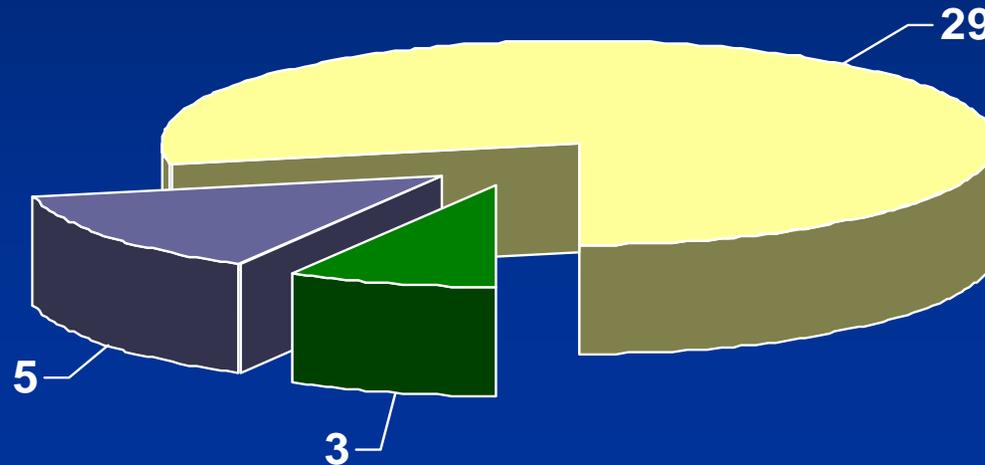
# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Findings



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### *Benefits to USGS*

- Validating the DM Backlog
- Updating the real property inventory
- Providing substantiated cost estimates
- Providing a planning tool for FM
- Identifying immediate life safety needs

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Next Steps

- Maximo Integration
- Restarting the 5 yr cycle

2004 DOI Facilities  
and Asset Management Conference

---

Condition Assessment Program Panel



**National Park Service**

Gayle Burgess



# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



The National Park Service

Condition Assessment Process

The First Step towards Long-Term Stewardship  
and Management Reform

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



Long-Term Stewardship means knowing answers to the following:

What do I own?

What is its value?

***What is its condition?***

How will I sustain it over time?

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### NPS Comprehensive Condition Assessment (CAC)

- *Condition Assessments will identify and document the scope of the backlog of deferred maintenance*
- *The data collected during a CAC provides the basis for long-range maintenance planning as well as annual work plans and budgets.*
- *The CAC to be performed on an asset every five (5) years.*

### Elements of NPS Comprehensive (CAC)

- *Review and validation of the inventory*
- *Inspection of an asset identifying in-depth deficiencies*
- *Documenting the condition as measured against the applicable maintenance or condition standards*
- *Developing verifiable deficiency cost estimates, determines the Facility Condition Index for a simple measurement of a facility's relative condition at a particular point in time*

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### Systems Management...

Implements industry standard technologies and provides the necessary technical support for training resources t

The Systems Management component administers the following software systems:

- Facility Management Software System (FMSS)
- Cost Estimating Software System (CESS).

Additionally, the Systems Management Team has developed a **Help Desk** to support staff using FMSS and other software tools.

### Training....

Conducts training programs on FMSS and related software programs

National Park Service employees are trained in the basics of asset management, the use of FMSS and the methodology for conducting condition assessments

### Communications...

Information sharing within FMP's various teams and field sites within the National Park Service, as well as external stakeholders.

Communication Tools:

- *Facility Management Connection* - quarterly electronic (publication) magazine
- In-house "Updates" - monthly programmatic status updates on implementation of FMSS condition assessments and asset management business practices

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



The NPS has developed and incorporated into the Facility Management Program and specifically the Condition Assessment Process the following tools:

- Current Replacement Value (CRV) Calculator
- Asset Priority Index (API) value
- Uniformat II Work Breakdown Structure
- Refinements of Condition Assessment Work Types
- Web Pages to assist with Condition Assessments data gather (by contractor), Equipment Inventories, Training and Communication
- Systems Support including Help Desk to respond to NPS field and contractor issues
- Extensive Training and Communication Efforts (e-course: Life Cycle, API, and the CRV calculator e-courses)

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### Current Replacement Value Calculator

B49 Other Building Type

1 Calculating Current Replacement Values for National Park Service Assets  
2 Use the following worksheet to calculate the CRV for your asset.

4 Park: Alleghaney Portage Railroad NHS Park Factor: 1.12  
5 Asset #: 23456 Asset Description: campground

8 Asset No.	Asset/Feature/Type Description	Quantity	Units	Unit Price	C
9	<b>4100 Buildings</b>				
11 *	Administrative, Headquarters, Office Building		SF	\$ 191.00	
12	Barn		SF	\$ 65.00	
13	Cabin		SF	\$ 83.00	
14	Comfort Station				
15	Conventional Toilets		SF	\$ 297.00	
16	Vault Toilets		SF	\$ 243.00	
17	Composting Toilets		SF	\$ 260.00	
18	Covered Storage Area (sand, salt, lumber, vehicle)		SF	\$ 76.00	
19	Elevator Building (Including elevator equipment)		SF	\$ 315.00	
20	Entrance Station with office and toilet		SF	\$ 135.00	
21	Entrance Station/Kiosk		SF	\$ 92.00	
22	Fire Management Centers/EMS				
23	Small (less than 4500 sf)		SF	\$ 145.00	
24	Medium (4501 - 7020 sf)		SF	\$ 155.00	
25	Large (greater than 7021 sf)		SF	\$ 113.00	

Ready

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Asset Priority Index (API)

For the FY06 budget, NPS recommends establishing funding dedicated to improving the condition of high priority assets

The API provides for the ranking within a park unit of assets based up their significance and importance to the NPS mission and goals

The API score coupled with the CRV of that asset is used to prioritize CAC

The API scoring implemented by NPS strengthens existing DOI project prioritization processes

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Uniformat II Work Breakdown Structure

- Aligns with industry standards
- Uniformat II is being used to link assets, to equipment, to the condition assessment process and to cost estimating

# 2004 DOI Facilities and Asset Management Conference

---



## Condition Assessment Program Panel

### Condition Assessment Work Types

#### Component Renewal

- Component Renewal Deferred Maintenance

- Deferred Maintenance

- Demolition

- Immediate Personal Hazard

- Recurring Maintenance

- Recurring Maintenance Deferred Maintenance

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



In support of the Administration's management reform initiative, the Park Facility Management Division (PFMD) committed to assisting parks in expediting and completing comprehensive condition assessments (CAC) Service wide by close of FY 2007.

PFMD continues to support the parks' need to meet this objective by providing assistance in completing CAC's. This assessment assistance is being contracted.

# 2004 DOI Facilities and Asset Management Conference

---

## Condition Assessment Program Panel



### Inspection Web Page

- Enables contractor to gather data on selected assets.
- The web page downloads from Maximo the real time asset information as it exists in the database.
- This information includes the asset location number and any existing equipment records attached to that asset
- Provides information about any existing deficiency work orders that may have been established through previous CA inspections.
- Enables contractors to input data into Maximo without having access behind NPS firewall
- User friendly tool

# 2004 DOI Facilities and Asset Management Conference

## Condition Assessment Program Panel



### “Lessons Learned” from 2003 Contracted Assessments

#### Communication

- Preplanning Session: Review group comprised of experienced POC's
- Planning Sessions to clearly definite expectations and process
- Park Agreement Letters
- All contractor Requests for Clarification (RFC's) forwarded through NPS Help Desk
- Web Page to provide responses to all contractor RFC's

#### Process

- Web Page Upgrade to respond to FMSS Upgrade
  - Uniformat II WBS
  - Deficiency Work Orders with appropriately assigned work types
- More efficient review cycle between contractor data and park review and approval process

# 2004 DOI Facilities and Asset Management Conference



## Condition Assessment Program Panel

### The asset management system implemented by NPS strengthens existing DOI project prioritization processes

DOI projects are ranked using a weighting process based on the percentage of the work (total project \$) that falls in each of the following categories:

	Critical Health and Safety Deferred Maintenance	
(CHSdm)	10	
	Critical Health and Safety Capital Improvement (CHSci)	
	9	
	Critical Resource Protection Deferred Maintenance	
(CRPdm)	7	
	Critical Resource Protection Capital Improvement (CRPci)	
	6	
	Critical Mission Deferred Maintenance (CMDM)	
	4	
	Compliance and Other Deferred Maintenance (C&ODM)	
	3	
	Other Capital Improvements (OCI)	
	1	

The NPS asset management system requires Asset Deficiency Work Orders (ADWOs) with estimated costs to be categorized by specific work types. By using the work types listed below, **NPS will be better able to identify accurate percentages of DOI project funding** for Repair

Rehab and Line Item Construction projects:

- Capital Improvement
- Immediate Personal Hazard
- Deferred Maintenance
- Legislatively Mandated