U.S. Green Building Council

- Founded in 1993 by Rick Fedrizzi, David Gottfried and Mike Italiano
- Mission: promote sustainability in the building & construction industry.
- LEED: Leadership in Energy and Environmental Design
  - Verification that design and construction strategies achieve high performance and a safe environment for people
    - Sustainable site development
    - Water savings
    - Energy efficiency
    - Wise material selection
    - Indoor environmental quality
  - Basic, Silver, Gold, Platinum
- www.usgbc.org
  - Education, conferences, support network, governmental advocacy, certification
Privately Funded Museum Founded in 1928

Mission “Inspire a sense of love and responsibility for the beauty and diversity of the Colorado Plateau through collecting, studying, interpreting, and preserving the region’s natural and cultural heritage.”

MNA Collections

- Historic Native American objects: 15,000
- Archaeology objects (cataloged): 225,000
- Arch. research collections – cu. ft: 17,296
- Paleontology specimens: 22,000
- Rocks & Minerals: 4,000
- Botany specimens: 33,000
- Zoology: 19,000
- Entomology specimens: 175,000
- Works of Art: 3,200
- Archives – linear ft: 3,536
- Library Titles: 76,000

Geographic Focus: Colorado Plateau
Federal Partners

- 83% of Arizona land is Federal, Tribal or State owned/controlled
- Forest Service
  - Coconino
  - Kaibab
- National Park Service
  - NPS Museum Curator
  - Wupatki NM
  - Walnut Canyon NM
  - Sunset Crater NM
  - Petrified Forest NM
  - Navajo NM
- Bureau of Reclamation
- Bureau of Indian Affairs
Tribal Partners

• Hopi
  • Collection storage at MNA
  • The Hopi School
    • Austin Lomatewama & Marvin Pooyouma classes
• Navajo
  • Cultural Traditional Practitioner needs
• Zuni
• Havasupai
• Yavapai Apache Tribe
Resetting Course

- 2002-2003 events
  - Loss of AAM Accreditation in 2003

- Need for New Storage Facility
  - Conservation Assessments
    - 1988 MAP II
      - “Provide improved and expanded facilities…New Federal…guidelines for repositories will require substantial improvement over the current situation.”
    - 1989 Conservation Survey
      - “It is essential that the museum address substantially upgrading in the storage…New facilities need to be considered”
    - 1990 Environmental Survey
      - “Ultimately, the only solution to the storage problem is the construction of new storage facilities…It is a question of throwing good money after bad.”
  - 2004 CMAP
    - “There are two overriding concerns regarding collections stewardship: the storage facilities and lack of collections staff”
Easton Collection Center (ECC)

- Harry & Betsy Easton donation
- $3 million that rose to $5.7 million

Architectural Design

- Jim Roberts & Associates
Tribal Consultations

- Zuni visit
- Tribe Concerns
  - No remains or funerary objects
  - No sacred/ceremonial
  - No cultural patrimony
  - No exposure to seasonally sensitive natural science holdings
✓ Connection to natural features
✓ Not a box
✓ Entrance to the east
✓ Link to seasonal change
Conservation Recommendations

- Appropriate & sustainable seasonal shift
  - 60-70°F, ±3°F
  - 27 to 43% Rh, ±6%
- Closed cases for highest level of protection
- Prioritize holdings
  - Space limitation
    - 17,283 sq. ft. total
    - 13,746 sq. ft. for Storage
  - Three priority levels
Relocation of Historic Buildings

Discovery Village
Building Deconstruction
What About That Cinderblock?
Blessing the Site
Maybe Some New Storage Furniture?

- Donor funding for construction, not cabinetry, staffing or other needs
- MNA has to seek funding for other collection needs
Institute of Museum and Library Services (IMLS)
National Endowment for the Humanities (NEH)
National NAGPRA grant program
National Film Preservation Foundation (NFPF)
Save America's Treasures (SAT)
Antique Tribal Art Dealers (ATADA)
Arizona Historical Records Advisory Board (AHRAB)
34 Collection Grants - $2,220,593

2013 - IMLS-MFA, $149,998, purchase zoology & entomology cases
2013 - IMLS-MFA, $150,000, perform photographic rehousing pilot projects
2013 - AHRAB, $2,314, purchase rehousing supplies for acetate films
2013 - NFPF, $4,870, create preservation copy of Cohonina Dig film
2013 - IMLS-CP, $65,264, complete a general conservation survey
2012 - ATADA, $500, rehousing of oversized Navajo sandpainting representations
2012 - Southwestern Foundation, $5,000, support for general conservation survey
2012 - IMLS-CP, $65,264, complete a general conservation survey
2011 - NEH-Preservation Assistance grant, $5,440, purchase fire proof file cabinets for registration files
2011 - Southwestern Foundation, $15,000, support Archivist salary
2011 - NEH-Sustaining Cultural Collections grant, $139,858, purchase ECC archive compactor shelving
2011 - NEH-PA grant, $6,000, to rehouse ethographic, archaeological and archive holdings
2011 - ATADA grant, $1,200, to rehouse Hopi and Zuni katsina dolls
2011 - Southwestern Foundation - $18,353, purchase acid free supplies and HEPA vacuums
2011 - IMLS - Conservation Project, $114,924, purchase botany and entomology cabinetry and compactors
2008 - ATADA grant, $1,000, purchase acid free roll storage tubes
2008 - AHRAB grant, $2,716, rehouse Anthropology records
2008 - Southwestern Foundation, $12,239, conservator to assess Fine Arts condition and storage requirements
2008 - IMLS - Museums for America grant, $150,000, hire Archivist
2008 - IMLS – Conservation Project, $107,311, purchase additional textile and basketry cabinetry
2007 – NAGPRA grant, $50,904, locate human remains in Ecofact collections
2007 – NEH -Stabilization Grant "We the People", $575,000, purchase mobile carriage/cabinetry & hire Move Coordinator
2007 – IMLS –Conservation Project, $8,924, support detailed condition survey of textile and katsina doll collections
2007 – AHRAB grant, $3000, add Heritage Program records to Institutional Archives
2007 – Southwestern Foundation, $4,850, consultant archivist to create storage & organization plans for MNA archives
2006 - NAGPRA grant, $74,629, tribal consultations
2006 – Save America’s Treasures Grant Program, $250,000, purchase archaeology cabinetry
2006 - AHRAB, $3,000, inventory archives
2005 - NAGPRA grant, $73,966, new tribal summaries based on new data
2005 – IMLS-Museums for America grant program, $149,976, hire Registrar and Collections Assistant
2005 - IMLS-CP, $42,746, address emergency & top priority needs of fluid preserved collections
2004 - Museum Loan Network grant, $19,849, survey 200 Navajo textiles
2003 – NEH-Preservation Assistance grant, $4,985, cabinetry for silver jewelry collection
2002 – NEH-Preservation Assistance grant, $4,882, develop preservation plan
2002 - IMLS/AAM MAP II, $1775, assess collection management practices and policies
Move, Clean, Rehouse & Purchase Cabinetry
Going Green Doesn’t Stop With the Building

- Reuse of Plastics & Cardboard
- Finding homes for old cases
- Fume Extractor fundraiser

Carmen Li, Move Coordinator
Construction

- 1 Year
  - Web cam
- Minimal site disturbance
  - No trees removed
- 75% of construction waste reused or recycled
- Locally obtained materials
Environmental Features

- Offices/work areas on south side
- Water conserving plumbing systems
- Thermal fly wheel
  - High-thermal-mass materials
  - Continuous insulation
- Hygroscopic lime plaster
- Radiant in-floor heating
- Dual pane windows with UV barrier
Living Roof

Irrigation system with leak detection
Energy & Health Safety Features

- Renewable Energy
  - Solar panels produce 23,000 kWh annually
- High efficiency light fixtures
  - Shielded to prevent nighttime light pollution
- Natural lighting in certain areas
- Electrical vehicle charging station
- Use of products to maintain good air quality
  - Low VOC paints and sealants
  - Formaldehyde free composite wood
- Positive air pressure
Used Throughout

- Coconino Sandstone
- COR-TEN® steel
- Recycled trestle wood
- Designs
- Calendar
Other Features
Collection Preservation Improved

- But More To Move
- More to Do
ECC June 21st, 2009
Easton Collection Center

AAM Accreditation Awarded to MNA in 2008

✓ Leeds Certified at Platinum Level