



MUSEUM *of* NORTHERN ARIZONA

Easton Collection Center:  
Building Green  
Strengthening Partnerships

# 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](http://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

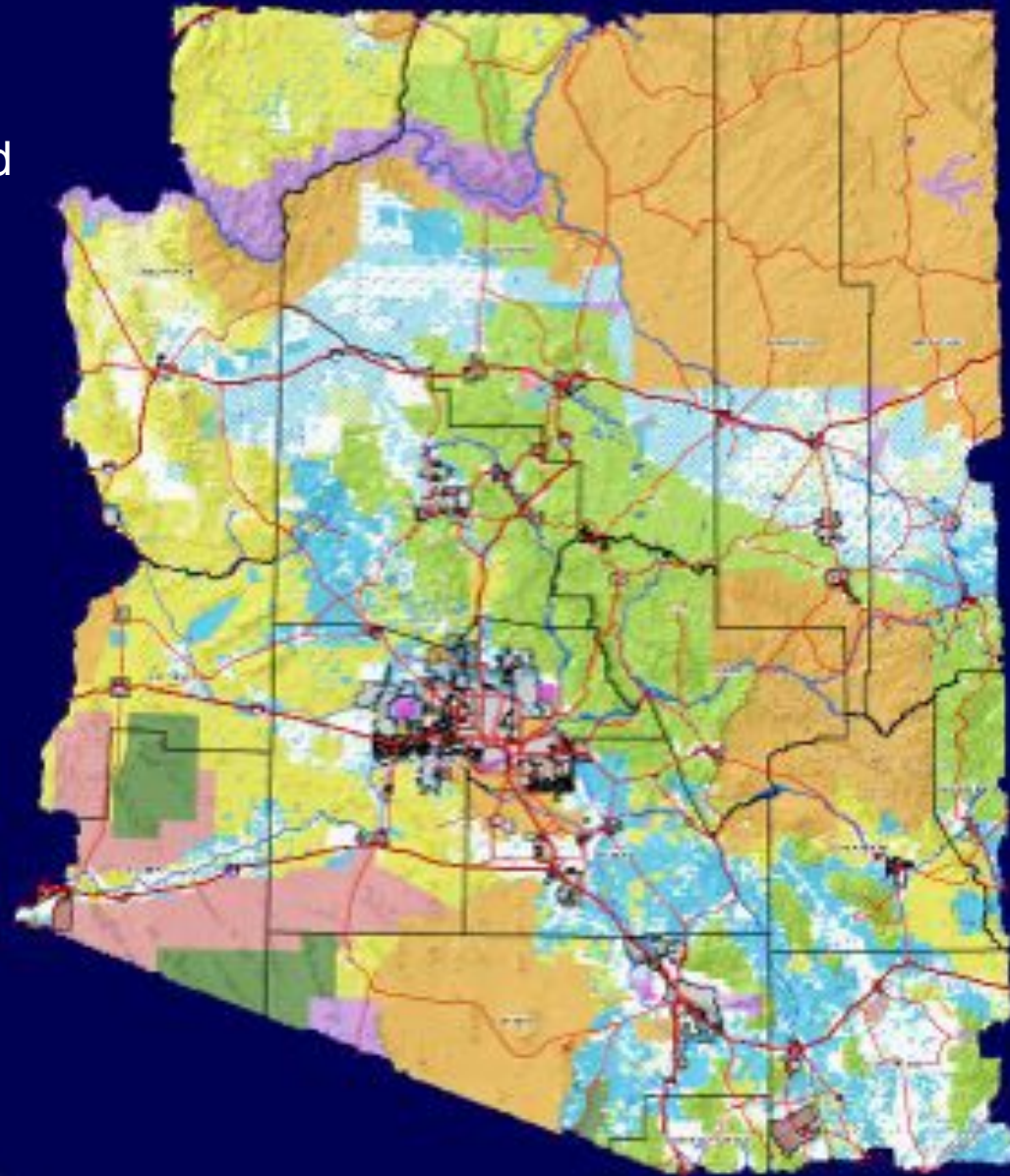
Historic Native American objects	15,000
Archaeology objects (cataloged)	225,000
Arch. research collections – cu. ft.	17,296
Paleontology specimens	22,000
Rocks & Minerals	4,000
Botany specimens	33,000
Zoology	19,000
Entomology specimens	175,000
Works of Art	3,200
Archives – linear ft	3,536
Library Titles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

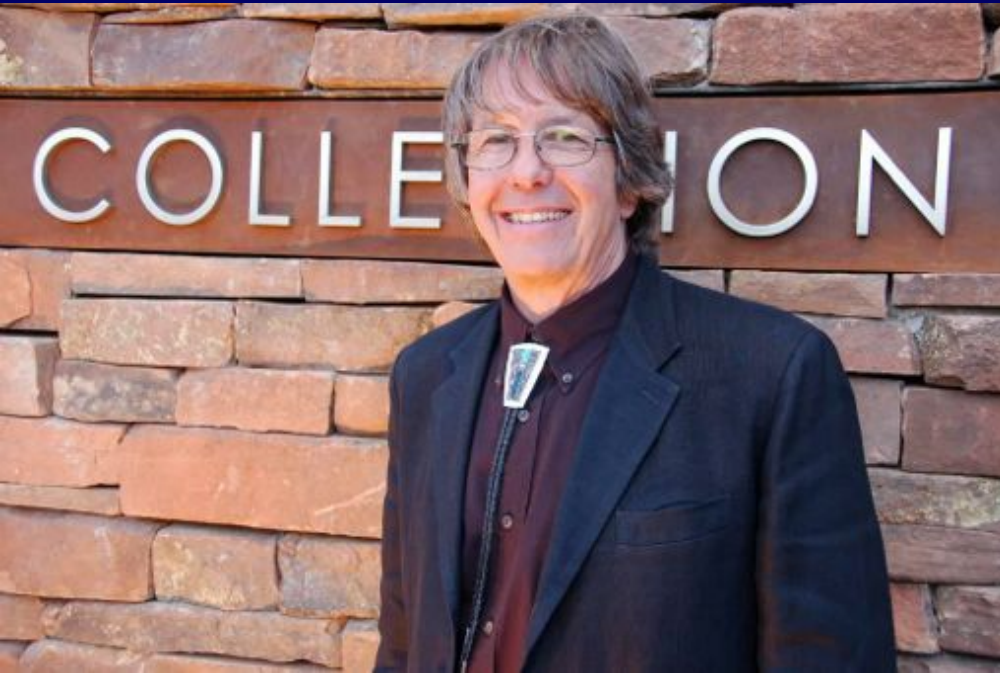


# Resetting Course

- 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

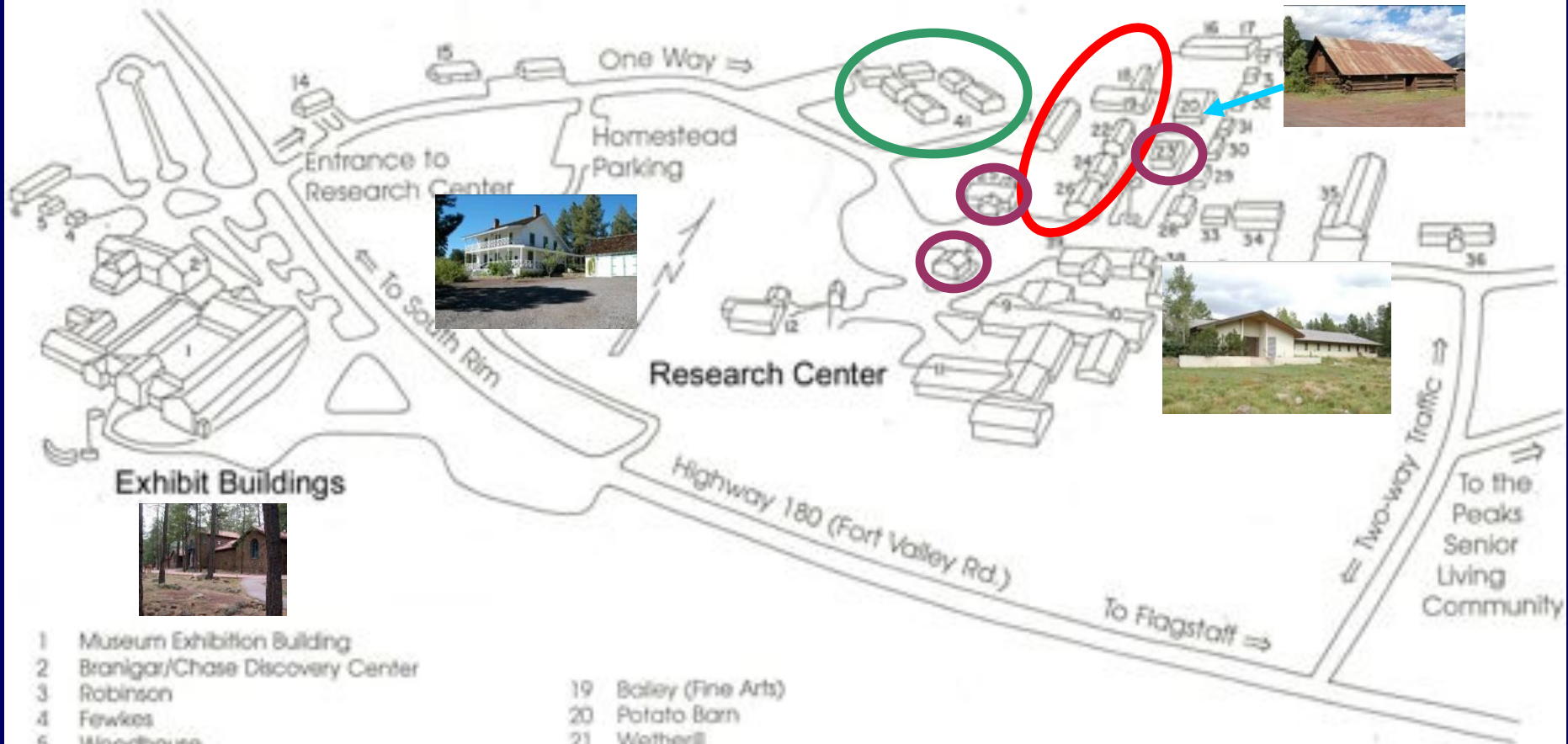


# Conservation Recommendations

- Appropriate & sustainable seasonal shift
  - 60-70°F,  $\pm 3^\circ\text{F}$
  - 27 to 43% Rh,  $\pm 6\%$
- 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



# Museum of Northern Arizona ~ H.S. Colton Research Center Campus

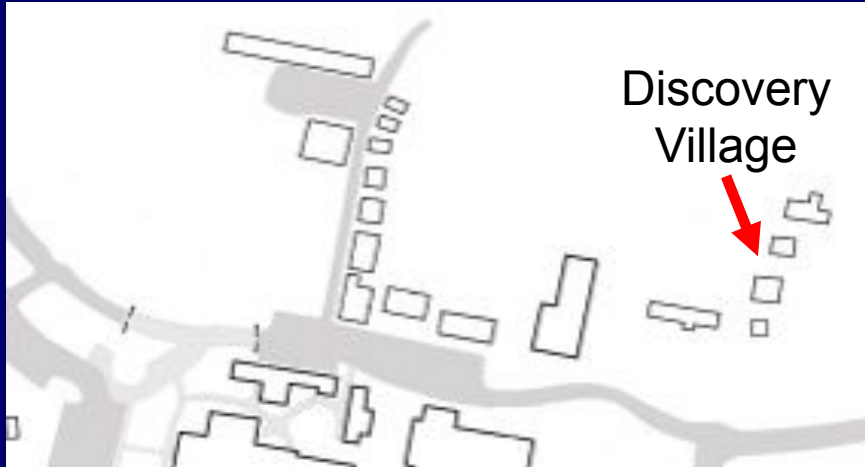


- 1 Museum Exhibition Building
- 2 Branigar/Chase Discovery Center
- 3 Robinson
- 4 Fewkes
- 5 Woodhouse
- 6 Jr. Science
- 7 Merriam
- 8 McMilton Homestead
- 9 Administration
- 10 Library
- 11 Anthropology
- 12 Hilltop (Education Department)
- 13 (unassigned)
- 14 Reichard
- 15 Bird's nest
- 16 Carpenter Shop
- 17 Garage Bays
- 18 Pima

- 19 Bailey (Fine Arts)
- 20 Potato Barn
- 21 Wetherill
- 22 Pollock (Herbarium)
- 23 Mit's Barn
- 24 Biology Lab
- 25 Guernsey (FALA Administration)
- 26 Parsons
- 27 Matthews
- 28 Gregory
- 29 Walcott
- 30 Gilbert
- 31 Duffon
- 32 Heye
- 33 Perin's Potties
- 34 Pearson (Lecture Hall)

- 35 Schaefer (Exhibits)
- 36 Newberry
- 37 Brady (Geology)
- 38 Marcou
- 39 Powell
- 40 (unassigned)
- 41 Flagstaff Arts & Leadership Academy

# Relocation of Historic Buildings





Map

Traffic

# Assessing Risks

City Water Reservoir

ECC

# Building Deconstruction



# What About That Cinderblock?



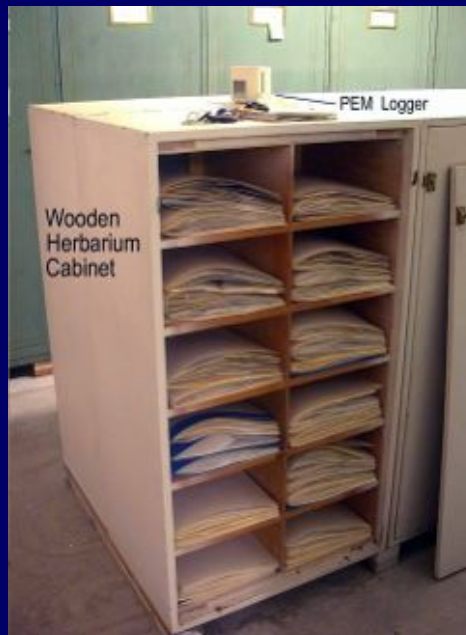


# Blessing the Site



# 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

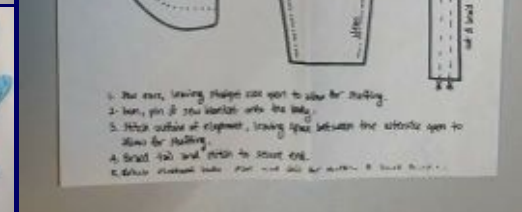
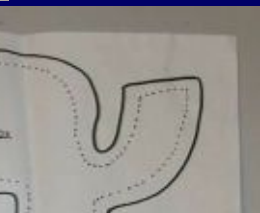
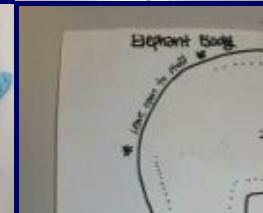
- 2013 - IMLS-MFA, \$149,998, purchase zoology & entomology cases
- 2013 - IMLS-MFA, \$150,000, perform photographic rehousing pilot projects
- 2013 - AHRAB, \$2,314, purchase rehousing supplies for acetate films
- 2013 - NFPF, \$4,870, create preservation copy of *Cohonina Dig* film
- 2012 – Southwestern Foundation, \$5,000, support for general conservation survey
- 2012 - IMLS-CP, \$65,264, complete a general conservation survey
- 2012 - ATADA, \$500, rehousing of oversized Navajo sandpainting representations
- 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
- 2009 - NEH-PA grant, \$6,000, to rehouse ethnographic, archaeological and archive holdings
- 2009 - ATADA grant, \$1,200, to rehouse Hopi and Zuni katsina dolls
- 2009 - Southwestern Foundation - \$18,353, purchase acid free supplies and HEPA vacuums
- 2009 – 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 21<sup>st</sup>, 2009



# Easton Collection Center

AAM Accreditation Awarded  
to MNA in 2008

✓ Leeds Certified at Platinum Level

