Digital Historic Preservation: 
Further Preserving Patterson-Altman’s Mill 
with the Use of 3-D Scanning

Sarah La Fevre
Mentor: Dr. Ben Ford
Indiana University of Pennsylvania
About: Patterson – Altman Mill

- Built in 1912 the Patterson Mill has produced flour and animal feed for the Pittsburg Area. (Via Canals/rails)
  - Produced 125 Barrels of flour a day
  - Ran off electricity, and machinery is original wood and metal

- Purchased by Altman family in 1940 until officially closing in 1995

- HAER documentation in 1985
Previous Awareness:
Research

• Questions:
  – Is 3-D Scanning as a possible preservation method?
  – Documenting the milling process
  – Compare 3-D scanning Vs. 2-D scale on effectiveness
Methodology

• Leica C-10 Scan Station
  – 360 X 270 (500ft)
  – With Images
  – 40 scans
    • Completed in 2 days
      – Each took 14 minutes

• Results: High quality data but restrictive
3-D V.S HAER
Comparison of Studies:

• Measurement Accuracy
  – HAER documents are half the size of actual measurements

• Access to the Data
  – HAER: Public access online
  – Scans: True view, but data is located at IUP

• Usability of Studies and Equipment
  – HAER: Easy to use and portable, not detailed
  – Scans: Need prior knowledge of software, VERY detailed

• Time and Investment
  – HAER: 8 years to complete, government funded
  – Scans: 1 year, costly
New Method

• Few instances where this is applied locally

• Final product
  – Full 3-D replica of the mill
    • Measurable
    • Detailed
    • Free to access
Thankful Resources

• Indiana County Historic Society
• Special collections, Indiana University of Pennsylvania
• Saint Vincent’s Mill, Father Thomas, Miller
  • Working flour mill, 1885 [Smaller scale]
• Saltsburg Historical society
• HAER [1987]
• McNair
• Jonathan 😊
At the end of the day...

Thank You!