

2014 GOVERNOR'S HISTORIC PRESERVATION AWARDS

CyArk



Digital scanning at Mission Dolores, San Francisco

CyArk is a non-profit organization with the mission to leverage cutting-edge technology to digitally preserve and share the world's cultural heritage. Since their founding in 2003, CyArk has added over 120 heritage sites to their free online archive. Utilizing non-invasive 3D laser scanning and other digital techniques, CyArk captures an accurate record of a heritage site that is accurate down to millimeters. The digital nature of the data allows them to share these sites with the public in new and meaningful ways—from virtual tours, to 3D models, to 2D architectural line drawings and structural tests for conservators. The CyArk nomination is based upon the organization's extensive preservation work in California and their use of digital technologies as a creative solution to preserving and interpreting California's historic resources.

CyArk has established many strong partnerships with sites and public and private organizations across California. Heritage sites where CyArk has worked to-date include the Emeryville Shellmound, John Muir National Historic Site, Manzanar War Relocation Center, Mission Carmel, Mission Dolores, Mission San Juan Bautista, Mission San Luis Rey, Mission Sonoma, the Presidio of San Francisco, Sonoma's Blue Wing Inn adobe, Tule Lake, and a vernacular cabin at Henry W. Coe State Park. Long term initiatives in California include digitally preserving and virtually reconstructing two WWII-era Japanese-American internment camps, and digitally preserving the missions, pueblos, and presidios that make up El Camino Real. State conservators and site owners receive the highly accurate 3D data sets free of charge.

They are proud to be providing a real service to their partners at heritage sites. At Mission Carmel, for instance, the 3D laser scan of the structure provided measurements of hand-cut wooden beams in

need of replacement. Prior to the laser scan, Mission Carmel site managers were planning to take apart the fragile roof in an extremely expensive and invasive process. The data generated by the 3D process allowed the Mission to circumvent this cost and prevented excessive exposure of the mission's interior.

The versatility of the digital data also has benefits for interpretation and education. The digital El Camino Real theme, with the interactive map and individual project portals, is accessible to the general public and to California 4th graders who study the missions each year. With the support of IBM, CyArk held workshops with local teachers to develop lesson plans in both English and Spanish for the El Camino Real study. At high schools such as Santa Ynez Union Valley High School, CyArk trains students in the marketable skills of laser scanning, survey, and modeling. By working with young, diverse groups of students, CyArk is committed to increasing the diversity of participants in the preservation field.

Learn more about CyArk and the digital preservation of resources: <http://www.cyark.org/>