

Bringing History to Life: LiDAR and digital modeling for the spatial reconstruction of Selma's 'Bloody Sunday' on the Edmund Pettus Bridge

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Abstract

As one of the most significant, extant landmarks associated with the American Civil Rights Movement, the National Historic Landmark (2013) of the Edmund Pettus Bridge in Selma, Alabama was the site of the infamous "Bloody Sunday" conflict on March 7th, 1965. Here, Alabama State Troopers, armed with clubs and tear gas, attacked 600 peaceful demonstrators as they attempted to march to Montgomery. The bridge, unlike Selma and much of the south, was not segregated, and as an element of transportation infrastructure still in use, it continues to be a connective thread that holds issues of race, socioeconomic status, and education in tension.

Despite the vivid archival material, little interpretation addresses the physical context and experiential timeline of "Bloody Sunday". Visitors can cross the Edmund Pettus Bridge, problematically named for a former KKK leader, but large portions of the built and natural environment have changed dramatically since 1965, presenting visitors with an altered perception of the sites surrounding the conflict. In order to digitally record this significant Civil Rights site and to make the specific context of the event more experientially engaging to the general public, this project's multidisciplinary team of architectural historians, Civil Rights historians, cultural resource managers, and construction technology specialists paired collected 3D digital data of Selma's extant structures with digital reconstructions to recreate the site through virtual simulation. By melding the physical and virtual, this project will bring enhanced historic interpretation to several extant museums and National Park sites in Selma. Additionally, the dissemination of the digitally reconstructed bridge from 1965 will allow viewers in distant locations to virtually 'visit' the bridge and discover an enriched presentation of the bridge's place in history, addressing its construction, the representation of the bridge in media, and how the bridge continues to act, simultaneously, as a community unifier and divider.

Theme: Communities united and communities divided by bridges