

Clifford S. Older



Clifford Older graduated from the University of Wisconsin Engineering School in 1900 and took up railroad bridge and tunnel engineering.

From 1902 to 1905 he was assistant engineer of the Chicago & Alton Railroad, in charge of maintenance and construction on the western division of that line.

In 1906 he was employed by the Illinois State Highway Department and was chief bridge engineer when he was appointed by Gov. Lowden as Chief Highway Engineer in 1917.

In October 1919, Bureau of Public Roads highway officials met in Chicago with representatives of the Division of Engineering (now called the Division on Engineering and Physical Sciences) of the National Academy of Sciences' National Research Council to discuss such a national research program, for which the States recognized a need.

Chief MacDonald and several other officials from the Bureau of Public Roads attended, along with Clifford Older. Anson Marston, dean and director of the engineering department at Iowa State College (and MacDonald's mentor), was one of two officials representing the Division of Engineering.

The resulting report advised the Division, "There is urgent need for very extensive [and] immediate scientific highway research to establish the fundamental data needed by highway engineers in designing and constructing the highways which are to be built." In October 1919, the division authorized a highway research committee.

During AASHO's 1919 annual meeting, Marston presented a plan to the State highway officials: "The country is about to spend untold billions of dollars in the construction of paved roads. Yet there is a very serious lack of the fundamental scientific data which are absolutely essential to the correct design and construction of paved roads."

After outlining the plan, which was adopted at the October meeting, Marston urged AASHO's support, saying, "Many of the researches cannot be made successfully without the active cooperation of the State highway departments."

The State of Illinois responded by authorizing construction in 1920 of the Bates Experimental Road near Bates, Illinois, to study the most important factors involved in the rational design of pavement surfaces. Tests were conducted from 1920 to 1923 under the supervision of Clifford Older.

Older presented the results of the studies at a meeting of the Highway Division of ASCE on January 17, 1924, which were published in the ASCE Transactions of 1924 as paper No. 1546, Highway Research in Illinois. The State of Illinois also published the results in an interim report as Bulletin No. 18, Bates Experimental Road, and later as the final report, Bulletin No. 21 of the Division of Highways.

Clifford Older resigned from the state after completion of the Bates Experimental Road tests to enter into a partnership with George Consoer as President and Treasurer in the firm of Consoer, Older & Quinlan in Chicago, which later became Consoer Townsend Envirodyne Engineers, and in 1990 became an independent subsidiary of AECOM Technology Corporation.

