Wilbur S. Smith

1911-1990

By Donald S. Berry

WILBUR S. SMITH, internationally known for his achievements in planning, designing, and evaluating transportation systems, died on July 25, 1990, at the age of seventy-eight. At the time of his death he was chairman of the board of Wilbur S. Smith Management of Columbia, South Carolina.

Elected to the National Academy of Engineering in 1968, Mr. Smith was still active in the transportation field up to the time of his death. During his career he was an innovator in the development of modern transportation systems. Mr. Smith directed the specialists in his consulting firm, Wilbur Smith and Associates, in evaluating the feasibility of alternative locations and designs for major sections of the Interstate Highway System, the New Jersey Turnpike, other toll roads, the Chesapeake Bay Bridge Tunnel, and the mass transit system in Washington, D.C. He was also an adviser on many other projects such as the transportation tunnels under the English Channel.

Mr. Smith was born in Columbia, South Carolina, on September 6, 1911, and graduated from the University of South Carolina in electrical engineering. After receiving an M.S. in 1933, he was employed by the South Carolina Highway Department. In 1935 he was appointed the state's first traffic engineer. Several months later he enrolled as a fellowship student at the Bureau for Street Traffic Research at Harvard University. After completing a nine-month training program in 1937, he returned to the
Highway Department of South Carolina, where he headed the state's first Traffic Engineering Division.

During the next four years, Mr. Smith developed a statewide traffic control program with emphasis on unifying traffic control devices, correcting high-hazard locations on the state highway system, and providing assistance to local authorities. He built a staff of thirty persons. In 1941 he took a year's leave of absence to work at the Bureau of Highway Traffic at Yale University on a research project on the economies of motor vehicle transportation.

At the beginning of World War II Mr. Smith was recruited by the Federal Bureau of Investigation (FBI) to organize and carry out a training program for engineering officials and police on emergency traffic control during blackouts and air raids. He assembled a group of twenty traffic specialists and trained them to teach a one-week course on emergency management. These one-week courses were held throughout the country, with more than a thousand public officials receiving the training.

In 1943 Mr. Smith returned to Yale University to become associate director of the Yale Bureau of Highway Traffic, where he stayed until 1957. During this time he served as a consultant to the FBI and also to the Office of Civil Defense on war-related traffic and transportation problems. He also began serving as a consultant on the traffic problems of cities and other government agencies while still teaching at the Yale Bureau.

In 1952 he established the consulting firm of Wilbur Smith and Associates, with offices at New Haven, Connecticut, and in Columbia, South Carolina. During the next twenty-nine years the firm expanded a great deal, with offices established in twenty-eight cities of the United States and in thirteen foreign locations. Wilbur at times handled some one hundred projects simultaneously, traveling as many as 250,000 miles in a year to review them. Wilbur was a licensed professional engineer in all fifty states, the District of Columbia, the United Kingdom, New Zealand, Hong Kong, and Queensland, Australia.

In 1981 Mr. Smith merged his consulting firm into Armco, Inc., and in 1983 he retired from the firm. The firm later was acquired by its 750 employees and was renamed Wilbur Smith
Mr. Smith then established a firm called Wilbur S. Smith Management, while serving as senior consultant to Wilbur Smith Associates.

Mr. Smith received many honors and awards, including an honorary doctor of laws degree from the University of South Carolina (1963), and an honorary doctor of humanities degree from Lander College (1975). He was awarded honorary membership status in the Institute of Transportation Engineers, the American Society of Civil Engineers (ASCE), and the American Public Works Association. Other awards include Engineer of the Year of the South Carolina Society of Professional Engineers (1964); the Theodore M. Matson Memorial Award sponsored by the Institute of Transportation Engineers (1965); the National Research Council Transportation Research Board's Roy W. Crum Award (1980); the Institute of Transportation Engineers' Burton W. Marsh Distinguished Service Award (1982); the Duke University School of Engineering Distinguished Service Award (1982); the Highway Division Award from ASCE, now known as the Wilbur S. Smith Award (1983); the George S. Bartlett Award of the American Association of State Highway and Transportation Officials (1985); the NSPE Award of the National Society of Professional Engineers (1985); and the Francis C. Turner Lecture award of ASCE (1990).

Mr. Smith was elected a member of the National Academy of Engineering (NAE) in 1968. He served from 1974 to 1978 as a member of the NAE-sponsored Committee on Transportation of the Assembly of Engineering, National Research Council. He was a member (1958-1969) and chairman (1963-1964) of the executive committee of the Highway Research Board of the National Research Council and chairman of the board's Special Committee on International Cooperative Activities. In addition, he served (1969-1970) on the Department of Traffic and Operations of the Highway Research Board.

Mr. Smith participated actively in many other professional engineering organizations. He was president of the Institute of Traffic Engineers (1949-1950) and a member of its board of directors from 1942 to 1958. He was chairman (1967-1968) of the Executive Committee of the Highway Division of ASCE.
chairman of the ASCE Committee on Transportation Planning, and chairman of the ASCE Committee on National Transportation Policy. He was president and chairman of the board of the Eno Foundation for Transportation for a great many years. He was national president of the American Road and Transportation Builders Association. He also was a member of the board of directors of the National Safety Council and was on the Board of the International Road Federation.

A partial list of Mr. Smith's memberships in other professional organizations includes the National Society of Professional Engineers, the International Bridge and Turnpike Association, the American Institute of Consulting Engineers, the Institute of Electrical and Electronics Engineers, the New York Society of Professional Engineers, the South Carolina Society of Professional Engineers, the Transportation Society of America, and the Institution of Civil Engineers in both Australia and Hong Kong.

Mr. Smith was a coauthor (with Matson and Hurd) of the first comprehensive traffic engineering textbook, which was published by McGraw Hill in 1955. Another early publication of which he was a coauthor was State-City Relationships in Highway Affairs, published by the Yale University Press in 1950. He was also author or coauthor of many publications on the state of the art, published by the Eno Foundation.

One of several papers of which Mr. Smith was the author or a coauthor in the 1960s is "Research and Worldwide Urban Transportation," published in Highway Research Record No. 125, Highway Research Board, 1966. Among the twelve papers he authored since the 1970s are "The Challenge in Developing a Multi-modal Urban Transportation System," ITE Journal, June 1978; "Current Trends in Toll Financing," Transportation Research Record 900, 1983; "Mass Transport for High-Rise High-Density Living," (with N. H. Westefeld) Journal of Transportation Engineering, v. 110, Nov. 1984; and "Observations on Australian Transportation," Transportation Quarterly, (with Thomas Larson) Oct. 1989. Many reports on contract research, written by staff members of Wilbur Smith and Associates, have been published over the years. Two published by the Transportation Research Board are "Bus Use of

Wilbur was a humanitarian who loved South Carolina. He moved his headquarters office to Columbia from New Haven in the 1950s. He served on many boards and advisory councils for the University of South Carolina, the Presbyterian College, the South Carolina Chamber of Commerce, the South Carolina Research Authority, the Salvation Army, the State Public Works Historical Society, the South Carolina Business Hall of Fame, and several banks and development corporations. He taught part-time at the University of South Carolina and at Clemson University while classes were suspended at the Yale bureau during part of World War II. He enjoyed bird hunting at one of his farms near Columbia.