



J. M. Byrd

L. G. (GARY) BYRD

1923–2009

Elected in 1987

*“For pioneering contributions to highway maintenance
management systems and research”*

BY FRED N. FINN

(WITH CONTRIBUTIONS FROM HIS SONS GARY AND JEFF BYRD)

GARY BYRD, a leader among leaders in his chosen profession as a civil engineer, died March 20, 2009, in Tryon, North Carolina, at the age of 85. He was born in Atlanta, Georgia, on May 6, 1923, the son of Lloyd Porter and Gladys Ardee (Daniell) Byrd. He received his B.S. in civil engineering from the Ohio State University in 1950, following time spent at the University of Michigan in 1944–45. In 1978 Gary was honored by his alma mater with its College of Engineering Distinguished Alumnus Award.

His early professional experience began in 1949 at the Ohio State Highway Department. In 1956 he moved to the Ohio Turnpike Authorities serving as its maintenance engineer until 1960. That year he moved to Ridgewood, New Jersey, to become associate editor at Public Works Publications. In 1963 he formed a partnership with Bertrum D. Tallamy, who had been the Federal Highway Administrator in the Eisenhower administration. He later formed the firm of Byrd, Tallamy, MacDonald and Lewis, which became a division of Wilbur Smith and Associates in 1972.

As senior vice president and director of Wilbur Smith and Associates, Byrd was principal-in-charge of major design projects for the Washington, D.C. Metropolitan Area Transit Authority, as well as for departments of transportation in Virginia, Illinois, New York, Pennsylvania, and Maryland. He led management systems studies covering highway operations, maintenance, and equipment fleets for transportation agencies in Idaho, Nevada, Montana, Colorado, Ohio, Illinois, New York, New Jersey, Massachusetts, and overseas in Bolivia and Jordan. He also led the inspection and evaluation of rehabilitation requirements for highway bridges in Virginia, Illinois, New York, North Carolina, and Pennsylvania.

After his retirement from Wilbur Smith and Associates in 1984 until his death in 2009, Byrd consulted with government agencies (state, federal, and international), and with many U.S. and international companies. During his career, lasting over 30 years, he also wrote volumes of reports, and papers for technical journals covering all aspects of highway operations and maintenance. He was the editor of the *Street and Highway Maintenance Manual* (American Public Works Association, 1985) and the *Handbook of Highway Engineering* (Van Nostrand Reinhold, New York, 1975). By the end of his career Gary was an internationally recognized expert and consultant in his chosen field.

This author remembers first becoming familiar with the name Gary Byrd in the late 1970s through his activities with the Transportation Research Board (TRB) of the National Academies and his publications which described efficient and cost-saving programs for agency oversight of highway networks. During those years when Gary was studying and publishing about highway maintenance, I was helping to develop better processes for pavement management. I often turned to his Handbook and journal publications as resources. Gary pioneered the idea of using systems engineering as a basis for “maximizing benefits and minimizing costs” when managing resources for the design and maintenance of a highway network.

From 1984 to 1986, Gary served as director of the American Association of State Highway and Transportation Officials (AASHTO) Strategic Highway Research Program (SHRP), and I was selected to chair a committee of experts—from state governments, private industry, and academia—to outline that portion of the \$150 million research program dealing with the use of asphalt and asphaltic mixtures for pavements. The proposed asphalt research program had similar goals to those Gary had been proposing for highway network maintenance (e.g., improved performance and reduced life-cycle costs). In his role as overall director of the research program, I and the other members of the committee would frequently call on Gary for advice and guidance. He was always available and helpful.

How best to conduct research on virgin asphalt was a controversial topic at the time. Some members of our committee supported a basic, more fundamental approach while others supported a more empirical approach. Ultimately the decision came down to a series of negotiations between the committee and the AASHTO directors. Gary played a key role in shaping an acceptable and productive program and the results of the SHRP asphalt research program will certainly remain as one of his major legacies. Many of that program's findings are still being used throughout the highway industry.

However, Gary's contributions to the improvement of highway maintenance programs and his leadership role in the SHRP asphalt research program, while very important, are only part of his legacy. Gary's subsequent policy guidance consulting contributions to the American Society of Engineers and to the National Academies (on the Transportation Research Board, the National Academy of Engineering, and the National Research Council) added significantly to his legacy.

Gary served on Transportation Research Board committees from 1975 through 1995 and was awarded the boards Roy W. Crum Distinguished Service Award in 1986. He was inducted into the National Academy of Engineering in 1987 "for pioneering contributions to highway maintenance systems

and research.” He served as a member of the Governing Board of the National Research Council from 1989 to 1995. He was also an active member of the American Association of Engineering Societies, the American Society of Civil Engineers, and the American Public Works Association.

Gary was also very active in civic life, serving as the chairman of the Fairfax County (Virginia) Human Rights Commission from 1978 to 1979, president of the Fairfax County Chamber of Commerce from 1975 to 1976, and as a member of the Hospice of the Carolina Foothills (North Carolina) board of directors from 2002 to 2007. He was a member of the Tryon Country Club (North Carolina), the Rotary Club of Tryon, and the Congregational Church in Tryon.

He is survived by his wife of 66 years, Jeanne Mae (Parkhurst) Byrd; two daughters, Donna Van Ness (David) of Monument, Colorado, and Julie Burke of Tryon; two sons, Gary Byrd of Buffalo, New York, and Jeff Byrd (Helen) of Tryon; three brothers, C. Daniell Byrd of Houston, Texas, Richard Byrd (Janine) of Downers Grove, Illinois, and Robert Byrd of Columbus, Ohio. Also surviving are ten grandchildren, Matthew, Amy, Greg, Adam, Emily, Katie, David, Sarah, Daniel, and Colleen and six great grandchildren, Thomas, Finn, Olivia, Aspen, Brooklyn, and Ella.

It was an honor to have had this opportunity to add to this tribute to the life and work of L. G. (Gary) Byrd. This tribute comes from a colleague who knew and worked with him personally for only a few years, but who was influenced by him professionally throughout his career.

