



QUALIFICATIONS SUMMARY Mr. Bynum has over 30 years of professional engineering experience in responsible charge of design, operation and maintenance of public and private transportation systems, with particular emphasis in roadway design, mass transit, traffic operations, roadway lighting, traffic control devices, and accident reconstruction.

REGISTRATION Professional Engineer, State of Florida - 1974

EDUCATION AND TRAINING BSCE - University of Arkansas - 1967
Post Graduate Work toward MSCE - West Virginia University - 1968
Traffic Operations and Design - University of Florida
Signalized Intersection Operation Analysis - University of Florida
Traffic Signal Workshop - Georgia Institute of Technology
Area and Indoor Lighting Workshop - General Electric Company
Digital Computer for Urban Traffic Control/Bus Priority System - FHWA
Traffic Accident Reconstruction - Northwestern University - 1984
Micro Computer Application Program for Traffic Accident Reconstruction - Northwestern University - 1986
Continued Case Studies in Traffic Accident Reconstruction - Northwestern University - 1986
Motorcycle Accident Reconstruction - Northwestern University - 1987
Computerized Traffic Accident Reconstruction - Introduction to EDSMAC - Northwestern University - 1993
Bio-Mechanics of Accidents - Texas A&M University - 1994
Analysis of Low Speed Collisions - Texas A&M University - 1997
Crash Data Retrieval System - Vetronix Corporation, Santa Barbara, CA - 2001
Advanced Traffic Crash Reconstruction with WinCrash - I.P.T.M. - 2002
CDR Tool - User Certification Course - I.P.T.M. - 2003
Vehicle Accident Reconstruction Methods - SAE - 2006 - 2010
Fundamentals of Heavy Truck Dynamics - 2012

PROFESSIONAL EXPERIENCE As Principal & co-founder of Transport Analysis Professionals, Inc., Mr. Bynum is actively engaged in transportation systems design, analysis and improvement. Many of his activities require direct involvement with environmental, feasibility and system studies which assist in his specific recommendations to improve traffic operations.

Mr. Bynum is also extensively engaged in traffic accident reconstruction. He has performed these services for governmental jurisdictions, insurance companies and trial lawyers for both the plaintiff and defendant. Mr. Bynum has been accepted in both the Federal and State of Florida Court systems to render expert testimony in traffic accident reconstruction matters and seat belt issues.

**PROFESSIONAL
EXPERIENCE
(Con't)**

Before founding Transport Analysis Professionals, Inc., Mr. Bynum was Vice President of a Miami-based traffic consulting firm. In that position he directed numerous projects involving the design of transportation systems in conjunction with private developments throughout South Florida. Mr. Bynum is experienced with the requirements and processes for Development of Regional Impact (DRI) studies, Binding Letters of Interpretation, and the governmental approval process for commercial, residential and recreational projects. He was also engaged as an expert witness for roadway design and traffic safety litigation.

Mr. Bynum served as Chief Civil and Traffic Engineer with a five-firm joint venture general engineering consultant for the design of the Metropolitan Miami-Dade County Metrorail System. In this capacity, Mr. Bynum was responsible for all aspects of civil and traffic design related to the system, including:

Roadway and parking lot design;

Traffic operations design for signalization, signing, pavement, markings;

Design of maintenance of traffic plans during construction.

These Metrorail responsibilities required Mr. Bynum to design and undertake special studies relating to transit guideway impacts on transportation facilities, including parking disruptions, street closings, sight distance visibility problems, traffic signalization modifications, and intersection redesign. As an adjunct service for the Metrorail client, Mr. Bynum directed preliminary engineering activity for the I-95/SR 112 High Occupancy Vehicle (HOV) project which involved geometric design of freeway lanes, vertical and horizontal alignment, and consideration of adjacent surface streets impacted by the transit system guideway and freeway widening.

Immediately prior to his joint venture assignment of the Metrorail project, Mr. Bynum was branch office manager of a consulting engineering firm that specialized in traffic planning and engineering. From a Tampa office, he provided consulting services for both public and private sector clients. Representative projects included:

Airport roadway and parking design (Tampa International Airport);

Traffic noise analysis;

PROFESSIONAL

Traffic signal system design, including the preparation of signal plans

**EXPERIENCE
(Con't)**

and specifications (West Palm Beach);

Comprehensive urban area traffic operations studies (Cape Coral and Naples);

Central business district traffic circulations studies (West Palm Beach).

Mr. Bynum previously served in the public sector as the Assistant Systems Engineer for the Miami-Dade County Department of Traffic and Transportation. In that position he was responsible for the design, installation, operation and maintenance of all traffic signals, signal systems, and other electronically operated traffic control devices in Miami-Dade County, Florida. During his tenure, there were some 1,700 traffic signals and 20 signal systems in Miami-Dade County.

Mr. Bynum had responsibility for the planning, installation and operation of the Miami-Dade Computerized Traffic Control System. This system, utilizes a central master computer employing pretimed and actuated local controllers programmed and coordinated on the basis of real time data gathered by system sensors. The system is designed to accommodate 2,000 signals.

Before moving to Florida in 1973, Mr. Bynum served as Assistant Traffic Engineer for the City of Little Rock, Arkansas and as a Traffic Engineer for the Arkansas Highway Department. He was actively engaged in all areas of traffic operations, geometric design of roadways and intersections, design and review of roadway lighting plans, and traffic studies. While serving with the State of Arkansas, Mr. Bynum was the Project Director of all TOPICS studies conducted in this state.

**PROFESSIONAL
AFFILIATIONS**

- Institute of Transportation Engineers
- National Society of Professional Engineers
- Florida Engineering Society
- National Academy of Forensic Engineers
- Society of Automotive Engineers
- Association for the Advancement of Automotive Medicine