



PROFESSIONAL SUMMARY

Vision-driven change agent with career-long record of engineering, consultation, program management, coaching and innovation for leading organizations

Proven talent for aligning business strategy and objectives with civil engineering and project management paradigms to achieve maximum operational impacts with minimum resource expenditures. Growth-focused thought leader with expertise spanning civil, construction and transportation engineering, program management, contract administration, civil testing, state/local government consultation, cross-functional team leadership, public works design, performance assessment and site inspection. Exceptional administrator with keen interpersonal, communication, and organizational skills.

ENGINEERING AND PROGRAM MANAGEMENT EXPERIENCE

BBFOSTER CONSULTING, PC, GREENSBORO, NORTH CAROLINA - AUGUST 2014 TO PRESENT

PRESIDENT

- BBFoster Consulting, PC provides civil engineering, program management, project engineering, facilities management, utility coordination, compliance assistance and coaching.

BBF ENGINEERING SERVICES, P.C., DETROIT, MICHIGAN - APRIL 1994 TO DECEMBER 2014

PRESIDENT and PRINCIPAL ENGINEER

- Functioned as Founder and Owner of BBF Engineering Services, P.C.
- Provided civil engineering, project management, construction engineering, construction inspection, contract administration, transportation engineering, utility coordination and DBE technical assistance and supportive services.

CITY OF ATLANTA DEPARTMENT OF PUBLIC WORKS, FEBRUARY 1992 TO MARCH 1993

DIRECTOR, BUREAU of HIGHWAYS and STREETS – APPOINTMENT BY MAYOR MAYNARD JACKSON

- Directed the activities to design, construct, and maintain street and sewer facilities for the City of Atlanta, Georgia.
- Administered a \$24 million dollar budget and a staff of 550
- Created and implemented project specifications for contract road and sewer construction projects;
- Coordinated the design and managed the construction necessary to complete and maintain infrastructure improvements.

MICHIGAN DEPARTMENT OF TRANSPORTATION – METRO REGION, SOUTHFIELD, MICHIGAN

SEPTEMBER 1985 TO FEBRUARY 1992

METRO REGION UTILITIES-PERMITS ENGINEER, 1988-1992

- Administered laws and regulations controlling the usage of the state trunkline right-of-way
- Spearheaded outdoor advertising program, coordination and relocation projects of public, private and municipally owned utilities
- Advised legal officials, individuals, organizational representatives and other governmental agencies.

ASSISTANT DESIGN UNIT LEADER

- Served as assistant road design supervisor responsible for project proposal review, design, writing specifications and completing project estimates.

STAFF ENGINEER

- Drew traffic diagrams, conducted road and bridge inspection, surveying, and verifying field quantities.

OAKLAND COUNTY (MICHIGAN) ROAD COMMISSION, JUNE 1984 TO SEPTEMBER 1985

ASSISTANT ROAD DESIGN UNIT LEADER

- Designed road construction projects, supervised personnel and coordinated projects.

BECHTEL POWER CORPORATION, LOCATION, SEPTEMBER 1983 TO JUNE 1984

STRUCTURAL ENGINEER

- Reviewed and coordinated structural components for a nuclear facility.

PROJECT MANAGEMENT AND CONSULTING EXPERIENCE

AECOM TECHNICAL SERVICES, INC, LOS ANGELES, CA FEBRUARY 2016 TO PRESENT

SUB-CONSULTANT

- BBFoster Consulting, PC entered into a continuing services agreement with AECOM to fulfill the need to provide subcontracted services to the NC Department of Emergency Management.

THE INSTITUTE OF ECONOMIC DEVELOPMENT, DURHAM, NORTH CAROLINA, NOVEMBER 2016 TO NOVEMBER 2017

CONSULTANT

- Served as a consultant to The Institute for the North Carolina Department of Administration Historically Underutilized Business (HUB) Program to provide assistance in the areas of business development and supportive and technical services. The contract was held by the North Carolina Institute of Economic Development (NCIMED).

THE INSTITUTE OF ECONOMIC DEVELOPMENT, DURHAM, NORTH CAROLINA, APRIL 2015 TO OCTOBER 2017

CONSULTANT

- Served as Director, North Carolina DOT Highway Construction Industry On-the-Job (OJT) training program. The contract was held by the North Carolina Institute of Economic Development (NCIMED).

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS, 2005 TO 2011

SUB CONSULTANT

- Facilitated Quality Control/Quality Assurance and field inspection services for various construction and engineering projects.

CITY OF DETROIT DEPARTMENT OF TRANSPORTATION, 2004 TO 2011

SUB CONSULTANT

- Provided transit planning, data collection and review services for various City of Detroit Department of Transportation projects.

MICHIGAN DEPARTMENT OF TRANSPORTATION—CONSTRUCTION ENGINEERING, CONSTRUCTION INSPECTION AND TESTING, 1998 TO 2011

PRIME CONSULTANT

- Provided construction engineering, project management, and construction inspection and testing services.
- Performed office technician duties to supplement expedited construction project requirements. See partial construction project listing at www.bbfosterconsulting.com.

MICHIGAN DEPARTMENT OF TRANSPORTATION —DBE CONTRACTOR ASSISTANCE AND TECHNICAL CONSULTATION SERVICES, 1998 TO 2009

PRIME CONSULTANT

- Coordinated Disadvantaged Business Enterprise (DBE) technical assistance services to the Michigan Department of Transportation in the areas of contract administration, contract document review, project administration, project documentation, contractor pre-qualification, contractor bid preparation, project claim resolution, and assistance to DBE contractors in field operations.

DETROIT ENTERTAINMENT, 2003 TO 2005

PRIME CONSULTANT

- Provided consulting services pertaining to the traffic and transportation components for the Detroit Entertainment Motor City Casino site.

PONTIAC SILVERDOME STADIUM DEVELOPMENT ADVISORY TEAM, DETROIT, MICHIGAN - 2002 TO 2004

SUB CONSULTANT

- Provided consulting services pertaining to the traffic and transportation components of the development review process for the Pontiac Silverdome Stadium site.

ROAD COMMISSION FOR OAKLAND COUNTY – OAKLAND COUNTY SIGNAL SYSTEMS OPTIMIZATION PROJECT, 2002 TO 2004

SUB CONSULTANT

- Completed the Traffic Crash Analysis portion of the Signal Systems Optimization Project for 566 intersections in southern Oakland County, Michigan.

CITY OF DETROIT – DEPARTMENT OF PUBLIC WORKS, 2002 TO 2003

SUB CONSULTANT

- Conducted field reviews, inspected utility construction projects, field permit construction activities, and buildings targeted for demolition.

CITY OF DETROIT BUILDING AUTHORITY, 1999 TO 2002

PRIME CONSULTANT

- Provided consultant services pertaining to the traffic and transportation components for the review and proposal evaluation process for the casino development sites within the City of Detroit.

ROAD COMMISSION FOR OAKLAND COUNTY FEASIBILITY STUDY FOR WESTERN OAKLAND COUNTY, MICHIGAN 2001

SUB CONSULTANT

- Followed through on a feasibility study for a new north-south state trunkline in Western Oakland County.
- Assisted in the area of intersection analysis to determine needs assessment and development of practical alternatives.

MICHIGAN DEPARTMENT OF TRANSPORTATION – DESIGN SURVEYS, 1999 TO 2001

SUB CONSULTANT

- Composed and gathered pavement design surveys for four preventative maintenance projects within the Metro Region of the MDOT.
- Detailed a log of field survey information and quantity computations for each project location.

CITY OF DETROIT TRANSPORTATION CORP. (DTC) WOODWARD AVENUE TRANSIT INVESTMENT STRATEGY, 1998 TO 1999

CIVIL ENGINEERING CONSULTANT

- BBF Engineering Services, P.C. was selected to assist in the Transit Investment Analysis to prepare for a Major Investment Study (MIS) to establish the basis for creating a practical and implementable transit service to support the Woodward Avenue Corridor. This study was incorporated into the Environmental Impact Statement (EIS) process. The scope of the study consisted of Woodward Avenue from Jefferson in the City of Detroit to 8 Mile Road.

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS – CITY OF DETROIT ECONOMIC DEVELOPMENT CORPORATION TRAFFIC AND TRANSPORTATION ENGINEERING SERVICES, 1997 TO 1999

CONSULTANT

- Advised the City of Detroit on Traffic/Transportation issues, and parking analysis for the proposed casino, office, recreational, and retail development sites located in the City of Detroit.
- Prepared various types of comprehensive transportation analyses to determine the transportation related impacts within the vicinity of proposed development sites within the Downtown Detroit area.

CITY OF DETROIT DEPARTMENT OF TRANSPORTATION (DDOT) CNG BUS FACILITY CIRCULATION PLAN, 1998

TRANSPORTATION ENGINEER

- Architected the circulation plan design for the proposed City of Detroit DOT Compressed Natural Gas (CNG) bus facility. The proposed facility will accommodate fueling and maintenance for CNG buses, and accommodations for fueling visiting city vehicles.

SOUTHEASTERN MICHIGAN COUNCIL OF GOVERNMENTS (SEMCOG) MICHIGAN DEPARTMENT OF TRANSPORTATION, 1997

TRANSPORTATION ENGINEER

- Oversaw roadside safety deficiency analysis, parking inventory, population and employment study, and assisted in developing recommendations for route M-24 between the limits of I-75 and the Oakland County line. The scope of services included an analysis of safety deficiencies, existing and future capacity deficiencies, an inventory of existing parking, and identification of existing right-of-way and physical constraints.

MICHIGAN DEPARTMENT OF TRANSPORTATION, 1995 TO 1996

PROJECT MANAGER

- Conceptualized and submitted traffic maintenance requirements and construction plans, and coordinated utilities. The project consisted of the design and implementation of Advanced Traffic Management and Information Systems equipment to be constructed for 148 miles of freeway within the Metropolitan Detroit area.
- Administered freeway equipment of various combinations of the following: changeable message signs, pavement loops, surveillance cameras, ramp metering, and highway advisory radio.
- Interfaced information directly with the MI Intelligent Transportation Systems Center.

CITY OF SOUTHFIELD, MICHIGAN – TRAFFIC IMPACT STUDY, 1995

TRANSPORTATION ENGINEER

- Evaluated the traffic impact of a proposed 116,222 square foot Target store in Southfield, Michigan.
- Estimated the amount of traffic that would be generated by the store utilizing a peak hour capacity analysis at each of the ten (10) signalized intersections in the project influence area for both weekdays and weekends.
- Compared the anticipated trips from the current office buildings and examined the daily variation versus the proposed retail store traffic.

CITY OF STERLING HEIGHTS, MICHIGAN – TRAFFIC CIRCULATION PLAN, 1995

TRANSPORTATION ENGINEER

- Assessed street patterns and prepared a unified traffic circulation plan providing appropriate access to major roads in the northwest portion of the City of Sterling Heights.
- Finished project details including recommending changes to the master road plan to accommodate proposed development given the city's master plan, wetland constraints and density provisions.

CITY OF DEARBORN, MICHIGAN – DEARBORN TRAFFIC STUDY, 1995

TRANSPORTATION ENGINEER

- Compiled information regarding traffic volumes, turning movements, accident experience, population distribution, and driving characteristics.
- Validated trip generation rates, assigned trips to the road network, determined geometric design adequacy, driveway placement and recommended the best method of whether or not to close the roadway.
- Prepared a detailed report, which included graphs, tables, figures, and drawings and delivered a comprehensive presentation to the planning commission, the City Council and administration.

ADVANCED TRAFFIC INFORMATION SYSTEMS (ATIS), 1994 TO 1995

CONSTRUCTION MANAGEMENT SUBCONSULTANT

- Supervised the installation of the roadside Ali-Scout Beacons for SIEMENS Automotive and the Road Commission for Oakland County.

CITY OF SOUTHFIELD, MICHIGAN – FRANKLIN ROAD/I-696 INTERCHANGE IMPROVEMENT STUDY, 1994 TO 1995

SUBCONSULTANT

- Utilized the TRAF-NETSIM traffic modeling software to demonstrate that an interchange in an urban environment can be converted from a partial to a full interchange with all movements permitted. Displayed the measures of effectiveness and traffic flow characteristics for the “after” construction condition of this project.
- Reported on evaluation of existing site conditions, existing traffic volumes with proposed local road improvements, and local road improvements with the completion of the Franklin Road Interchange using projected year traffic volumes.

THE UNIVERSITY OF MICHIGAN (U OF M) TRANSPORTATION RESEARCH INSTITUTE– GREAT LAKES CENTER FOR TRUCK AND TRANSIT RESEARCH, 1994 TO 1995

RESEARCH ANALYST

- Served as a Researcher for the U of M Great Lakes Center for Truck and Transit Research (GLCTTR).
- Conducted project research consisting of a study of High Speed Rail Safety Warrants and the analysis of changes and/or modifications needed for grade crossings on existing rail lines when high speed rail service is introduced.
- Assessed economic impact of constructing a grade separation based upon the required rail crossing protection.

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 1993 TO 1994

TRANSPORTATION ENGINEER

- Subcontracted for the Early Deployment of ATMS/ATIS in Metropolitan Detroit for MDOT.
- Analyzed the areas of priority corridor recommendation and the development of an Incident Management Plan. Examined thirteen (13) corridors for possible expansion of advanced traffic management systems on freeway segments in Metropolitan Detroit.
- Convened meetings with the Administrative Traffic Management Team for the I-75 corridor and developed goals, objectives and a consensus on alternate routes by this group.

MICHIGAN DEPARTMENT OF TRANSPORTATION AND THE ROAD COMMISSION FOR OAKLAND COUNTY, 1984 TO 1988

ASSISTANT DESIGN UNIT LEADER

- Assisted in supervising and training engineers and technicians in project design, writing specifications, project estimates, and reviewing project proposals for the Michigan Department of Transportation and the Road Commission for Oakland County.
- Performed as a highway design engineer on various types of design projects including overlays, roadway widening, drainage control, pavement management, roadway repair/maintenance, and new construction.

EDUCATION AND CREDENTIALS

DOCTOR OF PHILOSOPHY (PH.D.) IN CIVIL ENGINEERING (TRANSPORTATION INFRASTRUCTURE), 1999

Michigan State University, East Lansing, MI

MASTER OF SCIENCE (M.SC.) IN CIVIL ENGINEERING (TRANSPORTATION), 1989 - Wayne State University, Detroit, MI

BACHELOR OF SCIENCE (B.SC.) IN CIVIL ENGINEERING (STRUCTURAL), 1983 - Michigan State University, East Lansing, MI

ADDITIONAL EDUCATION

- OSHA 30-HOUR Certification (2019)
- Construction Management Diploma – North Carolina State University (2018)
- Traffic and Transportation Engineering Seminar, Northwestern University, Evanston, IL, 1999
- Certification in Intelligent Transportation Systems (ITS), University of Michigan, Ann Arbor, 1992

PROFESSIONAL CERTIFICATIONS AND REGISTRATIONS

PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer:

- State of Georgia
- State of Illinois
- State of Michigan
- State of North Carolina
- State of Ohio
- State of South Carolina

PROFESSIONAL CERTIFICATIONS

- South Carolina DOT Utility Coordination Certification - 2017
- U.S. Small Business Administration, Emerging 200 (E200), Class of 2011
- Level 1 Erosion and Sedimentation Control Inspector

PUBLICATIONS

"Surviving a Climate of Hate: Valuing Yourself in Spite of Bullying, Racism and Sexism," Amazon, 2014.

"For Love and Money: Seven Guidelines for Achieving Success in Your Home and Business," Wordpress, 2008.

"An Evaluation of the Impact of Changeable Message Signs on Freeway Diversion"
Michigan State University, Dissertation Approved December, 1999

"Development of Safety Management Systems for State Departments of Transportation,"
Michigan State University, December, 1995.

"Roadway Grade Crossing Protection for High Speed Rail Lines," Michigan State
University, Research completed for the Great Lakes Center for Truck
and Transit Research, University of Michigan, September, 1995.

"Sensitivity Analysis - Traf-NETSIM Comparison to Passer II-90 (Version 2) for Single
Intersection Analysis," Michigan State University, December, 1994.

AWARDS AND HONORS

- BBF Engineering Services, Michigan Department of Transportation DBE Contractor of the Year
- BBF Engineering Services, Federal Hwy. Administration/USDOT Minority Business Enterprise of the Year
- National Society of Black Engineers Award for Outstanding Commitment to Excellence in Entrepreneurship, 2013
- Michigan Chronicle Woman of Excellence Honoree, 2012
- Initiated into the Order of the Engineer, 2005

PROFESSIONAL AFFILIATIONS

- Michigan State University College of Engineering Alumni Advisory Board, 2010 to 2015
- Michigan State University College of Civil Engineering Advisory Board, Board Member, 2008 to 2011
- Eli Broad College of Business, Michigan State University Broad Executive Forum, Board Member, 2011-12
- Dwight D. Eisenhower Fellow, Federal Highway Administration
- Great Lakes Center for Truck and Transit Research Scholar, University of Michigan
- American Council of Engineering Companies (ACEC) – ACEC NC Future Leaders Class of 2018
- National Society Of Professional Engineers (NSPE)
- American Society of Civil Engineers (ASCE)
- Institute of Transportation Engineers (ITE)
- International Coach Federation (ICF) – ACC Certified Coach