

RFP-23-2020 **AECOM Supplier Response**

Event Information

Number: RFP-23-2020

Lexington Area Congestion Management Bottleneck Study Title:

Type: Request For Proposal

Issue Date: 7/22/2020

Deadline: 8/10/2020 02:00 PM (ET)

Contact Information

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sstone@lexingtonky.gov Email:

Vendor: AECOM Page 1 of 2 pages RFP-23-2020

AECOM Information

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Louisville, KY 40207

Phone: (502) 569-2301 Fax: (502) 569-2304

ONLY ONLINE BIDS WILL BE ACCEPTED! By submitting your response, you certify that you are authorized to represent and bind your company and that you agree to all bid terms and conditions as stated in the attached bid/RFP/RFQ/Quote/Auction documents.

Vanessa Nghiem	vanessa.nghiem@aecom.com			
Signature	Email			
Submitted at 8/10/2020 9:47:09 AM				

Response Attachments

RFP #23-2020 Lexington Area Congestion Management Bottleneck Study AECOM.pdf

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LEXINGTON AREA CONGESTION MANAGEMENT BOTTLENECK STUDY









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AECOM 500 West Jefferson Street, STE 1600 Louisville, KY 40202 www.aecom.com

August 10, 2020

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor Lexington, Kentucky 40507

Re: RFP #23-2020

Lexington Area Congestion Management Bottleneck Study

Dear Director:

AECOM is pleased to submit this proposal to support the Lexington Area Metropolitan Planning Organization (Lexington Area MPO). The AECOM Team provides both the local and regional expertise, resources, and experience necessary to identify the top bottlenecks along the congestion management corridors now and in the future. The AECOM Team will also assist the Lexington Area MPO and stakeholders in programming good projects that will alleviate those bottlenecks. We have assembled a strong and dynamic team, specifically tailored to meet all project requirements. The AECOM Team includes committed key individuals who have performed local transportation planning and traffic operations projects. This Project Team brings invaluable local knowledge of the existing operations as well as experience from past projects across the state and country and specifically, for the Lexington Area MPO.

AECOM is a recognized leader in transportation with proven results in congestion management. AECOM is well acquainted with the transportation stakeholders and infrastructure needs in the Lexington area with our involvement in the 2015 and 2019 Lexington Area ITS Architecture updates, Hamburg Signal Retiming, Town Branch Commons and the US 27 Access Management Plan. AECOM has played a prominent role shaping transportation in the Bluegrass Region.

Our strength is our team of subject matter experts. Vanessa Nghiem, PE, PTOE, the Project Manager, has been working on traffic operations and transportation planning projects in Kentucky her entire career. This includes serving as the Project Manager on the 2019 ITS Architecture update and managing the KYTC District 7 Traffic Engineering contract for the past six years, including the Man O'War Small Area Study.

Vanessa will be supported by Paul Slone, PE, PTOE, Brian Meade, PE, John Callihan, PE and Eddie Mesta, PE. Our team will be able to leverage the previous project knowledge and hit the ground running. With the selection of AECOM, Lexington Area MPO will receive the benefits of working with a Project Manager that you and many of the area stakeholders know well. Supported by the best transportation professionals AECOM has to offer, we will deliver a solid product that will chart the course for future congestion management relief projects in the Lexington Area MPO area.

Thank you for your consideration.

Sincerely,

Greg Groves, PE, Vice President

Project Principal (502) 217-1509

greg.groves@aecom.com

Vanessa Nghiem, PE, PTOE Project Manager

(513) 419-3451

vanessa.nghiem@aecom.com

01 ABOUT THE AECOM TEAM

Transportation is changing, and so is the delivery of our services. Throughout the world, we apply innovative technology solutions to improve our transportation systems' safety, reliability and mobility.

AECOM

When transportation systems don't work as planned, we all lose—

roadways become congested, travelers become frustrated and agencies are trapped in a reactive position. **AECOM**

Technical Services, Inc. (AECOM) understands and we can help. Our professionals are global leaders in transportation planning and design. We combine innovation, insight, knowledge and skills across a complete life cycle of services delivering cost-effective innovative projects that keep costs down and travelers moving.

ABOUT AECOM

AECOM has been providing engineering services in Kentucky for over 50 years. While AECOM's official founding was in 1990, some of our predecessor firms had distinguished histories dating back to the early 1900s. AECOM is made up of architects, engineers, designers, planners, scientists and management and construction services professionals, and services clients in more than 150 countries around the world.

AECOM is a full-service Transportation and Design firm which has the depth of technical experience to meet the multi-discipline needs of our clients. We have the local and nearby resources to successfully deliver this project on-schedule and on-budget. With more than 70 employees in Kentucky, and over 5,000 in the surrounding region, we can commit ample resources to meet project deadlines and milestones.

AECOM provides a blend of local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural and social environments. What sets AECOM apart is our collaborative approach and our ability to deliver. A trusted partner to our clients, we work across our business lines to bring together the best fit-for-purpose team dedicated to finding the most creative and appropriate project solutions.

This project will be managed out of our Louisville, Kentucky and Cincinnati, Ohio office locations:

AECOM

500 W Jefferson Street 525 Vine Street
Suite 1600 Suite 1800
Louisville, KY 40202 Cincinnati, OH 45202

Our local transportation and traffic engineering staff in Louisville and Cincinnati are just a little over an hour away from Lexington.



Accolades

Each year, media and independent organizations measure and evaluate our markets and competition. These surveys offer a clear picture of our reach and value to clients. For example this year, **Engineering News-Record (ENR)** ranked AECOM as the #1 firm in transportation and #2 overall.

- ► AECOM is ranked #1 in Transportation in **Engineering News Record's** "Top 500 Design Firms" for 2020 while being the #2 Design Firm overall. We also are ranked #1 in Highways, while ranking #2 in Mass Transit & Rail.
- ► AECOM was also named one of **Fortune Magazine's** "World's Most Admired Companies" for the sixth consecutive year.

AECOM KYTC Prequalifications

AECOM is prequalified by the Kentucky Transportation Cabinet (KYTC) in the following areas:

Aviation

- Airport Master Planning
- Airport Noise Analysis
- Airport Project Inspection

Construction Engineering Services

- Bridge Painting Project Inspection
- Bridge Painting Project Management
- ► Construction Project Supervision
- ► Construction Scheduling/Claims Analysis

Environmental & UST Services

- Hazmat Corrective Action
- ► Hazmat Site Investigation (Phase 2)
- UST & Hazmat Preliminary Site Assessment (Phase 1)
- UST Closure Assessment
- UST Corrective Action
- ► UST Site Investigation (Phase 2)

Environmental Aquatic & Terrestrial Ecosystems Analysis

- Botany
- Fisheries
- Freshwater
- Macroinvertebrates
- ► Terrestrial
- Water Quality
- Wetlands

Environmental Archeology & Other Services

- ► EIS Writing & Coordination
- Highway Noise Analysis
- ▶ Historic Archaeology
- Prehistoric Archaeology
- Socio-Economic Analysis
- Stream & Wetland Mitigation

Geotechnical Services

Geotechnical Engineering

Intelligent Transportation Systems

- Architecture Development
- System Design, Deployment & Integration
- System Maintenance, Management & Operations
- ► Technology/System Evaluation

Maintenance/Bridge Maintenance Services

- ► In-Depth Structure Inspection
- Landscaping Arboriculture
- ► Tunnel Inspection

Right-of-Way

- Acquisition
- ► Relocation

Structure Design

- > Spans Greater than 500 Feet
- Spans Under 500 Feet

Roadway Design

- Advanced Drainage Analysis
- Advanced Traffic Engineering Design & Modeling
- Photogrammetry & Related Services
- Rural Roadway Design
- Surveying
- Urban Roadway Design

Traffic Engineering

- Traffic Engineering
- Electrical Engineering Roadway Lighting
- Electrical Engineering Traffic Signals

Transportation Delivery Systems

- Transit Management
- Transit Marketing/Advertising
- Transit Technical Studies

Transportation Planning

- ▶ Traffic Forecasting
- Transportation Planning
- Advanced Transportation Planning Engineering
- Conceptual Transportation Planning
- Pedestrian & Bicycle Planning & Design
- ► Traffic Data Collection

Utility Design

- Utility Construction Inspection
- Utility Preconstruction Coordination
- Water & Sewer Level 1
- ► Water & Sewer Level 2

PARTNER: INTEGRATED ENGINEERING, PLLC

This Lexington-based firm has wide experience in various fields of design. It is classified as a DBE by the Kentucky Transportation Cabinet (KYTC) & Lexington Fayette Urban County Government (LFUCG).



Integrated Engineering, PLLC (IE) is committed to improving Lexington's sanitary sewer infrastructure,

playing a vital role in the timely completion of the Remedial Measures Plan. IE is an award-winning professional civil engineering, planning, surveying, and right-of-way/ easement acquisition consulting firm with experience in diverse disciplines. Having worked on various public works initiatives, with an emphasis on water and wastewater projects, they have successfully completed numerous municipal ventures in the region.

ABOUT INTEGRATED ENGINEERING

Over the years IE has provided its municipal clients with planning, surveying, design, and construction administration services on millions of dollars' worth of public infrastructure improvements to benefit the citizens of Kentucky. Their professional consulting services include:

- Boundary and Topographic Surveying
- Planning and Feasibility Studies (Technical Memorandum Preparation)
- Sanitary Sewer Conveyance Design (Gravity)
- Local, State, and Federal Permit Preparation
- Cost Estimating
- ▶ Bid and Contract Document Preparation
- Construction Administration
- Construction Inspection (Resident Project Representative)
- Right-of-Way/Easement Acquisition
- Preparation of As-Built Information

This project will be managed out of IE's Lexington, Kentucky office:

Integrated Engineering, PLLC 166 Prosperous Place Suite 220 Lexington, KY 40509 (859) 368-0145



2015 Commerce Lexington Inc. Small Business of the Year Integrated Engineering, PLLC

Accolades

IE was recognized in 2015 by receiving Commerce Lexington's prestigious **Small Business of the Year.**

KYTC Prequalifications

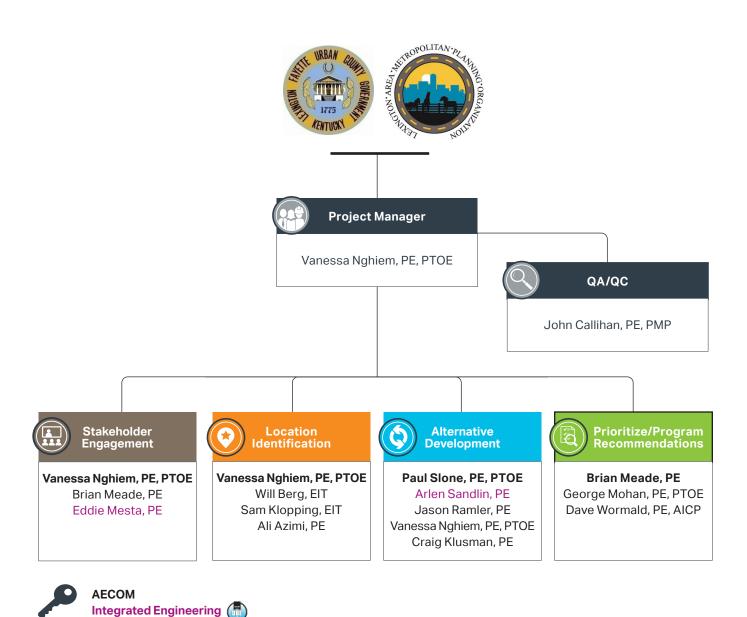
IE is prequalified by the Kentucky Transportation Cabinet (KYTC) in the following categories:

- Rural & Urban Roadway Design
- Structures
- Surveying
- Traffic Engineering Services
- ► Pedestrian & Bicycle Facility Planning & Design
- Airport Design/Project Inspection
- Construction Project Supervision
- Water & Sewer Design
- Utility Preconstruction Coordination
- Utility Construction Inspection
- Right-of-Way Services

02 THE AECOM TEAM

ORGANIZATIONAL CHART

In addition to the key staff listed below, AECOM will rely on its personnel in Cincinnati and Louisville to support this project.





VANESSA NGHIEM, PE, PTOE

PROJECT MANAGERSenior Traffic Engineer, AECOM

Education

BS, Civil Engineering, University of Kentucky, 2003

Years of Experience With AECOM: 13 With Other Firms: 3

Registrations PE/KY/#26090 PTOE/#3137

IMSA Signal Technician, Level II BE_144922

Training

KYTC Basic Traffic Engineering Design

AGi32 Roadway Emphasis 3-Day Lighting Training

Highway Capacity Manual 2010 Workshop

Kentucky Transportation Center Traffic Impact Study Training InRoads

Vanessa's depth of knowledge and experience also includes a unique understanding of evaluating roadway operations performance to identify areas of concern and potential mitigating strategies for mobility and safety concerns.

Vanessa is a Senior Traffic Engineer and Project Manager with 18 years of experience, primarily in traffic engineering. Her expertise is focused on Signal System Timing, Traffic Signal Design and Traffic Control. She is the Project Manager for the current KYTC Statewide Traffic Engineering, District 7 Traffic Engineering and Statewide Electrical Engineering contracts. She most recently managed the LFUCG Lexington Area ITS Architecture Update and has worked on many traffic related projects in the Lexington Area MPO region throughout her career. She is certified for IMSA Traffic Signal Technician, Level II.

Man O'War Small Area Study, KYTC, Lexington, KY. Project Manager. Led a collaborative effort with KYTC D7 and LFUCG to develop short- and long-term improvement projects in the vicinity of Man O'War Boulevard east of I-75. Some of the suggested projects have been implemented or are moving forward. This study involved large amounts of data collection to define the existing situation and evaluate which areas suffered the most severe traffic congestion.

US 27 Access Management Plan, KYTC, **Jessamine and Fayette Counties, KY.** Task Lead. AECOM was tasked to study the US 27 Corridor from Man O'War Boulevard in Fayette County, southward, to the northern access control line of the proposed East Nicholasville Bypass in Jessamine County to establish a specific set of access permitting guidelines to be accepted and enforced by multiple agencies that have funding or land use decision making power in the corridor. This establishes a common vision for the future, enhances safety and improves longterm traffic operations. Strategies included controlling access locations, utilizing U-turn and loon intersections and constructing quadrant intersections. AECOM also led the subsequent design efforts.

US 42 Weaver Road (KY 842), KYTC District 6, Boone County, KY. Project Engineer. Responsible for modeling and evaluating alternatives for intersection improvement to ease congestion and improve route reliability. The selected quadrant intersection design involved 2 new traffic signals at the termini as well as a rebuild of the existing intersection. This innovative design allowed for a 2-phase operation at an extremely congested intersection with left turning traffic using the quadrant road. The project construction completed in 2019 and has been considered highly successful.

Winchester Road (US 60) Corridor Study, KYTC, Lexington, KY. Microsimulation Analysis. Evaluated proposed pavement marking options that would place a third eastbound lane on US 60 (Winchester Road) in Fayette County. The proposed lane started at Patchen Wilkes Drive on the west end, and ended at either Sir Barton Way or the I-75 interchange on the east end. A preferred alternative was selected and AECOM provided striping plans. This solution used existing pavement to add capacity at a low cost with no major construction.

KY 313 Widening, Patriot Parkway to Bullion Boulevard Connector, Hardin

County, KY. Lead Traffic Engineer. Responsible for microsimulation models to analyze traffic implications of various alternatives and estimate queue lengths to determine necessary storage. AECOM prepared final design plans. The project widens the roadway to 4 lanes and provides a center median. AECOM analyzed existing intersections.

District 7 Traffic Engineering Services, KYTC, Central KY. Project Manager.
Contractual duties include performing signal warrant studies, speed studies, performing signal installation inspections, and evaluating signal systems. In the first year

of the contract, AECOM evaluated over 100 intersections. AECOM has been selected for this contract every two years since 2007. After subsequent renewals, traffic signal warrant studies, left turn evaluations, and a sign inventory that includes 65 miles of roadway have been performed, including signal system retiming in Georgetown near the Toyota plant and continued intersection evaluations for left turn phases and signal warrants, among other things. AECOM has been selected for this contract every 2 years since 2007.

Signal Retiming Various Routes, LFUCG, Lexington, KY.

Project Engineer. Provided services this traffic operations project involving 35 intersections on 4 of Lexington's major arterial routes. A minimum of 12 unique coordinated timing plans were developed for weekdays and weekends. The timing plans were based on over 800 hours of traffic data collected for the project. Paul was responsible for working in the Lexington Traffic Management Center to program and download signal timing to local controllers (utilizing Centracs) as well as provide field support to adjust the timing. Final project results indicated a benefit-cost ratio on each route ranging from 35:1 to 69:1 when considering fuel and delay (time) savings for motorists. Date: 2013-2014 Value: \$330,000

Downtown Area Traffic Signal Retiming, LFUCG,

Lexington, KY. Project Engineer. Responsible for developing the simulation used to improve system performance. The signal system includes 89 intersections in downtown Lexington, Kentucky. The project included an analysis of the existing system, development of improvements and implementation of the new timing.

Statewide Electrical Engineering Services

Subconsultant, KYTC, KY. Project Manager. Providing traffic signal design and highway lighting design as a subconsultant under this statewide contract. In addition to typical highway lighting, new designs for navigation lighting systems on several bridges were provided. Also, as part of HSIP funded work, AECOM provided new signal designs in 7 districts across the state to increase visibility, accessibility and safety at each intersection. AECOM was selected for this contract as a prime in 2019, however no assignments have been distributed to date.

Statewide Traffic Engineering Services, KYTC, KY. Project Manager. Providing a broad range of traffic engineering services under this statewide contract. Services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. New to 2019, duties include the update of traffic signal timing from Wapiti based to MaxTime in preparation of 2070 deployment. This contract has been renewed every two years since 2007.

Lexington ITS Architecture Updates, LFUCG, Lexington,

KY. Project Manager. Led 2 separate ITS Architecture update projects for the existing regional ITS Architecture for the Lexington Area MPO that covers Fayette, Jessamine and a small portion of Scott Counties in Kentucky. As part of both projects AECOM was tasked to coordinate and facilitate stakeholder engagement workshops to identify changes to regional needs and plans for future ITS deployments. During the 2015 update project, our team also developed an ITS Implementation Plan that identified specific projects for implementation and the strategies to sequence their deployment to increase the value provided to stakeholders as each project is constructed. As the Project Manager, Vanessa coordinated weekly check-in calls with LFUCG management and other key project stakeholders. She also coordinated the 2 stakeholder workshops where she and AECOM ITS professionals elicited input from participants based upon their and Ms. Nghiem's understanding of existing operational mobility and safety needs that ITS technologies could potentially address.

Statewide Signal System Timing, Ohio Department of Transportation (ODOT), OH. Project Manager. Providing a broad range of traffic engineering services under this statewide contract. Services include review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. This contract includes the inspection of the traffic signal hardware and operations as well as the implementation of newly designed traffic signal timing plans. The systems are evaluated after implementation to determine measures of effectiveness and estimate cost benefits.



Vanessa Nghiem, PE, PTOE, AECOM Project Manager.



PAUL SLONE, PE, PTOE

ALTERNATIVE DEVELOPMENT LEAD Senior ITS/Traffic Engineer, AECOM

Education BS, University of Kentucky, 1992

Years of Experience With AECOM: 11 With Other Firms: 17

Registrations PE/KY/#19880 PTOE/#1817

Paul is a subject matter expert in on-street operations including the analysis, optimization, and programming of traffic signals. His background with multiple public agencies gives him a unique perspective of the issues faced at the state and local levels.

Paul is a former LFUCG Traffic Signal Systems Manager and has been a key member of transformative Lexington area projects such as the US 27 Access Management Study, the initial Congestion Management Study, Winchester Road resurfacing project and numerous traffic signal retiming projects. He has been a preferred provider of traffic engineering services by Kentucky agencies for 19 years.

US 27 Access Management Plan, KYTC, Jessamine and Fayette Counties, KY.

Project Manager. Led a small area study driven by the potential impacts of a large planned development. The Brannon Crossing development was proposed to have approximately one million square feet of retail, 400,000 square feet of office space, and eventually new neighborhoods developed from an expanded street network. Paul was the lead professional responsible for oversight of traffic analysis and design recommendations of roadway improvements. The project involved trip generation, trip assignments, and detailed internal site circulation analysis.

Hamburg Corridor Traffic Signal Retiming, LFUCG, Lexington, KY. Senior Technical Advisor. Provided services for this traffic operations project involving 23 intersections on 3 of Lexington's major arterial routes. Project team developed 8 unique timing plans for use during weekends in the seasonally variable Hamburg area, including segment of Winchester Road and Man O'War Boulevard.

Regional Traffic Signal Operations On-Call Contract, GDOT Districts 1 & 6, North

GA. GDOT Districts 1 & 6, North GA. Task Lead. Provided services for the program that manages more than 1900 signals in the greater Atlanta metropolitan area. Monitored and responded to live traffic events as well as provided probe speed data analytics to drive and evaluate signal operational changes in the region.

US 42 Weaver Road (KY 842), KYTC District 6, Boone County, KY. Project Manager. Led this project, which proposed a quadrant intersection in lieu of traditional. This allowed for a 2-phase operation of the signal at the main intersection. The quadrant intersection performed the best and satisfied the purpose and need of the project in a cost-effective manner. The traffic analysis and preliminary line and grade were completed in August 2013. Overall, the project was tailored to be relatively low-cost with high benefits in terms of reducing congestion, improving air quality, improving safety, and increasing route reliability. This project opened in August 2019 and has proved to be a tremendous success for the Cabinet.

Winchester Road (US 60) Corridor Study, KYTC, Lexington, KY. Project Manager.
AECOM conducted a microsimulation analysis to evaluate proposed pavement marking options that would place a third eastbound lane on US 60 (Winchester Road) in Fayette County. The proposed lane started at Patchen Wilkes Drive on the west end, and ended at either Sir Barton Way or the I-75 interchange on the east end. An alternative was selected and AECOM then

provided striping plans. This solution used

existing pavement to add capacity at a low

cost with no major construction.

Signal Retiming Various Routes, LFUCG, **Lexington, KY.** Project Manager. Led this traffic operations project involving 35 intersections on 4 of Lexington's major arterial routes. A minimum of 12 unique coordinated timing plans were developed for weekdays and weekends. The timing plans were based on over 800 hours of traffic data collected for the project. Paul was responsible for working in the Lexington Traffic Management Center to program and download signal timing to local controllers (utilizing Centracs) as well as provide field support to adjust the timing. Final project results indicated a benefit-cost ratio on each route ranging from 35:1 to 69:1 when considering fuel and delay (time) savings for motorists.



JOHN CALLIHAN, PE, PMP

QA/QCSenior Project Manager, AECOM

EducationBS, Civil Engineering, University of Kentucky

Years of Experience With AECOM: 2 With Other Firms: 25

Registrations PE/KY/#19346

Prior to joining
AECOM, John
served as Louisville
Metro Government's
inaugural Director
of Transportation
from 2015 to 2018.
In this role, John
was the City's senior
transportation policy
officer, managed the
transportation capital
improvement program,
and led various cross
functional teams.

John spent his first 16 years after college with the Kentucky Transportation Cabinet (KYTC) and led transportation planning and project development efforts in the Louisville region. John was project manager for The New Dixie Highway Project. This \$35 million TIGER project is currently under construction and implements ITS, Access Management, and Kentucky's first Bus Rapid Transit line.

Bridging Kentucky, KYTC Highway
Districts 5, 6, and 9, KY. Area Team Lead.
Responsibilities included directing bridge replacement design teams, with staff from multiple firms to deliver 33 projects to construction in the first 18 months of the program. John also coordinated 26 bridge rehab projects. John performed site assessments and prepared planning level estimates for potential bridge projects. He served as the program's liaison with local governments, school boards, and area development districts.

The New Dixie Highway, KYTC and Louisville Metro, Louisville, KY. Project Manager. Led this \$35 million project that is implementing complete streets, access management, intelligent transportation system upgrades, and the state's first Bus Rapid Transit (BRT) line. John was responsible for overall management of the project as well as coordination and reporting to FHWA and KYTC. This project is currently under construction and scheduled for completion in 2020. One segment at I-264 was expedited and is complete. This segment included the re-alignment of the exit ramp, the related Interchange Modification Report, the installation of new traffic signal, and pedestrian facilities. This work has already resulted over a 70% reduction in crashes near the exit ramp.

US Army Reserve National Fire Alarm Monitoring Program, US Army Corps of Engineers (USACE), Nationwide. Program Manager. While working for the USACE, John developed methodology, coordinated field surveys, and implemented a phased, multi-year program to upgrade fire alarm systems, and consolidate all monitoring of 900+ Army Reserve Centers across the nation. This effort required coordination with USAR Command, 4 Army Reserve Readiness Commands, and facility managers for each site. His innovative, tiered approach to implementation, provided contact options to be executed as funding became available.

Louisville Loop Multi-Use Path, Louisville Metro, Louisville, KY. Director of

Transportation. Supervised Louisville Metro's Trail and Greenways Team that is responsible for the Louisville Loop. When finished, the Loop will be a 100-mile long multi-use path along the perimeter of Louisville-Metro. At this time, about 45 miles are complete. John was responsible for developing funding, implementation, governance, and maintenance strategies.

I-75/Lexus Way Interchange, FHWA KY
Division, Scott County, KY. FHWA Reviewer.
Served this project that constructed a new interchange off I-75 in Scott County. FHWA KY Division, Projects of Division Interest (PoDI) program, KY. Transportation Engineer. John developed the methodology and screening criteria for the Kentucky Division's PoDI program. He coordinated consultation of the PoDIs with KYTC and developed the PoDI Management Plans for each project.



BRIAN MEADE, PE

PRIORITIZE/PROGRAM RECOMMENDATIONS LEAD Senior Project Manager, AECOM

Education BS Civil Engineering, University of Kentucky, 1988

Years of Experience With AECOM: 8 With Other Firms: 24

Certification PE/KY/#18079

Affiliations

Transportation Advisory Board, Greater Louisville Inc. (Louisville Chamber of Commerce)

Board of Directors, American Society of Highway Engineers (ASHE)

Board of Directors, American Public Works Association (APWA)

Brian's experience in transportation ranges from rural to urban. His KYTC experience has allowed him to work closely with multiple public agencies and engage with elected officials, personnel from other agencies, and the public.

Brian serves as the Project Manager for the KYTC Statewide LPA Engineering Services contract. He has served as Project Manager for the multiple roadway design projects for KYTC and various municipalities in Kentucky. Prior to joining AECOM he spent over 24 years with KYTC. While there, he served as the Branch Manager for Traffic Operations for 6 years, as well as the Branch Manager for Project Development for 4 years.

US 27 Access Management Plan, KYTC, Jessamine and Fayette Counties,

KY. Alternative Development. Providing technical assistance related to alternative intersections. This project was a small area study completed in 2013. In 2016 AECOM was selected by KYTC to provide Preliminary Engineering Services, including preparation of engineering studies, typical sections, utility impacts, drainage, cost estimates, public engagement activities, and the approval of a CE Level I NEPA document. Several Alternates were considered and the Project Team recommended the conversion of 7 intersections to "superstreet intersections", AKA Restricted Crossing U-turns (RCUT).

US 42 Weaver Road (KY 842), KYTC District 6, Boone County, KY. Technical Advisor. Responsible for modeling and evaluating alternatives for intersection improvement to ease congestion and improve route reliability. The selected quadrant intersection design involved 2 new traffic signals at the termini as well as a rebuild of the existing intersection. This innovative design allowed for a 2-phase operation at an extremely congested intersection with left turning traffic using the quadrant road. The project construction completed in 2019 and has been considered highly successful.

Town Branch Commons Project, LFUCG, Lexington, KY. Assistant Program Manager. Providing program management and general engineering services for the project which runs through the heart of downtown

Lexington from Midland Avenue at 3rd Street in the east near the Isaacs Murphy Memorial Art Garden, through the downtown CBD, Rupp Arena District and into the Distillery District in the west. The project calls for a 2.5-mile multimodal path and park system that winds through downtown Lexington, following the path of historic Town Branch Creek. A component of this project was to improve the safety and operation of all modes of transportation within this corridor. It has multiple funding sources including local, state, federal and private partnerships (P3). The project costs approximately \$30 million. The project is currently under construction and is expected to be completed in 2022.

KY 53 Congestion Mitigation Project, KYTC, Oldham County, KY. Project

Manager. The project's purpose is to improve the safety and operations of the corridor and to relieve congestion on KY 53 from I-71 interchange to Downtown LaGrange. Traffic Modeling software was used to analyze the corridor. Based on the results of the analysis the Project Team recommended the installation of left turn lanes at the intersection of KY 53/Crystal Drive and the installation of a left turn phase. An additional lane is being added to the SB I-71 exit ramp to provide additional capacity. Several access points within the project limit will be removed to improve safety and operations. The project is now in Phase II and final plans were submitted in July 2020.

Hurstbourne Lane Access Management, Jefferson County, KY. Included widening Hurstbourne Lane to make it 6-lane typical section from I-64 to US 60 (Shelbyville Road). Area adjoining corridor has commercial businesses so minimizing right-of-way and utility impacts was critical. By using CORSIM traffic modeling software made turn lane improvements and access management strategies channelling traffic with positive separation eliminating unsafe left turns at adjacent intersections.



ARLEN SANDLIN, PE

ALTERNATIVE DEVELOPMENT

Transportation Manager, Integrated Engineering

Education

MA, Business Administration, University of Kentucky, 2008 BS, Civil Engineering, University of Kentucky, 1997

Years of Experience With IE: 2 With Other Firms: 21

Registrations PE/KY/#22065

Arlen is involved with every phase of the highway design process, including preliminary planning studies, alignment studies, public involvement, field survey oversight, drainage design, geometric design, structure layout, maintenance of traffic, right-of-way plan development, utility avoidance and relocation design, and final plan development.

Arlen serves as Project Engineer and Project Manager for transportation projects. His experience on highway projects ranges from small urban developments to major arterials and interstate highways.

Hamburg Corridor Traffic Signal Retiming, LFUCG, Lexington, KY. Subconsultant

Project Manager. As a subconsultant, documented whether pedestrian signals were present at the study intersections for both the Hamburg/Man-O-War corridor and the Winchester Road corridor. IE also measured and documented lengths of crosswalks to help determine pedestrian signal times and flashing don't walk times to be implemented in each of their phasing plans. IE also provided 2 days of field implementation and testing to gauge performance of phasing plans. IE put together several GIS maps showing the travel speeds along each segment of the corridors contrasting the pre- and post-signal timing implementation performance of the segments. The final deliverable was color-coordinated speed data for various time intervals over Saturday and Sunday, 2 GIS shapefiles (1 for Saturday, 1 for Sunday), and a spreadsheet with the speed data tables used to generate the shapefiles.

Lexington Transit Authority, Fayette
County, KY. Principal-in-Charge. Provided
services for development of a operations
analysis for Lextran. An in-depth analysis
of the system's operations including route
and ridership analysis, ADA compliance,

Comprehensive Operations Analysis,

and ridership analysis, ADA compliance, maintenance systems, and types of equipment were conducted. Multiple recommendations were made to reduce costs, improve revenues, and improve overall operational efficiency.

On-Call Services, Lexington Transit Authority, Fayette County, KY. Principalin-Charge. Provided services for a planning and engineering on-call contract to provide various services. Major tasks included an inventory of more than 1,000 bus stops and development of a standalone GIS platform for data analysis and delivery, and route change recommendations.

I-64 and Hurstbourne Parkway Interchange, Jefferson County, KY. Project Engineer.

Provided services for preliminary and final design for reconstruction of a directional interchange and other improvements to mitigate congestion in a densely developed urban area. Project involved development of a CORSIM traffic model that was used to evaluate the benefits of carious alternates and ramp configurations. The proposed configuration of the interchange will include 10 ramps. A portion of the interstate of Hurstbourne Parkway will also be reconstructed. Major tasks included development of preliminary alignments including one flyover ramp, roadway design, field survey coordination, preliminary bridge layout, right-of-way, and plan preparation. Estimated construction costs for this project are \$44 million.

Danville Small Urban Area Study, Boyle

County, KY. Principal-in-Charge. Provided services for a planning study to identify and analyze transportation issues related to safety and congestion in the City of Danville and its surrounding area. Short-term and long-term recommendations were developed. Major tasks included assistance in development of recommendations, construction cost estimation, and report development.

I-265 Programming Study, Jefferson

County, KY. Principal-in-Charge and Highway Engineer. Providing services for a strategic programming study to identify and evaluate improvements for I-265 from I-65 to the new East End Bridge in Louisville. The study focused on short-term and long-term solutions by examining future transportation needs. Major tasks included assistance in development of recommendations, construction cost estimation, and report development.



EDDIE MESTA, PE

STAKEHOLDER ENGAGEMENT Transportation Design, Integrated Engineering

EducationBS, Civil Engineering, University of Kentucky, 1995

Registrations PE/KY/#22048

Years of Experience With IE: 23 With Other Firms: 0

Eddie provides a wide array of experience for both public and private sector clients. He is responsible for design in transportation, wastewater collection, stormwater drainage, site development, and water supply for private and public entities. His experience includes public involvement and stakeholder coordination, bidding, construction administration, easement acquisition, and presentations.

US 42 Weaver Road (KY 842), KYTC District 6, Boone County, KY. Subconsultant Project Manager. As a subconsultant to AECOM, IE provided field surveying & CADD assistance for the development of the boundary and topographic survey that was utilized as the basis of design and right-of-way plan preparation of the project corridor.

City of Berea Comprehensive Traffic Study, Madison County, KY. Project Manager. Overseeing the planning and preliminary design in providing a comprehensive traffic evaluation of downtown Berea including the central campus of Berea College. The scope of services included the creation of a micro-simulation model of downtown Berea using PTV VISSIM software consisting of multiple signalized and intersections and pedestrian crossings. Various alignment alternatives were considered as part of this study process. Coordination is also being conducted with the Kentucky Transportation Cabinet, Berea College, and other key stakeholders.

Pear Orchard Road Corridor Study, City of Elizabethtown, Hardin County, KY. Project Engineer. Assisted the City of Elizabethtown in the planning and conceptual design of the Pear Orchard Road and Pear Orchard Road NW roadway improvements. Responsibilities included participation in numerous planning meetings as well as key stakeholder and public meetings. Was also responsible for utility coordination.

New Circle Road NE Scoping Study, Fayette County, KY. Involved in the scoping study for the 6-mile signalized portion of the New Circle Road NE corridor. Facilitated numerous focus group and public meetings throughout the duration of the project. The results of the study produced various design alternatives with preliminary construction cost estimates. The Lexington Area MPO also participated in this study. Involvement also included participating in presentations to the Lexington - Fayette Urban County Council.



ALI AZIMI, PE

LOCATION IDENTIFICATION
Senior Traffic Engineer, AECOM

Education MS, Civil Engineering, University of Akron, 2013 BS, Civil Engineering, Tehran Polytechnic, 2011

Years of Experience With AECOM: 1 With Other Firms: 0

drafting the final report.

Registrations PE/OH/#82798 PTOE/#4410 **Affiliations**

American Society of Civil Engineers

Institute of Transportation Engineers

American Society of Highway Engineers

Engineers without Borders
Engineering Club of Columbus

Ali is a Traffic Engineer with 7 years of experience performing operation analysis, corridor and intersection improvement studies, and safety analysis/studies. He also has experience with traffic counts collection, signing, and pavement marking design; maintenance of traffic design, signal design, and level of service analysis; and hands on ITS design. He is well-versed in the use of TransModeler, Synchro, VISSIM, Highway Capacity Software, SignCAD, Sidra, AutoCAD, MicroStation, ArcGIS, and Microsoft Suite products. In addition to his Ohio Department of Transportation (ODOT) prequalifications in Traffic Signal Design, Safety Study, and he has successfully completed the FHWA-NHI "Modern Roundabouts: Intersections Designed for Safety", ODOT "Maintenance of Traffic", "Traffic Signs and Pavement Markings", "Highway Safety Manual Freeway Analysis", and "GCAT Training".

STA-77-8.40/VAR Bridge Replacement, ODOT, Stark County, OH. Traffic Modeler. Responsible for preparing
TransModeler model and running the simulations to evaluate detoured traffic impacts on the network during replacement of bridges 9.12 and 9.37. Preparing quantities and cost estimate for detour signs and traffic signal modifications. Assisting with

General Engineering Services, CLA-41-12.04, ODOT, Clark County, OH. Traffic Engineer. Responsible for signal design at SR-41 and Titus Road/Ridge Road and preparing signal plans.

Statewide Signal Timing Analysis, ODOT, OH. Traffic Engineer. Responsible for collecting travel time, building synchro models, adjusting signal timing and coordination, and performing cost-benefit analysis.

Amazon Air/Ground Hub at Cincinnati/Northern Kentucky International Airport, KY. Traffic Engineer. Responsible for designing span wire traffic signals and preparing the signal plans.



SAM KLOPPING, EIT

LOCATION IDENTIFICATION

Traffic Engineer, AECOM

Education BS, Civil Engineering, University of Cincinnati, 2019 Registrations

Years of Experience With AECOM: 1 With Other Firms: 0

Sam is a Graduate Traffic Engineer who recently joined the AECOM Team in Cincinnati. He recently became an Engineer in Training in the state of Ohio. He is skilled in Microstation, GEOPAK, AutoCAD, Synchro, SignCAD, Excel, Access, Estimator, Bluebeam, and MATLAB. He gained valuable experience as a co-op for both the Ohio Department of Transportation (ODOT) as well as with an engineering firm.

District 7 Traffic Engineering Services, KYTC,

KY. Graduate Engineer. This project involves a staff augmentation contract for KYTC's District 7 Office. Studies include traffic signal requests, speed studies and other traffic engineering studies, supervision of the district electrical contractor, and assisting with the day-to-day operation and management of the district's 277 traffic signals and 15 closed loop systems that are outside of Fayette County.

KY 17 Improvements, KYTC D6, Subconsultant to EA Partners, KY. Graduate Engineer. Aided in the traffic forecast calculations and Synchro model development of alternatives in order to compare various impacts of each alternative.

I-74 and Dry Fork Road Origin-Destination Study, Engineering Firm, OH. Civil Engineer. Helped analyze and redesign intersection at I-74 and Dry Fork Road using HCS and Microstation. Organized an Origin-Destination study in Hamilton by setting up Bluetooth scanners and sorting the data in Microsoft Access. Retimed signals at multiple intersections through Synchro. Gathered field data and helped develop a database for multiple County Asset Management projects.

Signal and Sign Design, ODOT, OH. Civil Engineer. Assisted the department in signal and sign design, as well as mapping detours. Used SignCAD and Synchro, and signal cabinets. Focused on water management and drainage design. Used Microstation and GEOPAK to design culverts and other drainage systems in both 2D and some 3D. Helped design and draft roadway plans, estimated costs of projects, and went on field visits. Effectively used Microstation, GEOPAK, and Estimator.



WILL BERG, EIT

LOCATION IDENTIFICATION
ITS & Traffic Engineer, AECOM

Education BS Georgia Tech. University, 2016

Years of Experience With AECOM: 4 With Other Firms: 0 Registrations

Georgia Section ITE Southern District ITE ITE

Will is a probe speed data analyst with traffic signal operations experience. His background on multiple regional projects have allowed him to leverage data science to manage signal timing efforts and diagnose the impact of signal operations on congestion hot spots. He joined the AECOM Signal Operations team in January 2017. He gained valuable signal operations experience working on GDOT Signal Retiming projects in the metropolitan Atlanta area, culminating in him leading the Boulevard retiming project from start to finish in April 2018. Since then he has served as a data analyst and remote signal operator at the GDOT Traffic Management Center and is now leading a team of remote operators for the Regional Traffic Signal Operations contract.

Regional Traffic Signal Operations On-Call Contract, GDOT Districts 1 & 6, North GA. Remote Operations
Center Team Lead. The Regional Traffic Signal Operations is a \$20 million contract involving approximately 16 FTEs managing 900 GDOT traffic signals. He was Team Lead for the Remote Operations Center (ROC), a team of engineers that proactively asses signal system operational status and respond to roadway incidents. Ranging from Operational Improvement Studies to identification of capacity bottlenecks, this diverse program has made measurable impacts to traffic operations in areas by facilitating signal timing, maintenance activities and maintaining communications.

Regional Traffic Operations Project, GDOT, Atlanta, GA.

Traffic Signal Operations Specialist. Provided services for the program that manages more than 1900 signals in the greater Atlanta metropolitan area. Monitored and responded to live traffic events as well as provided probe speed data analytics to drive and evaluate signal operational changes in the region.

Regionwide Signal Timing Task Order, Boulevard,

Atlanta, GA. Junior Signal Timing Engineer. Provided services for retiming project that involved 19 signals in downtown Atlanta, GA. Led all retiming efforts including intersection inventory, clearance calculations, count data collections, Synchro modeling, field fine tuning and benefit cost analysis.



JASON RAMLER, PE

ALTERNATIVE DEVELOPMENT
Senior Roadway Engineer, AECOM

Education BS, Civil Engineering, University of Cincinnati, 1997

Registrations PE/KY/#26837

Years of Experience With AECOM: 21 With Other Firms: 0

Jason's design experience includes roadway and trail geometrics, drainage, pavement design, maintenance of traffic, signing and striping, noise barriers, culverts, utilities, sidewalks, parking lots, right-of-way plans, and construction cost estimating. He has extensive experience using InRoads, OpenRoads, Civil 3D, and ArcGIS. He has over 20 years designing and planning of projects involving highways, trails, bicycle and pedestrian facilities, and site development.

Man O'War Small Area Study, KYTC, Lexington, KY.

Project Engineer. Provided services for a collaborative effort with KYTC D7 and LFUCG to develop short- and long-term improvement projects in the vicinity of Man O'War Boulevard east of I-75. Some of the suggested projects have been implemented or are moving forward. This study involved large amounts of data collection to define the existing situation and evaluate which areas suffered the most severe traffic congestion.

US 42 Weaver Road (KY 842), KYTC District 6, Boone

County, KY. Roadway Designer. AECOM proposed a quadrant intersection in lieu of traditional. This allowed for a 2-phase operation of the signal at the main intersection. The quadrant intersection performed the best and satisfied the purpose and need of the project in a cost-effective manner. Due to right-of-way constraints and geometrics, the southeast corner was selected as the location for the new quadrant road. The traffic analysis and preliminary line and grade were completed in August 2013 and the roadway design is currently under construction. Overall, the project was tailored to be relatively low-cost with high benefits in terms of reducing congestion, improving air quality,

Town Branch Commons, LFUCG, Lexington, KY. Train and Park Engineering Design. AECOM is LFUCG's program manager for the Town Branch Commons, a proposed linear park and trail system running through downtown Lexington and connecting to the Legacy Trail. As the program manager, AECOM manages the work of other consultants, coordinates between multiple government agencies and stakeholders, and manages project grant funding, budget, and schedule. Provides engineering assistance related to the trail and park design, engineering reviews of plans produced by other consultants, utility coordination, and cost estimating.



CRAIG KLUSMAN, PE

ALTERNATIVE DEVELOPMENT
Senior Structures Engineer, AECOM

Education

MS, Civil Engineering, Virginia Polytechnic Institute & State University, 1998

BS, Civil Engineering, University of Kentucky, 1997

Years of Experience

With AECOM: 21 With Other Firms: 0

Registrations PE/KY/#22558

Craig has 21 years of experience and is responsible for the project management, marketing, analysis, design, details, rehabilitation, inspection, and seismic analysis for all types of highway structures, including complex and long span bridges. He manages the structural engineering group in the Louisville office that is responsible for bridge design, bridge rehabilitation design, and long-span bridge inspections.

Bridging Kentucky, KYTC Highway, KY. Structure Program Lead. Craig is part of the executive leadership team on the \$800 million program to replace or rehabilitation up to 1,000 structurally deficient bridges. As the structures program lead, Mr. Klusman oversees consistency, provides direction, and facilitates coordination across multiple disciplines for over twenty structural discipline leads. Mr. Klusman also contributed to the development of the program charter, project development directives, design-build instructions to proposers, and the structures playbook.

Bridge Improvement Plan, Louisville Metro Public Works,

KY. Project Manager. An inventory of over 300 short-span bridges and culverts was conducted in Jefferson County for Louisville Metro Public Works. Inspection forms were developed and programmed into handheld computers for data entry and GPS tracking. The structures are being inventoried for ease of future inspections and evaluated for repairs or replacement along with cost opinions for each recommendation. The client was continuously informed on the project's status through notification of significant findings and presentations at milestone dates. AECOM received a 10 out of 10 on the Client Satisfaction Rating.

Statewide NBIS Safety Inspections, KYTC, KY. Project

Manager. NBIS Safety Inspections including collection of element level data as defined by the National Bridge Inspection Standards and the AASHTO Manual for Bridge Element Inspection was conducted as assigned by KYTC. Inspection reports will be prepared using AASHTOWARE Bridge Management software. Assignments are across the state including single and multi-span bridges, multi-cell reinforced concrete box culvert and metal structures.

Statewide Fracture-Critical Inspections, KYTC, KY.

Qualified Team Leader. AECOM provided fracture critical inspection of numerous bridges throughout Kentucky. Structure types included two-girders bridges, multi-girder bridges with steel bent caps, post-tensioned concrete bridges, and a deck truss.



DAVE WORMALD, PE, AICP

PRIORITIZE/PROGRAM RECOMMENDATIONS
Senior Project Engineer, AECOM

Education MCP, Urban and Regional Planning, University of Cincinnati, 2010

BS, Civil Engineering, University of Kentucky, 1992

Years of Experience With AECOM: 28 With Other Firms: 0

Registrations PE/KY/#19646

Affiliations American Institute of Certified Planners

American Society of Civil Engineers

Dave's experience includes transportation planning, highway/ site design and structural design, environmental documentation and travel demand forecasting, railroad engineering and GIS spatial analysis. He has also been an integral member of consultant teams for integrating landuse into transportation projects. He is familiar with federal and statewide transportation planning requirements and funding programs and the Ohio Department of Transportation (ODOT) project development process. He has more than 27 years of diverse experience and expertise in the planning, design, and construction administration of major infrastructure projects.

US 42 Weaver Road (KY 842), KYTC District 6, Boone County, KY. Final Design Phase Project Manager. The project allowed for a two-phase operation of the signal at the main intersection. The quadrant intersection performed the best and satisfied the purpose and need of the project in a cost-effective manner. Due to right-of-way constraints and geometrics, the southeast corner was selected as the location for the new quadrant road. The traffic analysis and preliminary line and grade were completed in August 2013 and the roadway design is currently under construction. Overall, the project was tailored to be relatively low-cost with high benefits in terms of reducing congestion, improving air quality, improving safety, and increasing route reliability. This project opened in August 2019 and has proved to be a tremendous success for the Cabinet.

Bright I-74 Study, Ohio Kentucky Indiana Regional Council of Governments (OKI), Dearborn County, IN. Project Manager. Led this multimodal corridor study evaluating concepts to improve travel from Bright, Indiana to Interstate 74 in northeastern Dearborn County, Indiana. The project includes substantial stakeholder and public involvement and creation of a subarea travel demand model, environmental red flag summary and conceptual level engineering for improvements to the existing county roadway network as well as several new off alignment connectors following INDOT 3R design criteria. The project was completed in fall 2016.

Butler County Miami 2 Miami Action Plan, Green Umbrella, Butler County, OH. Project Manager. Led this planning project to evaluate the feasibility of non-motorized bike and pedestrian facilities along 2 corridors link trail networks along the Little and Great Miami Rivers in southern Butler County, Ohio. AECOM is serving as a subconsultant to Human Nature, Inc.



GEORGE MOHAN, PE, PTOE

PRIORITIZE/PROGRAM RECOMMENDATIONS
Senior Traffic Engineer, Ohio, AECOM

EducationBS, Civil Engineering, Cleveland State University, 2004

Years of Experience
With AECOM: 1
With Other Firms: 15

Registrations
PE/OH/ #76265
PTOE/TBCB-USA/#3436

George brings 15 years in traffic engineering including signing design, pavement marking design, traffic signals, highway lighting, and maintenance of traffic. His expertise includes state and local design and plan production standards. In addition to his traffic design experience, He is also experienced in traffic operations analysis, corridor progression analysis, safety studies, interchange modification/justification studies, traffic impact studies, crash analysis, traffic signal and turn lane warrant analysis and traffic data collection. He is responsible for leading complex traffic design tasks when working on roadway improvement projects and frequently leads the development of traffic studies. His engineering analysis and design software knowledge includes SignCAD, HCS, Synchro/SimTraffic, Visual, MicroStation, GEOPAK, and AutoCAD.

Middleton Road Intersection Improvements, Avon, OH.

Lead Traffic Engineer. Investigated capacity concerns at the Jaycox Road/Middleton Drive and Middleton Drive/Avon Commons Drive intersections. The 2 intersections evaluated the need for traffic signals based on applicable signal warrant criteria in the OMUTCD. In addition, all-way stop-control was investigated at the Middleton Drive/Avon Commons Drive intersection per the OMUTCD guidelines. Highway Capacity Software (HCS7) was utilized to perform capacity analysis in the AM and PM peak periods for existing and build conditions. A new traffic signal was warranted at the Jaycox Road/Middleton Drive intersection. Traffic signal control and all-way stop-control were not warranted at the Middleton Drive/Avon Commons Drive intersection. The proposed build condition extended northbound and southbound left turn lanes at the Jaycox Road/ Middleton Drive intersection and constructed an exclusive southbound right turn lane at the Middleton Drive/Avon Commons Drive intersection. [Prior to AECOM]

VAR-STW Safety Studies (No. 2018-2 (CMT), 2018-3 (Lanham), 2018-4 (LJB) & 2019-1 (Mead & Hunt), Ohio Department of Transportation (ODOT), OH. Providing traffic and safety engineering services on 4 statewide safety study task order agreements. Task orders support ODOT's Highway Safety Improvement Program which works to improve safety by implementing improvements at high-crash and severe-crash locations. Engineering work tasks include crash scrubbing, development of collision diagrams, signal warrant analysis, queuing analysis, intersection and freeway capacity analysis including microsimulation, signal timing recommendations and implementation, countermeasure development and cost estimating. [Prior to AECOM]

AVAILABILITY TABLE

This table shows the percentage of time available to this project from AECOM Team personnel.

Key Staff Member Availability for the duration of this Contract

NAME	POSITION	% AVAILABLE TO THIS PROJECT
Vanessa Nghiem, PE, PTOE	Project Manager/Stakeholder Engagement Lead/Location Identification Lead/Alternative Development	60%
Paul Slone, PE, PTOE	Alternative Development Lead	50%
John Callihan, PE, PMP, LEED AP BD+C	QA/QC	40%
Brian Meade, PE	Stakeholder Engagement/Prioritize/Program Recommendations Lead	45%
Arlen Sandlin, PE (IE)	Alternative Development	50%
Eddie Mesta, PE (IE)	Stakeholder Engagement	50%
Ali Azimi, PE	Location Identification	60%
Sam Klopping, EIT	Location Identification	75%
Will Berg, EIT	Location Identification	65%
Jason Ramler, PE	Alternative Development	50%
Craig Klusman, PE	Alternative Development	30%
Dave Wormald, PE, AICP	Prioritize/Program Recommendations	50%
George Mohan, PE, PTOE	Prioritize/Program Recommendations	60%

03 THE AECOM TEAM ADVANTAGE

The AECOM Team possesses the subject matter expertise, relevant experience, and the strong, strategic approach necessary to successfully support the LFUCG, the Lexington Area MPO, and other stakeholders involved in the Lexington Area Congestion Management Bottleneck Study.

A FAMILIAR TEAM

The AECOM Team includes AECOM and Integrated Engineering, Inc. (IE), a certified Disadvantaged Business Enterprise (DBE) with KYTC. The AECOM Team's DBE participation for this project is expected to be 10-15%. Most recently, AECOM, also joined by IE as a subconsultant successfully updated the Lexington Area ITS Architecture Update, led by our proposed Project Manager, Vanessa Nghiem, PE, PTOE.

Our team brings a unique blend of local knowledge and national Congestion Management expertise to this project. Our familiarity with the CM Network in the MPO 2-county area is strong. In addition to assisting the Lexington Area MPO with the ITS Architecture, we have performed numerous projects in the region for not only LFUCG but also KYTC District 7, namely the Man O'War Small Area Study and the US 27 Access Management Plan.

We look forward to working with various data sources, including INRIX data, NPMRDS, HEPGIS and the MPO transportation planning forecast models to aide in the identification of roadway bottlenecks on the CM network. We will have assembled a multi-disciplinary team in order to brainstorm alternatives to improve congestion in the identified areas and create a prioritized plan for implementation of these improvements, including preliminary engineering costs. Our familiarity with many of the stakeholders will greatly benefit the project process. Our project manager, Vanessa Nghiem, PE, PTOE, will lead the stakeholder meetings, delivering information in a relaxed, comprehendible format, and providing stakeholders the knowledge base to understand the value of alternatives and a decision matrix. The goal is to program good projects for the future that will meet the needs of the region in the most congested areas.

AECOM understands the interactions between transportation planning and transportation operations. We have direct, hands-on experience applying Federal Highway Administration (FHWA) guidance on developing

an objectives-driven, performance-based approach to incorporating congestion analysis and planning.

AECOM is pleased to present the specialized experience and technical competence of the team on the following pages. Our local project manager, Vanessa has worked closely with many local stakeholders. Supporting Vanessa on this project, Paul Slone, PE, PTOE, our Alternative Development Lead has a deep background in traffic analysis and design simulation with nearly 30 years of experience, including time as the Traffic Manager with LFUCG.

This project will be led from our Louisville and Cincinnati offices.



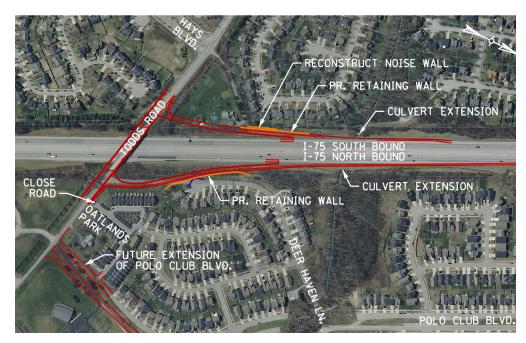
Vanessa Nghiem, PE, PTOE, AECOM Project Manager.

04 SIMILAR STUDIES

To expand on the qualifications we have shown in the preceding pages, we provide further details on several of our team's successful local and regional projects. Our project experience demonstrates our congestion management expertise, as well as our history of success in managing transportation and traffic projects locally in the central Kentucky area.

MAJOR SCOPE OF WORK ELEMENTS

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	CONGESTION MITIGATION	LEXINGTON AREA MPO REGION	STAKEHOLDER ENGAGEMENT	INNOVATIVE DESIGN	MULTIMODAL IMPROVEMENTS	MICROSIMULATION	ALTERNATIVE DEVELOPMENT AND PRIORITIZATION
Man O'War Small Area Study Lexington, KY	\checkmark	√	√	\checkmark	\checkmark	\checkmark	✓
US 27 Access Management Plan Jessamine and Fayette Counties, KY	\checkmark	√	√	\checkmark	√	\checkmark	√
Hamburg Corridor Traffic Signaling Lexington, KY with Integrated Engineering	\checkmark	✓				✓	
Regional Traffic Signal Operations On-Call Contract Districts 1 & 6, North GA	\checkmark					√	
US 42 Weaver Road (KY 842) Boone County, KY with Integrated Engineering	✓			✓	√	✓	✓
I-71/I-265 Interchange Planning Study Jefferson County, KY	\checkmark					\checkmark	√
Winchester Road (US 60) Corridor Study Lexington, KY	\checkmark	√				\checkmark	
KY 313 Widening, Patriot Parkway to Bullion Boulevard Connector Hardin County, KY	\checkmark			\checkmark		\checkmark	√



Client KYTC D7 and LFUCG

Similar Services

Congestion Mitigation Lexington Area MPO Region Stakeholder Engagement Innovative Design Multimodal Improvements Microsimulation Alternative Development and Prioritization

Project Duration 2015-2016

Key Contact Details Kelly Baker, PE (859) 246-2355

Kev Staff

Vanessa Nghiem, PE, PTOE Jason Ramler, PE Craig Klusman, PE

AECOM

Man O'War Small Area Study

LEXINGTON, KY

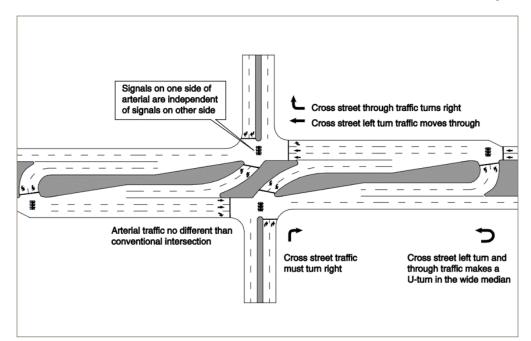
AECOM was tasked by the Kentucky Transportation Cabinet (KYTC) and Lexington-Fayette Urban County Government (LFUCG) to develop short-term and long-term improvement projects for the Man O'War Small Area in the vicinity of I-75 on the east side of Lexington, KY. The study area stretches from Sir Barton Way to the west, Polo Club Boulevard to the east, US 60 to the north and Man O'War Boulevard to the south.

In addition to reduction in congestion, the goal was to improve safety and mobility for all modes of transportation in the area and improve route reliability. Lexington does not have a north-south expressway, so I-75 is also used by local traffic as an expressway for the east side of greater Lexington. The land use in the area is a mix of commercial retail, food service, entertainment, office and residential. This mix of different traffic generators makes the area congested throughout the weekday and on weekends.

A wide variety of data was collected including traffic volume data, crash data, traffic signal timing, planned future developments, etc. Traffic queues were measured in several locations and an inventory of pedestrian, bicycle and transit facilities was performed. This data defined the existing situation and indicated which areas suffered the most severe traffic congestion, as well as other areas identified for improvement.

Once alternatives were developed, preliminary cost estimates for these alternatives were formulated, and the alternatives were grouped in order of their recommended implementation. Alternatives range from short term, relatively low cost "quick fix" types to long term, and more costly options. The projects ranged from added turn lanes to a tunnel under I-75 to a partial interchange.





Client

KYTC District 7

Similar Services

Congestion Mitigation Lexington Area MPO Region Stakeholder Engagement Innovative Design Multimodal Improvements Microsimulation Alternative Development and Prioritization

Project Duration 2011-2017

Key Contact Details

Kelly Baker, PE (859) 246-2355

Kev Staff

Vanessa Nghiem, PE, PTOE Paul Slone, PE, PTOE Brian Meade, PE

AECOM

US 27 Access Management Plan

JESSAMINE AND FAYETTE COUNTIES, KY

AECOM was commissioned by the KYTC District 7 office to study the US 27 Corridor from Man O'War Boulevard in Fayette County, southward, to the northern access control line of the proposed East Nicholasville Bypass in Jessamine County.

The primary goal of the plan was to establish a specific set of access permitting guidelines to be accepted and enforced by multiple agencies that have funding or land use decision making power in the corridor.

Local access spacing and design requirements are often different from KYTC's requirements, and this created confusion with respect to which set of requirements should take precedence is a particular situation.

This establishes both a common vision for the future, enhances safety and improves long term traffic operations. This final plan establishes both spacing requirements and defined short and long term projects for implementation with additional strategies for sustaining the current 4-lane US 27. Strategies included controlling access locations, utilizing U-turn and loon intersections and construction quadrant intersection as the graphics below represent.

Fortunately, the elected leadership of the City of Nicholasville and Jessamine County realized that an

Access Management Plan was needed for US 27 between Nicholasville and Lexington. This helped with getting the plan enacted through a Memorandum of Understanding (MOU). The memorandum is a multi-agency agreement that outlines the roles and responsibilities of the Kentucky Transportation Cabinet and local planning agencies, establishing a commitment to the vision and purpose of this plan. After a presentation with Secretary Hancock on the plan, he openly praised the AECOM and District staff for developing a successful partnership with the community.

In 2016 AECOM was selected by KYTC to provide Preliminary Engineering Services, including preparation of engineering studies, typical sections, utility impacts, drainage, cost estimates, public engagement activities, and the approval of a CE Level I NEPA document. Several Alternates were considered and the Project Team recommended the conversion of 7 intersections to "superstreet intersections", AKA Restricted Crossing U-turns (RCUT).





Client

Similar Services

Congestion Mitigation Lexington Area MPO Region Microsimulation

Project Duration 2018-2019

Key Contact DetailsJeff Neal, PE
jneal@lexingtonky.gov

Kev Staff

Vanessa Nghiem, PE, PTOE Paul Slone, PE, PTOE Arlen Sandlin, PE (IE)

AECOM



Hamburg Corridor Traffic Signal Retiming

LEXINGTON, KY

AECOM was a subconsultant responsible for developing 4 weekend timing plans for the Hamburg Corridor in Lexington, KY. The corridor included 23 intersections on 3 major routes, Winchester Road, Sir Barton Way, and Man O'War Boulevard.

This was one of the most advanced traffic signal retiming projects performed in Kentucky to date.

This project was unique compared to most traffic signal retiming projects. The weekend traffic volumes and flow patterns contrast starkly with average weekdays. The variety of land uses such as retail, office, residential, hotels, restaurants, entertainment venues, and churches make the Hamburg area is a city unto itself. As a large retail center, Hamburg is a significant regional attraction and has high seasonal variability.

Project highlights include:

- Programming 2,070 controllers with the new Intelight firmware
- Working remotely through a secure VPN connection with Intelight's MaxView central server platform to:
- Program controller databases
- Perform field adjustments to timing parameters and schedules
- Setup traffic responsive operation
- Used split monitor and other tools to assess system performance
- Developed locations for system detectors

- ▶ Utilized TruTraffic software to assist with field adjustments
- Before/After evaluation performed using Inrix, a thirdparty transportation data analysis platform

The project team developed resilient plans and worked to setup traffic responsive operation at the end of the project to allow the system server to choose the best plan for the prevailing traffic conditions. The project area was broken into 2 zones with independent schedules and timing patterns. In both subnetworks, shorter cycle length patterns were developed for the morning and evening hours, while longer cycle lengths were proposed on Man O'War Boulevard for the peak shopping times (mid-day and afternoon) on Saturday.

The desired outcomes for the new timing patterns included:

- Reduce or eliminate in the number of cycle failures on Sir Barton Way approaching Man O'War Boulevard
- Create balanced, bi-directional progression on all routes
- Reduce side street delays
- ► Goal v/c ratio of 0.8 to 0.85, where practical, to reserve capacity for random spikes in traffic volume

The project greatly improved performance on the worse roadway segment in the corridor; Sir Barton Way at Man O'War Boulevard. The time to exit the development at Man O'War Boulevard was reduced by more than 100 seconds through repeated simulation and field experimentation of different phasing sequences to most efficiently move traffic. Other performance improvements documented by the Inrix data also included greater system reliability, improved travel time, and more uniform speeds reported for most of the weekend.

AECOM

20



Client

Similar Services Congestion Mitigation Microsimulation

Project Duration 2017-Ongoing

Key Contact Details Kate Shearin, PE, PTOE (404) 635-2842

Key Staff Paul Slone, PE, PTOE Will Berg, EIT

AECOM

Regional Traffic Signal Operations On-Call Contract

DISTRICTS 1 & 6 (NORTH GA)

AECOM is providing support for traffic signal operations through corridor retiming, post conversion MaxTime database validation, advanced traffic signal programming, remote management of signal systems, signal inventory and preventative maintenance.

AECOM is providing GDOT with dedicated office and field personnel to perform services including Traffic Engineering Studies, preventative maintenance, bottleneck identification, traffic signal retiming, ATSPM setup and analysis, and active management of traffic signals in Districts 1 and 6 (North GA).

AECOM's project highlights include the development of a data driven reporting and tracking tools utilizing a custom built SharePoint site, as well as implementing and calibrating traffic responsive programming. Our engineers and technicians are also leveraging the power of MaxTime's advanced user programming including controller peer-to-peer interactions, custom action plans, and custom alarms.

Projects under this contract include:

- Leveraging the RITIS platform for identification of bottlenecks
- Retiming multiple routes in small urban areas
- Implementing traffic responsive programming on
 Interstate parallel route for automated incident response
- ▶ 50 intersection studies in the City of Rome to evaluate phasing or lane assignment changes







Client KYTC District 6

Similar Services

Congestion Mitigation Innovative Design Multimodal Improvements Microsimulation Alternative Development and Prioritization

Project Duration 2013-2018

Key Contact Details Mike Bezold, PE, District 6 (859) 341-2700

Key Staff

Vanessa Nghiem, PE, PTOE Paul Slone, PE, PTOE Jason Ramler, PE Dave Wormald, PE, AICP Brian Meade, PE Eddie Mesta, PE (IE)

AECOM



US 42 Weaver Road (KY 842)

BOONE COUNTY, KY

US 42 at Weaver Road (KY 842) in northern Kentucky is located on a heavily traveled urban arterial corridor. This section of US 42 providing a connection to Interstate 75/71 from Union, KY to the south. Located approximately one mile west of I-75/71, Hopeful Church Road/Weaver Road (KY 842) connects commercial and residential areas.

AECOM was selected in 2013 to conduct an alternatives analysis to evaluate alternatives to alleviate the existing congestion while minimizing costs and right-of-way impacts.

AECOM evaluated several alternatives. The intersection had heavy left turn volumes requiring long left turn phases resulting in congestion along both roadway corridors for through movements. Existing commercial properties located on all 4 quadrants of the intersection including a gas station made right-of-way acquisition costly. Additionally, there many subsurface and overhead utilities that would likely require relocation if additional turn lanes were to be added.

Based upon the analysis, AECOM proposed a quadrant intersection in lieu of traditional widening, adding turn lanes or a roundabout. The quadrant intersection concept allows for a two-phase operation of the signal at the main intersection by eliminating left turns. The 2-phase signal operation permits greater through put at the main intersection. The recommended alternative for implementation included a single connector road approximately 700 feet long located in the southwestern quadrant of the intersection. The heavy westbound and northbound left turn movements would be redirected to the connector road and secondary signals at either end spaced approximately 300 feet from mainline intersection. This

quadrant intersection configuration performed the best and satisfied the purpose and need of the project cost effectively.

AECOM subsequently prepared detail plans for the connector road and new signals which were completed early 2018. The profile and geometry of the connector road were established to provide adequate spacing and storage between the existing and new secondary signals while minimizing impacts to the adjacent commercial properties .

Access management improvements modified existing commercial drives on US 42 to right in and right out between the new quadrant road connections and the mainline intersection.

The project also included the addition of new sidewalks on Weaver Road within the project limits. This created dedicated pedestrian facilities where none previously existed.

The intersection opened to the public in fall 2019. While there were concerns expressed by the public over the loss of the of the left turns on US 42 prior to opening, the intersection has operated as intended resulting in improved and more reliable travel time for residents and businesses with reduced costs and impacts compared to a conventional intersection. The quadrant road also provides new access for adjacent property owners and accommodations for pedestrians.

This unique intersection improvement is one of the first of its kind implemented in Kentucky and 4th in the nation and has been included as a case study in the recently published

Federal Highway Administration QUADRANT ROADWAY INTERSECTION Informational Guide.



Client KYTC

Similar Services

Congestion Mitigation Microsimulation Alternative Development and Prioritization

Project Duration 2008-2010

Key Contact Details Paul Davis, PE

Paul Davis, PE (502) 210-5400

Key Staff

Vanessa Nghiem, PE, PTOE Paul Slone, PE, PTOE Brian Meade, PE Craig Klusman, PE

AECOM

I-71/I-265 Interchange Planning Study

JEFFERSON COUNTY, KY

AECOM was selected in 2008 to provide preliminary engineering and environmental services for evaluating alternatives to improve the operation of the interchange of I-71 and I-265 (Gene Snyder Freeway) in Louisville, KY. The project evaluated both long-term alternatives as well as short-term spot improvements.

Environmental Services:

AECOM provided the environmental documentation for this interstate interchange project. An overview was prepared to define red flag issues and avoidance and minimization efforts.

Short-Term Alternatives:

The following short-term alternatives were considered by the project team:

- Addition of an auxiliary lane from I-71 SB to I-265 SB
- ▶ Widening the existing I-71 NB ramp to I-265 SB to 2 lanes
- ▶ Adding an auxiliary lane from I-265 NB to I-71 SB
- All the proposed spot improvements will be designed to fit within the future long-range alternatives

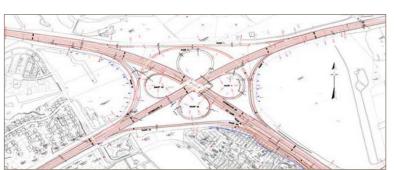
Long-Term Alternatives:

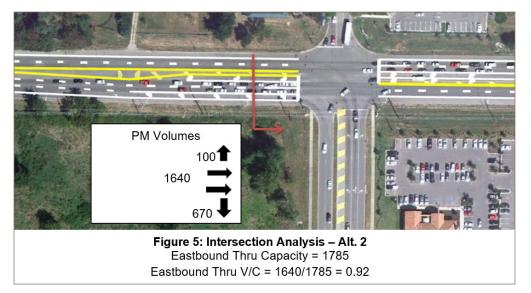
- ➤ A flyover ramp from I-265 NB to I-71 SB. This ramp would be 2-lane and eliminate the current merge/weave conflict at the existing ramps
- ➤ A flyover ramp from I-265 SB to I-71 NB this improvement is based on the completion of the east end bridge from Southern Indiana

Traffic Analysis:

AECOM collected tube counts on all segments approaching the interchange including a manual merge/weave count to analyze the existing ramps. The merge/weave analysis was analyzed using a VISSIM simulation model to show existing traffic conditions and future traffic conditions with the proposed alternatives. Future traffic volumes were generated by utilizing the KIPDA model and required close coordination with the Louisville Bridges Project Team. A HCS analysis was also prepared for FHWA to document the existing and future level of service.







Client KYTC

Similar Services

Congestion Mitigation Lexington Area MPO Region Microsimulation

Project Duration 2011-2012

Key Contact Details Kelly Baker, PE (859) 246-2355

Key Staff

Vanessa Nghiem, PE, PTOE Paul Slone, PE, PTOE

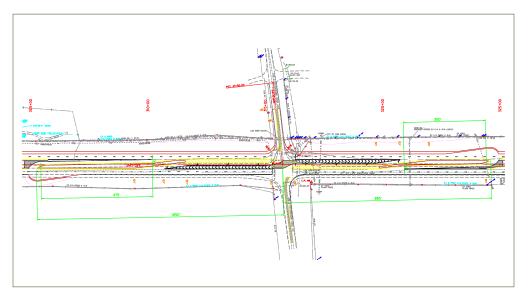
Winchester Road (US 60) Corridor Study

LEXINGTON, KY

AECOM

AECOM conducted a microsimulation analysis to evaluate proposed pavement marking options that would place a third eastbound lane on US 60 (Winchester Road) in Fayette County. The proposed lane started at Patchen Wilkes Drive on the west end, and ended at either Sir Barton Way or the I-75 interchange on the east end. Two alternatives were developed noted by

the different endpoint locations for the 3-lane section. We presented these 2 options to District 7 and it was decided that Alternate 2 was the preferred alternative. AECOM then provided striping plans. This solution used existing pavement to add capacity at a low cost with no major construction.



Client KYTC

Similar Services

Congestion Mitigation Innovative Design Microsimulation Alternative Development and Prioritization

Project Duration 2017-2020

Key Contact Details

Bradley Bottoms, PE bradley.bottoms@ky.gov

Kev Staff

Vanessa Nghiem, PE, PTOE

KY 313 Widening, Patriot Parkway to Bullion Boulevard Connector

HARDIN COUNTY, KY

AECOM

As part of the Statewide Roadway Design Services contract, AECOM was assigned this project to prepare Final Design plans for District 4. Right-of-way for the project was previously purchased for an ultimate 4-lane section. The project will widen the existing roadway to 4 lanes (12 foot) and provide a center median (40 foot). AECOM analyzed existing intersections which included evaluating operational capacity, turn lane

requirements, signal phasing, and alternative intersection configurations. J-turns were evaluated at two locations in order to combine closely spaced signalized and stop controlled intersections. Using the plans provided by District 4, AECOM met the project schedule developed in the scoping and had a Joint Inspection on January 16, 2018. The project was awarded to construction during the summer of 2018.

05 STUDY APPROACH

The AECOM Team provides a highly qualified team with broad skillsets and experience delivering congestion-relieving projects. We will begin work immediately with a clear project approach, which is outlined below. We have the experienced team leadership and familiarity of local conditions to deliver another successful project that will benefit the MPO, stakeholders, and all transportation users.

THE AECOM PROJECT TEAM

In talking with Max Conyers and Sam Hu about their goals for this project, Max summed it up very simply: "We want to program good projects". A straightforward statement, but it speaks volumes. We acknowledge the desire to pinpoint the areas where we can make a difference by reducing congestion and improving safety, with the understanding that the solutions need to be buildable. Not to say that larger projects would not be included in the recommended alternatives, but we must also explore cost-effective steps along the way that can still gain measurable results. The AECOM Team looks forward to the opportunity to partner with the Lexington Area MPO and LFUCG again to make a positive impact for the travelers in this region and improve the congestion management network. We have the local knowledge, relationships, technical expertise, creative designers and funding-savvy to deliver a program full of "good projects".

Cost-Conscience but Effective

Our Team takes great pride in our project successes in the Congestion Management arena. Our past work in the Lexington MPO area has improved traffic flow through a series of very modest projects. These include:

- Man O'War Small Area Study: AECOM worked with Kentucky Transportation Cabinet (KYTC) District 7 and LFUCG to examine ways to improve the area near I-75 on Man O'War Blvd and Winchester Road. AECOM provided short- and long-term solutions and used a tailored decision matrix, created in collaboration with stakeholders to determine a ranking of projects in order to prioritize funding. The solutions ranged from adding turn lanes to a new interchange to a tunnel under I-75 among others.
- ► <u>US 27 Access Management Study:</u> AECOM worked with KYTC District 7 office and area stakeholders to plan for development in southern Fayette/northern Jessamine County along the US 27 corridor. AECOM established a plan for strategic access points and presented alternatives for limiting access including a superstreet

- intersection with median U-Turns. AECOM continued the work into the design phase. Phase I design has been completed with recommendation and an approved Design Executive Summary.
- Winchester Road: The KYTC 2014 resurfacing of Winchester Road (US 60) presented an opportunity to repurpose pavement to relieve congestion. The District 7 office proposed paving over the grass median and AECOM determined that an asymmetrical cross section (two lanes inbound with three lanes outbound) was the best use of the new pavement. A third eastbound lane was added from Patchen Wilkes Drive to drop as a right turn lane at Sir Barton Way. This was a quick, low cost, creative solution.
- ▶ <u>US 27 at Man O' War Boulevard:</u> As a temporary solution, AECOM developed the AM peak period lane use control concept for northbound US 27 at Man O' War Boulevard. Recently removed from service by improvements made by The Summit development, this innovative concept solved the Man O' War bottleneck on Nicholasville Road until other improvements were implemented.
- ▶ Traffic Signal Systems: AECOM has assisted KYTC District 7 and LFUCG with a multitude of traffic signal retiming projects to address ever increasing growth and shifting traffic patterns in the Lexington Area. This includes the recent Hamburg Area Retiming, 23 signals across 3 corridors in Lexington, and various systems in Fayette County. These projects work to continually maximize the efficiency of the existing infrastructure.



Hamburg Corridor, Lexington, KY.

Innovative Intersection Solutions

Innovative intersection and interchange designs alter conventional vehicle, pedestrian and bicycle movements providing new options for reducing delay, increasing efficiency and providing safer travel for all users. The toolbox is expanding as adding width can no longer be the default solution on many roadways. With innovative designs and innovations in technology, the options to reduce congestion and provide route reliability on our roadways are increasing.

AECOM has a robust history throughout the Commonwealth of implementing practical solutions for congestion. One of the most recent examples of this occurred in Florence, Kentucky last year. AECOM designed a quadrant intersection at US 42 and Weaver Road. At the time of completion, this was one of six such intersections in the nation. This intersection has had a profound impact on solving congestion in the US 42 corridor. After much public skepticism, the \$3.2 million intersection opened in August 2019 with very positive reactions from the public. Below is a photo of the intersection and some comments received on the KYTC District 6 Facebook page.

The quadrant intersection and other innovative intersection solutions provide significant enhancements to safety, mobility and have proven value.

Safety

- Removal of Intersection Conflict Points
- Increased Access Management
- Speed Management

Mobility

- Reduced Delay and Congestion
- ► Improved Reliability
- ▶ Bicycle and Pedestrian Improvement Opportunities

Value

- ► Lesser Right-of-Way Impacts in Some Cases
- Decreased Construction and Life Cycle Costs
- ▶ Faster Construction
- High Benefit/Cost Ratios

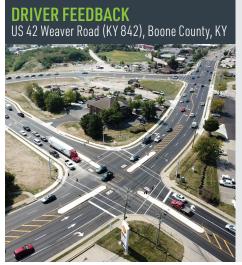
There are many tools in the congestion management toolbox. A short list of options in the toolbox include:

- Double Crossover Diamond interchanges
- Restricted Crossing U-Turn (R-CUT)
- ► Michigan U-Turn or Median U-Turns
- Continuous Flow Intersections (Displaced Left Turn)
- Quadrant Intersection
- Technology Solutions
 - ► Traffic responsive signal operation
 - Advanced detection systems (all transportation modes)
 - Connected and Autonomous Vehicle (CAV) applications
 - Intersections represent about 25% of all traffic fatalities and about HALF of all severe crashes (Source: FHWA)

AECOM has utilized all these designs across the county with several in Kentucky recommended/implemented by our key team members. Intersection concepts such as these provide high impact, and high value when applied properly.

Technology solutions are also very powerful. The LFUCG Division of Traffic Engineering has been a leader in innovation for the Commonwealth testing and deploying new technology. There are many on-street enhancements still to be leveraged with the new MaxView/MaxTime signal system including traffic responsive and adaptive capabilities.

The AECOM Team of experts are well versed in applying the best tool(s) for each specific congestion bottleneck. No two sites are alike. We will leverage these tools to achieve the maximum benefit of transportation users and available budgets.



- This intersection is soooo much faster! I love it!

 Takes 5 minutes or more off my drive each way! "
- I've finally been through here a few times over the past few days and **all I can say is WOW! IT WORKS!** Based on the pictures, I thought it would make the problem even worse, but nope, traffic is flowing great!
- Work out the timing of these two signals and I think it's safe to call this problem corridor resolved! Thank you for a great job!
- Works flawlessly!

PROJECT APPROACH

Local Knowledge

Our Key staff members have tremendous local knowledge of Lexington's historic and current operations. Here are a few examples:

Project Manager, Vanessa Nghiem, PE, PTOE

- ➤ 2014-Current District 7 Traffic Engineering Services Project Manager – In this role, Vanessa has worked on signal systems, small area studies, access management studies, intersection studies and with stakeholders across Central KY.
- ➤ 2020 Lexington Area ITS Architecture Project Manager – This project has an almost identical Stakeholder group to this Congestion Management Bottleneck Study. Vanessa conducted in-person and virtual stakeholder meetings.
- 2015 Lexington Area ITS Architecture Co-Project Manager

Alternative Development Lead, Paul Slone, PE, PTOE

- 2007-2014 District 7 Traffic Engineering Services Project Manager
- 2015 Lexington Area ITS Architecture Co-Project Manager
- ► Former Traffic Signal System Manager for the LFUCG
- Senior Technical Advisor as Subconsultant on Hamburg Retiming

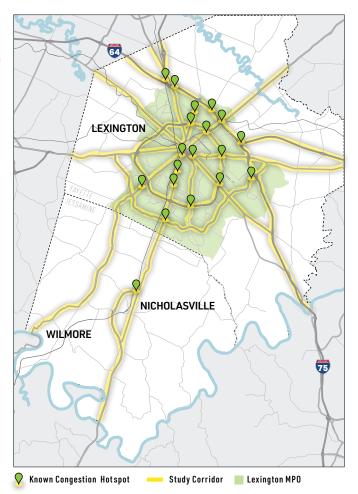
Stakeholder Engagement and Programming, Brian Meade, PE

► Town Branch Commons Assistant Program Manager-Stakeholder Coordination & Familiarity

The inclusion of Integrated Engineering (IE) to the team not only serves to promote a disadvantaged business, but brings "depth of bench" specifically to Stakeholder Engagement and Alternative Development. IE has assisted AECOM with these tasks on other projects and proven to be a valuable asset. Through the performance of the projects highlighted in this proposal, and more, the AECOM Team has collected and reviewed hundreds of hours of traffic data throughout the Lexington Area. We have had our feet on the streets and eyes on the most congested corridors.

Our past involvement in these and other successful Lexington Area projects provides perspective on where to initially focus efforts identifying bottlenecks. The map in the next column highlights known areas of recurring as well as non-recurring congestion (crash sensitive areas). Our analysis will begin here and follow the data to identify the next tier of congested sites.

The areas of focus highlighted on the map are not surprising to those who live and work in the Lexington Area. The arterial section of New Circle Road and multiple radial arterials are the usual suspects. Also highlighted on the map are the I-75/I-64 interchanges. An anecdotal scan of the news reveals many significant crashes that result in lane closures and traffic impacts.



Familiarity with Process

AECOM is well versed in the bottleneck identification process identified in the RFP. Our staff routinely uses both INRIX and the Regional Integrated Transportation Information System (RITIS) on similar projects. AECOM developed a very similar process for the Georgia Department of Transportation (GDOT). GDOT subscribes to the RITIS, which is a similar online platform to INRIX and includes INRIX data. AECOM developed a methodology for GDOT to identify bottlenecks and monetize the delay incurred by motorists. The delay costs were used to develop a benefit cost analysis of the solutions.

The AECOM Team has also used INRIX for the LFUCG. INRIX was utilized for generating the before and after comparisons for the signal retiming on the Winchester Road, Sir Barton Way, and Man o' War corridors in the Hamburg area.

As with any software tool, we have learned there are limitations. The formatted segments within INRIX may need refinement. Filtering and reconciling crash data with congestion hotspots will require a combination of manual review and spatial analysis to bring the full picture into focus. The INRIX data will be compared with other available data sets such as NPMRDS and HEPGIS to gain a comprehensive list of locations with congestion, high crash rates and poor travel time reliability, especially in comparison to national averages on similar segments.

SR 369 Bottleneck Evaluation

AECOM pioneered the use of probe data to identify bottlenecks for the Regional Traffic Signal Operations On-Call Contract. Below are some report samples of State Route 369 north of Lake Lanier. This is a popular residential and tourist area that presents unique seasonal, off-peak and weekend demands in addition to the typical AM and PM peak periods. Using the RITIS tool was essential for scanning a wide range of dates and identifying the seasonal impacts. This led to the development of customized signal timing strategies for SR 369 that better serve the conditions.



Once the study area statistics are compiled, we will manually review the listing to identify more than 30 sites for deeper analysis. The tasks will include:

Analyze INRIX Data for 2017-Present

- ► Look for increasing congestion at bottlenecks
- Include seasonal considerations such as school in or out of session
- Consider impacts of COVID-19 upon traffic patterns (may be assessed using 2020 data if available)

Requesting Crash Data

- Reconcile high crash locations with recurring bottlenecks
- Identify non-recurring congestion caused by high crash locations

Perform Field Reviews to Visually Assess Congestion Levels

- Utilize drone footage
- Leverage CCTV remote access possible with the Division of Traffic
- Visit sites
- Mix data and field experience

Use the MPO Transportation Planning Model to Look Forward on the 5-year and 10-year Horizons

- Expand the list of the historic locations
- Identify locations that may not have had historic issues but will in the future
- Detect where congestion may escalate more rapidly in the future

Our analysis will likely identify some simple maintenance level projects. With our understanding of the data, we may find locations with traffic signal operational issues, such as inoperable detection, that could be quickly solved. Identifying the root cause of congestion will be the key to recommending effective solutions.

Locations involving safety improvements will likely score well in benefit/cost-based prioritization model. Our AECOM Team has a thorough understanding of the process that the KYTC Highway Safety Improvements Projects staff have utilized through examination of Expected Excess Crashes (EECs), analyzing segments and intersections, filtering data, and use of pivot tables to narrow focus.

The program-level analysis should use both a systemic approach and crash analysis to identify locations of concern. This comprehensive analysis and the subsequent diagnosis and selection of countermeasures is a challenge our AECOM Team is well equipped for. We will start with the Transportation Cabinet's established methodology and look for ways to build upon it, which could include, but not be limited to the Highway Safety Manual and the analysis spreadsheets, the Interactive Highway Safety Design Model (IHSDM) or the Enhanced Interchange Safety Analysis Tool (ISATe). Our team is well versed in the execution of these analysis tools.

Analysis - Bottleneck Identification

Data Collection

These are challenging times to collect relevant data for transportation analysis. We will be leveraging recent data sources under the presumption that historical patterns will return at some point. To effectively move forward with this project and complete by the September 2021 deadline, historical data will be necessary. Depending up the age of the data, adjustment factors may be employed to develop a consistent 2020 baseline condition for all study routes. For an AECOM study in Jefferson County on I-65, Streetlight data is being used to compare historic traffic patterns and volumes to post -COVID-19 volumes. This same type of comparison could be applied for future estimates.

Analysis Models

The LFUCG Division of Traffic Engineering possesses Synchro/SimTraffic models for most of the Fayette County study routes. To expedite the analysis, we will request to use these models. The AECOM Team will update the geometric characteristics, traffic data, and signal timing of these models as necessary. As an added value, the Division of Traffic Engineering will benefit from receiving updated models for their future use. We will create new models to include any bottleneck studies outside of Fayette County.

Future Data

We will request future traffic data from the MPO via the regional travel demand model. We will translate the data into the future scenario models for evaluating proposed solutions.

Future Analysis

Future analysis results will be delay based. The delay calculated by SimTraffic will be used to compare the effectiveness of solutions as well as feed the benefit/cost (B/C) analysis. Delay will be monetized and used as the primary factor in demonstrating project benefits relative to estimated construction cost. The B/C analysis will also play a significant role in project prioritization.

The future delay output will be used to estimate future travel time and reliability indices. We feel this is important because the initial bottlenecks will be identified using these metrics. Our goal is to use consistent analytical metrics throughout the project. Projecting estimated INRIX metrics into the future will enable the Lexington Area MPO and stakeholders to monitor the 5- and 10-year future conditions in INRIX and directly compare them to our results. Should traffic patterns continue to shift, or there are longer term impacts still to be realized, this will better equip the Lexington Area MPO and stakeholders to update and shift priorities over the life of the report.

Draft Location List

A draft location list will be created to include the top ten bottleneck locations now, the top ten bottleneck locations in 2025 and the top ten bottleneck locations in 2030.

Alternatives Development

Once the list is established and vetted with stakeholders (See Stakeholder Engagement), the AECOM Team will leverage a comprehensive list of tools to address congestion. This effort will be led by Paul Slone with a multidisciplinary team. We expect to work up from lower cost, easily implementable solutions to larger construction heavy projects.

Tier 1 Solutions - Streamline Existing Facilities

- Examine Signal Timing Strategies & Traffic Signal Technology
 - ► Time of day operational strategies
 - Differing phase rotation by time of day
 - Omitting phase(s) by time of day
 - Flush timing plans for recurring congestion
 - ► Traffic responsive operation to address frequent non-recurring congestion
- ► Enhanced Signage and Electronic Warning Systems (Open Road or Interstate Safety Solutions)
 - Warnings for curves
 - Warnings for commercial vehicles
- Examine Pavement Usage
 - Evaluate current cross section for most efficient usage of pavement area
 - Evaluate restriping options
 - ► Evaluate minimal pavement work (e.g. remove/fill in median) to expand intersection capacity
 - Evaluate traffic signal operations in conjunction with restriping; possible reduction in phases/ more efficient operations

Tier 2 Solutions – Longer Term Projects Involving Construction

- ▶ Phased Improvements Such as Turn Lane Additions
- Innovative Intersection Solutions
- Multimodal Enhancements
 - Opportunities for bike/pedestrian connectivity
 - ▶ Transit options such as Bus Rapid Transit

We will develop a strategy to address route reliability challenges, knowing this is an increasingly important metric. There is no one size fits all solution. In fact, congestion management tools are often used in combination to develop long-term congestion relief.

We expect to run interchange and intersections alternatives through the SPICE and/or CAP-X tools available from FHWA to quickly assess the potential performance of each solution. These tools can compare various intersection or interchange layouts while only having to enter in the existing condition data (traffic volumes) once. AECOM used CAP-X for both intersection and interchange alternative comparison and found it an effective tool for this level of evaluation. The project documentation will Identify our proposed toolbox of solutions and include the best use cases for each.

Sample User Cost Table AM Peak PM Peak 07:00 AM to 09:00 AM 04:00 PM to 06:30 PM WB EB EB WB 59.81 Veh-Delay (hrs) 52.49 91.86 132.88 User Delay Cost \$ 1,373.43 Ś 2,403.67 \$ 3,477.32 SR 369 Daily User Cost \$ \$200.00 0:00 11:00 EB User Delay Costs

Prioritize/Develop Program "Program Good Projects"

Brian Meade, PE will lead the prioritization effort. Brian is well versed in right-sizing solutions and making projects come to fruition. He will be assisted by Dave Wormald, PE, AICP. Dave has worked with many clients on funding applications and understands how projects can be packaged in order to meet funding requirements.

The foundation of the prioritization will be in the available data. We will compare current and future indices and use Benefit/Cost Analysis as a starting point. We fully understand that while this is intended to be a data driven process, there may be overriding engineering and planning reasons to deviate from a strictly data-based prioritization. These may include the need to better align project timing with anticipated funding levels and sources, accelerating a higher volume of low-cost projects sooner in lieu of larger, more costly projects that may be challenging to fund in the near term, and geographically diversifying projects.

We expect to work with the Core Project Team (likely representatives from Lexington Area MPO, CMC and LFUCG but should be defined during scoping) to create a decision matrix with input on ranking of factors in order to select appropriate alternatives meeting the needs of the region.

Stakeholder Engagement

The AECOM Team is very familiar with the Lexington Area MPO's partner agencies and committees such as the:

- Congestion Management Committee (CMC)
- Transportation Technical Coordination Committee (TTCC)
- ► Transportation Policy Committee (TPC)

These groups can count upon AECOM to deliver expert findings and clear conveyance of the recommended solutions, how those solutions will work, and how we arrived at those solutions. We will rely on the stakeholders to assist in the gathering of data and navigation of data sets. We expect to receive input on data driven bottleneck locations, rankings for decision matrix to select alternatives, project recommendations and prioritization.

The AECOM Team proposes to have regular monthly update meetings with the Core Project Team to provide project progress and receive guidance regarding any project issues as the workflow proceeds. We anticipate holding larger meetings at these project milestones:

Meeting 1 - Project Launch

Meeting 2 - Project Analysis

- Present filtered list of Top 20-30 congested sites analysis of current year, 5-year & 10-year analyses
- Discuss and adopt reliability goals

Meeting 3 - Draft Report 1

- Presentation(s) to CMC and TTCC
- Identified alternative(s)
- ► Top 10 lists for current, 5-year and 10-year
- ► High Level Cost and B-C Analysis

Meeting 4 - Draft Report 2

- Presentation to UCG and TPC
- Recommended project prioritization
- Final report presentation

The timing of these meetings, related to outstanding health guidance, may necessitate a hybrid in-person/virtual meeting or a fully virtual one. The AECOM Team is equipped to facilitate meetings in any format. We conducted the second of 2 stakeholder meetings for the ITS Architecture Update virtually in the early months of COVID-19.



I-71/I-265 Interchange, Jefferson County, KY.

Project Documentation

The project document will be comprehensive. It is intended as a living document through the 10-year project list. This report will guide project development as well as contain the necessary detail that if priorities should change in the future (as they often do) informed decisions will be made.

The proposed outline of the project report is as follows:

- Executive Summary
- ► Introduction and Background
- Purpose and Objectives
- Existing and Future Bottlenecks
- Stakeholder Engagement
- ▶ Short-term and Long-term Solutions
- Improvement Priorities
- Implementation Strategies
- Appendices
 - Listing and description of congestion toolbox strategies and tools
 - Project description and schematic layout
 - Cost estimates and benefit/cost analysis

We anticipate delivering a first and second draft of the report prior to a final report.

WHY SELECT THE AECOM TEAM?

The success of this project hinges on recommending projects with appropriate scope, scale and countermeasures. Through many intersection design projects, the AECOM staff listed in this proposal are proven leaders in delivering congestion-relieving projects. We work tirelessly to create the best plan with solid projects that utilize anticipated funding, and more importantly, be built with in 5- and 10-year timeframes.

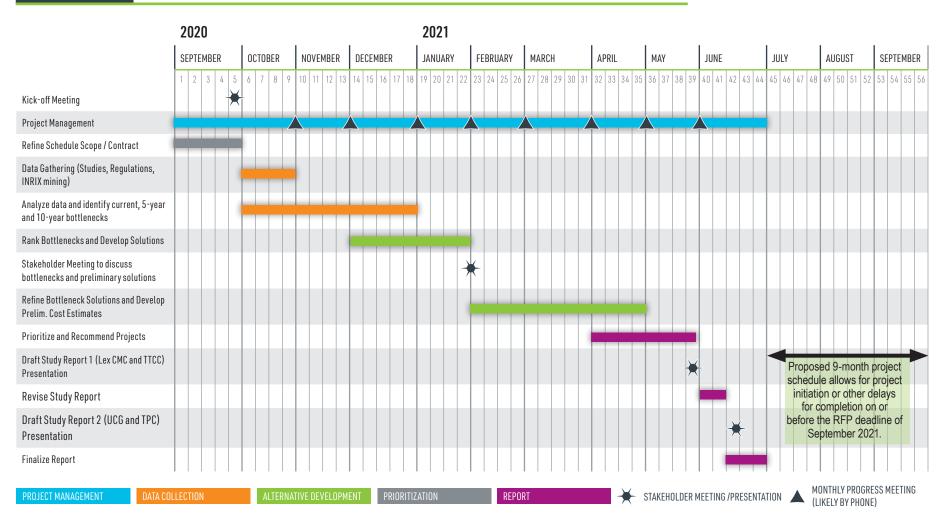
We will embrace this project. Why? Because the Lexington Area is near and dear to our hearts. Because the Lexington Area MPO, the LFUCG, and your stakeholders are among our favorite clients to work for. On our long list of past projects with Lexington Area MPO and LFUCG we have always enjoyed a strong spirit of collaboration and likeminded thought throughout the project process. We firmly believe that is one reason why all these past projects have been great successes.

We value you as our client. We simply cannot wait to begin work on projects and develop a program of very targeted solutions that pinpoint the root causes of congestion. These are among the most satisfying projects we perform because they are high-impact.

We thank you for your time and consideration of the AECOM Team.

06 PROJECT TIME & COST OF SERVICES

PROJECT TIME



COST OF SERVICES

AECOM acknowledges the budget of \$225,000 and given the assumed hours above as well as rates of assigned staff and estimated direct costs, we are confident we can stay within the budget.

AECOM TEAM LABOR HOURS DISTRIBUTION

STAFF HOURS

TASK	DESCRIPTION	Project Manager	Project Principal	aA/ac	Senior Engineer/ Planner	Mid-Level Staff	General Support	IE Principal	IE Mid Level	Total
1	Project Management	100					20	20		140
2	Data Collection	30	15	10	20	20	40			135
3	Bottleneck Identification	30	30	10	20	20	80			190
4	Alternative Development	20	20	10	60	110	100	40	40	400
5	Alternative Prioritization	30	40	10	40	80	80	20	20	320
6	Key Stakeholder Presentations	20	10	5	20	20	0	20	10	105
7	Report Preparation	50	30	20	20	40	40			200
TOTAL	PERSON HOURS	280	145	65	180	290	360	100	70	1,490

LABOR COSTS

PERSONNEL	HOURS	RATE
Project Manager	280	\$160.00
Project Principal / Senior Advisor	145	\$215.00
QA/QC	65	\$185.00
Senior Engineer/ Planner	180	\$185.00
Mid-Level Staff	290	\$115.00
General Support	360	\$90.00
IE Principal/Senior Roadway	100	\$150.00
IE Mid Level	70	\$130.00

32 AECOM

07 FORMS

33 AECOM



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 07/24/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

Marsh Risk & Insurance Services CA License #0437153 633 W Fifth Street Suite 1200	Marsh Risk & Insurance Services					NAME:						
Los Angeles, CA 90071			Ā			DING COVERAGE		I				
Attn: LosAngeles.CertRequest@Marsh.Com				INS		NAIC#						
CN101348564-STND-GAUE-20-21	8564-STND-GAUE-20-21 07 2022					mpany		22667				
INSURED AECOM	11	ISURER B : N/A				N /A						
AECOM Technical Services, Inc.			11	NSURER C : Illinois Unio	n Insurance Co			27960				
500 West Jefferson Street, Suite 1600			11	SURER D : SEE ACOR	D 101							
Louisville, KY 40202			i i i	NSURER E :								
3			-	NSURER F :								
COVERAGES CER	TICIC	ATC	NUMBER:	LOS-002496260-01		REVISION NUMBER:						
THIS IS TO CERTIFY THAT THE POLICIES INDICATED. NOTWITHSTANDING ANY RECERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	OF IN QUIRE PERTA POLICI	ISUF EMEI (IN, IES.	VANCE LISTED BELOW HAVE NT, TERM OR CONDITION OF THE INSURANCE AFFORDED LIMITS SHOWN MAY HAVE BE	BEEN ISSUED TO F ANY CONTRACT BY THE POLICIES BEN REDUCED BY I	THE INSURE OR OTHER DESCRIBED PAID CLAIMS.	D NAMED ABOVE FOR THE	CT TO	WHICH THIS				
INSR TYPE OF INSURANCE	ADDL S	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s					
A X COMMERCIAL GENERAL LIABILITY			HDO G7123311A	04/01/2020	04/01/2021	EACH OCCURRENCE	\$	1,000,000				
CLAIMS-MADE X OCCUR						DAMAGE TO RENTED	\$	1,000,000				
CLAIMS-MADE OCCOR						PREMISES (Ea occurrence)		5,000				
						MED EXP (Any one person)	\$	1,000,000				
						PERSONAL & ADV INJURY	\$					
GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	2,000,000				
X POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000				
OTHER:							\$					
A AUTOMOBILE LIABILITY	 		ISA H25301730	04/01/2020	04/01/2021	COMBINED SINGLE LIMIT	\$	1,000,000				
X ANY AUTO						(Ea accident)	s	7,000,000				
OWNED SCHEDULED	1 1			1		BODILY INJURY (Per person)						
AUTOS ONLY AUTOS						BODILY INJURY (Per accident)	\$					
HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$					
							\$					
UMBRELLA LIAB OCCUR						EACH OCCURRENCE	\$	······································				
- VOTOS LLOS												
CCAIMS-MADE	1					AGGREGATE	\$					
DED RETENTION \$ D WORKERS COMPENSATION	-		SEE ACORD 101	04/01/2020	04/01/2021	Y PER OTH-	\$					
AND EMPLOYERS' LIABILITY Y/N			SEE ACORD IOI	04/01/2020	04/01/2021	X PER STATUTE ER						
ANYPROPRIETOR/PARTNER/EXECUTIVE	N/A					E.L. EACH ACCIDENT	\$	1,000,00				
(Mandatory in NH)	N.A.					E.L. DISEASE - EA EMPLOYEE	\$	1,000,000				
If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	s	1,000,000				
C ARCHITECTS & ENG.			EON G21654693 005	04/01/2020	04/01/2021	Per Claim/Agg	1	1,000,00				
				04/01/2020	04/01/2021			1,000,00				
PROFESSIONAL LIAB.			"CLAIMS MADE"			Defense Included						
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHIC Re: AECOM Project No: OPP-1054023; Client Reference Lexington-Fayette Urban County Government is named a	No: ACC	2-263	8; For RFP/RFQ Purposes.				red by w	ritten contract.				
CERTIFICATE HOLDER				CANCELLATION								
Lexington-Fayette Urban County Government Attn: Todd Slatin, Director, Division of Central I 200 East Main Street, 3rd Floor	Purchasi	ing			N DATE TH	ESCRIBED POLICIES BE C EREOF, NOTICE WILL Y PROVISIONS.						
Lexington, KY 40507			I -	AUTHORIZED REPRESE of Marsh Risk & Insura				7, ***				
1			· .	James L. Vogel		000						

AGENCY CUSTOMER ID: CN101348564

Loc #: Los Angeles



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Marsh Risk & Insurance Services POLICY NUMBER		NAMED INSURED AECOM AECOM Technical Services, Inc. 500 West Jefferson Street, Suite 1600 Louisville, KY 40202
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM TITLE: Certificate of Liability Insurance

Workers Compensation/Employer Liability cont.

Policy Number

WLR C6692340A Indemnity Insurance Company of North America - NAIC # 43575

WLR C66923320 ACE American Insurance Company - NAIC # 22667

SCF C66923368 ACE American Insurance Company - NAIC # 22667

States Covered

CA, AZ, MA

WI Retro

AOS

AFFIDAVIT

Comes the Affiant,	Gregory T. Grov	es	, and after being first duly
sworn, states under penalty			
His/her name is	Gregory T. Groves		and he/she is the individual
submitting the p			authorized representative , the entity submitting
the proposal (hereinafter ref	erred to as "Proposer").		
Government at the time the "current" status in regard to	proposal is submitted, proposal is submitted, proposal is submitted, proposed through the transfer of the contraction of the proposed to the p	prior to award or ring the life of the	Lexington-Fayette Urban County of the contract and will maintain a he contract. nent business license, if applicable,
	of Revenue and to discle	ose to the Urba	g to verify the above-mentioned in County Council that taxes and/or ed.
*	within the past five (5)	years and the a	e campaign finance laws of the award of a contract to the Proposer ommonwealth.
6. Proposer has not knowin			

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Sugge	5 Sean	
STATE OF _	KENTUCKY	
COUNTY OF	JEFFERSON	
The fo	pregoing instrument wa	as subscribed, sworn to and acknowledged before me
byGrego	ory T. Groves	on this the24th day
of July	, 20 <u>20</u> .	
		Notary Public, State at Large, KY My commission expires May 25, 2022
My Co	ommission expires:	
	NOTARY PUE	Jennifer Starp
		Chilital Sinks

EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Sugo T Scan	AECOM Technical Services, Inc. (AECOM)
ature	Name of Business

WORKFORCE ANALYSIS FORM

Name of Organization: AECOM Technical Services, Inc. - Louisville Office

Categories	Total	(N His c	hite Not pani or tino)	С	pani or tino	Afr Am n His	ick or ican- nerica (Not panic _atino	Nati Hawa an Oth Pac Islan (No Hispa or La	aiian d er ific der ot anic	Asi (N Hisp c c Lat	ot pani or	n In C Alas Na (n Hisp	erica dian or skan tive not oanic atino	m ra (N His c	o or ore ces Not pani or tino
		M	F	М	F	M	F	М	F	M	F	M	F	М	F
Administrators	9	6	3												
Professionals	60	40	12			2	1			2	2				1
Superintendents															
Supervisors															
Foremen															
Technicians	5	5													
Protective															
Para-															
Office/Clerical															
Skilled Craft															
Service/Maintena															
Total:	74	51	15			2	1			2	2				1

Prepared by: Madvi Pitani (Employee Relations & Compliance Specialist) Date: 7/29/20

(Name and Title)

Revised 2015-Dec-15

WORKFORCE ANALYSIS FORM

Name of Organization: AECOM Technical Services, Inc.

	_	NIC OR TINO						NOT-HISPAN	IIC OR LATII	NO					
				MALE						FEMALE					
		FEMALE	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE	TWO OR MORE RACES	WHITE	BLACK OR AFRICAN AMERICAN	NATIVE HAWAIIAN OR PACIFIC ISLANDER	ASIAN	AMERICAN INDIAN OR ALASKAN NATIVE	TWO OR MORE RACES	Overall Totals
EXECUTIVE/SR OFFICIALS & MANAGERS	-	-	27	-	-	1	1	1	9	2	-	-	-	1	41
FIRST / MID OFFICIALS & MANAGERS	83	35	1764	45	1	135	2	11	540	37	3	51	2	2	2711
PROFESSIONALS	396	258	5666	239	13	787	17	85	2872	211	13	454	14	74	11099
TECHNICIANS	129	36	1338	157	7	78	7	26	256	56	-	18	3	8	2119
SALES WORKERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADMINISTRATIVE SUPPORT	8	59	44	16	2	11	-	1	314	58	6	34	2	10	565
CRAFT WORKERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPERATIVES	-	-	3	-	-	-	-	-	-	-	-	-	-	-	3
LABORERS & HELPERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SERVICE WORKERS	-	-	-	-	-	-	-	-	-	-	-	-	-	ı	-
TOTAL	616	388	8842	457	23	1012	27	124	3991	364	22	557	21	94	16538

DIRECTOR, DIVISION OF CENTRAL PURCHASING LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 EAST MAIN STREET LEXINGTON, KENTUCKY 40507

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well Veteran –owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, MPA, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor, Room 338

Lexington, Kentucky 40507

smiller@lexingtonky.gov

Firm Submitting Prop	oosal: AECC	OM Technical Se	ervices, Inc.
Complete Address:	500 West Jeffers	son St., STE 1600	Louisville, KY 40207
•	Street	City	Zip
Contact Name: Gree	g T. Groves	Title: Vice Pre	sident
Telephone Number:	(502) 569-2301	Fax Number: _	(502) 569-2304
Email address: gr	eg.groves@aecor	n.com	

Lexington-Fayette Urban County Government MWDBE PARTICIPATION GOALS

A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.
- 4) The LFUCG has also established a 3% of total procurement costs as a Goal for participation for of Veteran-Owned Businesses.
- 5) It is therefore a request of each Bidder to include in its bid, the same goal (3%) for Veteran-Owned participation and other requirements as outlined in this section.

B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
 - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and Veteran-Owned subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by one or more women.

- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned, managed and controlled by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran-Owned subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) Failure to submit this information as requested may be cause for rejection of bid or delay in contract award.

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE and/or Veteran participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:
 - a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
 - b. Included documentation of advertising in the above publications with the bidders good faith efforts package

- c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
- d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
- f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- d. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs and/or Veteran-Owned businesses soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- e. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.
- j. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
- l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

- o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
- p. Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.
- q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

<u>Note</u>: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.



MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented Resolution 484-2017 – A Certified Minority, Women and Disadvantaged Business Enterprise ten percent (10%) minimum goal and a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and Certified Service Disabled Veteran – Owned Businesses for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals (a full copy is available in Central Purchasing):

Certified Disadvantaged Business Enterprise (DBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a person(s) who is socially and economically disadvantaged as define by 49 CFR subpart 26.

Certified Minority Business Enterprise (MBE) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. African American, Asian American/Pacific Islander, Hispanic Islander, Native American/Native Alaskan Indian) as defined in federal law or regulation as it may be amended from time-to-time.

Certified Women Business Enterprise (WBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a woman.

Certified Veteran-Owned Small Business (VOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

Certified Service Disabled Veteran Owned Small Business (SDVOSB) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by a disabled veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

The term "Certified" shall mean the business is appropriately certified, licensed, verified, or validated by an organization or entity recognized by the Division of Purchasing as having the appropriate credentials to make a determination as to the status of the business.

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

Business	Contact	Email Address	Phone		
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323		
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625		
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tsmsdc.com	502-365-9762		
Small Business Development Council	Shawn Rogers UK SBDC	shawn.rogers@uky.edu	859-257-7666		
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054		
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601		
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815		
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537		
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099		
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwboc.org	800-675-5066		
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971		
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106		
The Key News Journal	Patrice Muhammad	production@keynewsjournal.com	859-685-8488		



LFUCG MWDBE PARTICIPA	ATION FORM
Bid/RFP/Quote Reference #_	RFP #23-2020

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. Integrated Engineering, PLLC 166 Prosperous Place, Suite 220 Lexington KY 40509 Phone: 859-368-0145 Fax: 859-904-1538 arlens@int-engineering.com	DBE	INRIX data Analysis, Alternative Development, Cost Estimating	TBD	10%
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

AECOM Technical Services, Inc.	Sego T Scou
Company	Company Representative
July 29, 2020	Vice President
Date	Title



LFUCG MWDBE SUBSTITUTION FORM Bid/RFP/Quote Reference #____ RFP #23-2020

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project.

SUBSTITUTED	MWDBE Formally	Work to Be	Reason for the	Total Dollar	% Value of Total
MWDBE Company	Contracted/ Name,	Performed	Substitution	Value of the	Contract
Name, Address, Phone,	Address, Phone,			Work	
Email	Email				
1.					
2.					
3.					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

AECOM Technical Services, Inc.	Sugar Scow
Company	Company Representative
July 29, 2020	Vice President
Date	Title



MWDBE QUOTE SUMMARY FORM Bid/RFP/Quote Reference #_____ RFP #23-2020

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name AECOM Technical Services, Inc.	Contact Person Greg T. Groves
Address/Phone/Email	Bid Package / Bid Date
500 West Jefferson Street, STE 1600 Lousiville, KY 40202 (502) 569-2301	RFP #23-2020/August 10, 2020

MWDBE	Contact	Contact	Date	Services	Method of	Total dollars \$\$	MBE *	Veteran
Company Addres	Person	Information	Contacted	to be	Communication	Do Not Leave	AA	
1 .		(work phone,		performed	(email, phone	Blank	HA	
		Email, cell)		-	meeting, ad,	(Attach	AS	
		,			event etc)	Documentation)	NA	
					,	,	Female	

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Vice President	
	
	Company Representative Vice President Title



LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE and Veteran contractors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

East Main Street / I				инѕ .		to the Division	of Central Fu	ichashig/ 200	
Bid/RFP/Quote	. # RFP #2	23-2020							
Total Contract A	mount Award	led to Prime (Contract	tor f	or this Proj	ect			
Project Name/ Contract # RFP #23-2020 Lexington Area Congestion Management Bottleneck Study Company Name: AECOM Technical Services, Inc.				Wo	ork Period/ l	From:		To:	
				Address: 500 West Jefferson St., STE 1600 Louisville, KY 40207					
Federal Tax ID:	95-2661922			Co	ntact Person	Greg T. Grov	es		
Subcontractor Vendor ID (name, address, phone, email	Description of Work	Total Subcontract Amount	% of Total Contrac Awarde to Prim for this Project	ed ie	Total Amount Paid for this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date	
By the signature bel of the representation prosecution under a	ns set forth belo	ow is true. Any	misrepres	enta	tions may res	ult in the te r mina	tion of the co		
AECOM Technical	Services, Inc.			Su	ego TS	ou			
Company		<u>-</u>	C	Comp	pany Repres	entative		<u> </u>	
July 29, 2020			,	Vice	President				
Date				Title					

LFUCG STATEMENT OF GOOD FAITH EFFORTS

of the contract.

Bid/RFP/Quote #__RFP #23-2020 By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation. _____ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate. Included documentation of advertising in the above publications with the bidders good faith efforts package _____ Attended LFUCG Central Purchasing Economic Inclusion Outreach event Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s). Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation. X Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively. X Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest. X Provided the interested MWBDE firm and/or Veteran-Owned business with

> X_{-} Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items

> adequate and timely information about the plans, specifications, and requirements

even when the prime contractor may otherwise perform these work items with its own workforce X Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation. NOTE: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met. The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims. AECOM Technical Services, Inc. Kego T Scan Company Representative Company July 29, 2020 Vice President Title

Date

into economically feasible units to facilitate MWDBE and Veteran participation,

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
 - (a) Failure to perform the contract according to its terms, conditions and specifications;
 - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services:
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
- 20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Sugo T Scow	July 29, 2020				
Signature	Date				

AFFIRMATIVE ACTION PROGRAM FOR MINORITIES & WOMEN

AECOM Technical Services Inc.

500 West Jefferson Street, STE 1600 Louisville, KY 40202

January 1, 2020 through December 31, 2020

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Preface

AECOM Technical Services Inc. (also referred to as the Company) is fully committed to the concept and practice of equal opportunity and affirmative action.

In the preparation of this Affirmative Action Program (AAP), AECOM Technical Services Inc. has been guided by Executive Order 11246 and its implementing regulations. Nothing contained in this AAP or its supporting data should be construed as an admission by the Company, in whole or in part, that it has contravened any federal, state or local employment practice laws.

In developing and implementing the AAP, the Company has been guided by its established policy of providing equal employment opportunity. Nothing herein is intended to sanction the discriminatory treatment of any person. Indeed, all employment decisions at the Company are made based on job related criteria. Thus, this AAP has been developed in strict reliance upon the Guidelines on Affirmative Action issued by the Equal Employment Opportunity Commission ("EEOC") (29 C.F.R. Part 1608).

While AECOM Technical Services Inc. firmly believes in wide dissemination of its affirmative action policies and equal employment opportunity practices, this AAP contains certain proprietary information relating to the Company's business that must be kept confidential. The detailed information provided in good faith as a part of the AAP contains specific information that, if disseminated, could be detrimental to the competitive and business interests of AECOM Technical Services Inc..

Therefore, even though the Company is justifiably proud of its efforts described in the following pages, this AAP and its support data are to be disclosed to individuals, companies and government agencies only where such individuals or entities have a legitimate business interest or legal entitlement to the information. AECOM Technical Services Inc. specifically requests the following:

- If this AAP or any supporting data or documentation is submitted to Office of Federal Contract Compliance Programs ("OFCCP") pursuant to the Executive Order, the Rehabilitation Act, the Vietnam Era Veterans' Readjustment Assistance Act, and/or any implementing regulations (as any or all may have been or may be amended), those documents and the information they contain are to be considered confidential and not subject to disclosure without notifying AECOM Technical Services Inc. of the agency's decision to disclose and providing the Company with ample time to contest the disclosure. Advance notice of disclosure should be sent to . The Company requests this information be treated as exempt from public disclosure under the Freedom of Information Act, 5 U.S.C. §552.
- If this AAP or any supporting data or documentation is supplied by Company to another government contractor, EEOC or fair employment practices agency representatives, or any other person, it is not to be copied, reproduced, or disclosed by such persons without prior notification to AECOM Technical Services Inc..
- No information contained in the AAP or any supporting data or documentation is to be copied, removed from the premises, or released to other individuals without a prior notification to and permission from AECOM Technical Services Inc..
- Reports that require specific data, such as names of employees and salary information, are not an official part of this AAP. This information is on file at the Company as Documentation and Supporting Data for AAP Reports and is available for review only

as required by law.

This AAP does not constitute an express or implied contract between the Company and its employees, job applicants, or other persons, nor does it change in any way the basic at will employment relationship all Company employees have with the Company. Nothing in this AAP creates a private right of action on behalf of any individual group against the Company.

Introduction

Ever committed to affirmative action, AECOM Technical Services Inc. has prepared this AAP to cover employees reporting to and/or working in 500 Louisville, KY. This plan also covers employees working in other establishments who report to managers included in this plan. In accordance with 41 C.F.R. 60-2.1, employees included in AAPs other than where they are located are listed in the annotated employee list reports. These reports identify the actual location of such employees.

As detailed in the Job Group Analysis, this AAP covers 54 employees including 7 (12.96%) minorities and 13 (24.07%) women. It is expected these employees will help us to reach mutual goals of profitability and efficiency, resulting in both business and personal growth. As described in detail in the Plan that follows, the management of AECOM Technical Services Inc. has a continuing commitment to the practice and implemented action of this AAP.



Statement of Commitment from AECOM's Chief Executive Officer

It is the policy of AECOM not to discriminate or allow the harassment of employees or applicants on the basis of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law with regard to any employment practices, including recruitment, advertising, job application procedures, hiring, training, promotion, transfer, compensation, job assignments, benefits, and/or other terms, conditions of employment, provided the individual is qualified, with or without reasonable accommodations, to perform the essential functions of the job. This policy applies to all jobs at the Company. The Company will continue to ensure that individuals are employed, and that employees are treated during employment, without regard to their sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law in all employment practices as follows:

Employment decisions at the Company are based on legitimate job-related criteria. All personnel actions or programs that affect qualified individuals, such as employment, promotion, demotion, transfer, recruitment, advertising, termination, rate of pay or other forms of compensation, and selection for training, are made without discrimination because of any basis protected by law. Employees may choose to voluntarily disclose their sex, race, national origin, disability and protected veteran status at any time by contacting Human Resources. Such information will be maintained in a confidential manner and will not be used against an individual when making any employment decisions. Employees and applicants with disabilities and disabled veterans are encouraged to inform Human Resources if they need a reasonable accommodation to perform a job for which they are otherwise qualified. The Company makes, and will continue to make, reasonable accommodations to the known physical or mental limitations of an otherwise qualified applicant or employee to promote the employment of qualified individuals with disabilities and disabled veterans, unless such accommodations would impose an undue hardship on the operations of the Company's business.

As AECOM's Chairman and Chief Executive Officer, I am fully committed to the principles of equal employment opportunity and affirmative action. I have appointed EEO Officers responsible for supporting the successful implementation of the Company's Affirmative Action Plans (APPs). Those EEO Officers work with Affirmative Action Coordinators at various locations of the Company, with joint responsibility for implementation of the Company's affirmative action activities. The EEO Officers and Affirmative Action Coordinators have the full support of top management and the staff necessary to fully implement this Program. All managers and supervisors will take an active part in the Company's AAPs to ensure qualified employees and prospective employees are considered and treated in a nondiscriminatory manner with respect to all employment decisions. Furthermore, AECOM will solicit the cooperation and support of all employees for the Company's Equal Employment Opportunity and Affirmative Action Policy. Our Affirmative Action Plans include an audit and reporting system, which, among other things, uses metrics and other information to measure the effectiveness of our Programs. The

Affirmative Action Coordinator is responsible for periodically reviewing progress in the compliance and implementation of the policy of affirmative action. In accordance with public law, the Company's program of affirmative action for qualified individuals with disabilities and the program of affirmative action for protected veterans are available for inspection in the Human Resources Department, Monday through Friday, from 9:00 a.m. to 5:00 p.m. upon request.

In addition, employees and applicants will not be subjected to harassment, intimidation, threats, coercion, or discrimination because they have engaged in, or may have engaged in, filing a complaint, assisting or participating in an investigation, compliance review or hearing, or other activity related to the administration of Section 503 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, Executive Order 11246, all as amended, and/or any other federal, state, or local law or regulation regarding Equal Employment Opportunity, opposing any act or practice made unlawful, or exercising any other right protected by such laws or regulations. AECOM will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information.

Michael S. Burke

January 2020

Religious and National Origin Discrimination Policy 41 C.F.R. 60-50.1 – 60.50.5

Pursuant to the Company's equal employment opportunity and affirmative action policy, we have adopted the following policy prohibiting religious and national discrimination and harassment in the workplace. This policy applies to all terms and conditions of employment, including but not limited to, recruitment, hiring, promotion, transfer, demotion, layoff or recall from layoff, termination, wage and benefit administration, and selection for training or other employment opportunities. In furtherance of our commitment to ensuring equal employment opportunity regardless of national origin or religious beliefs, we will take the following steps, as appropriate:

- Recruit individuals for all positions without regard to their national origin or religious beliefs
- Review employment practices and personnel policies to ensure that applicants and employees are not discriminated against or harassed on the basis of religion or national origin
- Provide qualified employees with an equal opportunity to any available job without regard to their religion or national origin
- Administer employment opportunities, wages, hours, conditions of employment, retirement programs, and other employee benefits regardless of religion or national origin
- Develop written policies which prohibit unwelcome verbal or physical conduct based on religion or national origin and take reasonable steps to prevent such harassment occurring
- Explain the Company's commitment to equal employment opportunity to supervisors and employees and request their support
- Develop reasonable internal procedures to monitor our implementation of the Company's equal employment opportunity and affirmative action policy
- Inform all recruitment sources of the Company's commitment to equal employment opportunity and seek their assistance and support of AECOM Technical Services Inc.'s commitment to providing equal employment opportunity without regard to national origin or religion
- Endeavor to make reasonable accommodations to religious observations and practices
 of an employee or prospective employee unless doing so would pose an undue
 hardship on the Company's business.

Responsibility for Implementation 41 C.F.R. 60-2.17

Lisa Boecker, EEO Officer, has overall responsibility for implementation of the Equal Employment Opportunity Policy and the AAP. The Company has assigned primary management responsibility and accountability for ensuring full compliance with the Program to , the Affirmative Action Coordinator of the Company. As Affirmative Action Coordinator, has the authority, resources, support of and access to top management necessary to ensure the effective implementation of the AAP. The EEO Officer actively supports the program and provides assistance whenever it is needed, making managers and supervisors aware of the program and requesting their cooperation and assistance. The name of the Affirmative Action Cooridnator appears on internal and external communications on the Company's Equal Employment Opportunity Policy and AAP.

With regard to the 500 Louisville, KY AAP, Lisa Boecker works closely with to implement the programs which are specific to the Company., together with the Human Resources staff, has primary responsibility for implementing programs at the Company.

The duties of the Affirmative Action Coordinator and designees include:

- Developing policy statements, AAPs, and internal and external modes of communication
- Overseeing regular discussions with local managers, supervisors, and employees to ensure the Company's policies are being followed
- Training personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes to ensure the commitments in the Company's affirmative action program are implemented
- Advising supervisors that the Company is obligated to prevent discrimination and harassment of employees
- Identifying, in conjunction with line management any problem areas in implementing the AAP, and developing solutions
- Identifying any barriers to employment for protected individuals and assisting managers in developing solutions to ensure that all individuals benefit from equal employment opportunities
- Designing and implementing an internal audit and reporting system that will measure
 the effectiveness of the Company's Program, indicate the need for remedial action,
 determine the degree to which the Company's objectives have been attained,
 determine whether all employees have had the opportunity to participate in Companysponsored educational, training, recreational, and social activities, and ensure each
 Company location is in compliance with applicable laws and regulations
- Serving as liaison between the Company and enforcement agencies, and between the Company and organizations of and for minorities or women
- Encouraging active involvement by Company representatives in the community service programs of local organizations of and for minorities and women
- Ensuring posters and notices are properly displayed or disseminated in ways that are accessible and understandable to applicants and employees

Keeping management informed of the latest developments in affirmative action.

The Company recognizes the cooperation of department supervisors and line managers is required to reach the full potential of this AAP. Therefore, supervisors and managers are expected to:

- Assist the Affirmative Action Coordinator in the identification of any problem areas and help eliminate any barriers to equal employment opportunity
- Whenever possible, become involved in local minority organizations, women's organizations, community action groups, and community service programs
- Work with the Affirmative Action Coordinator to periodically review hiring and promotion
 patterns and training programs to isolate impediments to the attainment of affirmative
 action placement goals and objectives. Results from these reviews are communicated
 through appropriate management meetings
- Review the qualifications of applicants and employees in a nondiscriminatory manner with regard to hire, promotion, transfer and termination
- Provide career counseling for employees as needed
- Adhere to the Company's policy of equal employment opportunity for all employees and ensure the policy is understood, supported, and adhered to by the employees they supervise
- Take action to prevent the discrimination and harassment of employees based on protected characteristics or due to a perception that an individual might have been the beneficiary of the Company's affirmative action efforts.

Organizational Profile

41 C.F.R. 60-2.11

As one of the diagnostic components of AECOM Technical Services Inc.'s AAP, and to conform to applicable regulations, the Company has completed a profile of the workforce at the 500 Louisville, KY establishment. The organizational profile is an overview of the staffing patterns at this establishment, and is used to determine whether there are areas in the workforce where individuals are underrepresented or concentrated by gender or race. To complete our organizational profile we have elected to follow the Workforce Analysis methodology.

The following charts set forth our Workforce Analysis. The analysis identifies the departments at the 500 Louisville, KY establishment and for each department lists all job titles from lowest to highest paid. For each job title, we provide the following data: the total number of incumbents, the total number of male and female incumbents, and the total number of male and female incumbents by racial/ethnic group.

We have included a chart identifying the employees included in this AAP who work at other AECOM Technical Services Inc. locations but are covered by this AAP, and those employees who work at locations covered by this AAP but who, in accordance with 41 C.F.R. 60-2.1, are included in another AECOM Technical Services Inc. AAP. This chart sets forth the locations where the employees are actually working and/or the AAP in which they are included.

Job Group Analysis 41 C.F.R. 60-2.12

As the second diagnostic component of our AAP we have conducted a job group analysis. The job group analysis is the first step in comparing the representation of minorities and women in the workforce covered by this AAP with the estimate of the available qualified minorities and women who could be employed by AECOM Technical Services Inc. in positions covered by this AAP.

In designing our job groups we considered similarities of duties and opportunities.

Although not a determinative factor in designing job groups, we also attempted to create job groups large enough to conduct appropriate analysis.

The following charts identify the job groups created for this AAP, the job titles that comprise each job group, and the percentage of minority incumbents and the percentage of female incumbents in each job group.

We have included a chart identifying the employees included in this AAP who work at other AECOM Technical Services Inc. locations and those employees who work at locations but are covered by this AAP covered by this AAP but who, in accordance with 41 C.F.R. 60-2.1, are included in another AECOM Technical Services Inc. AAP. This chart sets forth the locations where the employees are actually working and/or the AAP in which they are included.

Availability Analysis 41 C.F.R. 60-2.14

The availability analysis is a part of the Incumbency vs. Estimated Availability Analysis - the final diagnostic component of this AAP. The purpose of the availability analysis is to establish a benchmark against which the demographic composition of the Company's workforce may be compared to determine whether barriers to equal employment opportunity may exist within particular job groups.

Pursuant to applicable regulations, the availability analysis for each job group examines two potential areas of availability: individuals with the requisite skills outside the establishment (external availability) and those within the establishment who are promotable, transferable, and/or trainable (internal availability). In determining availability, we have selected our reasonable recruitment area and our pool of promotable, transferable, and trainable employees in such a way as not to exclude qualified minorities and women. Moreover, when determining external availability we have used as our source of data the most current and discrete statistical information available. For this availability analysis, we have used the EEO Tabulation 2006-2010 American Community Survey data. Finally, where a job group is composed of different job titles that carry different availability rates, we calculated a composite availability figure. We arrived at the composite availability figure by determining the proportion of the job group incumbents employed in each job title, weighting the availability for each job title by the proportion of incumbents employed in that title, and adding together the weighted availability estimates.

A brief written rationale for the selection of the recruitment areas and internal pools by job group follows:

1.2A - First/Mid Lvl Officials & Mgrs-Managerial

Factor 1: Louisville/Jefferson County, KY-IN Metropolitan Statistical Area- This is the geographical area from which the Company usually seeks or reasonably would seek workers to fill positions in job group 1.2A - First/Mid LvI Officials & Mgrs-Managerial. This area was chosen based on current practices and was drawn in such a way as not to have the effect of excluding minorities or women.

Factor 2: Feeder Job Computations- There are no feeder positions for this job group.

2A - Professionals-Professional

Factor 1: Louisville/Jefferson County, KY-IN Metropolitan Statistical Area- This is the geographical area from which the Company usually seeks or reasonably would seek workers to fill positions in job group 2A - Professionals-Professional. This area was chosen based on current practices and was drawn in such a way as not to have the effect of excluding minorities or women.

Factor 2: Feeder Job Computations- There are no feeder positions for this job group.

2B - Professionals-Specialist

Factor 1: Louisville/Jefferson County, KY-IN Metropolitan Statistical Area- This is the geographical area from which the Company usually seeks or reasonably would seek workers to fill positions in job group 2B - Professionals-Specialist. This area was chosen based on current practices and was drawn in such a way as not to have the effect of excluding minorities or women.

Factor 2: Feeder Job Computations- There are no feeder positions for this job group.

3 - Technicians (Non-union)

Factor 1: Louisville/Jefferson County, KY-IN Metropolitan Statistical Area- This is the

geographical area from which the Company usually seeks or reasonably would seek workers to fill positions in job group 3 - Technicians (Non-union). This area was chosen based on current practices and was drawn in such a way as not to have the effect of excluding minorities or women.

Factor 2: Feeder Job Computations- There are no feeder positions for this job group.

5 - Admin. Support Workers (Non-Union)

Factor 1: Louisville/Jefferson County, KY-IN Metropolitan Statistical Area- This is the geographical area from which the Company usually seeks or reasonably would seek workers to fill positions in job group 5 - Admin. Support Workers (Non-Union). This area was chosen based on current practices and was drawn in such a way as not to have the effect of excluding minorities or women.

Factor 2: Feeder Job Computations- There are no feeder positions for this job group.

Comparison of Incumbency vs. Estimated Availability 41 C.F.R. 60-2.15

AECOM Technical Services Inc. has compared the representation of minorities and women in each job group with their representation among those identified in the availability analysis as available for employment in the job group. Where actual representation was less than the calculated availability, the Company determined whether the difference was greater than could reasonably be expected. The comparison of availability with actual representation follows:

Placement Goals 41 C.F.R. 60-2.16

As required by applicable regulations, AECOM Technical Services Inc. has established placement goals where the actual representation of women or minorities in a job group is less than would be reasonably expected based on calculated availability.

In establishing placement goals, we applied the following principles:

- When the percentage of minorities or women employed in a particular job group is less than would reasonably be expected, given their availability percentage in that job group, the Company established a percentage annual placement goal at least equal to the availability figure derived for women or minorities, as appropriate, for that job group.
- Placement goals are not quotas that must be met, nor are they to be considered as either a ceiling or a floor for the employment of particular groups.
- In all employment decisions, the Company makes selections in a nondiscriminatory manner. Placement goals do not provide a justification to extend a preference to any individual, select an individual, or adversely affect an individual's employment status, on the basis of that individual's sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or other characteristic protected by law.
- Placement goals do not create set-asides for specific groups, nor are they intended to achieve proportional representation or equal results.
- Placement goals are not used to supersede merit selection principles, nor do these
 placement goals require the Company to hire a person who lacks qualifications to
 perform the job successfully or hire a less qualified person in preference to a more
 qualified one.

As is described in more detail in the Action Oriented Program section of this AAP, where a placement goal is set, the Company will develop action oriented steps to increase the recruitment and training of minorities or women, or both.

Identification of Problem Areas by Organizational Unit and Job Group 41 C.F.R. 60-2.17(b)

We have conducted analyses of our total employment process, including evaluating the workforce by organizational unit and job group, personnel activity, compensation systems, and other personnel procedures to determine whether and where impediments to equal employment opportunity exist.

An analysis of each of these processes follows.

Composition of the Workforce by Organizational Unit

Of the 9 departments in this AAP, 5 or 55.56% include minorities, and 6 or 66.67% include females. Our analysis by organizational unit reveals that minorities and women are not significantly underrepresented or concentrated in any particular organizational unit. This analysis suggests that there is no policy or practice excluding minorities or women from any departments, nor is there any racial or sexual discrimination in the selection process.

Composition of the Workforce by Job Group

Pursuant to OFCCP regulations, we have conducted an availability analysis by job group, taking into account both external and internal availability, and have compared incumbency to estimated availability to determine placement goals. The descriptions of Factor 1 and Factor 2 by job group are summarized in the Availability Analysis. Our findings are as follows:

- Our analysis of incumbency vs. estimated availability indicates that in some cases, incumbency is less than estimated availability, however, our more detailed analysis concludes that there is no significant problem concerning minority utilization.
- Our analysis of incumbency vs. estimated availability indicates that in some cases, incumbency is less than estimated availability, however, our more detailed analysis concludes that there is no significant problem concerning female utilization.
- The Company has established affirmative action placement goals and programs to address any areas of underutilization, and will continue to make a good faith effort to reach the placement goals established by implementing action oriented programs, which are detailed elsewhere in this AAP.

Analysis of Progress Towards Prior Year Goals

In establishing placement goals, the following principles apply:

- When the percentage of minorities or women employed in a particular job group is less than would reasonably be expected given their availability percentage in that job group, the Company has established an annual percentage placement goal at least equal to the availability figure derived for women or minorities, as appropriate, for that job group.
- Placement goals are not quotas that must be met, nor are they to be considered as either a ceiling or a floor for the employment of particular groups.
- In all employment decisions, the Company makes selections in a nondiscriminatory manner. Placement goals do not provide a justification to extend a preference to any individual, select an individual, or adversely affect an individual's employment status, on the basis of that individual's sex, gender identity, sexual orientation, race,

color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law.

- Placement goals do not create set-asides for specific groups, nor are they intended to achieve proportional representation or equal results.
- Placement goals are not used to supersede merit selection principles, nor do these
 placement goals require the Company to hire a person who lacks qualifications to
 perform the job successfully or hire a less qualified person in preference to a more
 qualified one.

A review of progress and goal attainment for the period from January 01, 2019 to December 31, 2019 reveals that there are no prior year goals for minorities and women.

Personnel Activity

The Company has analyzed additional personnel activities to determine whether and where impediments to equal employment opportunity exist and whether there are significant selection disparities by race/ethnicity or gender. These activities include applicant flow, hires, promotions, terminations, and other personnel actions.

Applicant Flow

During the plan year, January 01, 2019 to December 31, 2019, the Company listed all non-executive positions lasting three days or more not expected to be filled from within the appropriate state employment service delivery system. The Company accepted applications for open positions, and all persons interested in obtaining employment with the Company were advised to apply according to the Company's current policy. Applications and complete records have been kept to ensure goals of equal employment opportunity are being applied to this reflecting process.

The Company believes applicant flow is not and will not be a problem area. Our analysis reveals that the percentage of minority and female applicants compares very favorably with the general availability in the respective categories. The Company's success in implementing and communicating affirmative action and outreach efforts.

The following report summarizes applicant flow by job group:

Hires

The Human Resources Department develops all procedures and all hiring at the Company is conducted on the basis of nondiscriminatory criteria. Specifically, the following criteria and procedures have resulted in hiring decisions that are free of discrimination:

- Job descriptions have been reviewed and revised to make sure duties are accurately described, that the experience and education requirements are job related, and that all incumbents meet minimum job requirements. Job titles have and will continue to be written without regard to sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law.
- O Application forms have been reviewed to ensure all requested information is job related, and the forms comply with all applicable laws. In addition, all forms state the Company is an Equal Opportunity/Affirmative Action Employer.
- o AECOM Technical Services Inc. representatives who are involved in the selection process have been briefed on the Company's obligations.
- o Where applicable, tests have been reviewed and are administered and conducted in a non-discriminatory manner.
- o All employees are encouraged to refer qualified applicants to the Company for employment. In addition, the Company has formal recruitment procedures to apprise minority and women's groups, educational institutions, and other referral sources of openings.
- Placing an applicant in a specific job in a department is the responsibility of management. Hiring decisions are based on the applicants knowledge, skills, abilities, and any other job related criteria.

A review of external hires for the prior plan year indicates that selection decisions were made in a non-discriminatory manner. There were 6 new employees hired during the period from January 01, 2019 to December 31, 2019 including 1 minority at 17% and 1 woman at 17%.

The following report summarizes hiring activity by job group:

Promotion Practices

A review of promotion data indicates these selection decisions are being made in a non-discriminatory manner. To ensure that such decisions are being made in a non-discriminatory manner, the following equal employment opportunity practices are in place:

- The Company provides every reasonable opportunity for employees to advance. In this regard, training and other developmental opportunities are offered.
- o Employees are encouraged to contact their supervisor and/or the Human Resources Department, at any time, should they desire information relative to another position within the Company.
- Management initiated promotions are based on performance and other job related criteria without discrimination on account of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law
- Most promotional opportunities are posted, providing all interested employees with an opportunity to apply and call their special skills to the attention of the manager.
- o The Company's career development program enables all employees to designate career paths and positions for which they wish to be considered.

A summary of promotion actions for the year is included on the following page:

Compensation Systems

As part of its affirmative action obligations, the Company has reviewed its compensation systems to determine whether those systems are being administered without regard to an individual's sex, race, ethnicity, or other characteristic protected by law. Our analysis did not identify any significant problem areas. If the Company discovers significant compensation system differences between individuals who are similarly situated, it will determine whether they are the result of legitimate, nondiscriminatory factors.

Terminations

The Company has evaluated its termination practices to determine whether there are disparities on the basis of sex, race or ethnicity. When terminations or reductions in force are necessary, the Company makes its decisions without regard to sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law.

A report summarizing terminations by job group follows:

Outreach Recruitment and Other Good Faith Efforts

AECOM Technical Services Inc. has reviewed its employment practices to determine whether its personnel programs are designed to effectively recruit and advance in employment protected individuals. While the Company believes there are no deficiencies in its current employment practices with respect to applicants and employees who are protected individuals, it engages in outreach, positive recruitment, and internal and external dissemination programs to augment its existing affirmative efforts. The Company engages in or has made plans to implement the following activities:

- Written notification of Company's affirmative action policy is sent to all subcontractors, including subcontracting vendors and suppliers, and requests appropriate action on their part. AECOM Technical Services Inc. makes the Equal Employment Opportunity Clause part of all covered contracts and purchase orders, and requires all qualified contractors and subcontractors to develop and maintain a written AAP.
- AECOM Technical Services Inc. advertisements or solicitations for prospective employees indicate that AECOM Technical Services Inc. is an equal opportunity employer.
- The Company will inform recruiting sources of AECOM Technical Services Inc.'s
 policy of affirmative action for protected individuals. Recruiting sources will be
 requested to actively recruit and refer qualified protected individuals for all positions.
- AECOM Technical Services Inc. will identify local organizations and/or community
 agencies known to specialize placing and/or developing training programs for
 protected individuals and send them notices of vacant positions. When appropriate,
 the Company will invite community service and other outreach partners to tour the
 office and discuss the Company, job recruitment needs, selection process, and
 other details related to recruitment and placement. In the event a partner is unable
 to schedule an on-site meeting, the Company will suggest a telephone meeting so
 they can better identify qualified individuals for our positions.
- When the Company recruits at colleges and universities, it will incorporate efforts to reach students who are covered by this AAP.
- The Company includes a copy of its Equal Employment Opportunity and Affirmative Action Policy Statement in its Policy Manual. When applicable, AECOM Technical Services Inc. publicizes the policy in Company publications. The policy is discussed in both new employee orientation and management training programs.
- AECOM Technical Services Inc.'s policy on equal employment opportunity and affirmative action is posted on Company bulletin boards. The posting includes a statement that employees and applicants are protected from coercion, intimidation, and interference or discrimination for filing a complaint or assisting in an investigation under Executive Order 11246, as amended. The Company also posts a copy of the policy in electronic format in a conspicuous location on the Company intranet, along with other employment forms, and otherwise ensures all off-site personnel have a copy of or the ability to view the policy

- The Company's employment application and electronic application processes include information about the AECOM Technical Services Inc.'s commitment to equal employment opportunity and affirmative action.
- All other required affirmative action notices and policy statements are posted on Company bulletin boards and are updated annually.
- Executives, management officials, supervisors, and other employees of the
 Company are encouraged to assist in the effort to disseminate AECOM Technical
 Services Inc.'s policy of affirmative action to appropriate individuals outside of the
 Company. Meetings with executive management and supervisory personnel will be
 conducted at least annually to explain the Company's policy of affirmative action, to
 make clear the EEO Officer's support for the policy, and to impart to these
 personnel their responsibility in making the AAP a success.
- AECOM Technical Services Inc. will seek to include individuals covered by this AAP when employees are pictured in consumer and personnel recruitment advertising.
- The Company will communicate to employees its obligation to take affirmative action to employ protected individuals and will encourage employee referral of covered applicants.
- An invitation to participate in AECOM Technical Services Inc.'s policy of affirmative
 action is disseminated to all applicants, as well as to all employees once the
 Company has extended a job offer, but before beginning employment duties.
- All personnel and employment records made or kept by the Company are retained for the required period as mandated by OFCCP regulations.
- The Company files annual EEO-1 and veteran employment reports with the appropriate agencies.

Development and Implementation of Action Oriented Programs 41 C.F.R. 60-2.17

The Company has developed and executed action oriented programs designed to correct any problem areas that may exist. These programs, which are listed below, demonstrate our good faith efforts to remove identified barriers, expand employment opportunities, and produce measurable results.

The Company has analyzed and will continue to analyze all positions and prepare written descriptions to accurately reflect position functions. Due to the use of a position description format, they are and will continue to be consistent for the same position from one organizational unit to another.

Job descriptions have been and will continue to be reviewed to determine the knowledge, skills, abilities, and other requirements necessary for the adequate performance of every job. Specifications will continue to be consistent for the same job title in all organizational units and will not contain any requirements that would result in discrimination on the basis of sex, gender, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law.

Job descriptions are available to incumbents and all members of management involved in the recruiting, screening, selection, and promotion process. Job descriptions are also made available to employees, applicants, and recruiting sources as appropriate.

The Company has carefully evaluated the total selection process and found it to be free from discrimination.

- We have instructed all supervisory personnel to ensure elimination of discrimination in all personnel actions in which they are involved.
- Any tests administered by the Company are job related and given to all applicants for applicable positions.
- Application forms do not contain questions with potential discriminatory effects.
- The Company does not and will not use any selection techniques that can be improperly used to discriminate against minority groups or women.

The Company has evaluated its techniques for improving recruitment and increasing the flow of qualified minority or female applicants through the following:

- Minority and women, as well as non-minority and male, employees are actively encouraged to refer applicants to our organization.
- The Company relies on the State Department of Employment as well as job fairs and recruiting programs sponsored by local community colleges and other community organizations.
- The Company provides an orientation program to inform new employees of their equal employment responsibilities, promotional opportunities, Company rules, ways to alleviate any problems that might arise, and any other issues related to affirmative action compliance.
- Local organizations will be contacted for referrals of potential minority and female employees.

- The Company utilizes the Internet to identify targeted recruitment sites for qualified minority and female applicants.
- Furthermore, we plan to take the following additional steps to ensure adequate representation of all minorities and women:
 - Where placement goals exist as defined by the OFCCP, we will continue to contact universities and two- and four-year local colleges, vocational technical schools, high schools, local business schools, and state and community organizations which attract qualified minority and female students. We will advise these institutions of our desire to fill job openings in these classifications with minority and female employees. When possible, we will continue to participate in job fair and career day activities and we will consider relevant work experience programs.
- We will continue to contact our normal sources of recruitment (e.g., State Employment) and advise them that under the AAP we are specifically seeking to employ minorities and/or women for job openings. During the period from January 01, 2019 to December 31, 2019, targeted recruitment activities were conducted.

The Company has implemented the following programs and procedures to guarantee minority and female employees are given equal opportunities for promotion:

- On-the-job training is provided to all qualified employees to assist them in developing the necessary knowledge and skills for promotion to higher level jobs. In addition, a tuition reimbursement benefit is also available to all qualified employees.
- The Company utilizes a formal performance evaluation program for all employees. In addition, management and supervisors are trained on the basic methodology of performance evaluation.
- Neither minority nor female employees are required to possess higher qualifications than those of the lowest qualified incumbent in the job for which they apply.
- Seniority practices are not a problem since the Company has no formal seniority system. Promotions are based on merit selection principles.
- We will continue to make opportunities for advancement into more stimulating positions widely known through our career development process and by encouraging minorities and women to take advantage of these opportunities.
- Special internal training programs are provided as necessary to ensure the
 achievement of our placement goals. Programs are offered to eligible employees
 without regard to sex, gender identity, sexual orientation, race, color, religious creed,
 national origin, physical or mental disability, protected veteran status, or any other
 characteristic protected by applicable law.
- We will continue to participate in targeted external training programs.

Internal Audit and Reporting System 41 C.F.R. 60-2.17

It is the responsibility of the Company's Affirmative Action Coordinator to monitor employment and personnel practices to ensure compliance with applicable regulations and adherence to the Company's Affirmative Action Policy, and to measure the effectiveness of AECOM Technical Services Inc.'s AAP.

The Company's audit and reporting system is designed and implemented to:

- Measure the effectiveness of the AAP
- Identify any need for remedial action
- Determine the degree to which the Company's objectives are being attained
- Determine whether protected individuals have had the full opportunity to equal employment and to participate in all Company sponsored educational, training, recreational, and social activities
- Measure the Company's compliance with the AAP's specific obligations
- Document the actions taken to monitor the Company's compliance with the AAP's specific obligations.

In order to measure the effectiveness of the AAP, Company may take the following actions:

- Audits its voluntary self-identification process to monitor the number of individuals who
 choose to self-identify and evaluates whether changes could be made to Company's
 self-identification process to encourage greater voluntary self-identification
- Monitors records of applicant flow, referrals, placements, rejected offers, training, transfers, promotions, terminations, and any layoffs or recalls to evaluate the degree to which equal employment opportunity and organizational objectives are being obtained
- Reports on the organization's progress towards equal employment opportunity, and any identified problem areas, to top management and those involved in the selection process, so that immediate and appropriate steps can be taken to resolve any issues
- Examines available utilization and benchmark data regarding protected individuals and develops action-oriented programs to address any areas of underutilization
- Reviews available data computations and analyses regarding applicants and hires
- Reviews the effectiveness of its recruitment and outreach activities
- Audits its communications with vendors and subcontractors to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action
- Audits its communications with applicants and employees to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action
- Audits its job listings to ensure that the postings reflect the Company's commitment to equal employment opportunity and affirmative action, and that such postings are timely

listed with the appropriate state employment delivery system

- Audits its personnel policies to ensure that such policies reflect the Company's commitment to equal employment opportunity and affirmative action
- Audits its personnel processes to ensure that individuals have equal opportunity in employment without regard to sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law
- Audits any mental and physical qualifications to ensure that they are job-related and consistent with business necessity

Where the affirmative action program is found to be deficient, Company shall endeavor to undertake necessary action to bring the program into compliance.

Conclusion

The AAP year, January 1, 2020 through December 31, 2020, shows a continued commitment to equal employment opportunity and affirmative action, and has strong plans to ensure both corporate and employee success.

Through its Affirmative Action Coordinator, , the Company will continue to communicate its policies, both within the organization and to the community in which it works. The EEO Officer affords the Affirmative Action Coordinator full authority to take action to implement the plan and to pursue solutions to problems that might impede the progress of this plan.

At the close of AECOM Technical Services Inc.'s most recent plan year, an analysis of the composition of the workforce was undertaken. The workforce was analyzed by job group and by department to determine the employment of minorities and women, and to identify if placement goals are indicated when compared to the appropriate available workforce. This analysis revealed no areas in which the difference between incumbency vs. estimated availability was statistically significant, showing that for the overwhelming majority of the workforce, employment levels of women and minorities are representative of our recruiting population. Nonetheless, the Company expects to continue its successful outreach efforts and to ensure all applicants and employees are treated fairly, based on job related criteria and without regard to sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by applicable law.

The Company is mindful of the fact that continued achievements in the area of equal employment opportunity and affirmative action are important. As a result, we have included additional action oriented plans and programs for recruiting, communication, and reporting, to ensure that our compliance with affirmative action continues in good stead.

Finally, it should be noted the Company's thorough analysis of its workforce reveals that AECOM Technical Services Inc. is in full compliance with sex discrimination guidelines and that there is no evidence of discrimination in any form against female employees. As outlined in this AAP, AECOM Technical Services Inc. is ready and willing to make affirmative action both a commitment and a continued reality.

AFFIRMATIVE ACTION PROGRAM FOR PROTECTED VETERANS

AECOM Technical Services Inc.

500 West Jefferson Street, STE 1600 Louisville, KY 40202

January 1, 2020 through December 31, 2020

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Preface

AECOM Technical Services Inc. (also referred to as the Company) is committed to the concept and practice of equal opportunity and affirmative action. In the preparation of this affirmative action program (AAP), we have been guided by the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended by the Jobs for Veterans Act of 2002 (38 U.S.C. § 4212), and its implementing OFCCP regulations (41 C.F.R. Part 60-300). Nothing contained in this AAP or its supporting data should be construed as an admission by the Company, in whole or in part, that it has contravened any federal, state, or local employment practice laws.

In developing and implementing this AAP, AECOM Technical Services Inc. has been guided by its established policy of providing equal employment opportunity. Nothing herein is intended to sanction the discriminatory treatment of any person. Thus, this AAP has been developed in strict reliance upon the Guidelines on Affirmative Action issued by the Equal Employment Opportunity Commission (EEOC) (29 C.F.R. Part 1608).

While the Company firmly believes in dissemination of its affirmative action policies and equal employment opportunity practices and makes the non-data components of this AAP available for review to employees and applicants upon request, the AAP remains a Company proprietary document. Moreover, the data on which the Company has relied in preparing this AAP are confidential and sensitive, and the Company believes release of the data would subject the Company to commercial harm. Therefore, the following is requested:

- If this AAP or any supporting data or documentation are submitted to Office of Federal Contract Compliance Programs (OFCCP) pursuant to the Executive Order, the Rehabilitation Act, The Vietnam Era Veterans' Readjustment Assistance Act and/or any implementing regulations (as any or all have been or may be amended), those documents and the information they contain are to be considered confidential and not subject to disclosure without notifying the Company of the agency's decision to disclose and providing the Company with ample time to contest the disclosure. Advance notice of disclosure should be sent to . The Company requests this information be treated as exempt from public disclosure under the Freedom of Information Act, 5 U.S.C. § 552.
- If this AAP or any supporting data or documentation is supplied by Company to another government contractor, EEOC or fair employment practices agency representatives, or any other person, it is not to be copied, reproduced, or disclosed by such persons without prior notification to the Company.
- No information contained in the AAP or any supporting data or documentation is to be copied, removed from the premises, or released to other individuals without a prior notification to and permission from the Company.
- Reports that require specific data, such as names of employees and salary information, are not an official part of this AAP. This information is on file at the Company as Documentation and Supporting Data for AAP Reports and is available for review only as required by law.

This AAP does not constitute an express or implied contract between the Company and its employees, job applicants, or other persons, nor does it change in any way the basic at will employment relationship all Company employees have with the Company. Nothing in this AAP creates a private right of action on behalf of any individual or group against the Company.



Statement of Commitment from AECOM's Chief Executive Officer

It is the policy of AECOM not to discriminate or allow the harassment of employees or applicants on the basis of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law with regard to any employment practices, including recruitment, advertising, job application procedures, hiring, training, promotion, transfer, compensation, job assignments, benefits, and/or other terms, conditions of employment, provided the individual is qualified, with or without reasonable accommodations, to perform the essential functions of the job. This policy applies to all jobs at the Company. The Company will continue to ensure that individuals are employed, and that employees are treated during employment, without regard to their sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law in all employment practices as follows:

Employment decisions at the Company are based on legitimate job-related criteria. All personnel actions or programs that affect qualified individuals, such as employment, promotion, demotion, transfer, recruitment, advertising, termination, rate of pay or other forms of compensation, and selection for training, are made without discrimination because of any basis protected by law. Employees may choose to voluntarily disclose their sex, race, national origin, disability and protected veteran status at any time by contacting Human Resources. Such information will be maintained in a confidential manner and will not be used against an individual when making any employment decisions. Employees and applicants with disabilities and disabled veterans are encouraged to inform Human Resources if they need a reasonable accommodation to perform a job for which they are otherwise qualified. The Company makes, and will continue to make, reasonable accommodations to the known physical or mental limitations of an otherwise qualified applicant or employee to promote the employment of qualified individuals with disabilities and disabled veterans, unless such accommodations would impose an undue hardship on the operations of the Company's business.

As AECOM's Chairman and Chief Executive Officer, I am fully committed to the principles of equal employment opportunity and affirmative action. I have appointed EEO Officers responsible for supporting the successful implementation of the Company's Affirmative Action Plans (APPs). Those EEO Officers work with Affirmative Action Coordinators at various locations of the Company, with joint responsibility for implementation of the Company's affirmative action activities. The EEO Officers and Affirmative Action Coordinators have the full support of top management and the staff necessary to fully implement this Program. All managers and supervisors will take an active part in the Company's AAPs to ensure qualified employees and prospective employees are considered and treated in a nondiscriminatory manner with respect to all employment decisions. Furthermore, AECOM will solicit the cooperation and support of all employees for the Company's Equal Employment Opportunity and Affirmative Action Policy. Our Affirmative Action Plans include an audit and reporting system, which, among other things, uses metrics and other information to measure the effectiveness of our Programs. The

Affirmative Action Coordinator is responsible for periodically reviewing progress in the compliance and implementation of the policy of affirmative action. In accordance with public law, the Company's program of affirmative action for qualified individuals with disabilities and the program of affirmative action for protected veterans are available for inspection in the Human Resources Department, Monday through Friday, from 9:00 a.m. to 5:00 p.m. upon request.

In addition, employees and applicants will not be subjected to harassment, intimidation, threats, coercion, or discrimination because they have engaged in, or may have engaged in, filing a complaint, assisting or participating in an investigation, compliance review or hearing, or other activity related to the administration of Section 503 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, Executive Order 11246, all as amended, and/or any other federal, state, or local law or regulation regarding Equal Employment Opportunity, opposing any act or practice made unlawful, or exercising any other right protected by such laws or regulations. AECOM will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information.

Michael S. Burke

January 2020

Definitions 41 C.F.R. 60-300.2

"DISABLED VETERAN" is (1) A veteran of the U.S. military, ground, naval, or air service who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Secretary of Veterans Affairs, or (2) A person who was discharged or released from active duty because of a service connected disability.

"QUALIFIED DISABLED VETERAN" means a disabled veteran as defined above who has the ability to perform the essential functions of the employment position at issue with or without reasonable accommodation.

"RECENTLY SEPARATED VETERAN" means any veteran during the three-year period beginning on the date of such veteran's discharge or release from active duty in the U.S. military, ground, naval or air service.

"ARMED FORCES SERVICE MEDAL VETERAN" is any veteran who, while serving on active duty in the U.S. military, ground, naval or air service, participated in a United States military operation for which an Armed Forces service medal was awarded pursuant to Executive Order 12985.

"ACTIVE DUTY WARTIME OR CAMPAIGN BADGE VETERAN" means a veteran who served on active duty in the U.S. military, ground, naval or air service during a war or in a campaign or expedition for which a campaign badge has been authorized, under the laws administered by the Department of Defense.

"PROTECTED VETERANS" means Disabled Veterans, Recently Separated Veterans, Armed Forces Service Medal Veterans, and Active Duty Wartime or Campaign Badge Veterans.

Responsibility for Implementation 41 C.F.R. 60-300.44(i)

Lisa Boecker, EEO Officer, has overall responsibility for implementation of the Equal Employment Opportunity Policy and the AAP. The Company has assigned primary management responsibility and accountability for ensuring full compliance with the Program to . The Affirmative Action Coordinator, , has the authority, resources, support of and access to top management necessary to ensure the effective implementation of the AAP. The EEO Officer actively supports the program and provides assistance whenever it is needed, making managers and supervisors aware of the program and requesting their cooperation and assistance. The identity of the Affirmative Action Coordinator appears on internal and external communications regarding the Company's Equal Employment Opportunity Policy and AAP.

With regard to the Company AAP, Lisa Boecker works closely with to implement the programs which are specific to the Company., together with the Human Resources staff, has primary responsibility for implementing programs at the Company.

The duties of the Affirmative Action Coordinator and designees include:

- Developing policy statements, AAPs, and internal and external modes of communication
- Overseeing regular discussions with local managers, supervisors, and employees to ensure the Company's policies are being followed
- Training personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes to ensure the commitments in the Company's affirmative action program are implemented
- Advising supervisors their affirmative action efforts and results are a component of their performance evaluations, and the Company is obligated to prevent discrimination and harassment of employees
- Identifying, in conjunction with line management any problem areas in implementing the AAP, and developing solutions
- Identifying any barriers to employment for protected veterans, including those with known disabilities, and assisting managers in developing reasonable accommodations to ensure that individuals with disabilities benefit from equal employment opportunities
- Designing and implementing an internal audit and reporting system that will measure
 the effectiveness of the Company's Program, indicate the need for remedial action,
 determine the degree to which the Company's objectives have been attained,
 determine whether employees who are protected veterans have had the opportunity to
 participate in Company-sponsored educational, training, recreational, and social
 activities, and ensure each Company location is in compliance with applicable laws and
 regulations
- Serving as liaison between the Company and enforcement agencies, and between the Company and organizations of and for protected veterans
- Encouraging active involvement by Company representatives in the community service programs of local organizations of and for protected veterans
- Ensuring posters and notices are properly displayed or disseminated in ways that are

accessible and understandable to applicants and employees and

• Keeping management informed of the latest developments in affirmative action.

The responsibilities of managers and supervisors under this AAP include:

- Taking action to prevent the discrimination and harassment of employees
- Ensuring their departments fully comply with the spirit and letter of the affirmative action program and policies
- Reviewing the qualifications of all applicants and employees to make sure qualified individuals are treated in a nondiscriminatory manner with regard to hire, promotion, transfer, and termination
- Reviewing the job performance of each employee to assess whether personnel actions are justified based on the employee's performance of his or her job duties and responsibilities and
- Working with the Affirmative Action Coordinator or Human Resources Manager and qualified veteran employees or applicants with known disabilities to determine appropriate reasonable accommodations if they are necessary for performance of the job and/or recruitment process.

Request for Self-Identification 41 C.F.R. 60-300.42

In order to notify applicants and employees of the existence of and the opportunity to participate in this affirmative action program and to provide sufficient data to allow AECOM Technical Services Inc. to measure and improve, if necessary, the effectiveness of the Company's affirmative action efforts, AECOM Technical Services Inc. invites applicants and employees to complete an invitation to self-identify status as a protected veteran as follows:

- When an applicant applies or is considered for employment, the Company invites the applicant to self-identify race, ethnicity, sex, veteran, and disabled status.
- Following an offer of employment but before the individual begins his/her job duties, the Company again invites the individual to self-identify race, ethnicity, sex, veteran, and disabled status.

The Company keeps all self-identification information confidential and maintains it in a data analysis file rather than in individual employee personnel or medical files.

Review of Personnel Policies 41 C.F.R. 60-300.44(b)

AECOM Technical Services Inc. periodically reviews its personnel procedures to determine whether they ensure the careful, thorough, and systematic consideration of the job qualifications of employees or job applicants who are protected veterans for jobs filled either through vacancy or promotion and for educational or training opportunities. The Company ensures that its personnel processes facilitate the implementation of the Affirmative Action Program.

Vacancies are advertised, and applications are accepted from any interested person. AECOM Technical Services Inc.'s employment application, the Careers section of its website, and all advertisements include a link to the non- discrimination statement to further assure applicants of the Company's policy of equal employment opportunity. An EEO statement will be included in other recruitment literature should the Company use such documents in the future. All non-executive positions lasting three days or more not expected to fill from within will be referred to the appropriate state employment service delivery system. In addition, to ensure protected veterans are aware of our openings, the Company will send vacancy announcements to the sources listed in the Outreach, Positive Recruitment, and External Dissemination of Policy section of this Affirmative Action Program.

The Company ensures its personnel processes do not limit, segregate, or classify an employee or job applicant in a way that adversely affects employment opportunities or status on the basis of status as a protected veteran. The Company makes sure when a protected veteran is considered for an employment opportunity, the Company relies only on that portion of the individual's military record, including his or her discharge papers, relevant to the requirements of the opportunity at issue. The Company periodically reviews any physical and mental job qualifications to ensure they do not tend to screen out disabled veterans for reasons that are not job related or consistent with business necessity, or do not relate to ensuring the safe performance of the essential functions of the job. The Company makes any necessary modifications to ensure applicants and employees receive equal opportunity in the operation of all personnel processes, and protected veterans are not stereotyped in a manner that limits their access to jobs for which they are qualified.

The Company ensures applicants and employees who are protected veterans and who meet job qualifications have equal access to its personnel process, including those implemented through information and communication technologies, and provides necessary reasonable accommodation to make sure applicants and employees who are disabled veterans receive equal opportunity in the operation of all personnel processes.

Review of Physical and Mental Job Requirements 41 C.F.R. 60-300.44(c)

AECOM Technical Services Inc. reviews physical and mental job qualification requirements as job qualification requirements are established or revised to ensure qualification requirements do not screen out qualified individuals with disabilities or qualified disabled veterans for reasons that are not job related or consistent with business necessity and the safe performance of the essential functions of the job. This review occurs at regular intervals throughout each calendar year, such as when a job may be advertised or filled through hiring or promotion, when the duties of a position are significantly revised, and when considering requests for reasonable accommodation related to the performance of the functions of the position.

AECOM Technical Services Inc. also regularly reviews its personnel processes to ensure any medical exams or inquiries are conducted in accordance with the Section 503 regulations. Information regarding the medical condition or history of an individual obtained as a result of any such inquiry or exam is collected and maintained on separate forms and in separate medical files and treated as a confidential medical record.

To the extent any physical or mental job qualification measurements are found to potentially screen out qualified individuals with disabilities or qualified disabled veterans in the selection of employees or applicants for employment or in other changes in employment status such as promotion or training, AECOM Technical Services Inc. will ensure the requirements are related to the specific job(s) for which the individual is being considered and are consistent with business necessity and the safe performance of the job.

To date, no qualification requirements have been identified that are likely to have a screening effect. All job qualification requirements have been found to be job related, consistent with business necessity, or required for the safe performance of the job.

Reasonable Accommodations 41 C.F.R. 60-300.44(d)

AECOM Technical Services Inc. has made and will continue to make reasonable accommodations, which do not impose undue hardship on its business, to the known physical and mental limitations of otherwise qualified employees and job applicants who are disabled veterans.

Included among the specific accommodations for qualified disabled veterans that may have been implemented are the following:

- Short- and long-term disability programs provide pay for eligible employees absent due to disability.
- A personal leave policy enables eligible employees to accumulate paid time off to be used for medical appointments or personal illness.
- A medical leave of absence may be available to any employee who provides medical documentation of disability, where the requested absence constitutes a reasonable accommodation.
- Adaptive equipment, such as supportive desk chairs, special computer monitors and/or keyboards, is made available when necessary to enable an employee to perform an essential job function.
- Should reasonable accommodations be necessary to facilitate access to work areas by qualified employees or applicants who are known disabled veterans, the Company will take reasonable steps to provide such accommodations.
- If necessary to accommodate a veteran with a known disability, the Company will remove or alter nonessential job functions, unless doing so creates an undue hardship.
- The Company will provide alternative work schedules if needed due to disability where that arrangement constitutes a reasonable accommodation.
- Company will accommodate employees who are veterans with known disabilities by allowing a reasonable amount of time off for physicians' visits.
- Special parking for veterans with known disabilities is available at AECOM Technical Services Inc..
- The Company's online application system makes clear to all applicants if they are unable to fully use the automated system, they may follow specified alternate procedures so they receive equal opportunity to apply for and be fully considered for all jobs.
- The Company has designed its online application system and its internal information and communication technologies to increase the accessibility of those systems.

If a veteran has a disability, the Company encourages the individual to disclose (i) any special methods, skills, and procedures which qualify him or her for positions which he or she might not otherwise be able to do, so that he or she can be considered for any position of that kind, and (ii) the reasonable accommodations which would enable the individual to perform the job properly and safely. Such accommodations may include special equipment, changes in the physical layout of the job, elimination of certain nonessential duties related to the job, or other

reasonable accommodations.

The Company informs employees and applicants of its desire to discuss reasonable accommodations in various ways, including through the Policy Statement and on the Invitation to Self-Identify. Both the Policy Statement and the Invitation to Self-Identify are provided to employees and applicants, and posted for employees to view. Individuals interested in discussing accommodations may contact, the Affirmative Action Coordinator, the Human Resources Department, and/or the individual's supervisor. Managers and supervisors are trained to ensure they know what to do if an employee or applicant makes a request for a reasonable accommodation so that such requests are processed swiftly.

Where an employee who is known to be a veteran with a disability is having significant difficulty performing their job and the Company reasonably concludes the performance issues may be related to the known disability, the Company may notify the employee of the performance problem and confidentially inquire whether the problem is related to the employee's disability. If the employee indicates their disability is impacting performance, the Company will engage in confidential discussions with the employee regarding whether the employee requires reasonable accommodations to improve performance.

Compensation 41 C.F.R. 60-300.21(i)

In offering employment or promotions, AECOM Technical Services Inc. does not reduce the amount of compensation offered to protected veterans because of any disability income, pension, or other benefit the employee receives from another source. Similarly, the Company does not reduce the amount of compensation offered to an employee or applicant because of the actual or anticipated cost of a reasonable accommodation needed, requested, or anticipated.

Internal Communication Procedure

The Company has developed an internal communication procedure whereby all employees, including protected veterans, can raise any issues or claims that may arise during the course of their employment. General communications procedures encourage any and all employees, including protected veterans, to discuss such issues or claims. All matters brought to the attention of the Affirmative Action Coordinator will be confidentially addressed.

Harassment 41 C.F.R. 60-300.44(e)

AECOM Technical Services Inc. has developed and implemented policies and procedures to ensure employees who are protected veterans are not harassed because of their veteran status.

A copy of the Company's Equal Employment Opportunity and Affirmative Action Policy Statement forbidding harassment against individuals based on protected characteristics is included in this AAP.

Training 41 C.F.R. 60-300.44(j)

The Company trains personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes to ensure the commitments in the Company's AAP are implemented.

Internal Dissemination of Policy 41 C.F.R. 60-300.44(g)

The Company recognizes that, however strong its outreach program, internal support from supervisory management and other employees is necessary to ensure maximum effectiveness of its AAP for protected veterans. So that these employees' awareness of the needs of protected veterans can be increased and employee participation in the program is increased, the Company will utilize the following procedures to maximize the internal implementation and dissemination of its Equal Employment Opportunity and Affirmative Action Policy:

- The Company includes a copy of the policy statement in its Policy Manual.
- AECOM Technical Services Inc.'s policy on equal employment opportunity and
 affirmative action for protected veterans is posted on Company bulletin boards. The
 posting includes a statement that employees and applicants are protected from
 coercion, intimidation, and interference or discrimination for filing a complaint or
 assisting in an investigation under the Vietnam Era Veterans Readjustment Assistance
 Act of 1974, as amended.
- The Company posts a copy of the policy in electronic format in a conspicuous location on the Company intranet, along with other employment forms, and otherwise ensures all off-site personnel have a copy of or the ability to view the policy.
- The Company's electronic applicant process includes information about the Company's commitment to equal employment opportunity and affirmative action.
- The Company will communicate to employees its obligation to take affirmative action to employ qualified protected veterans and will encourage employee referral of covered applicants.
- AECOM Technical Services Inc. will invite employees who are protected veterans to participate in the AAP.
- Meetings with executive management and supervisory personnel will be conducted at least annually to explain the Company's policy of affirmative action, to make clear the Chairman and Chief Executive Officer's support for the policy, and to impart to these personnel their responsibility in making the AAP a success.
- An invitation to participate in AECOM Technical Services Inc.'s policy of affirmative
 action is disseminated to all applicants, as well as to all employees once the Company
 has extended a job offer, but before beginning employment duties.
- When applicable, AECOM Technical Services Inc. publicizes the policy in Company publications.
- The policy is discussed in both new employee orientation and management training programs.
- When applicable, Company publications include articles on accomplishments of all employees, including protected veterans.

If the Company has or becomes party to collective bargaining agreements, union officials will be informed the Company is bound by the terms of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, and is committed to take affirmative action to employ and advance in employment protected veterans, and the Company will not discriminate

against protected veterans. For those sites not subject to a collective bargaining agreement, no notification of union officials is necessary.

Outreach, Positive Recruitment and External Dissemination of Policy 41 C.F.R. 60-300.44(f)

AECOM Technical Services Inc. has reviewed its employment practices to determine whether its personnel programs are designed to effectively recruit and advance in employment protected veterans. While the Company believes there are no deficiencies in its current employment practices with respect to applicants and employees who are protected veterans, it engages in outreach, positive recruitment, and external dissemination programs to augment its existing affirmative efforts. For example, the Company sends written notification of its affirmative action policy to all subcontractors, including subcontracting vendors and suppliers, and requests appropriate action on their part. In addition, the Company engages in or has made plans to implement the following activities:

- AECOM Technical Services Inc. makes the Equal Employment Opportunity Clause part of all covered contracts and purchase orders.
- The Company posts all job vacancies (other than some executive and senior management positions or positions lasting three days or less) for which it considers outside applicants with the state workforce agency job bank or local employment delivery system where the opening occurs. These postings occur before or concurrently with the use of other recruitment efforts to fill the job and are provided in the manner and format specified by the relevant agency that will allow the agency to provide priority referral of protected veterans.
- AECOM Technical Services Inc. has notified the employment service delivery system in each state where it has establishments that it is a federal contractor and it desires priority referrals of protected veterans for job openings in that state. The Company also provided the employment service delivery system with the name and location of all hiring locations within the state and the contact information for an employee who can answer questions about such job listings. The notice also included the names and contact information for job search organizations the Company uses to assist in hiring, if any. If any of the information in this disclosure changes, the Company sends an update with the next relevant job listing.
- Executives, management officials, supervisors, and other employees of the Company
 are encouraged to assist in the effort to disseminate AECOM Technical Services Inc.'s
 policy of affirmative action to appropriate individuals outside of the Company.
- The Company will inform recruiting sources of AECOM Technical Services Inc.'s policy
 of affirmative action for protected veterans. Recruiting sources will be requested to
 actively recruit and refer qualified protected veterans for all positions.
- AECOM Technical Services Inc. will identify local organizations and/or community agencies known to specialize placing and/or developing training programs for protected veterans and send them notices of vacant positions. Examples of these outreach efforts include:
 - Veterans' Employment Representative in the employment service center near the facilities covered in this AAP
 - Department of Veterans Affairs Regional office near the facilities covered in this AAP
 - Veterans' coordinators on campuses where the Company normally recruits

- Other recruitment sources that specialize in placement of protected veterans
- When appropriate, the Company will invite community service and other outreach
 partners to tour the office and discuss the Company, job recruitment needs, selection
 process, and other details related to recruitment and placement. In the event a partner
 is unable to schedule an on-site meeting, the Company will suggest a telephone
 meeting so they can better identify qualified individuals for our positions.
- When the Company recruits at colleges and universities, it will incorporate efforts to reach students who are protected veterans.
- AECOM Technical Services Inc. will seek to include protected veterans when employees are pictured in consumer and personnel recruitment advertising.
- AECOM Technical Services Inc. makes reasonable accommodations for qualified veterans with disabilities.
- AECOM Technical Services Inc. advertisements or solicitations for prospective employees indicate that the Company is an equal opportunity employer.
- As described in more detail in Exhibit A, AECOM Technical Services Inc. evaluates the
 effectiveness of its outreach and recruitment efforts to determine if its affirmative action
 objectives are being met, and makes appropriate changes.

Data Collection Analysis 41 C.F.R. 60-300.44(k)

AECOM Technical Services Inc. documents computations or comparisons pertaining to applicants and hires on an annual basis and maintains the documentation for a period of three years.

Hiring Benchmarks 41 C.F.R. 60-300.45

In establishing a hiring benchmark, the following principles apply:

- The purpose of establishing a hiring benchmark is to provide the Company with a quantifiable method by which it can measure its progress toward achieving equal employment opportunity for protected veterans.
- The hiring benchmark is not a quota that must be met, nor is it a ceiling that limits or restricts the employment of protected veterans.
- In all employment decisions, the Company makes selections in a nondiscriminatory manner. Hiring benchmarks do not provide a justification to extend a preference to any individual, select an individual, or adversely affect an individual's employment status, on the basis of that individual's veteran status.
- Hiring benchmarks do not create set-asides for specific groups, nor are they intended to achieve proportional representation or equal results.
- Hiring benchmarks are not used to supersede merit selection principles, nor do they
 require the Company to hire a person who lacks qualifications to perform the job
 successfully or hire a less qualified person in preference to a more qualified one.
- A finding that the hiring benchmark has not been attained does not constitute either a finding or admission of discrimination.

AECOM Technical Services Inc. has established its benchmark in accordance with the national percentage of veterans in the civilian labor force as published on the OFCCP website. As of January 01, 2020, this benchmark percentage is 5.9 percent.

Monitoring and Reporting Systems 41 C.F.R. 60-300.44(h)

It is the responsibility of the Company's Affirmative Action Coordinator to monitor employment and personnel practices to ensure compliance with applicable regulations and adherence to the Company's Statement of Policy, to report specific problems to the appropriate management personnel, and to measure the effectiveness of AECOM Technical Services Inc.'s AAP.

The Company's audit and reporting system is designed and implemented to:

- Measure the effectiveness of the AAP
- Identify any need for remedial action
- Determine the degree to which the Company's objectives are being attained
- Determine whether individuals who are known protected veterans have had the full opportunity to participate in all Company sponsored educational, training, recreational and social activities
- Measure the Company's compliance with the AAP's specific obligations, and
- Document the actions taken to monitor the Company's compliance with the AAP's specific obligations.

In order to measure the effectiveness of the AAP, the Company may take the following actions:

- Audit its voluntary self-identification process to monitor the number of protected veterans who choose to self-identify and evaluates whether changes could be made to Company's self-identification process to encourage greater voluntary self-identification by protected veterans
- Establish a hiring benchmark to measure its progress towards achieving equal employment opportunity for protected veterans
- Review available data computations and analyses regarding applicants and hires
- Review the effectiveness of its recruitment and outreach activities
- Regularly assess its personnel processes to ensure that protected veterans have equal opportunity in employment
- Use a schedule to regularly assess any mental and physical qualifications to ensure that they are job-related and consistent with business necessity
- Audit its communications with vendors and subcontractors to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action for protected veterans
- Audit its communications with applicants and employees to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action for protected veterans
- Audit its job listings to ensure that the postings reflect the Company's commitment to equal employment opportunity and affirmative action for protected veterans, and

 Audit its personnel policies to ensure that such policies reflect the Company's commitment to equal employment opportunity and affirmative action for protected veterans.

Where the affirmative action program is found to be deficient, the Company shall endeavor to undertake necessary action to bring the program into compliance.

List of Exhibits

Exhibit A – Annual Assessment of Outreach and Recruiting Efforts

Exhibit A - Annual Assessment of Outreach and Recruiting Efforts

AECOM Technical Services Inc. evaluates available data regarding the effectiveness of its outreach and recruitment efforts on an annual basis. For areas where the Company concludes the totality of its efforts were not effective in identifying and recruiting qualified protected veterans, AECOM Technical Services Inc. will identify and implement alternative efforts.

Criteria used to evaluate the effectiveness of outreach efforts may include:

- Available data regarding applicants and hires, including the AECOM Technical Services Inc.'s established veteran hiring benchmark.
- Whether the activity expanded AECOM Technical Services Inc.'s outreach to protected veterans.
- Whether the activity increased the Company's ability to include protected veterans in its workforce.
- · Whether the activity attracted qualified protected veterans.
- Whether the activity resulted in the selection of qualified protected veterans.

The Company will continue to monitor and review outreach sources to evaluate the effectiveness of outreach and recruitment efforts.

AFFIRMATIVE ACTION PROGRAM FOR INDIVIDUALS WITH DISABILITIES

AECOM Technical Services Inc.

500 West Jefferson Street, STE 1600 Louisville, KY 40202

January 1, 2020 through December 31, 2020

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Preface

AECOM Technical Services Inc. (also referred to as the Company) is committed to the concept and practice of equal opportunity and affirmative action. In the preparation of this Affirmative Action Program (AAP), we have been guided by Section 503 of the Rehabilitation Act of 1973 (as amended) (29 U.S.C. § 793) and its implementing regulations (41 C.F.R. Part 60-741). Nothing contained in this AAP or its supporting data should be construed as an admission by the Company, in whole or in part, that it has contravened any federal, state, or local employment practice laws.

In developing and implementing this AAP, AECOM Technical Services Inc. has been guided by its established policy of providing equal employment opportunity. Nothing herein is intended to sanction the discriminatory treatment of any person. Thus, this AAP has been developed in strict reliance upon the Guidelines on Affirmative Action issued by the Equal Employment Opportunity Commission ("EEOC") (29 C.F.R. Part 1608).

While the Company firmly believes in dissemination of its affirmative action policies and equal employment opportunity practices and makes the non-data components of this AAP available for review to employees and applicants upon request, the AAP remains a Company proprietary document. Moreover, the data on which the Company has relied in preparing this AAP are confidential and sensitive, and the Company believes release of the data would subject the Company to commercial harm. Therefore, the following is requested:

- If this AAP or any supporting data or documentation are submitted to Office of Federal Contract Compliance Programs (OFCCP) pursuant to the Executive Order, the Rehabilitation Act, The Vietnam Era Veterans' Readjustment Assistance Act and/or any implementing regulations (as any or all have been or may be amended), those documents and the information they contain are to be considered confidential and not subject to disclosure without notifying the Company of the agency's decision to disclose and providing the Company with ample time to contest the disclosure. Advance notice of disclosure should be sent to . The Company requests this information be treated as exempt from public disclosure under the Freedom of Information Act, 5 U.S.C. § 552.
- If this AAP or any supporting data or documentation is supplied by Company to another government contractor, EEOC or fair employment practices agency representatives, or any other person, it is not to be copied, reproduced, or disclosed by such persons without prior notification to the Company.
- No information contained in the AAP or any supporting data or documentation is to be copied, removed from the premises, or released to other individuals without a prior notification to and permission from the Company.
- Reports that require specific data, such as names of employees and salary information, are not an official part of this AAP. This information is on file at the Company as Documentation and Supporting Data for AAP Reports and is available for review only as required by law.

This AAP does not constitute an express or implied contract between the Company and its employees, job applicants, or other persons, nor does it change in any way the basic at will employment relationship all Company employees have with the Company. Nothing in this AAP creates a private right of action on behalf of any individual or group against the Company.



Statement of Commitment from AECOM's Chief Executive Officer

It is the policy of AECOM not to discriminate or allow the harassment of employees or applicants on the basis of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law with regard to any employment practices, including recruitment, advertising, job application procedures, hiring, training, promotion, transfer, compensation, job assignments, benefits, and/or other terms, conditions of employment, provided the individual is qualified, with or without reasonable accommodations, to perform the essential functions of the job. This policy applies to all jobs at the Company. The Company will continue to ensure that individuals are employed, and that employees are treated during employment, without regard to their sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law in all employment practices as follows:

Employment decisions at the Company are based on legitimate job-related criteria. All personnel actions or programs that affect qualified individuals, such as employment, promotion, demotion, transfer, recruitment, advertising, termination, rate of pay or other forms of compensation, and selection for training, are made without discrimination because of any basis protected by law. Employees may choose to voluntarily disclose their sex, race, national origin, disability and protected veteran status at any time by contacting Human Resources. Such information will be maintained in a confidential manner and will not be used against an individual when making any employment decisions. Employees and applicants with disabilities and disabled veterans are encouraged to inform Human Resources if they need a reasonable accommodation to perform a job for which they are otherwise qualified. The Company makes, and will continue to make, reasonable accommodations to the known physical or mental limitations of an otherwise qualified applicant or employee to promote the employment of qualified individuals with disabilities and disabled veterans, unless such accommodations would impose an undue hardship on the operations of the Company's business.

As AECOM's Chairman and Chief Executive Officer, I am fully committed to the principles of equal employment opportunity and affirmative action. I have appointed EEO Officers responsible for supporting the successful implementation of the Company's Affirmative Action Plans (APPs). Those EEO Officers work with Affirmative Action Coordinators at various locations of the Company, with joint responsibility for implementation of the Company's affirmative action activities. The EEO Officers and Affirmative Action Coordinators have the full support of top management and the staff necessary to fully implement this Program. All managers and supervisors will take an active part in the Company's AAPs to ensure qualified employees and prospective employees are considered and treated in a nondiscriminatory manner with respect to all employment decisions. Furthermore, AECOM will solicit the cooperation and support of all employees for the Company's Equal Employment Opportunity and Affirmative Action Policy. Our Affirmative Action Plans include an audit and reporting system, which, among other things, uses metrics and other information to measure the effectiveness of our Programs. The

Affirmative Action Coordinator is responsible for periodically reviewing progress in the compliance and implementation of the policy of affirmative action. In accordance with public law, the Company's program of affirmative action for qualified individuals with disabilities and the program of affirmative action for protected veterans are available for inspection in the Human Resources Department, Monday through Friday, from 9:00 a.m. to 5:00 p.m. upon request.

In addition, employees and applicants will not be subjected to harassment, intimidation, threats, coercion, or discrimination because they have engaged in, or may have engaged in, filing a complaint, assisting or participating in an investigation, compliance review or hearing, or other activity related to the administration of Section 503 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, Executive Order 11246, all as amended, and/or any other federal, state, or local law or regulation regarding Equal Employment Opportunity, opposing any act or practice made unlawful, or exercising any other right protected by such laws or regulations. AECOM will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information.

Michael S. Burke

January 2020

Definitions 41 C.F.R. 60-741.2

"DISABILITY" means, generally, (i) a physical or mental impairment that substantially limits one or more of an individual's major life activities, (ii) a record of such impairment, or (iii) being regarded as having such impairment.

For the purposes of this Program, a disability is substantially limiting if it substantially impairs the ability of an individual to perform a major life activity as compared to most people in the general population. An impairment need not prevent, or significantly or severely restrict the individual from performing a major life activity to be considered substantially limiting.

For the purposes of this Program, major life activities include but are not limited to the operation of a major bodily function, caring for oneself, performing manual tasks, seeing, hearing, sleeping, walking, standing, sitting, reaching, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, interacting with others, and working.

"A QUALIFIED INDIVIDUAL" means an individual who satisfies the requisite skill, experience, education, and other job related requirements for the particular position he/she holds or desires and who is capable of performing the essential functions of that position, with or without reasonable accommodation for any disability.

Responsibility for Implementation 41 C.F.R. 60-741.44(i)

Lisa Boecker, EEO Officer, has overall responsibility for implementation of the Equal Employment Opportunity Policy and the AAP. The Company has assigned primary management responsibility and accountability for ensuring full compliance with the Program to , the Affirmative Action Coordinator of the Company. As Affirmative Action Coordinator, has the authority, resources, support of and access to top management necessary to ensure the effective implementation of the AAP. The EEO Officer actively supports the program and provides assistance whenever it is needed, making managers and supervisors aware of the program and requesting their cooperation and assistance. The identity of the Affirmative Action Coordinator appears on internal and external communications regarding the Company's Equal Employment Opportunity Policy and AAP.

With regard to the Company AAP, Lisa Boecker works closely with the Affirmative Action Coordinator to implement the programs which are specific to the Company., together with the Human Resources staff, has primary responsibility for implementing programs at the Company.

The duties of the Affirmative Action Coordinator and designees include:

- Developing policy statements, AAPs, and internal and external modes of communication
- Overseeing regular discussions with local managers, supervisors, and employees to ensure the Company's policies are being followed
- Training personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes to ensure the commitments in the Company's affirmative action program are implemented
- Advising supervisors their affirmative action efforts and results are a component of their performance evaluations, and the Company is obligated to prevent discrimination and harassment of employees
- Identifying, in conjunction with line management, any problem areas in implementing the AAP, and developing solutions
- Identifying any barriers to employment for individuals with known disabilities and assisting managers in developing possible reasonable accommodations to ensure that individuals with disabilities benefit from equal employment opportunities
- Designing and implementing an internal audit and reporting system that will measure
 the effectiveness of the Company's Program, indicate the need for remedial action,
 determine the degree to which the Company's objectives have been attained,
 determine whether employees with known disabilities have the opportunity to
 participate in Company-sponsored employment, educational, training, recreational, and
 social activities, and ensure each location is in compliance with applicable laws and
 regulations
- Serving as liaison between the Company and enforcement agencies, and between the Company and organizations of and for persons with disabilities
- Encouraging active involvement by Company representatives in the community service programs of local organizations of and for individuals with disabilities

- Ensuring posters and notices are properly displayed or disseminated in ways that are accessible and understandable to applicants and employees, and
- Keeping management informed of developments in the affirmative action area.

The responsibilities of managers and supervisors under this AAP include:

- · Taking action to prevent the discrimination and harassment of employees
- Ensuring their departments fully comply with the spirit and letter of the affirmative action program and policies
- Reviewing the qualifications of all applicants and employees to make sure qualified individuals are treated in a nondiscriminatory manner with regard to hire, promotion, transfer and termination
- Reviewing the job performance of each employee to assess whether personnel actions are justified based on the employee's performance of his or her job duties and responsibilities, and
- Working with the Affirmative Action Coordinator or Human Resources Manager and qualified employees or applicants with disabilities to determine appropriate reasonable accommodations if they are necessary for performance of the job and/or the recruitment process.

Request for Self-Identification 41 C.F.R. 60-741.42

In order to notify applicants and employees of the existence of and the opportunity to participate in this affirmative action program and to provide sufficient data to allow AECOM Technical Services Inc. to measure and improve, if necessary, the effectiveness of the Company's affirmative action efforts, AECOM Technical Services Inc. invites applicants and employees to complete an invitation to self-identify status as a person with a disability as follows:

- When an applicant applies or is considered for employment, the Company provides the applicant with a copy form CC-305 at the same time the Company invites the applicant to self-identify race, ethnicity, sex, and veteran status.
- Following an offer of employment but before the individual begins his/her job duties, the Company provides an additional copy of form CC-305.
- Recognizing an individual's status regarding disability may change over time and/or an employee may feel more comfortable disclosing an existing disability after being employed for a period of time, the Company also sends a copy of form CC-305 to all employees at least once every five years. In addition, the Company posts a copy of the Invitation to Self-Identify and at least once during the five-year intervals between workplace surveys, sends a written reminder to employees that they may voluntarily update their disability status.

The Company keeps all self-identification information confidential and maintains it in a data analysis file rather than in individual employee personnel or medical files.

Review of Personnel Processes 41 C.F.R. 60-741.44(b)

AECOM Technical Services Inc. periodically reviews its personnel procedures to determine whether they ensure the careful, thorough, and systematic consideration of the job qualifications of employees or applicants with known disabilities for jobs filled either through vacancy or promotion and for educational or training opportunities. The Company ensures that its personnel processes facilitate the implementation of the affirmative action program.

Vacancies are advertised, and applications are accepted from any interested person. AECOM Technical Services Inc.'s employment application, the careers section of its website, and all advertisements include a non-discrimination statement to further assure applicants of the Company's policy of equal employment opportunity. An EEO statement will be included in other recruitment literature should the Company use such documents in the future. All non-executive positions lasting three days or more not expected to be filled from within will be referred to the appropriate state employment service delivery system. In addition, to ensure qualified individuals with disabilities are aware of openings, the Company will send vacancy announcements to selected sources listed in the Outreach, Positive Recruitment, and External Dissemination of Policy section of this Affirmative Action Program.

The disability of any otherwise qualified individual who applies for any vacancy, promotion, transfer, or training opportunity will not be a factor in employment decisions. The Company periodically reviews any physical and mental job qualifications to ensure they do not tend to screen out individuals with disabilities for reasons that are not job related or consistent with business necessity, or do not relate to ensuring the safe performance of the essential functions of the job. The Company makes any necessary modifications to ensure applicants and employees receive equal opportunity in the operation of our personnel processes, and that persons with disabilities are not stereotyped in a manner that limits their access to jobs for which they are qualified.

The Company also ensures applicants and employees with disabilities who meet job qualifications have equal access to its personnel process, including those implemented through information and communication technologies, and provides necessary reasonable accommodation to ensure that applicants and employees with disabilities receive equal opportunity in the operation of personnel processes. Finally, the Company makes sure its personnel processes do not limit, segregate, or classify an employee or job applicant in a way that adversely affects employment opportunities or status on the basis of disability.

Review of Physical and Mental Job Requirements 41 C.F.R. 60-741.44(c)

AECOM Technical Services Inc. reviews physical and mental job qualification requirements as job qualification requirements are established or revised to ensure qualification requirements do not screen out qualified individuals with disabilities or qualified disabled veterans for reasons that are not job related or consistent with business necessity and the safe performance of the essential functions of the job. This review occurs at regular intervals throughout each calendar year, such as when a job may be advertised or filled through hiring or promotion, when the duties of a position are significantly revised, and when considering requests for reasonable accommodation related to the performance of the functions of a position.

AECOM Technical Services Inc. also regularly reviews its personnel processes to ensure any medical exams or inquiries are conducted in accordance with the Section 503 regulations. Information regarding the medical condition or history of an individual obtained as a result of any such inquiry or exam is collected and maintained on separate forms and in separated medical files and treated as a confidential medical record.

To the extent any physical or mental job qualification measurements are found to potentially screen out qualified individuals with disabilities or qualified disabled veterans in the selection of employees or applicants for employment or in other changes in employment status, such as promotion or training, AECOM Technical Services Inc. will ensure the requirements are related to the specific job for which the individual is being considered and are consistent with business necessity and the safe performance of the job.

To date, no qualification requirements have been identified that are likely to have a screening effect. All job qualification requirements have been found to be job related, consistent with business necessity, or required for the safe performance of the job.

Reasonable Accommodations 41 C.F.R. 60-741.44(d)

AECOM Technical Services Inc. has made and will continue to make reasonable accommodations, which do not impose undue hardships on its business, to the known physical and mental limitations of otherwise qualified employees and job applicants.

Included among the specific accommodations for qualified individuals with disabilities that have been implemented are the following:

- Short- and long-term disability programs provide pay for eligible employees absent due to disability.
- A personal leave policy enables eligible employees to accumulate paid time off to be used for medical appointments or personal illness.
- A medical leave of absence is available to any employee who provides medical documentation of disability, where the requested absence constitutes a reasonable accommodation.
- Adaptive equipment, such as supportive desk chairs, special computer monitors and/or keyboards, is made available when necessary to enable an employee to perform an essential job function.
- Should reasonable accommodations be necessary to facilitate access to work areas by qualified employees or applicants with known disabilities, the Company will take reasonable steps to provide such accommodations.
- If necessary to accommodate a disability, the Company will redesign jobs to eliminate nonessential functions, unless the redesign creates an undue hardship.
- The Company will arrange suitable work hours for employees returning from sick leave, leave of absence, and long-term disability where that arrangement constitutes a reasonable accommodation.
- The Company will accommodate employees with disabilities by allowing a reasonable amount of time off for physicians' visits.
- Special parking for individuals with disabilities is available at AECOM Technical Services Inc..
- The Company's online application system makes clear to all applicants that if they are unable to fully use the automated system, they may follow specified alternate procedures so that they receive equal opportunity to apply for and be fully considered for all jobs.
- The Company has designed its online application system and its internal information and communication technologies to increase the accessibility of those systems.

If an individual has a disability, the Company encourages the individual to tell us about (i) any special methods, skills, and procedures which qualify him or her for positions which he or she might not otherwise be able to do, so that he or she can be considered for any position of that kind, and (ii) the reasonable accommodations which would enable the individual to perform the job properly and safely. Such accommodations may include special equipment, changes in the physical layout of the job, elimination of certain nonessential duties related to the job, or other

reasonable accommodations.

The Company informs employees and applicants of its desire to discuss reasonable accommodations in various ways, including through our Policy Statement and on the Invitation to Self-Identify. Both the Policy Statement and the Invitation to Self-Identify are provided to employees and applicants, and posted for to employees. Individuals interested in discussing accommodations may contact, the Affirmative Action Coordinator, the Human Resources Department, and/or the individual's supervisor. Managers and supervisors are trained to ensure that they know what to do if an employee or applicant makes a request for a reasonable accommodation so that such requests are processed swiftly.

Where an employee with a known disability is having significant difficulty performing their job and the Company reasonably concludes that the performance issues may be related to the known disability, the Company may notify the employee of the performance problem and confidentially inquire whether the problem is related to the employee's disability. If the employee indicates that their disability is impacting performance, the Company will engage in confidential discussions with the employee regarding whether the employee requires reasonable accommodations to improve performance.

Compensation 41 C.F.R. 60-741.21(a)(9)

In offering employment or promotions, AECOM Technical Services Inc. does not reduce the amount of compensation offered to individuals with disabilities because of any disability income, pension, or other benefit the employee receives from another source. Similarly, the Company does not reduce the amount of compensation offered to an employee or applicant because of the actual or anticipated cost of a reasonable accommodation needed, requested, or anticipated.

Internal Communication Procedure

The Company has developed an internal communication procedure whereby all employees, including individuals with disabilities, can raise issues or claims that may arise during the course of their employment. General communications procedures encourage any and all employees, including those with disabilities, to discuss such issues or claims. All matters brought to the attention of the Affirmative Action Coordinator will be confidentially addressed.

Harassment 41 C.F.R. 60-741.44(e)

AECOM Technical Services Inc. has developed and implemented policies and procedures to ensure employees who are individuals with disabilities are not harassed because of their disability status.

A copy of the Company's Equal Employment Opportunity and Affirmative Action Policy Statement forbidding harassment against individuals based on protected characteristics is included in this AAP.

Training 41 C.F.R. 60-741.44(j)

The Company trains personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes to ensure the commitments in the Company's AAP are implemented.

Internal Dissemination of Policy 41 C.F.R. 60-741.44(g)

The Company recognizes that, however strong its outreach program, internal support from supervisory management and other employees is necessary to ensure maximum effectiveness of its AAP for individuals with disabilities. So that these employees' awareness of the needs of individuals with disabilities can be increased and employee participation in the program is increased, the Company will utilize the following procedures to maximize the internal implementation and dissemination of its Equal Employment Opportunity and Affirmative Action Policy:

- The Company includes a copy of the policy statement in its Policy Manual.
- AECOM Technical Services Inc.'s policy on equal employment opportunity and affirmative action for individuals with disabilities is posted on Company bulletin boards. The posting includes a statement that employees and applicants are protected from coercion, intimidation, and interference or discrimination for filing a complaint or assisting in an investigation under the Rehabilitation Act of 1973, as amended.
- The Company posts a copy of the policy in electronic format in a conspicuous location on the Company intranet, along with other employment forms, and otherwise ensures all of its personnel have a copy of or the ability to view the policy.
- The Company's electronic applicant process includes information about the Company's commitment to equal opportunity and affirmative action.
- The Company will communicate to employees its obligation to take affirmative action to employ qualified individuals with disabilities and will encourage employee referral of covered applicants.
- AECOM Technical Services Inc. will invite employees who are individuals with disabilities to participate in the AAP.
- Meetings with executive management and supervisory personnel will be conducted at least annually to explain the Company's policy of affirmative action, to make clear the Chairman and Chief Executive Officer's support for the policy, and to impart to these personnel their responsibility in making the AAP a success.
- An invitation to participate in AECOM Technical Services Inc.'s policy of affirmative action is disseminated to all applicants, as well as to all employees once the Company has extended a job offer, but before beginning employment duties. In addition, in recognition that an individual's disability status may change and/or that employees may feel more comfortable disclosing an existing disability after a period of time in the Company, the Company posts a copy of the invitation to participate in the affirmative action program and distributes the invitation to all current employees at least once every five years.
- When applicable, AECOM Technical Services Inc. publicizes the policy in Company publications.
- The policy is discussed in both new employee orientation and management training programs.
- When applicable, Company publications include articles on accomplishments of all employees, including individuals with disabilities.

If the Company has or becomes party to collective bargaining agreements, union officials will be informed the Company is bound by the terms of the Rehabilitation Act of 1973, as amended, and is committed to take affirmative action to employ and advance in employment persons with disabilities, and the Company will not discriminate against individuals with physical or mental disabilities. For those sites that are not subject to a collective bargaining agreement, no notification of union officials is necessary.

Outreach, Positive Recruitment and External Dissemination of Policy 41 C.F.R. 60-741.44(f)

AECOM Technical Services Inc. has reviewed its employment practices to determine whether its personnel programs are designed to effectively recruit and advance in employment qualified individuals with disabilities. While the Company believes there are no deficiencies in its current employment practices with respect to applicants and employees with disabilities, it engages in outreach, positive recruitment, and external dissemination programs to augment its existing affirmative efforts. For example, the Company sends written notification of its affirmative action policy to all subcontractors, including subcontracting vendors and suppliers, and requests appropriate action on their part. In addition, the Company engages in or has made plans to implement the following activities:

- Executives, management officials, supervisors, and other employees of the Company
 are encouraged to assist in the effort to disseminate AECOM Technical Services Inc.'s
 policy of affirmative action to appropriate individuals outside of the Company.
- The Company will inform recruiting sources of AECOM Technical Services Inc.'s policy
 of affirmative action for individuals with disabilities. Recruiting sources will be requested
 to actively recruit and refer qualified individuals with disabilities for all positions.
- AECOM Technical Services Inc. makes the Equal Employment Opportunity Clause part of all covered contracts and purchase orders.
- AECOM Technical Services Inc. will identify local organizations and/or community agencies known to specialize placing and/or developing training programs for individuals with disabilities and send them notices of vacant positions. Examples of these outreach efforts include:
 - State Vocational Rehabilitation Service agencies, mental health agencies, and/or developmental disabilities agencies in the states covered by this AAP
 - Employment One-Stop Career Centers in the states covered by this AAP
 - Department of Veterans Affairs offices close to the facilities covered in this AAP
 - Private recruitment sources, such as professional organizations or employment placement services that specialize in placement of individuals with disabilities
- When appropriate, the Company will invite community service and other outreach
 partners to tour the office and discuss our Company, job recruitment needs, selection
 process, and other details related to recruitment and placement. In the event a partner
 is unable to schedule an on-site meeting, the Company will suggest a telephone
 meeting so they can better identify qualified individuals for our positions.
- When appropriate, AECOM Technical Services Inc. will include disabled individuals when employees are pictured in consumer and personnel recruitment advertising.
- AECOM Technical Services Inc. makes reasonable accommodations for qualified individuals with disabilities.
- AECOM Technical Services Inc. advertisements or solicitations for prospective employees indicate that Company is an equal opportunity employer.
- As described in more detail in Exhibit B, AECOM Technical Services Inc. evaluates the

effectiveness of its outreach and recruitment efforts to determine if its affirmative action objectives are being met, and makes appropriate changes.

Data Collection Analysis 41 C.F.R. 60-741.44(k)

AECOM Technical Services Inc. documents computations or comparisons pertaining to applicants and hires on an annual basis and maintains the documentation for a period of three years.

Utilization Analysis 41 C.F.R. 60-741.45

AECOM Technical Services Inc. will compare the representation of employees with known disabilities in our workforce with the utilization goal identified by Office of Federal Contract Compliance Programs in effect at the start of this Affirmative Action Program year. In conducting this analysis, the following principles apply:

- The purpose of the utilization goal established by OFCCP is to provide a benchmark against which the Company may measure the representation of individuals with disabilities in its workforce.
- OFCCP believes the utilization goal serves as an equal employment opportunity objective that should be attainable through the use of the affirmative action measures included in this Affirmative Action Program.
- The utilization goal is not a quota that must be met, nor is it to be considered as a ceiling that limits or restricts the employment of individuals with disabilities.
- In all employment decisions, the Company makes selections in a nondiscriminatory manner. Utilization goals do not provide a justification to extend a preference to any individual, select an individual, or adversely affect an individual's employment status, on the basis of that individual's disability status.
- Utilization goals do not create set-asides for specific groups, nor are they intended to achieve proportional representation or equal results.
- Utilization goals are not used to supersede merit selection principles, nor do these
 utilization goals require the Company to hire a person who lacks qualifications to
 perform the job successfully or hire a less qualified person in preference to a more
 qualified one.
- A finding that the utilization goal has not been attained in the workforce does not constitute either a finding or admission of discrimination.

Identification of Problem Areas 41 C.F.R. 60-741.45(e)

When the Utilization Analysis conducted in accordance with the regulations indicates the representation of individuals with known disabilities is less than the current goal identified by OFCCP, the Company will take steps to assess whether and where impediments to equal employment opportunity exist, including the following, as appropriate:

- Sources which have provided limited qualified candidates will be reviewed, and the Affirmative Action Coordinator will identify actions which may increase the number of qualified applicants received.
- The Affirmative Action Coordinator will review positions or job groups that require specialized skill sets or physical requirements.
- Our affirmative action program audit will be reviewed.
- The Affirmative Action Coordinator will review our personnel processes to ensure the careful, thorough, and systematic consideration of the job qualifications of applicants and employees with known disabilities and that no barriers to equal employment opportunities exist.

Based on this analysis, we have developed and will execute the action oriented programs described in this AAP.

Development and Execution of Action-Oriented Programs 41 C.F.R. 60-741.45(f)

To demonstrate our good faith efforts to expand employment opportunities for individuals with disabilities and to produce measurable results, the Company developed and executed the following action oriented programs, as appropriate:

- The Company will continue to analyze all positions and prepare written descriptions to accurately reflect position functions and to ensure any physical or mental requirements are job related and consistent with business necessity.
- Job descriptions will continue to be reviewed to determine the knowledge, skills, abilities, and other requirements necessary for the adequate performance of the job. Specifications will continue to be consistent for the same job title and will not contain any requirements that would result in discrimination on the basis of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, and/or protected veteran status, or any other characteristic protected by law.
- Job descriptions are available to incumbents and all members of management involved in the recruiting, screening, selection, and promotion process. Job descriptions are also made available to employees, applicants, and recruiting sources as appropriate.
- The Company has carefully evaluated the total selection process and found it to be free from discrimination:
 - We have instructed supervisory personnel to ensure elimination of discrimination in personnel actions in which they are involved.
 - o Application forms do not contain questions with potential discriminatory effects.
 - O All parts of the selection process are free from stereotyping of individuals with disabilities in a manner which limits their access to jobs for which they are qualified.
 - o The Company does not and will not use any selection techniques that can be improperly used to discriminate against individuals with disabilities.
- The Company has evaluated its techniques for improving recruitment and increasing the flow of qualified applicants with disabilities through the following:
 - o All employees are actively encouraged to refer applicants to the Company.
 - o The Company lists all required positions with the appropriate state workforce agency and state disability agency.
 - o The Company provides copies of policies to inform new employees of their equal employment rights and responsibilities, right to request reasonable accommodation, promotional opportunities, Company rules, and ways to alleviate any problems that might arise.
 - o The Company identifies alternative or additional outreach and recruitment efforts to increase recruitment of individuals with disabilities.
- The Company has implemented the following programs and procedures to ensure employees with disabilities are given equal opportunities for promotion:

- On-the-job training is provided to all qualified employees to assist them in developing the necessary knowledge and skills for promotion to higher level jobs. In addition, a tuition reimbursement benefit is available to all qualified employees.
- o The Company utilizes a formal performance evaluation program for all employees. Management and supervisors are trained on the basic methodology of performance evaluation.
- Employees with known disabilities are not required to possess higher qualifications than those of the lowest qualified incumbent in the job for which they apply.
- o Seniority practices are not a problem since the Company has no formal seniority system. Promotions are based on merit selection principles.
- We will continue to make opportunities for advancement widely known through our internal posting process which encourages all employees, including employees with disabilities, to apply for any open position for which they are qualified with or without reasonable accommodation.
- o We have assessed our personnel processes, and have concluded our personnel processes continue to ensure the careful, thorough, and systematic consideration of the job qualifications of applicants and employees with known disabilities and that no barriers to employment exist.

Monitoring and Reporting Systems 41 C.F.R. 60-741.44(h)

It is the responsibility of the Company's Affirmative Action Coordinator to monitor all employment and personnel practices to ensure compliance with applicable regulations and adherence to the Company's Statement of Policy, to report specific problems to the appropriate management personnel, and to measure the effectiveness of AECOM Technical Services Inc.'s AAP.

The Company's audit and reporting system is designed and implemented to:

- Measure the effectiveness of the AAP
- Identify any need for remedial action
- Determine the degree to which the Company's objectives are being attained
- Determine whether individuals with known disabilities have had the full opportunity to equal employment and to participate in all Company sponsored educational, training, recreational and social activities, and
- Measure the Company's compliance with the AAP's specific obligations.
- Document the actions taken to monitor the Company's compliance with the AAP's specific obligations.

In order to measure the effectiveness of the AAP, the Company may take the following actions:

- Audit its voluntary self-identification process to monitor the number of individuals with disabilities who choose to self-identify and evaluates whether changes could be made to Company's self-identification process to encourage greater voluntary selfidentification by individuals with disabilities
- Examine its utilization of individuals with disabilities and develops action-orientated programs to address any areas of underutilization
- Review available data computations and analyses regarding applicants and hires
- Review the effectiveness of the Company's recruitment and outreach activities
- Regularly assess the Company's personnel processes to ensure that individuals with disabilities have equal opportunity in employment
- Use a schedule to regularly assess any mental and physical qualifications to ensure that they are job-related and consistent with business necessity
- Audit the Company's communications with vendors and subcontractors to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action for individuals with disabilities
- Audit the Company's communications with applicants and employees to ensure that such communications reflect the Company's commitment to equal employment opportunity and affirmative action for individuals with disabilities
- Audit the Company's job listings to ensure that the postings reflect the Company's commitment to equal employment opportunity and affirmative action for individuals with

disabilities

 Audit the Company's personnel policies to ensure that such policies reflect the Company's commitment to equal employment opportunity and affirmative action for individuals with disabilities

Where the affirmative action program is found to be deficient, the Company shall endeavor to undertake necessary action to bring the program into compliance.

List of Exhibits

Exhibit A – Reasonable Accommodation Policy and Procedures

Exhibit B – Annual Assessment of Outreach and Recruitment Efforts

Reasonable Accommodations

Americans with Disabilities Act.

AECOM is committed to complying with all relevant and applicable provisions of the Americans with Disabilities Act ("ADA"), as amended by the Americans with Disabilities Act Amendments Act ("ADAAA"), and related state and local laws. AECOM will not discriminate against any qualified individual with respect to any terms, privileges or conditions of employment because of a person's physical or mental disability.

Upon request of a qualified individual with a disability, it is our policy to provide reasonable accommodation to allow the individual to perform the essential functions of the position. A reasonable accommodation involves a change or adjustment to job duties or the work environment, including providing or extending a leave, that does not constitute an undue hardship for the Company. Reasonable accommodations enable a qualified individual with a disability to participate in the job application process, to perform the essential functions of their position, or to enjoy the benefits and privileges of employment equal to those enjoyed by individuals without disabilities.

This ADAAA / Reasonable Accommodation Policy is implemented by following this procedure:

- 1. An individual may request an accommodation in order to perform the essential functions of a job he or she holds or desires by contacting Human Resources and providing sufficient information concerning the nature of the disability and corresponding limitations on his or her ability to perform the essential functions of the position. The accommodation request can be written or verbal and can be made by the individual or by someone else on the individual's behalf. The accommodation request should specify the accommodation the individual desires to perform the job. Upon receipt of such request for an accommodation, AECOM will evaluate the request and determine whether the requested accommodation is reasonable and will not create an undue hardship for the Company. AECOM may propose an alternative accommodation.
- 2. In determining whether the requested accommodation or some other reasonable accommodation is appropriate, AECOM will engage in an interactive process with the individual requesting the accommodation. We also will engage in the interactive process with an applicant or employee when AECOM has sufficient information to reasonably believe that the applicant or employee: (a) has a disability, and (b) requires an accommodation. If AECOM concludes a reasonable accommodation can be made, the Company will offer this accommodation to the individual.
- 3. In evaluating the nature of a disability and whether a reasonable accommodation is available, AECOM may request and rely on information provided by the individual's health care providers. We may also request information from third parties that possess information or experience relevant to the requested accommodation. All medical information that AECOM obtains about an individual shall be treated as confidential in accordance with the ADAAA, HIPAA and related federal, state and local laws. Individuals requesting an accommodation are expected to fully cooperate in the accommodation process and the interactive dialogue. The duty to cooperate includes making every effort to provide health care provider information regarding the need for, and type of, accommodation. Individuals who do not cooperate in the accommodation process will waive the right to accommodation.
- 4. In cases where providing or extending a leave constitutes a reasonable accommodation, the terms and conditions of that leave will be in accordance with the ADA and/or, if applicable, the FMLA (or state law equivalent leave law).

An employee who believes he or she has been treated in a manner not in accordance with this policy should inform a supervisor or Human Resources representative immediately. Employees may also use AECOM Ethics Hotline 1-888-299-9602 or 1-770-613-6332 (outside of the U.S.) or email AECOMethics.hotline@tnwinc.com to report incidents of discriminatory, harassing or retaliatory conduct in the workplace or any other violation of Company policies.

2. Religious Accommodation

AECOM is committed to complying with all laws that protect employees' religious beliefs and observances. When requested, the Company will provide a reasonable accommodation for employees' religious beliefs and observances, including religious dress and grooming practices, provided the requested accommodation does not create an undue hardship for the Company or pose a direct threat to the health or safety of others in the workplace or to the requesting employee.

This policy applies to all employees and extends to all aspects of the company's employment practices, including recruiting, hiring, discipline, termination, promotions, transfers, compensation, benefits, training, leaves of absence and other terms and conditions of employment.

To request an accommodation for religious beliefs or observances, employees must notify or submit a written request to Human Resources. An employee requesting an accommodation should include in the request the employee's suggestion for an accommodation. Reasonable accommodations may include a change in job duties or schedule, time off (with or without pay) for religious observances, or exceptions to the Company's dress and appearance code, provided that such exceptions do not pose a direct threat to the health or safety of others in the workplace or to the requesting employee. Once the Company is aware of the need for an accommodation, we will engage with the employee in an interactive process to identify possible accommodations. Employees are encouraged to use this procedure without fear of retaliation.

An employee who believes he or she has been treated in a manner not in accordance with this policy should inform a supervisor or Human Resources representative immediately. Employees may also use AECOM Ethics Hotline 1-888-299-9602 or 1-770-613-6332 (outside of the U.S.) or email AECOMethics.hotline@tnwinc.com to report incidents of discriminatory, harassing or retaliatory conduct in the workplace or any other violation of Company policies.

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Exhibit B - Annual Assessment of Outreach and Recruiting Efforts

AECOM Technical Services Inc. evaluates available data regarding the effectiveness of its outreach and recruitment efforts on an annual basis. For areas where the Company concludes the totality of its efforts were not effective in identifying and recruiting qualified individuals with disabilities, AECOM Technical Services Inc. will identify and implement alternative efforts.

Criteria used to evaluate the effectiveness of outreach efforts may include:

- · Results of utilization analysis for individuals with disabilities
- Available data related to applicant and hires
- Whether the activity increased the Company's ability to include individuals with disabilities in its workforce
- Whether the activity attracted qualified individuals with disabilities
- Whether the activity resulted in the selection of qualified individuals with disabilities



ABOUT AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM companies have annual revenue of approximately US\$18 billion. See how we deliver what others can only imagine at aecom.com and @AECOM.

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