GRESHAM, SMITH AND PARTNERS

IN RESPONSE TO REQUEST FOR PROPOSAL

# RFP #28-2015

# Traffic Video Distribution and Management System

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

LEXINGTON, KENTUCKY • JULY 13, 2015

GRESHAM SMITH AND PARTNERS

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July 13, 2015

Mr. Todd Slatin
Purchasing Director
Lexington-Fayette Urban County Government
Room 338, Government Center
200 East Main Street
Lexington, KY 40507

Subject: **RFP #28-2015 Traffic Video Distribution and Management System**
**Advertisement Date: June 22, 2015**

Dear Mr. Slatin,

Gresham, Smith and Partners (GS&P) is pleased to submit our response to the Lexington-Fayette Urban County Government's (LFUCG) RFP for Traffic Video Distribution and Management System advertised on June 22, 2015.

Having completed award-winning video distribution and management system (VDMS) designs and implementations for several state DOTs, we feel we are uniquely poised to develop a VDMS solution that best meets your needs. As you will see within our response, our team of professionals has the knowledge and hands-on experience required to deliver a successful project.

Our team includes individuals that have recent and specific experience in VDMS design and implementation. To ensure we consider the technical complexities along with the overall goals of the project, we have proposed staff knowledgeable in networking and software integration as well as staff who bring a diverse background in all areas of ITS. We are also including a local DBE firm, EHI Consultants, that will assist in any marketing or branding efforts once the system is in place.

Our team has designed and implemented VDMS solutions that have been tested and proven with multiple clients. Our team first successfully developed a VDMS for the Mississippi Department of Transportation (MDOT) in 2012. MDOT wanted to share video with the public and partners. At the same time, they needed to greatly simplify configuration and management efforts, and reduce costs. The end result was a VDMS that has been recognized by the ITS and ITE industry on multiple occasions as an award-winning innovative solution and best practice. Since that time, the GS&P team has developed similar solutions for other DOTs and local government agencies. This experience has allowed us to design VDMS solutions both large and small, in different network and policy environments. This has provided our staff with the experience required to meet the unique needs and goals of our clients.

As several of our key team members facilitated a site visit with LFUCG staff and MDOT personnel to demonstrate other VDMS designs, we feel we have a keen understanding of the project details and your unique needs. We understand that the underlying goal is to be able to share video with the public and LFUCG partners—both internal and external—via the internet and on mobile devices. We also understand that as part of this project several details, which are described later in this response, will need to be analyzed and evaluated to ensure the most cost-effective and efficient solution is delivered.

We believe what sets us apart from others is that we design and deliver end-user systems and solutions, and unlike vendors who will offer a one-size-fits-all product, our solutions are geared toward the needs of the client and not towards selling a product. We are confident in our solution as we've clearly seen our clients' satisfaction at each of the locations we have delivered a tailor-made VDMS.

If selected, our team will provide you with a state-of-the-art, sustainable, and cost-effective video distribution solution that is available to the public, both on demand and on the go. This will allow for you to share live streaming videos with the public—via your traffic website and mobile applications—as well as emergency responders, media partners and internal stakeholders. With access to this information, the public will be able to make more informed travel decisions, thereby improving congestion and mobility on your city streets. This will also allow first responders to evaluate and clear incidents faster, saving time when seconds can mean saving lives.

At the conclusion of this project, LFUCG will be able to better manage congestion, improve mobility and improve safety to the motoring public.

We are very grateful for this opportunity to provide LFUCG with our proposal for consideration for the Traffic Video Distribution and Management System project. If you have any questions or need additional information, please feel free to contact me or our project manager, Laura Hartley, P.E. I may be reached by phone at 502.627.8941 or by e-mail at mike_sewell@gspnet.com. Laura may be reached by phone at 601.991.2393 or by e-mail at laura_hartley@gspnet.com.

Sincerely,

Mike Sewell, P.E.
Principal-in-Charge

# TABLE OF CONTENTS



GS&P
GRESHAM SMITH AND PARTNERS

# SELECTION CRITERIA RESPONSE

SECTION 1.0

# SELECTION CRITERIA RESPONSE

*(1) Specialized experience and technical competence of the person or firm (including a joint venture or association) with similar VDMS system design, configuration and integration. (35 points)*

As demonstrated in our individual team resumes in later sections, our team has the experience and technical expertise required for this project. Our team includes an impressive array of individuals, including those with specialized expertise, as well as those with broad based ITS knowledge whose experience spans over 20 years.

GS&P team members represent the full-range of experience needed for the design, configuration and integration of this project. The individuals we have selected for our team on this project have expertise in electrical engineering, civil engineering, traffic engineering, networking, communications, computer systems and databases, software applications and websites, ITS program management, TMC operations and ITS maintenance.

Our comprehensive team of ITS professionals have experience not only as design and integration consultants, but also first-hand experience with operational environments of TMCs, TOCs, and first responder centers. This combination of experience and familiarity with partner needs and communication systems, positions us to appropriately address the intricate details both from a technical standpoint, as well as from operational, program, and policy standpoints. Our team's experience also includes implementing VDMS systems for multiple clients. Some of those implementations have been large, statewide systems such as MDOT or LaDOTD and smaller regional systems such as Montgomery, Alabama or Pinellas County, Florida.

Although there are similarities between the systems, each deployment is unique and has provided our team with additional skills and knowledge that has allowed us to continue to develop new and innovative VDMS solutions for our clients. We are able to tailor a video distribution system to meet our clients' needs that is not limited by a vendor's product capability. We are uniquely situated to deliver a video distribution system for the LFUCG, given our expertise and experience in the subject area has been developed and specialized though a number of successful deployments, starting with our first MDOT Statewide VDMS project that was completed in 2011. MDOT, concerned with the scalability of their existing system, expressed their specific needs for a video distribution solution that would support planned growth and allow them to share real-time streaming video both internally, with partner agencies and the public. GS&P developed a solution for MDOT that allowed them to operate in accordance to their concept of operations with their statewide and regional TMCs as well as accommodate interfacing with their partner agencies and cities, first responders, the media, and the traveling public. The solution we developed has been nationally recognized in the ITS industry, and we have continued to refine our solution for other clients such as LaDOTD, ALDOT, and Pinellas County, Florida. Each of these organizations solicited our expertise after hearing about the cost-effective and flexible system provided to MDOT—which is very similar to the system the LFUCG is requesting in this RFP.

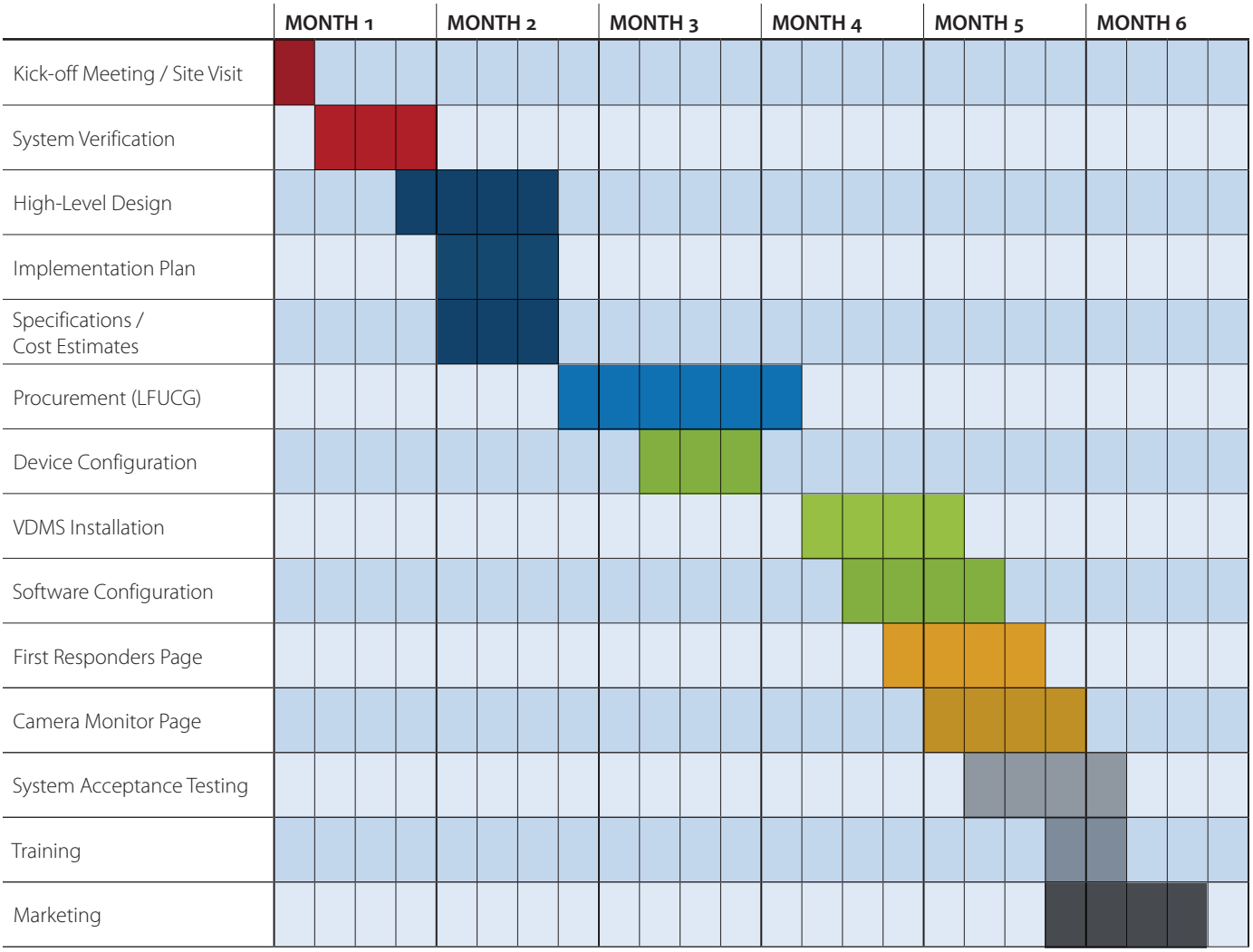
*(2) Capacity of the person or firm to perform the work, including any specialized services, within an anticipated 6-month period from the Notice to Proceed. (20 points)*

The GS&P team members proposed on this project all have experience working on other VDMS systems, including projects for MDOT, LaDOTD, ALDOT and Pinellas County, Florida.

Our team has a keen understanding of the processes and steps from design through implementation of a VDMS system allowing us to effectively and efficiently deliver a solution specific to meet the LFUCG's needs. After having completed several similar projects we know the skill sets required and time needed to design and implement a VDMS solution. There are several specialized services required, by nature, for this project; however, these are all services that our team is able to provide with the staff listed within the 6-month period.

Though many of our team members are also working on other long-term DOT contracts, the contracts are task-based, and are experienced at balancing and scheduling other comparable sized projects, and even larger deployments of VDMS systems, simultaneously. We have also recently added staff in anticipation of growth in our ITS group. We are confident that we are prepared and have the staff available to offer these services to the LFUCG with the experience and expertise specific to this project's needs, as well as the staff capacity and availability.. Though we are prepared to the deliver the project on a short timeline, it will take a heavily orchestrated effort to ensure that procurement is expedited, and the correct hardware and software are in place. GS&P is prepared to assist the LFUCG with that task.

Additionally, due to the fact that we have met with LFUCG staff and have knowledge of the desires, current systems and devices in place, we feel we are uniquely positioned to hit the ground running, minimizing the cost and time associated with a team becoming familiar with the project. We have already begun to internally program time of key staff in anticipation of our team being selected for this opportunity.




### *(3) Familiarity with the details of the project. (20 points)*

LFUCG, having heard about and seen MDOT's website and their ability to stream video, requested to tour MDOT's TMC and video distribution system. As the statewide ITS integrators for MDOT and the developers of MDOT's VDMS, GS&P was available during LFUCG's tour of the MDOT VDMS system to answer any questions.

From discussions occurring during this visit, we have an understanding of the current systems in place, as well as the desires to improve travel for the motoring public by providing streaming video and offering mobile applications. We know that as part of this project LFUCG would like a first responder page that will allow internal staff and partner agencies to create a virtual video wall, complete with the ability to create camera tours and to customize default video wall layouts to better manage incidents. In addition, a camera monitoring page that allows staff to turn on and off feeds to the public, but leave active for first responders is desired. This page would also alert LFUCG when a camera is down or unresponsive and in need of maintenance. We have developed simular pages for other clients and are equipped with the required software, web and database experience to provide and integrate these pages into LFUCG's current traffic site, if that is desired.

As part of this we also know that LFUCG would like to consider hosted vs. owned solutions, associated costs and impact to current goverment staff. Having conducted several alternatives analysis and systems engineering studies on other video systems, our team is ready to provide LFUCG with the options and alternatives to consider. As a first task under this project, we will conduct a detailed review of current system topology and interview staff to document needs and develop the framework for evaluating alternatives. Although we have developed several VDMS solutions as indicated above, each evaluation and implementation is unique. We are not in the business of selling a product, but in engineering the right solution for our clients' needs.

*(4) Project approach and proposed procedures to accomplish scope of the project. (20 points)*

### PHASE 1

We recommend that the best approach to this project is to break it down into several phases. The first phase will consist of an on-site visit and system verification. As part of this process, we will want to review any system documentation, concept of operations, and/or operational procedures as well as document existing devices, infrastructure and systems in place. As part of this phase we will:

- Review current video systems
- Review concept of operations and network topology
- Review partner agencies and discuss sharing requests
- Review operational tools, software(s), ATMS, websites
- Review any relevant and current ITS planning documents, including but not limited to: ITS master plans, business plans, and ITS architectures

Understanding stakeholders' individual needs and parameters will give us greater insight for the design process and ultimately ensures a more successful implementation. As such, as part of the system verification phase we would also like to meet with your internal stakeholders, including program managers, operations and maintenance staff as well as IT and network staff. In addition to meeting with internal staff, we would also want to interview any contacts for third party applications or systems that would be required to integrate with the VDMS. (ATMS, 511, etc.). We know coordinating such an effort can sometimes be a hurdle; however, getting as many stakeholders on-board and involved during the early stages of the project is important. This is a pertinent step in the verification process as it will allow us to identify as many details as possible in regards to how you want your VDMS to interface with operations, existing systems, partner agencies, media, and the traveling public. Our approach is to deliver a solution catering to your distinct operational needs, while evaulating all relevant options and alternatives.

### PHASE 2

After completing an evaluation and analysis of the information collected during the verification phase, we will develop a high level design providing documentation and diagrams of the materials collected in the system verification phase, a discussion of proposed design and alternatives, along with high level associated costs. This design will include system recommendations for an LFUCG managed solution with required hardware, operating systems, software and ISP bandwidth. Costs and an evaluation of a hosted solution will also be included along with integration options with existing systems including the Lexcall 311 application. As part of the design, an implementation plan will also be developed. The implementation plan will include a detailed migration step. It will also include more detailed specifications for any hardware, servers, or licenses. A detailed schedule will be included and will take into account any procurement needs and timetable needed implementation of the VDMS, integration with existing systems, testing and training.

### PHASE 3

If LFUCG does decide to implement an on-site hosted solution and once procurement of any required hardware or software needed for the VDMS has begun, the following phase will be the VDMS implementation and integration. In this phase, the existing devices and equipment will be configured and once the procurement of any new equipment is complete, hardware, systems, and software(s) will be installed, configured, and integrated into the LFUCG's Traffic Management Systems. The first portion will include installation of the server for the VDMS. Our team will configure individual streams from camera sources and conduct testing simultaneously. We prefer LFUCG staff work alongside our team members in this phase to not only familiarize themselves with the new system but begin the training process. Configurations of cameras in the field, VDMS servers and databases, at a minimum will be necessary. As configuration of the VDMS is nearing completion, our team will coordinate with desired vendors and partners in order for their system to be integrated with the VDMS. This could include ATMS, 511, the Lexcall 311 app, etc. At this time, our team will also begin setting up the first responders and camera monitoring webpages. We will customize "look and feel" elements of the VDMS specific to the LFUCG. Throughout this phase, we will coordinate with IT and ITS staff for local access, remote access, and ensure network security during setup of the web components.

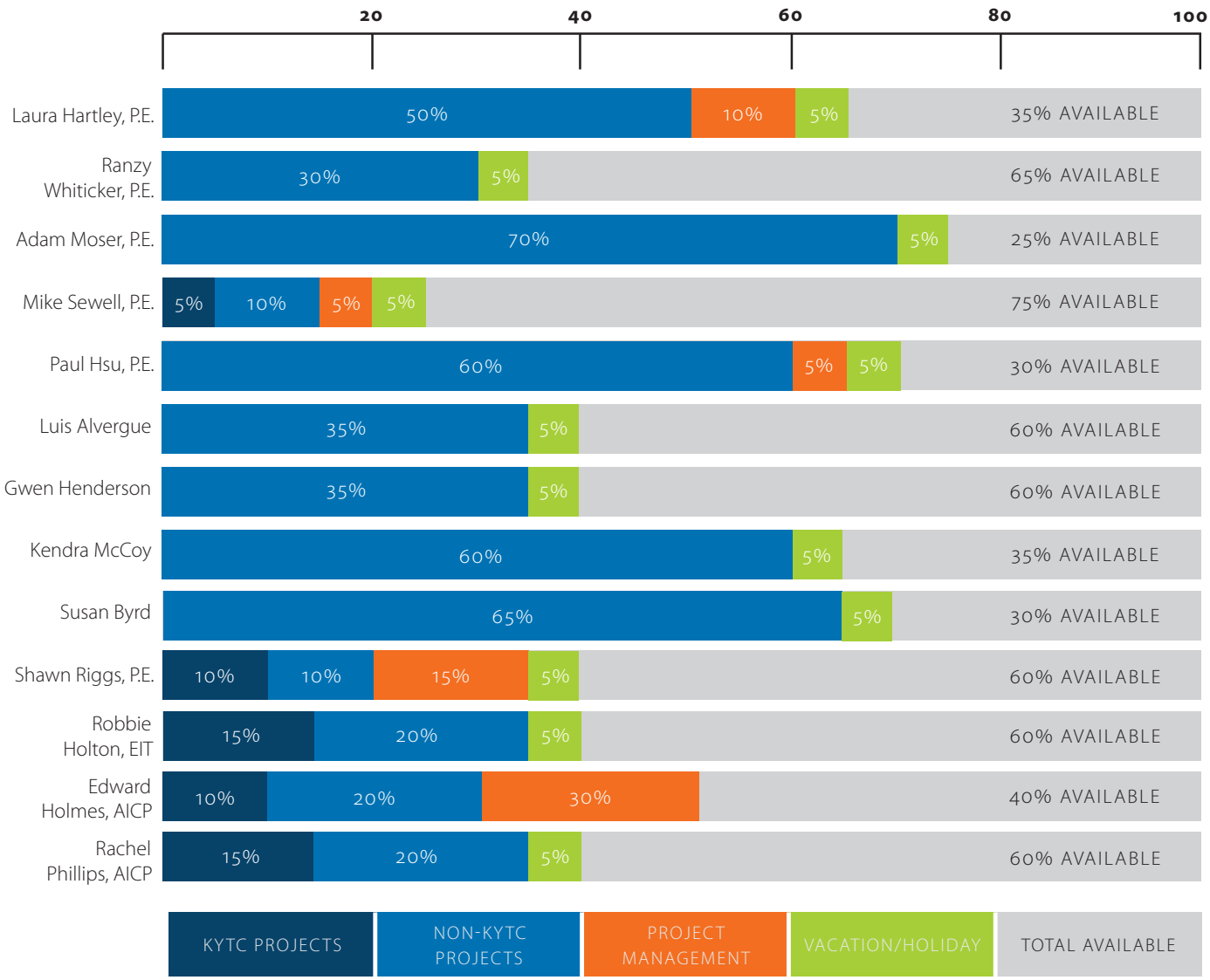
### PHASE 4

The acceptance phase will include validation of the system via testing and training. We plan to conduct testing and training simultaneously throughout the implementation phase but will provide a formal testing and training deliverable, including verbal and written training for System Operation, Administrating, System users and system maintenance. Lastly, we will coordinate a marketing effort with the City of Lexington ITS and outreach groups as appropriate to make sure users, whether internal or external, are aware of the changes and benefits available via the new VDMS system.

Upon project completion, our team will have provided you with a state-of-the-art, sustainable, and cost-effective video distribution solution that caters to the public's expectation of information—both on demand and on the go. This will allow for you to share live streaming videos with the public—via your traffic website and mobile applications—as well as emergency responders, media partners and internal stakeholders. With access to this information, the public will be able to make more informed travel decisions, thereby improving congestion and mobility on your city streets. This will also enable more effective coordination between first-responders—such as faster evaluation and clearing of accident scenes—saving time when seconds can mean saving lives.

At the conclusion of this project, Lexington will be able to better manage congestion, improve mobility and improve safety to the motoring public.

## Team Members' Current Workload and Uncommitted Time over 6 Months




*(5) Degree of local employment to be provided by the person or firm. (5 points)*

Our principle-in-charge for the project, Michael Sewell, P.E., will be local to assist with the LFUCG's specific operational needs as well as to learn of their "look and feel" preferences for the VDMS websites that will be delivered as part of this project.

We will also be utilizing a local GS&P support staff to help coordinate the identification of some of the existing systems, and provide configurations support. Our team also includes a local MBE that will lead any outreach and marketing efforts. We believe the local expertise to provide what is being requested is not needed on a full-time basis in order to fully meet your needs and successfully deliver the project. This project is a very specific deliverable due to the expertise and experience needed. Although most members are not local, you can be assured we are presenting a comprehensive team of efficient, skilled staff. A large portion of the configuration work to occur during the implementation and integration phase of the project can be done remotely. However, key team members will be present during interviews/workshop(s) as well as for any major project meetings or project milestones.

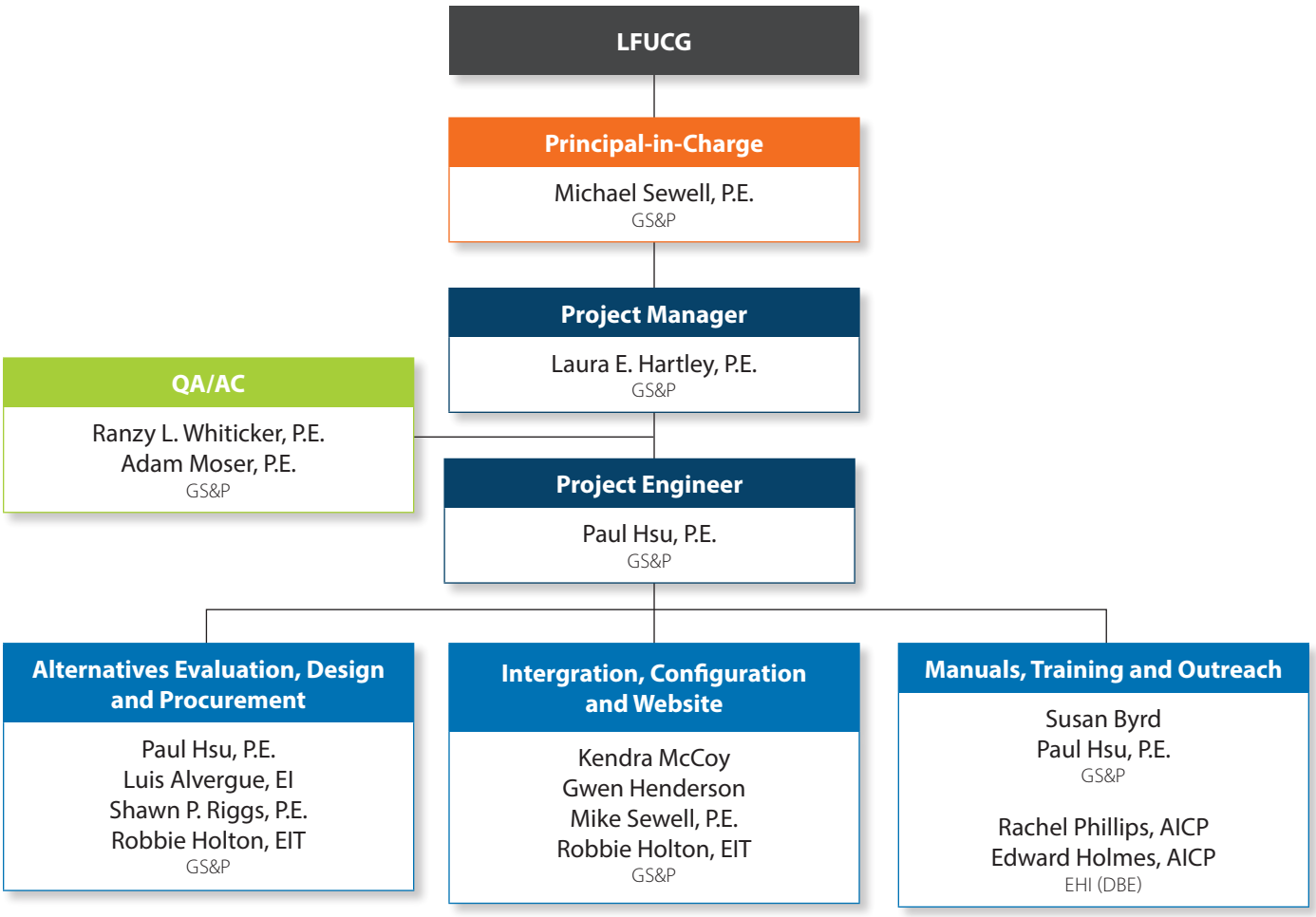
In our expert opinion, what is requested in this RFP can simply not be provided by a vendor. This has been demonstrated by other instances of unsatisfied clients who chose to try a vendor's solution and have been ultimately dissatisfied with the limitations of the end product. We are very proud of the positive reputation we have developed with each of our clients and gladly invite you to contact them as desired to further understand our performance on previous similar projects.

# TEAM ORGANIZATION AND RESUMES

SECTION 2.0

# TEAM ORGANIZATION AND CHART

## Organizational Chart



GRESHAM SMITH AND PARTNERS

# Michael Sewell, P.E.

PRINCIPAL-IN-CHARGE AND WEBSITE SUPPORT

Mike brings 20 years of experience in the planning, design and implementation of varying transportation projects. An accomplished transportation engineer and project manager, he brings a wealth of knowledge gained from providing successful solutions to clients, and having worked in four different GS&P offices throughout his career. While Mike has undertaken a broad variety of projects ranging from rural roadways to some of the largest endeavors that GS&P has undertaken, his passion is advancing the cause for multimodal transportation planning.

Mike is also intimately familiar with setting up a variety of server platforms including Linux and Windows based systems. He also lends his talents to helping code websites that are responsive to both desktop and mobile platforms.

## EDUCATION

2003/Master of Engineering, Civil Engineering, University of Louisville

2002/Bachelor of Civil Engineering, University of Louisville

## REGISTRATIONS

Professional Engineer: KY, OH

## MEMBERSHIPS/ AFFILIATIONS

American Council of Engineering Companies/Kentucky

American Society of Civil Engineers/Louisville

American Society of Highway Engineers/ Derby City

American Society of Highway Engineers/ Middle Tennessee, Treasurer

Indiana Society of Professional Engineers

## YEARS OF EXPERIENCE

With GS&P: 12

With other firms: 7

## RELEVANT PROJECTS

**LFUCG - TIGER Grant Application, Lexington, KY—**Project Manager. GS&P was hired by the Lexington Fayette Urban County Government (LFUCG) to assist in writing a TIGER Grant Application for submitting to the Federal Department of Transportation. Our team first measured the potential impacts that the Town Branch Commons Corridor (TBCC) project would have on the central Lexington business district and immediate neighborhoods. GS&P formulated, analyzed and documented the broader contextual impact the TBCC would have on the region. We also drew upon our local expertise, which has carved a niche for itself as regional multimodal leaders to describe the TBCC as an innovative multimodal greenway that will provide the critical missing link in two regional trail systems—the Legacy Trail and Town Branch Trail—connecting the urban core and Downtown Transit Center to the rural Bluegrass region.

**Louisville Metro - Buechel Bank Road Redesign, Louisville, KY—**Project Manager. GS&P is currently designing Phase I and II plans for the realignment and reconstruction of Buechel Bank Road. The constructed product will provide a safer route for both motorists and pedestrians as well much need drainage improvements.

**Louisville Metro Government - Dutchmans Lane Signal Timing, Louisville, KY—**Project Manager. This signal timing project in the fast growing southeast Louisville area concentrated on Dutchmans Lane and its relationship to Brackenridge Lane and the Henry Watterson Expressway. The traffic on Dutchmans Lane was experiencing unacceptable delays caused by over capacity conditions at several intersections and approaches.

**Louisville Metro Public Works and Assets - Hubbards Lane Widening, Jefferson County, KY—**Principal. GS&P is designing this 1.4 miles roadway widening project located in Jefferson County, Kentucky between KY 1447 (Westport Road) to Kresge Way/Bowling Boulevard. The purpose and need of this project is to increase capacity and safety of Hubbards Lane between KY 1447 (Westport Road) to US 60 (Shelbyville Road), and to improve bicycle and pedestrian accessibility from KY 1447 (Westport Road) to Kresge Way/Bowling Boulevard. The factor that truly separated GS&P from the rest of firms is the way the public involvement was handled. While the questioning was difficult and the visibility was high, GS&P was able to foster goodwill and provide solid background for each decision made to the public. This was packaged into a public involvement campaign recording document for archiving by the Louisville Metro PM and to assist the newly assigned KYTC PM with backup that LPA projects require. GS&P presented alternatives that fell outside of currently allowed KYTC standards, we took the initiative to provide central office justification for our decisions. In the end, a workable solution was provided and a preliminary DES has been drafted.

**Louisville Metro Economic Development - 4th Street Improvements, Louisville, KY—**Project Manager. GS&P was called on to develop preliminary and final construction plans as well as right-of-way documents that were sufficient to support roadway improvements for 4th Street as recommended by the University Corridor Redevelopment Study. Through preliminary design, GS&P made significant improvements to the initial study recommendations with regard to bicycle/pedestrian mobility and safety, as well as reducing costly utility relocations and providing alternative that gave a variety of potential alternatives. These alternatives ranged from complete avoidance of existing residences to a fresh start approach. An intensive public involvement process allowed GS&P to gain the support of area residents. One addition to the study is a roundabout at the intersection of Industry Road and 4th Street, which will help divert truck traffic away from the University of Louisville as well create a signature entrance to the campus. In the end, we are helping Louisville Metro move forward with our original plan to minimize impacts to residences while still providing the critical components that allow users safe and comfortable passage on whatever mode they choose.

GRESHAM SMITH AND PARTNERS

# Laura E. Hartley, P.E.

PROJECT MANAGER

Laura has over eight years of experience at GS&P working on a variety of ITS and traffic engineering projects. This includes ITS planning, design and specification development, benefit / cost analysis, as well as video systems and associated communication and systems analysis. She has been heavily involved in ITS program and project management as well as transportation management center (TMC) operations. She has worked on video distribution and management system projects for MDOT and LaDOTD, including coordinating several public communication and award efforts, and recently managed ALDOT's first VDMS deployment in Montgomery.

## EDUCATION

2006/Bachelor of Civil Engineering, University of Mississippi

## REGISTRATIONS

Professional Engineer: MS #20500, LA

## MEMBERSHIPS/ AFFILIATIONS

American Society of Civil Engineers

Gulf Region Intelligent Transportation Society

Institute of Transportation Engineers

Intelligent Transportation Society of Americas

## YEARS OF EXPERIENCE

With GS&P: 8

## RELEVANT PROJECTS

**LaDOTD W.O. #2&3 Video Distribution Management System, Baton Rouge, LA—**Transportation Engineer. This task included the design and implementation of a VDMS (VDMS) for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the Final VDMS design and Implementation Plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**ALDOT - Montgomery Video Distribution Management System (VDMS), Montgomery, AL—**Project Manager. This project involved the design, implementation and integration of video distribution servers, software and websites for ALDOT to support high-quality streaming video across multiple platforms to multiple stakeholders. Other tasks of the project included providing technical IT coordination and support for project completion.

**MDOT - ITS Integrator, Task 1: Program Management, Jackson, MS—**Deputy Project Manager, Transportation Engineer. When MDOT decided to expand its ITS—which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. By implementing multiple ITS solutions that translated into improved mobility, safety and quality of life for citizens and visitors, GS&P helped MDOT make the most of its existing roadway infrastructure. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS project.

**MDOT - ITS Integrator, Task 7: Design MDOT's ATMS Software, Jackson, MS—** Project Manager, Transportation Engineer. GS&P developed and maintained MDOT's advanced traffic management system.

**MDOT - ITS Integrator, Task 8: Provide TMC Review, Jackson, MS—**Project Manager, Transportation Engineer. GS&P assisted with the planning and design of new TMC facilities and the expansion of existing TMC facilities. This task also included provision of TMC operations staff on a contractual basis where requested by MDOT.

**MDOT - ITS Integrator, Task 9: Develop ITS Business Plan, Jackson, MS—**Project Manager, Transportation Engineer. GS&P developed the business plan for the MDOT ITS program.

**MDOT - ITS Integrator, Task 10: Design and Specs, Jackson, MS—**Project Manager, Transportation Engineer. This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; and smart work zone systems. Under this task, GS&P prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project.

**ALDOT - ITS SOPs, Performance Measures and TIMs, Statewide, AL—**Project Manager. GS&P assisted ALDOT with developing statewide standard TMC operational procedures, statewide performance measures, traffic incident management guidelines and a traffic management center staffing RFP. Other tasks include developing detour plans for Mobile, Montgomery and Birmingham, as well as conducting stakeholder workshops to implement a statewide TIMs program.

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# Ranzy L. Whiticker, P.E.

QA/QC

Ranzy has 21 years of experience in planning, development, and deployment of ITS improvements including planning, design, installation, implementation, maintenance, and management of various emergency management and ITS architectures. Most of Ranzy's work lies in the integration between hardware and software. Ranzy contributed to the time sensitive projects such as the Atlanta Georgia Traveler Information Showcase project for the 1996 Olympics which featured technologies and communications to get travel information to people on the go, whether by web, kiosk, handheld devices or in-vehicle devices.

## EDUCATION

1994/Bachelor of Science, Electrical Engineer, University of Tennessee

## REGISTRATIONS

Professional Engineer: MS, AR, FL, LA

## MEMBERSHIPS/ AFFILIATIONS

American Council of Engineering Companies/ Louisiana

Gulf Region Intelligent Transportation Society/Member

Board of Directors; Institute of Transportation Engineers/District 5

Deep South Section Intelligent Transportation Society of Tennessee

Mississippi Engineering Society

## YEARS OF EXPERIENCE

With GS&P: 9

With other firms: 12

## RELEVANT PROJECTS

**LaDOTD - W.O. 2 and 3: Video Distribution Management System, Baton Rouge, LA—**Project Manager. This task included the design and implementation of a VDMS for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the final VDMS design and implementation plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**LaDOTD - W.O. 7: Video System Support, Baton, LA —**Project Manager. This task included providing technical and engineering support to assist LaDOTD in maintaining continuous and efficient operations of DOTD's video systems. Responsibilities included providing configuration, integration, backup, and testing support to implement necessary system hardware/software updates, integrate new equipment, and troubleshoot issues that may have resulted from configuration changes of network and field devices. This task also included providing system enhancements to the VDMS and video wall maintenance activities and integration efforts of new system components.

**ALDOT - Montgomery Video Distribution Management System, Montgomery, AL—**Principal. This project involved the design, implementation and integration of video distribution servers, software and websites for ALDOT to support high quality streaming video across multiple platforms to multiple stakeholders. Other tasks of the project included providing technical IT coordination and support for project completion.

**MDOT - ITS Integrator, Jackson, MS—** Program Manager/ Project Manager. When MDOT decided to expand its ITS—which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. The GS&P team assisted in the development of an array of planning and design documents and has helped MDOT make the most of the existing roadway infrastructure by planning, designing, implementing, operating and maintaining ITS solutions that translate directly to improved mobility, safety and quality of life for citizens and visitors to the state. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS, including overall program management, regional architectures, needs analysis, concept of operations, deployment plans, amber alert SOPs, 511, a systems engineering management plan, multiple SEAs, system requirements, ATMS software, TMC design and operations, business plan, and various design and specification tasks. Also includes grant development, technology research, pilot and concept project development, CEI and oversight of system testing. The tasks in this contract include the following: Task 1 – Program Management, Task 2 – Update ITS Planning Documents, Task 3 – Conduct Needs Analysis, Task 4 – Develop Concept of Operations, Task 5 – Develop MDOT Amber Alert SOP, Task 6 – Define System Requirements, Task 7 - Design MDOT's ATMS, Task 8 – Provide TMC Overview, Task 9– Develop ITS Business Plan, Task 10 – ITS Field Devices/ Design and Specifications.

**MDOT - TMC Design, Statewide, MS—** Project Manager. GS&P is the long-term ITS integrator for MDOT and, as part of that role, GS&P provided the layout and design of the future statewide TMC that will replace the existing facility. GS&P also provided design services for regional TMCs in Southaven, Hattiesburg and Lyman.

**LaDOTD - ITS Program Continuing Services Contract, Baton Rouge, LA—**Project Manager. Under this ITS retainer contract, GS&P is providing systems engineering, integration and support services, system analysis, and independent verification and validation services. Additionally, GS&P is developing system designs, specifications and cost estimates, as well as providing GIS services to support the LaDOTD ITS program in the areas of video distribution, traveler information services, data validation and dissemination and ATMS for the statewide and regional ITS TMS, including TMCs. Major components of the program include ITS configuration, configuration verification and management, 511 ATIS Concept of operations and high-level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services; coordination and providing management oversight of the ITS program, providing system configuration and documentation support public relations and sponsorship program support, and providing system configuration management support.

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# Adam Moser, P.E.

QA/QC

Adam has 20 years of experience in ITS ASCT design, integration, testing, operation and maintenance. He has performed these tasks working in both the private and public sectors, most recently championing the Pinellas County Department of Public Works for Florida's ATMS and Adaptive Signal system.

## EDUCATION

1995/Bachelor of Science, Civil Engineering, Michigan State University

## REGISTRATIONS

Professional Engineer: LA, FL, GA, AL, CA, MS, TN

## MEMBERSHIPS/ AFFILIATIONS

Institute of Transportation Engineers

Intelligent Transportation Society of Florida

## YEARS OF EXPERIENCE

With GS&P: 7

With other firms: 12

## RELEVANT PROJECTS

**City of Lebanon - CMAQ Signal Timing, Lebanon, TN—**ITS Engineer. The GS&P team developed, refined and implemented new basic and coordinated traffic signal timing plans for 27 signalized intersections within the City of Lebanon. Fifteen of the subject intersections were on West Main Street, with the remaining 12 on US 231. The task encompassed the collection of traffic counts, intersection geometry and signal timing settings.

**City of Goodlettsville - CMAQ Improvement Projects, Goodlettsville, TN—**Quality Assurance/Quality Control. GS&P is providing improvements which include: the design of a fiber optic network for a coordinated traffic signal system from SR 11 (Main Street) at Memorial Drive to Loretta Drive at Long Hollow Pike, along with the conversion of traffic signal head lens from incandescent to LED; the design of a traffic signal at the intersection of Long Hollow Pike and Madison Creek Road; and the evaluation and design of a pedestrian crossing at the intersection of Caldwell Drive and Indian Hills Mound at the entrance of Moss-Wright Park.

**City of Franklin - Engineering Services for Adaptive Signal Control Technology Implementation and Infrastructure Construction, Franklin, TN—**Project Manager. GS&P was selected by the City of Franklin to develop a system engineering analysis, project corridor design, CEI and before/after studies on Franklin's first ASCT project. The project encompasses multiple corridors in the Cool Springs commercial and residential area, which include many large corporate businesses, the Galleria Mall, big box retail chain stores and many restaurants. GS&P is tasked with independently reviewing various ASCT software, developing ASCT requirements and a concept of operations for the ASCT based on prior experience with such systems and the existing systems deployed within the City of Franklin. After the SEA is completed, GS&P is tasked to design the detection and hardware platforms of the system, which includes plans and specification creation for the ASCT. GS&P will then be conducting inspection and testing of the ASCT selected software, including identifying performance measures for initial study and a before/after analysis.

**City of Knoxville - Cumberland Avenue Streetscape - Traffic, Pedestrian, Bicycle and Transit Operations Study, Knoxville, TN—**Quality Assurance/Quality Control, Signal Communications Engineer. GS&P evaluated a proposed "road diet" (conversion from four-lane section to three-lane section) on Cumberland Avenue and its effects on traffic operations, pedestrian and bicycle movements, and transit operations. Additional issues that were considered in this evaluation of the proposed three-lane conversion were truck deliveries and alley access. Potential impacts on the surrounding street network were evaluated based on anticipated traffic diversion, conversion of the intersecting streets from one-way to two-way operations, and changes in intersection traffic controls.

**TDOT - Diverging Diamond Interchange at SR-66 (Exit 407), Knoxville, TN—**Task Manager. GS&P was charged by TDOT with complete design development from preliminary roadway plans to final signed and sealed roadway construction plans for the reconstruction of the I-40 interchange at SR 66 Exit 407 to a DDI. The current SR 66 interchange at I-40 has an inadequate interchange configuration to accommodate the existing and projected traffic, and fails during peak traffic hours due to inadequate number of lanes and geometric deficiencies. GS&P's scope of services include preliminary, right-of-way and final construction plans; public meetings presentations and stakeholder coordination; traffic control phasing; signal and lighting design; ITS design; and utility coordination. The project was on an extremely fast-track schedule.

**Pinellas County Department of Environment and Infrastructure (DEI) - ITS/ATMS and Adaptive Signal System, Design Integration, Operation and Maintenance, Pinellas County, FL—**Project Manager. GS&P is a subconsultant to TransCore and Cardno TBE for the Pinellas County ITS GEC contract for engineering and integration services to the ITS/ATMS system. GS&P is responsible for assisting the County in its further advancement of the countywide deployment of adaptive signal systems. This includes design, testing and integration assistance of the ATMS and adaptive signal system to the County. GS&P has assisted in projects such as arterial travel time in which GS&P is helping to integrated Bluetooth readers that provide data to a central control system that outputs travel time to the many arterial dynamic message signs and future website. GS&P is also involved in the review of adaptive signal design plans, detector placement, and controller enhancements needed for the adaptive signal systems.

GRESHAM SMITH AND PARTNERS

# Paul Hsu, P.E.

PROJECT ENGINEER AND TECHNICAL LEAD

Paul is an ITS communications engineer with more than 10 years of experience in both the public and private sectors. His areas of expertise in ITS include design and analysis of communication systems, electrical systems, traffic management centers as well as performing system engineering analysis for ITS deployments. As a system engineer for LaDOTD for more than seven years, Paul has a wealth of experience in working with ITS devices both in design and implementations phases of the projects. In addition, Paul was also responsible for handling maintenance issues on a daily basis to ensure seamless operations. As a project engineer in the private sector, Paul was responsible for performing ITS project design on numerous deployments such as Monroe ITS Phase 1 and Sunshine Bridge ITS. As a project engineer in the private sector, one of Paul's major responsibilities is to design, implement, and maintain Video Distribution Management System (VDMS) for DOT clients in Louisiana, Alabama, and Florida Pinellas County

## EDUCATION

2002/Bachelor of Engineering, Electrical Engineering, Louisiana State University

## REGISTRATIONS

Professional Engineer: LA

## MEMBERSHIPS/ AFFILIATIONS

American Council of Engineering Companies/ Louisiana

Gulf Region

Intelligent Transportation Society

## YEARS OF EXPERIENCE

With GS&P: 2

With other firms: 1.5

## RELEVANT PROJECTS

**LaDOTD - W.O. 2 and 3: Video Distribution Management System, Baton Rouge, LA—** ITS Communications Engineer. This task included the design and implementation of a VDMS for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the final VDMS design and implementation plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**ALDOT - Montgomery Video Distribution Management System, Montgomery, AL—** ITS Communications Engineer. This project involved the design, implementation and integration of video distribution servers, software and websites for ALDOT to support high-quality streaming video across multiple platforms to multiple stakeholders. Other tasks of the project included providing technical IT coordination and support for project completion.

**MDOT - ITS Integrator, Jackson, MS—**ITS Communications Engineer. When MDOT decided to expand its ITS—which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. The GS&P team assisted in the development of an array of planning and design documents and has helped MDOT make the most of the existing roadway infrastructure by planning, designing, implementing, operating and maintaining ITS solutions that translate directly to improved mobility, safety and quality of life for citizens and visitors to the state. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS.

**MDOT - ITS Task 10: Design and Specs, Jackson, MS—**ITS Communications Engineer. This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; and smart work zone systems. Under this task, GS&P prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project.

**ALDOT Temporary TMC Operations, Statewide, AL—** ITS Communications Engineer. GS&P is serving as RTMC manager and adviser to ALDOT on start-up operations of the Montgomery Regional Traffic Management Center (RTMC), providing personnel management duties including hiring and training an RTMC manager and operators; providing and overseeing the provision of RTMC services including traffic incident management, traveler information dissemination, emergency management, coordination with other agencies, performance monitoring, and other duties relating to traffic operations and safety in a county area in southeastern Alabama; and providing traffic engineering services such as collecting data and performing traffic analysis in support of ALDOT's future ITS projects.

**LaDOTD - ITS Program Continuing Services Contract, Baton Rouge, LA—**ITS Communications Engineer. Under this ITS retainer contract, GS&P is providing systems engineering, integration and support services, system analysis, and independent verification and validation services. Additionally, GS&P is developing system designs, specifications and cost estimates, as well as providing GIS services to support the LaDOTD ITS program in the areas of video distribution, traveler information services, data validation and dissemination and ATMS for the statewide and regional ITS TMS, including TMCs. Major components of the program include ITS configuration, configuration verification and management, ATIS Concept of operations and high-level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services; coordination and providing management oversight of the ITS program, providing system configuration and documentation support public relations and sponsorship program support, and providing system configuration management support.

GRESHAM SMITH AND PARTNERS

# Luis Alvergue, EI

ALTERNATIVE EVAULATION AND DESIGN SUPPORT

Luis is a registered engineering intern (EI) in Louisiana with two years of experience. He is a member of the IEEE Control Systems Society and the IEEE Baton Rouge section. Luis worked as an engineer intern with Shell Exploration and Production for two summers and as a research assistant/part time instructor at LSU for two years. He is experienced in preparing technical reports, providing communication systems analysis and design, performing electrical load analysis, and computer programming in Java, Javascript, and html. Luis will be performing all integration, application and web support throughout this project for LFUCG.

## EDUCATION

2013/Doctor of Philosophy, Electrical Engineering, Louisiana State University

## YEARS OF EXPERIENCE

With GS&P: <1

With other firms: 1

## RELEVANT PROJECTS

**Pinellas County Department of Environment and Infrastructure (DEI) - ITS/ATMS and Adaptive Signal System, Design Integration, Operation and Maintenance, Pinellas County, FL—**GS&P is a subconsultant to TransCore and Cardno TBE for the Pinellas County ITS GEC contract for engineering and integration services to the ITS/ATMS system. GS&P is responsible for assisting the County in its further advancement of the countywide deployment of adaptive signal systems. This includes design, testing and integration assistance of the ATMS and adaptive signal system to the County. GS&P has assisted in projects such as arterial travel time in which GS&P is helping to integrated Bluetooth readers that provide data to a central control system that outputs travel time to the many arterial dynamic message signs and future website. GS&P is also involved in the review of adaptive signal design plans, detector placement, and controller enhancements needed for the adaptive signal systems.

**LaDOTD WO#1 - Program Assistance, Baton Rouge, LA—**Major components of the project includes general program assistance, ITS system configuration, configuration verification and management, 511 ATIS Concept of operations and high level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services, coordination and providing management oversight of the ITS program, providing system configuration and documentation support, Public Relations and sponsorship program support, and providing system configuration management support.

GRESHAM SMITH AND PARTNERS

# Kendra McCoy

CONFIGURATION MANAGEMENT AND INTEGRATION SUPPORT

Kendra has more than 20 years of experience and continued success in network management, project management, QA/QC and business administration environments. development of traffic management center operations, incident management and ITS maintenance software and management of system devices are a few of her rewarding successes. Additionally, a strong track record for the successful completion of multi-million dollar projects through coordinating stakeholders, developing partnerships, and building relationships with designers and developers, local officials, vendors, and clients while maintaining costs.

## EDUCATION

2012/Bachelor of Science, Project Management, DeVry University

## REGISTRATIONS

Professional Engineer: LA

## MEMBERSHIPS/ AFFILIATIONS

American Council of Engineering Companies

Louisiana Gulf Region Intelligent Transportation Society

## YEARS OF EXPERIENCE

With GS&P: 2

With other firms: 18

## RELEVANT PROJECTS

**LaDOTD - W.O. 2 and 3: Video Distribution Management System, Baton Rouge, LA—** ITS Specialist. This task included the design and implementation of a VDMS for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the final VDMS design and implementation plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**LaDOTD W.O. 7: Video System Support, Baton, LA—**ITS Specialist. This task included providing technical and engineering support to assist LaDOTD in maintaining continuous and efficient operations of DOTD's video systems. Responsibilities included providing configuration, integration, backup, and testing support to implement necessary system hardware/software updates, integrate new equipment, and troubleshoot issues that may have resulted from configuration changes of network and field devices. This task also included providing system enhancements to the VDMS and video wall maintenance activities and integration efforts of new system components.

**ALDOT - Montgomery Video Distribution Management System, Montgomery, AL—**ITS Specialist. This project involved the design, implementation and integration of video distribution servers, software and websites for ALDOT to support high-quality streaming video across multiple platforms to multiple stakeholders. Other tasks of the project included providing technical IT coordination and support for project completion.

**MDOT - ITS Integrator, Task 1: Program Management, Jackson, MS—**ITS Specialist. When MDOT decided to expand its ITS, which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. By implementing multiple ITS solutions that translated into improved mobility, safety and quality of life for citizens and visitors, GS&P helped MDOT make the most of its existing roadway infrastructure. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS project.

**MDOT - ITS Integrator, Task 6: System Requirements, Jackson, MS —**ITS Specialist. GS&P will use the concept of operations developed to define major functional requirements. This task includes three major components: high level system requirements, detailed system requirements and software functional requirements.

**MDOT - ITS Integrator, Task 8: Provide TMC Review, Jackson, MS —**ITS Specialist. GS&P assisted with the planning and design of new TMC facilities and the expansion of existing TMC facilities. This task also included provision of TMC operations staff on a contractual basis where requested by MDOT.

**MDOT - ITS Integrator, Task 10: Design and Specs, Jackson, MS—**ITS Specialist. This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; and smart work zone systems. Under this task, GS&P prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project.

**LaDOTD - ITS Program Continuing Services Contract, Baton Rouge, LA—**ITS Specialist. Under this ITS retainer contract, GS&P is providing systems engineering, integration and support services, system analysis, and independent verification and validation services. Additionally, GS&P is developing system designs, specifications and cost estimates, as well as providing GIS services to support the LaDOTD ITS program in the areas of video distribution, traveler information services, data validation and dissemination and ATMS for the statewide and regional ITS TMS, including TMCs. Major components of the program include ITS configuration, configuration verification and management, 511 ATIS Concept of operations and high-level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services; coordination and providing management oversight of the ITS program, providing system configuration and documentation support public relations and sponsorship program support, and providing system configuration management support.

**LaDOTD W.O. 4: SCVM Website, Baton, LA —**ITS Specialist. This task included the review of ITS system configuration documents, verifying configuration of ITS systems, and documenting and updating as directed by LaDOTD.

GRESHAM SMITH AND PARTNERS

# Gwen Henderson

WEBSITE AND NETWORK INTEGRATION SUPPORT

Gwen has 22 years in the field of network design. She will be providing configuration, integration, backup and testing support to implement necessary system hardware, and software for the VDMS. Gwen will integrate new equipment and troubleshoot any issues that may arise from configuration changes of network and field devices. Her specialty in the VDMS has been network, communications, and database.

## EDUCATION

2002/Associate of Arts, Computer Networking and Engineering, Virginia College

1985/Master of Business Administration, Mississippi College

1983/Bachelor of Science, Business Administration, Mississippi College

## YEARS OF EXPERIENCE

With GS&P: <1

With other firms: 21

## RELEVANT PROJECTS

**LaDOTD - W.O. 2 and 3: Video Distribution Management System, Baton Rouge, LA—** ITS Systems Specialist. This task included the design and implementation of a VDMS for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the final VDMS design and implementation plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**LaDOTD W.O. 7: Video System Support, Baton Rouge, LA —**ITS Systems Specialist. This task included providing technical and engineering support to assist LaDOTD in maintaining continuous and efficient operations of DOTD's video systems. Responsibilities included providing configuration, integration, backup, and testing support to implement necessary system hardware/software updates, integrate new equipment, and troubleshoot issues that may have resulted from configuration changes of network and field devices. This task also included providing system enhancements to the VDMS and video wall maintenance activities and integration efforts of new system components.

**MDOT–ITS Integrator, Task 10: Design and Specs, Jackson, MS —**ITS Systems Specialist. This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; and smart work zone systems. Under this task, GS&P prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project.

**MDOT ITS Task 8: Provide TMC Review, Jackson, MS—**ITS Systems Specialist. GS&P assisted with the planning and design of new TMC facilities and expansion of existing TMC facilities. Task also included provision of the TMC operations staff on a contractual basis where requested by MDOT.

**MDOT ITS Task 6: Systems Requirements, Jackson, MS —**ITS Systems Specialist. GS&P will use the Concept of Operations developed in Task 4 to define major functional requirements. This task includes three major components: high level system requirements, detailed system requirements and software functional requirements.

**MDOT - ITS Integrator, Task 1: Program Management, Jackson, MS —**ITS Systems Specialist. When MDOT decided to expand its ITS—which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. By implementing multiple ITS solutions that translated into improved mobility, safety and quality of life for citizens and visitors, GS&P helped MDOT make the most of its existing roadway infrastructure. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS project.

**LaDOTD – ITS Program Continuing Services Contract, Baton Rouge, LA—**ITS Systems Specialist. Under this ITS retainer contract, GS&P is providing systems engineering, integration and support services, system analysis, and independent verification and validation services. Additionally, GS&P is developing system designs, specifications and cost estimates, as well as providing GIS services to support the LaDOTD ITS program in the areas of video distribution, traveler information services, data validation and dissemination and ATMS for the statewide and regional ITS TMS, including TMCs. Major components of the program include ITS configuration, configuration verification and management, 511 ATIS Concept of operations and high-level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services; coordination and providing management oversight of the ITS program, providing system configuration and documentation support public relations and sponsorship program support, and providing system configuration management support.

*** Denotes individual experience**

GRESHAM SMITH AND PARTNERS

# Susan Byrd

DOCUMENTATION AND TRAINING MATERIALS

Susan has more than six years of experience with GS&P developing marketing and program materials including project maps, newsletters, brochures and reports. Susan also maintains document control, ensures updated project websites, and provides formatting and editing assistance for published documents and reports. She provides assistance for project presentations and papers along with award and grant applications. Susan also manages project schedules via Microsoft Project for various tasks in order to determine priorities and staff availability. Susan has been responsible for developing training materials as well as user manuals for the VDMS.

## EDUCATION

2007/Bachelor of Science, Journalism/ Marketing, University of Southern Mississippi

## MEMBERSHIPS/ AFFILIATIONS

Gulf Region Intelligent Transportation Society

## YEARS OF EXPERIENCE

With GS&P: 6

## RELEVANT PROJECTS

**LaDOTD - W.O. 2 and 3: Video Distribution Management System, Baton Rouge, LA—**Project Manager. This task included the design and implementation of a VDMS for the distribution of LaDOTD video sources statewide. Done in two phases, Phase 1 included the development of a detailed VDMS design and implementation plan. Phase 2 included the implementation and integration of the VDMS in accordance with the final VDMS design and implementation plan. The VDMS was designed collect video sources from throughout the state and distribute amongst their internal ITS systems and externally to media, partners, and other agencies, and to and from other regional and the Statewide Traffic Management Center(s) (TMC).

**ALDOT - Montgomery Video Distribution Management System, Montgomery, AL—**Technical Support. This project involved the design, implementation and integration of video distribution servers, software and websites for ALDOT to support high-quality streaming video across multiple platforms to multiple stakeholders. Other tasks of the project included providing technical IT coordination and support for project completion.

**MDOT - ITS Integrator, Task 10: Design and Specs, Jackson, MS—**Technical Support. This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; 511 and smart work zone systems. Under this task, GS&P prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project. Susan provided document control management, ensuring the most recent version of published items were available via the MDOT ITS web page on the goMDOT web site. She also provided coordination for distribution of design and plan sets.

**MDOT - ITS Integrator, Task 1: Program Management, Jackson, MS—**Technical Support. When MDOT decided to expand its ITS—which required the assistance of an experienced outside consultant—they hired GS&P as the MDOT integrator team for the statewide ITS. By implementing multiple ITS solutions that translated into improved mobility, safety and quality of life for citizens and visitors, GS&P helped MDOT make the most of its existing roadway infrastructure. This comprehensive contract included all engineering services necessary to provide MDOT with a fully operational and integrated ITS project. Susan provided content and graphic design support for marketing and program materials including project maps, newsletters, brochures and reports. She maintained document control and project websites, and provided assistance for project presentations, papers, and award and grant applications.

**MDOT - ITS Integrator, Task 2: Architectures, Jackson, MS—**Technical Support. Development of the statewide ITS architecture, the Gulf Coast regional ITS architecture, the Northwest Mississippi regional ITS architecture, the Jackson regional ITS architecture and the Hattiesburg-Petal-Forrest-Lamar regional ITS architecture. Susan coordinated stakeholder meetings and assisted in development of documents. She developed and managed the public stakeholder web site and email account, and provided general assistance as needed in achieving objectives.

**MDOT - ITS Integrator, Task 7: Design MDOT's ATMS Software, Jackson, MS—**Technical Support. GS&P developed and maintained MDOT's advanced traffic management system. Susan coordinated stakeholder input for ATMS functional requirements and client-desired features.

**LaDOTD - ITS Program Continuing Services Contract, Baton Rouge, LA—**Technical Support. Under this ITS retainer contract, GS&P is providing systems engineering, integration and support services, system analysis, and independent verification and validation services. Additionally, GS&P is developing system designs, specifications and cost estimates, as well as providing GIS services to support the LaDOTD ITS program in the areas of video distribution, traveler information services, data validation and dissemination and ATMS for the statewide and regional ITS TMS, including TMCs. Major components of the program include ITS configuration, configuration verification and management, ATIS Concept of operations and high-level requirements, video system support, and ATMS system support. Tasks and activities include assisting in project management services; coordination and providing management oversight of the ITS program, providing system configuration and documentation support public relations and sponsorship program support, and providing system configuration management support.

GRESHAM SMITH AND PARTNERS

# Shawn P. Riggs, P.E.

DESIGN AND VERIFICATION SUPPORT

Prior to joining GS&P, Shawn served as the engineering manager for the Louisville Metro Department of Public Works & Assets. With nearly 10 years of experience, Shawn brings a strong background and understanding of the public sector, having served in various roles within four government agencies in two different states. This diverse background has provided Shawn the capabilities to successfully design and manage projects that are both constructible and maintainable. With this experience and in-depth understanding of local processes and KYTC's LPA requirements, Shawn is able to effectively provide guidance on all aspects of the project. He will ensure all information for the LPA Project Development Checklist (PDC) is delivered.

## EDUCATION

2004/Bachelor of Science, Civil Engineering, University of North Carolina

## REGISTRATIONS

Professional Engineer: KY

## MEMBERSHIPS/ AFFILIATIONS

American Society of Highway Engineers/ Derby City Section

## ACCREDITATIONS/ CERTIFICATIONS

Asphalt Field Technician

## YEARS OF EXPERIENCE

With GS&P: 2

With other firms: 8

## RELEVANT PROJECTS

**KYTC - KY 22, Owen, KY—**Project Manager. KYTC selected GS&P to perform the final design for the realignment of KY 22. This 4.5-mile segment of rural highway begins at the Owenton City limits at the entrance to the Owen County School complex and extends east to the University of Kentucky Eden Shale Agricultural Research Farm. This is the first in a series of projects that will connect the City of Owenton to I-75 in the city of Dry Ridge. GS&P reviewed the proposed line and grade plans developed by the KYTC staff and made minor modifications to improve the earthwork balance and overall constructability of the corridor. Impacts were also considered at this stage of development to identify potential major conflicts. A major overhead electric transmission line was identified and the alignment was adjusted to avoid a low wire conflict that would have created the need for a new support tower for the line.

**KYTC - KY 9, Newport, KY—**Project Manager. GS&P is responsible for Phase I and Phase II design for the reconstruction of KY 9 in Campbell County. The project, on the west side of Newport, includes the widening and realignment of KY 9, involving alternate alignment studies, the design of two roundabouts, surveying, environmental analysis, drainage design, traffic control, erosion control, right-of-way plans, construction plans and construction cost estimates. When completed, this project will provide a walkable corridor connecting urban neighborhoods to the planned ovation mixed-use development and other existing attractions such as the Newport Aquarium. The storm sewer has been designed such that the entire roadway footprint as well as many adjacent blocks will be completely removed from the combined sewer system. GS&P is currently working with the KYTC and Sanitation District No. 1 to explore green infrastructure possibilities on the project.

**KYTC - Greenwood Road, Louisville, KY—**Project Manager. The project involved alternative designs for the reconstruction of a two-lane, rural section to an urban collector. The project is complicated by extremely flat terrain with shallow drainage structures as well as a 30-inch waterline along the entire project. The final design will include a sidewalk on the south side and a 10-foot, multi-use path on the north side providing connectivity to the numerous schools, churches and commercial establishments.

**KYTC - Statewide Enhanced Curve Signing Phases 1 and 2, KY—**Project Engineer. The state contracted with a GS&P led team to improve the horizontal alignment signs throughout the eastern third of the state. To date our staff and teaming partners have identified over 1000 curves on 425 miles of state highways that require updated horizontal alignment signage. Included in this number are 74 enhanced applications that will receive additional signage above the minimums identified by the MUTCD, these locations were identified due to the high number of accidents at these locations. At GS&P we have developed a series of automated forms that improve the accuracy and consistency of the sign applications and reduce the chance for data entry errors.

**Louisville Metro - McNeely Lake Park Access Road, Louisville, KY—**Project Manager. GS&P provided preliminary engineering and final design on approximately two miles of McNeely Lake Park roadway. This access road provides connection to an inaccessible portion of the park. Additionally, a multi-use trail will roughly follow the access road and will eventually become part of the Louisville Loop.

GRESHAM SMITH AND PARTNERS

# Robbie Holton, EIT

VERIFICATION AND CONFIGURATION SUPPORT

Robert brings two years of experience, and is well versed in many software programs including MicroStation, InRoads, HY 8, AutoCAD, ArcGIS, HCS, SAP, SPSS, Minitab, Java and C++.

## EDUCATION

2012/Bachelor of Engineering, Civil Engineering, University of Kentucky

2012/Master of Business Administration, Business Administration, University of Kentucky

## MEMBERSHIPS/ AFFILIATIONS

Institute of Transportation Engineers

## YEARS OF EXPERIENCE

With GS&P: 2

## RELEVANT PROJECTS

**Louisville Metro Economic Development - 4th Street Improvements, Louisville, KY—**Transportation Engineer Intern. GS&P was called on to develop preliminary and final construction plans as well as right-of-way documents that were sufficient to support roadway improvements for 4th Street as recommended by the University Corridor Redevelopment Study. Through preliminary design, GS&P made significant improvements to the initial study recommendations with regard to bicycle/ pedestrian mobility and safety, as well as reducing costly utility relocations and providing an alternative that gave a variety of potential options. These alternatives ranged from complete avoidance of existing residences to a fresh-start approach.

**Statewide Enhanced Curve Signing Phases I and II, KY—**Project Engineer-in-Training. The state contracted with a GS&P-led team to improve the horizontal alignment signs throughout the eastern third of the state. To date, our staff and teaming partners have identified over 1000 curves on 425 miles of state highways that require updated horizontal alignment signage. Included in this number are 74 enhanced applications that will receive additional signage above the minimums identified by the MUTCD; these locations were identified due to the high number of accidents at these locations. At GS&P, we have developed a series of automated forms that improve the accuracy and consistency of the sign applications and reduce the chance for data entry errors.

**Louisville Metro Public Works and Assets - Hubbards Lane Widening, Jefferson County, KY—**Transportation Engineer Intern. GS&P is designing this 1.4 miles roadway widening project is located in Jefferson County, Kentucky between KY 1447 (Westport Road) to Kresge Way/Bowling Boulevard. The purpose and need of this project is to increase capacity and safety of Hubbards Lane between KY 1447 (Westport Road) to US 60 (Shelbyville Road), and to improve bicycle and pedestrian accessibility from KY 1447 (Westport Road) to Kresge Way/Bowling Boulevard. The thing that truly separated GS&P from the rest of firms is the way that the public involvement was handled. While the questioning was difficult and the visibility was high, GS&P was able to foster goodwill and provide solid background for each decision made to the public. This was packaged into a public involvement campaign recording document for archiving by the Louisville Metro PM and to assist the newly assigned KYTC PM with backup that LPA projects require. GS&P presented alternatives that fell outside of currently allowed KYTC standards, we took the initiative to provide central office justification for our decisions.

**Louisville Metro - Buechel Bank Road Redesign, Louisville, KY—**Transportation Engineer Intern. GS&P is currently designing Phase I and II plans for the realignment and reconstruction of Buechel Bank Road. The constructed product will provide a safer route for both motorists and pedestrians as well much need drainage improvements.

**KYTC - Campbell County KY 9 - Section 1, Newport, KY—**Transportation Engineer Intern. KY 9 connects with US 27 over the Ohio River from Cincinnati and extends along the back of the Ohio River and Licking River floodwalls in largely old industrial land use area. One section of the flood wall for the Licking River had to be penetrated to discharge flow into the river. GS&P's task was to inventory all water, storm, sanitary and combined sewers to assess the impacts to these infrastructures. Working with the Northern Kentucky Sanitation District No. 1 staff all of the sanitary lines were evaluated in a condition assessment rating process. Many of the 2,480 feet of large diameter sewer were rehabilitated with CIPP lining and point repairs and due to the new road profile there were pipe relocations, new connections to adjoining street sewers. In addition, many of the access structures on the large sewers required modifications as most were not standard manhole shapes.

# Edward Holmes, AICP

PRINCIPAL/PRESIDENT

Edward is a certified planner with over 35 years of experience focusing on incorporating sustainable planning strategies into redevelopment, master planning, environmental justice, and land use plans. As an urban planner and Principal in EHI Consultants, Ed has created sustainable development frameworks that provide benchmark considerations for future environmentally responsible planning and sustainable neighborhoods. Ed has direct experience with numerous public-sector and private-sector projects throughout the Southeast United States. He has been recognized by the planning profession for his planning efforts in neighborhood planning, environmental justice and farmland preservation.

EDUCATION

Bachelor of Arts, Urban Planning & Design, University of Cincinnati

REGISTRATIONS

American Institute of Certified Planners #00472

AWARDS/HONORS

Kentucky Planning Association

Statewide Planning Coordination Award

YEARS OF EXPERIENCE

With EHI Consultants: 35

RELEVANT PROJECTS

**Passage Mound Way Elementary School for Fayette County Public Schools, Fayette County, KY**

**Armstrong Mill Small Area Plan, Lexington-Fayette Urban County Government, Lexington, KY**

**Magoffin County Comprehensive Plan, Magoffin County, KY**

**Euclid Avenue Corridor Study, Lexington-Fayette Urban County Government-Division of Planning, Lexington, KY**

**Newtown Pike Extension/Southend Park Urban Village Plan, Lexington, KY**

**Infill and Redevelopment Strategies,Lexington-Fayette Urban County Government-Division of Planning, Lexington, KY**

**Complete Streets Plan,Lexington-Fayette Urban County Government - Division of Planning, Lexington, KY**

**Georgetown Street Neighborhood Assessment - Commerce Lexintong**

**East End Small Area Plan, Lexington-Fayette Urban County Government – Division of Planning, Lexington, KY**

# Rachel Phillips, AICP

SENIOR PLANNER

Rachel is a graduate of University of Illinois with a Masters of Urban Planning. She has prior experience with water use planning, development proposals, infill and redevelopment planning, and planning analysis and recommendation, along with vast knowledge community engagement processes. Rachel is a planner at EHI consultants that has previously worked for the Army Corps of Engineers, LFUCG, and the Georgetown-Scott County Planning Commission.

EDUCATION

Bachelor of Science Geography/City and Regional Planning, Western Kentucky

University Masters of Urban Planning, University of Illinois

REGISTRATIONS

American Institute of Certified Planners

American Planning Association

YEARS OF EXPERIENCE

With EHI Consultants: ???

RELEVANT PROJECTS

**Newtown Pike Extension/ Southend Park Urban Village Plan, Lexington, KY**

**Armstrong Mill Small Area Plan, Lexington, KY**

**Cardinal Valley Small Area Plan, Lexington, KY**

**Magoffin County Comprehensive Plan, Magoffin, KY**

**Senior Planner Lexington Urban County Government, Lexington, KY**

**Design overlays and redevelopment plans, LFUCG, Lexington, KY**

**Preparation of planning reports for compliance of Resource Management Act of New Zealand, Auckland, New Zealand**

**Water Conservation at Camp Atterbury, Champaign, IN**

# RELEVANT PROJECTS

SECTION 3.0

# RELEVANT PROJECTS

GRESHAM SMITH AND PARTNERS

## MDOT – VDMS Initiative ITS Task 7: Design MDOT's ATMS Software & ITS Task 10: Design and Specs

JACKSON, MISSISSIPPI


PROJECT MANAGER
Laura E. Hartley, P.E.

REFERENCE
Jim Willis
Assistant State Traffic Engineer
P.O. Box 1850
Jackson, MS 39215
601.359.9710
jcwillis@mdot.ms.gov


GS&P was hired as the MDOT ITS integrator team for the statewide ITS system. The team assisted with the development of an array of planning and design documents and helped MDOT make the most of the existing roadway infrastructure by planning, designing, implementing, operating and maintaining ITS solutions that translate directly to the improved mobility, safety and quality of life for citizens and visitors to the state.

The Video Distribution Management System (VDMS) initiative for MDOT was done under the Statewide ITS Integrator Project ($17 million contract total over 9 years) that had 10 individual project tasks. The design for the VDMS was done under Task 10 (design and specs), while the integration was done under Task 7 (ATMS software). It was under the MDOT Integration project that the VDMS system took development and shape into what has become a system provided to multiple clients and DOTs. This system has won several ITS industry national awards for its design and innovation.

The need for the MDOT VDMS started with MDOT's use of a mix of analog video and proprietary IP video systems that required analog display. This project initiative required the delivery of a new video system that would allow MDOT to continue to use many of the network architectures, ATMS software packages, and commitment to sharing their video with the public, partners, and other agencies, while reducing their hardware and environmental footprints to do so even while expanding.

MDOT's costly traditional multicast transport method was replicated with off-the-shelf software capable of mimicking the job of the switch or router in the multicast operation. The new method allows for video to traverse any network that can handle standard IP packets, regardless of the network topology or multicast capabilities. The media server can supply thousands of simultaneous users while only receiving a single stream from the source encoder, drastically reducing the load on the server. The media server, at the same time, also repackages the video from different transport types required by various platforms, such as iPhone and Adobe Flash, allowing for a reduction in duplicated hardware and distribution delay.


Prior to the upgrades to the system, MDOT was using 37 high-end servers to recompress analog video to Windows Media Format for display on the MDOT Traffic website. The computers, along with other supporting equipment, were replaced with a single media server and three encoder chassis. As a result of the migration, MDOT is now saving approximately $35,000 in electricity costs per year.

The new video system, which leverages H.264 technology and media servers, allows MDOT to provide live streaming video of its cameras statewide, across multiple platforms, both internally and externally, and on demand--reducing network band-width, equipment needs, costs and system complexity, along with power and energy consumption.

This project received the 2011 Best of Rural ITS Award and was a runner up for the 2011 Best of ITS Award.

GRESHAM SMITH AND PARTNERS

# LaDOTD - WO#2 - VDMS Design Implementation Plan

BATON ROUGE, LOUISIANA


PROJECT MANAGER
Ranzy L. Whiticker, P.E.

REFERENCE
Carryn Sollie
ITS System Integration Manager
Intelligent Transportation Systems - Section 56
Louisiana Department of Transportation and Development
Office: 225.379.2518
Cell: 225.202.2426
Carryn.Sollie@la.gov


This project included the design and implementation plan of a VDMS for the distribution of DOTD video sources statewide in Louisiana. The project provided a detailed final VDMS design and implementation plan. Upon successful completion of the design and implementation plan, the implementation project began in accordance to the plan. The system was designed to meet the needs of LaDOTD to distribute video internally amongst their ITS systems and externally to media, partners, and other agencies. The VDMS was designed and implemented to collect video sources from throughout the state and distribute video from the regional and the Statewide Traffic Management Center(s) (TMC). The implementation plan included a schedule and costs estimates for the equipment needed to support the new system.

The project required collecting information necessary to define the existing video system and the video distribution needs of LaDOTD. Information included current specifications, equipment types, equipment configurations, equipment subcomponents, software, and interfaces of the existing video system. The data collection process included direct meetings with stakeholders and systems managers; existing documentation review, including the previous Systems Engineering Analysis for the Statewide VDMS, as well as other system architecture or network diagrams; obtaining information on third-party Trafficland video distribution system; and investigation of the current video infrastructure, including network capabilities and encoding hardware. Following the documentation review, review meetings were held with the DOTD at the Statewide TMC in Baton Rouge to confirm understanding of existing systems, DOTD's needs, and VDMS requirements.

Once all relevant information was collected, the VDMS preliminary design was developed. The VDMS preliminary design included alternatives and options with estimated cost comparisons, implementation schedules, and system impacts. The design was presented to LaDOTD for consideration and selection. Options and alternatives were analyzed and presented for hardware solutions, including hardware types, and the use of third parties and services for some aspects of the VDMS. All alternatives recommended were in accordance with LaDOTD's Concept of Operations and FHWA's ITS System Engineering process.


Based on the direction provided by DOTD in responses and workshops to the alternatives presented to them, 90-percent and 100-percent final design and list of quantities for equipment needed was developed. The final design incorporated DOTD's needs and functional requirements, as well as DOTD's existing communications infrastructure. The VDMS system design accounted for a system that could handle the distribution of video from a minimum of one Statewide TMC system and four Regional TMC systems seamlessly. The VDMS was designed to accommodate a minimum of 700 closed circuit television cameras to be distributed and accessed by DOTD ITS staff, other state employees, government agencies, first responders, and via web to news-media and the traveling public. The final design identified the required hardware, including: the manufacturer, model, and quantity of all hardware, software, communications equipment, communications circuits, and associated materials required to integrate the VDMS at the Statewide TMC and the estimated costs of each. Additionally, any services or third party support was identified as necessary, and their costs provided a 90-percent VDMS design and cost estimate was presented to DOTD for review. After receiving comments, a final VDMS design and cost estimate was provided.

The Implementation Plan project indicated priorities and implementation order for LaDOTD regions and systems. The VDMS Implementation Plan also identified what hardware procurements would be needed and equipment procurement timelines for LaDOTD in order to meet the overall schedule. Non-ITS systems that would possibly require changing or reconfiguring and/or support from other entities, support agreements, or services were also identified in the VDMS Implementation Plan. The Implementation Plan also included the testing and training of the new system delivered by this project.

GRESHAM SMITH AND PARTNERS

# LaDOTD - WO#3 - VDMS Implementation

BATON ROUGE, LOUISIANA

PROJECT MANAGER
Ranzy L. Whiticker, P.E.

REFERENCE
Carryn Sollie
ITS System Integration Manager
Intelligent Transportation Systems - Section 56
Louisiana Department of Transportation and Development
Office: 225.379.2518
Cell: 225.202.2426
Carryn.Sollie@la.gov

This project included the implementation, integration, and coordination identified and documented in the VDMS final design of the *LaDOTD - WO#2 - Video Distribution Management System (VDMS) Implementation Plan Project*.

The implementation and integration required coordination with other DOTD staff and consultants for specific work, changes, procurements, installation, and configuration on the systems. The project required coordination with DOTD network and IT staff to complete configurations of video systems, cameras and encoders in the field. Additionally, the project required coordination with third parties for DOTD's ATMS, 511, and traveler information website integrations. It also required coordination with first responders and media stakeholders.

A System Acceptance Test Plan for the VDMS was developed, coordinated, and conducted with LaDOTD. The project required the development of a structured training program approved by the DOTD. This training program included formal instruction in all applicable components of the VDMS, as well as system administration and support.

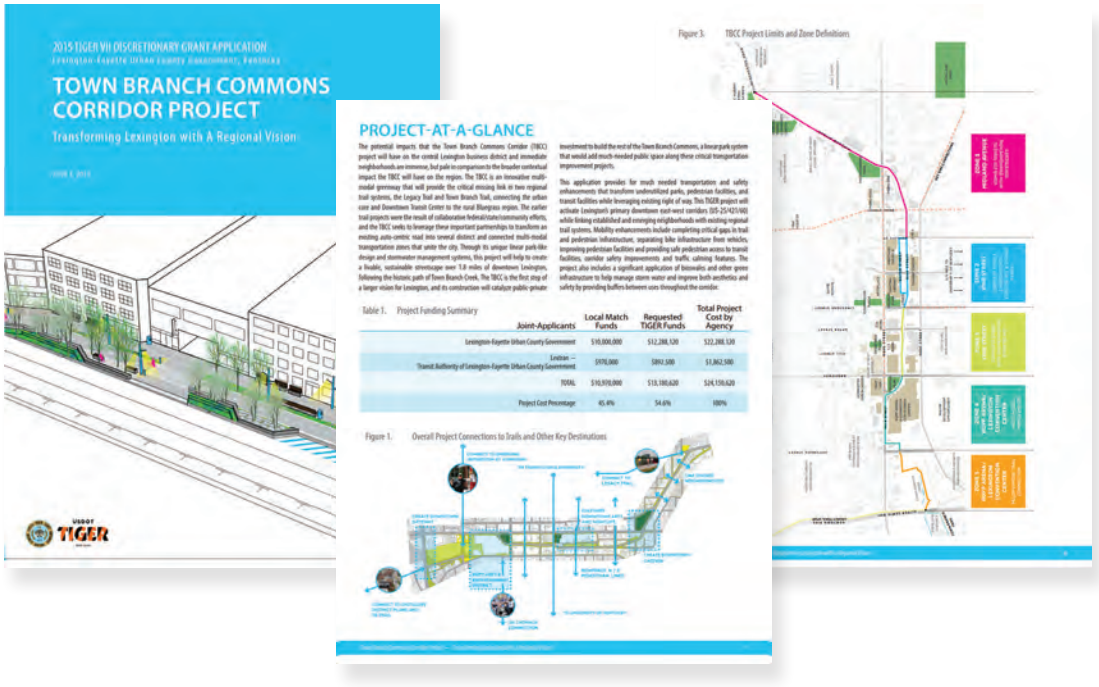
GRESHAM SMITH AND PARTNERS

# LFUCG - TIGER Grant Application

LEXINGTON, KENTUCKY

PROJECT MANAGER
Shawn P. Riggs, P.E.

REFERENCE
Dowell Hoskins
LFUCG Traffic
101 E Vine St. #300
Lexington, KY 40507
859.425.2255
dhoskinssquier@
lexingtonky.gov

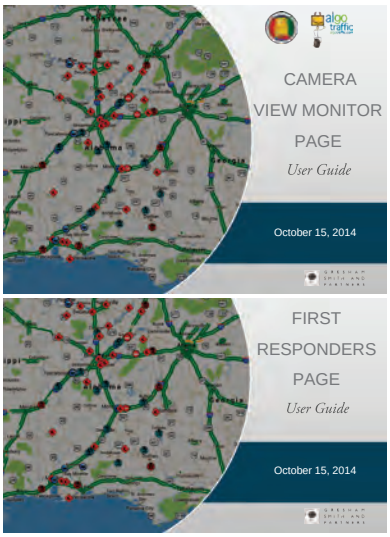


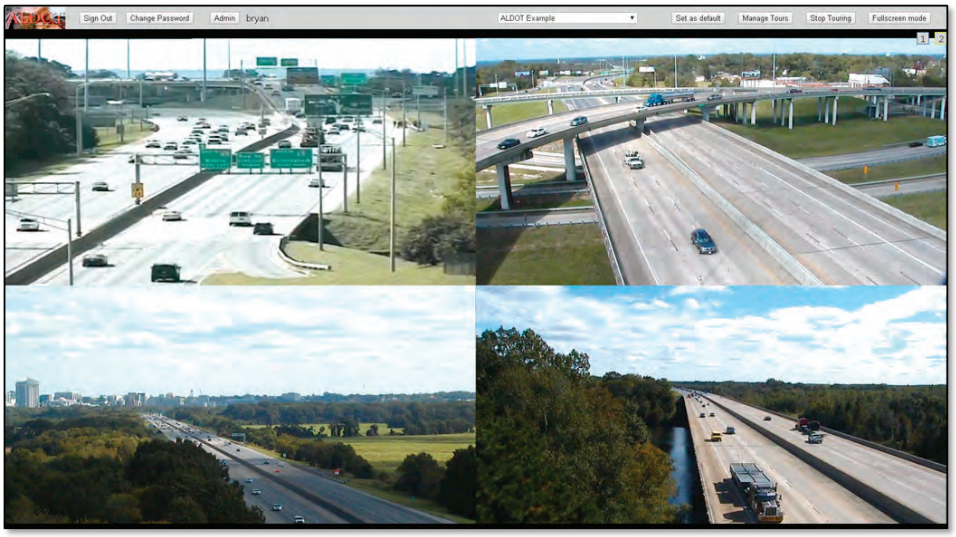

GS&P was hired by the Lexington Fayette Urban County Government (LFUCG) to assist in writing a TIGER Grant Application for submitting to the Federal Department of Transportation. Our team first measured the potential impacts that the Town Branch Commons Corridor (TBCC) project would have on the central Lexington business district and immediate neighborhoods. GS&P formulated, analyzed and documented the broader contextual impact the TBCC would have on the region. We also drew upon our local expertise, which has carved a niche for itself as regional multimodal leaders to describe the TBCC as an innovative multimodal greenway that will provide the critical missing link in two regional trail systems—the Legacy Trail and Town Branch Trail—connecting the urban core and Downtown Transit Center to the rural Bluegrass region. The earlier trail projects resulted from collaborative federal/state/community efforts; the TBCC seeks to leverage these important partnerships to transform an existing auto-centric road into several distinct and connected multi-modal transportation zones that unite the city. Our team was able to describe and quantify the benefit of its unique linear park-like design and stormwater management systems. The GS&P team used internal technical experts to create a website to help push out the analysis as well as track visitors so that our clients could be notified when target regional areas have visited the site.

GRESHAM SMITH AND PARTNERS

# ALDOT (Montgomery) - VDMS

MONTGOMERY, ALABAMA




PROJECT MANAGER
Laura E. Hartley, P.E.

REFERENCE
Christopher O. Hilyer
State ITS Program Manager
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, AL 36110
334.353.6003

The project included the implementation and integration of a VDMS for the distribution of Alabama Department of Transportation (ALDOT) video sources--Montgomery Division. At the time of this project, this included about 50 video sources. The VDMS was designed to meet the needs of the ALDOT Montgomery Division to distribute video internally amongst their ITS systems and externally to the media, partners, and other agencies. The VDMS collects ALDOT video sources from throughout the Montgomery Region and distributes video to the Regional Traffic Management Center, integrates with the ALDOT Advanced Transportation Management System (ATMS), which is Algo ATMS and ALDOT's Algo Traffic website. The implementation included providing an implementation plan, schedule, specifications and costs estimates of the equipment needed for the VDMS.

This project required coordination with other ALDOT staff and consultants for specific work, changes, procurements, installation, and configuration of the systems. Work included meetings with ALDOT ITS stakeholders to finalize design details, approach, and process for the delivery of the project by collection of system descriptions, network diagrams, and required access to system to be integrated, and verifications.

The VDMS system was designed to handle the distribution of video for a minimum of 100 closed circuit television (CCTV) cameras to be distributed and accessed by ALDOT, first responders, news-media and the public via the Algo Traffic website.

During Implementation, the project required coordination with the Algo vender/developer to identify specific configurations and access between VDMS and ALGO systems. Implementation also required working with the ALDOT ITS staff on specific configuration of the camera streams and sources to provide functionality to distribute the video streams and provide JPEG snapshots from the VDMS server to the Algo ATMS and website.

The project also included the development and delivery of first responders and media webpages for exclusive access by stakeholders to view video and set up virtual tours. A camera monitoring webpage was also developed for monitoring and maintaining the system. Testing and training of the VDMS was provided.

GRESHAM SMITH AND PARTNERS

# Pinellas County - VDMS

TAMPA, FLORIDA

PROJECT MANAGER
Adam Moser, P.E.
Paul Hsu, P.E.

REFERENCE
Tyson Evatz

This project included a system verification task to review and analyze existing streaming video web software and hardware, including becoming familiar with the operational issues the county was experiencing with their current streaming video system. Direct procurement, implementation, and testing of a solution will be included in a separate scope once the preliminary design has been completed and approved.

The system verification task included conducting a site visit to collect all available documentation pertaining to the existing video distribution system and compiling the information for preliminary design. Methodologies of collecting the relevant information included conducting meetings with stakeholders such as the county web developer, the county BTS Department, and ITS/ATMS personnel. Other goals of the stakeholder meetings were to determine a suitable video distribution solution utilizing either the current website development system or identifying a separate system from the general public website to enable media and first responder streaming video. Conducting review meetings, preparing action items and providing meeting minutes were also included in this task.

Finally, a system assessment report was prepared and submitted to Pinellas County for review. The primary purpose of this document was to provide the assessment from the initial site visit which included reviewing and analyzing the existing streaming video website, software, hardware and available system documentation. The analysis was presented in the report and included inventory diagrams, current issues and needs, an outline of viable options, and resulting action items.

Once the final design option is determined, a preliminary design task will be conducted to provide specifications, estimates and diagrams for successful launch of the media, first responder, and view monitor website. The task shall also include preparing an implementation schedule based on recommendations and selected options. The preliminary design document will be submitted for review and approval.

# REQUIRED DOCUMENTATION

SECTION 4.0

# REQUIRED DOCUMENTATION

## Affirmative Action Plan

GRESHAM
SMITH AND
PARTNERS

**Gresham, Smith and Partners**
**Affirmative Action Plan**

**Programmatic Activities and/or Goals**

1. **Recruitment/Advertising**

- All employment advertisements will include a statement that our company is an Equal Opportunity Employer.
- Specific affirmative action in the areas of recruitment and hiring in terms of the employment of minority individuals and minority businesses will be taken to insure equal employment opportunity and shall include but not be limited to the following:

  a. When vacancies occur, Gresham, Smith and Partners will advertise utilizing minority media or minority published newspapers, where available, that have greater minority readership, using the term "Equal Opportunity/Affirmative Action Employer" in all such employment opportunities.

  b. With respect to use of part-time college students and/or co-ops, efforts are currently made to include minority candidates in the interview/hiring process.

  c. Gresham, Smith and Partners will refer to its Affirmative Action Policy Statement on its employment application to reaffirm its commitment to equal employment opportunity.

- Our Company's Equal Employment Opportunity Policy will be displayed on the applicant website which is the location that all applicants apply for employment.
- Gresham, Smith and Partners will seek to increase the flow of minority applicants through community resources and any governmental referral programs with placement opportunities. Such public and private employment offices and business contacts will be advised in writing of its AAP/EEO policy and will be urged to refer qualified minority applicants as needed.
- Gresham, Smith and Partners considers minority applicants for vacancies in all job classifications in conjunction with its established AAP policy, including advancement and promotion from within on the basis of individual qualifications, potential and job performance.

Design Services For The Built Environment
1400 Nashville City Center / 511 Union Street / Nashville, Tennessee 37219-1733 / Phone 615.770.8100 / www.greshamsmith.com

- Any tests which show differential rejection rates for minority will be validated prior to continued use.

2. **Hiring Procedures**

   - All positions will be filled without regard to age, race, color, religion, handicap, sex, physical condition, developmental disability, sexual orientation or national origin.

   - Gresham, Smith and Partners currently utilizes its best efforts to hire qualified minority applicants for employment when vacancies occur. Gresham, Smith and Partners maintains a policy of equal opportunity in employment which is communicated to all levels of management and consultation for hiring purposes.

   - Testing is currently the same for everyone and limited to the precise job skills required.

   - Qualified minority applicants are currently given consideration during the hiring process.

3. **Promotion Procedures**

   Gresham, Smith and Partners will afford promotions and advancement opportunities to all qualified minority employees through the following affirmative actions:

   a. Communicate policy of promotion from within of qualified employees to Minorities when such advancement opportunities occur, and during performance reviews.

   b. Post promotional opportunities in a conspicuous place for all employees' awareness.

   c. Brief supervisors at all levels of management of Company's AAP promotion policy and its intent to insure utilization of qualified minority personnel at all job levels.

   d. Review objectively all qualifications of all candidates including minorities for promotion from within.

   e. Transfers will be fairly considered upon request or as deemed necessary by company discretion for advancement or better operations.

   f. Promotion will be based on factors such as job skills, performance, aptitude and attitude, potential, seniority, etc.


4. **Training Procedures**

   - As part of any tuition reimbursement program, and in support of the Affirmative Action thrust, encouragement and special effort will be made to encourage minority employees to utilize the program.
   - All training and development programs within the company will be reviewed periodically and made available to all employees including minorities.
   - All trainers and supervising management personnel shall be required to report the progress of any minority employee in training, directly to the AAP officer to assure that the skills of minority employees are being developed and upgraded to their fullest potential.
   - Employees are currently trained by experienced employees under full working conditions under the supervision of a management employee.

5. **Publicity**

   - **External**

     a. In the development of company brochures and direct mail flyers, and all external publicity material, an Affirmative Action statement will be included with the printed material.

     b. Where pictures of the staff are included in external publicity material, minority employees will be included.

     c. Printed materials for company use, such as purchase orders, etc., will include an Affirmative Action statement where possible.

   - **Internal**

     Development of new procedures, policies, and other administrative internal publications will include a statement of Affirmative Action, and in particular, place special emphasis on the recruitment and utilization of minority employees.


**6. Grievance Procedures**

- It is the policy of Gresham, Smith and Partners to provide a non-discriminating procedure for every employee to express a complaint or personnel concern about his or her employment or benefits that are administered and implemented by the company.

- In the event of such an occurrence, the following procedure is suggested for resolution:

  a. Employees are encouraged to report any grievance to the immediate supervisor.

  b. If the result of (a) above is not satisfactory to the employee, his or her supervisor will schedule a meeting with him or her before the Affirmative Action Program Officer, who will listen and respond to each complaint in a fair and non-discriminating manner.

  c. Should the above verbal processes not suffice; the Affirmative Action Officer will assist the grieved employee, to direct a letter to the company's Chief Executive Officer, asking for consideration of his or her grievance. Any such letters will be answered in a timely manner in writing to the employee.

  d. Should all of the above fail, the Chief Executive Officer (CEO) will schedule a personal meeting with the employee and make every effort to understand and resolve his or her problems in a fair and equitable manner.

- Each formal grievance will be documented in writing and forwarded to the Affirmative Action Officer for immediate resolution.

- The CEO will be responsible for changing any policy or procedure which in any way has caused discrimination.

- Retaliation is not prohibited. No harm or retaliation against any employee filing a grievance will be tolerated. All employees may seek assistance from the Affirmative Action Officer at any time.

**7. Program Reporting and Monitoring**

- The Affirmative Action Plan, along with all employment and other related statistical and/or records, is available for review during normal working hours. These records are located at the Gresham, Smith and Partners headquarters at 511 Union Street, Nashville, TN 37219.

- A periodic reporting and auditing system has been established internally for the purpose of measuring EEO progress and for updating the affirmative action plan annually.

07/02/15

Brackney J. Reed Date
Equal Employment Opportunity Officer

07/02/15

*Carolyn A. Kitts Date
Director of Human Resources
(615) 770-8167

*Responsible for implementation of the AAP.

**AFFIDAVIT**

Comes the Affiant, Michael Sewell, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is Michael Sewell and he/she is the individual submitting the proposal or is the authorized representative of Gresham, Smith and Partners, the entity submitting the proposal (hereinafter referred to as "Proposer").

2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.

6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

**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.

_____

STATE OF Kentucky

COUNTY OF Jefferson

The foregoing instrument was subscribed, sworn to and acknowledged before me by Michael Sewell on this the 7th day of July, 2015.

My Commission expires: 22 MARCH 2016


_____
NOTARY PUBLIC, STATE AT LARGE

## EQUAL OPPORTUNITY AGREEMENT

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.

Bidders

*I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.*

_____ Gresham, Smith and Partners

*Signature* *Name of Business*

**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 goal for the utilization of Disadvantaged Business Enterprises 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:

Marilyn Clark, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507
mclark@lexingtonky.gov

Firm Submitting Proposal: Gresham, Smith and Partners

Complete Address: 101 South Fifth Street Louisville, KY 40202

Contact Name: Michael Sewell, P.E. Title: Principal-in-Charge

Telephone Number: 502.627.8941 Fax Number: 866.651.2722

Email Address: michael_sewell@gspnet.com

# Current Work Force Analysis

**EEO-1 Section D - Employment Data**
**from 7/2/2015 to 7/2/2015 - All Locations**

Employment at this establishment - Report all permanent full-time and part-time employees including apprentices and on-the-job trainees unless specifically excluded as set forth in the instructions. Enter the appropriate figures on all lines and in all columns. Blank spaces will be considered as zeros.

| Job Categories | | Number Of Employees (Report employees in only one category) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Race/Ethnicity | | | | | | | | | | | | | |
| | | Hispanic or Latino | | Not-Hispanic Or Latino | | | | | | | | | | | Total Col ( A- N) |
| | | | | Male | | | | | | Female | | | | | |
| | | Male | Female | White | Black or African American | Native Hawaiian or Other Pacific Islander | Asian | American Indian or Alaska Native | Two or more races | White | Black or African American | Native Hawaiian or Other Pacific Islander | Asian | American Indian or Alaska Native | Two or more races | |
| | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
| Executive/Senior Level Officials and Managers | 1.1 | 1 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | **26** |
| First/Mid-Level Officials and Managers | 1.2 | 1 | 0 | 29 | 0 | 0 | 1 | 0 | 1 | 11 | 1 | 0 | 0 | 0 | 0 | **44** |
| Professionals | 2 | 20 | 4 | 302 | 9 | 1 | 9 | 1 | 1 | 160 | 7 | 0 | 3 | 1 | 0 | **518** |
| Technicians | 3 | 3 | 1 | 24 | 4 | 0 | 2 | 0 | 0 | 10 | 2 | 0 | 0 | 0 | 0 | **46** |
| Sales Workers | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Administrative Support Workers | 5 | 1 | 3 | 22 | 2 | 0 | 1 | 0 | 0 | 48 | 8 | 0 | 0 | 1 | 0 | **86** |
| Craft Workers | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Operatives | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Laborers and Helpers | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Service Workers | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **TOTAL** | 10 | **26** | **8** | **400** | **15** | **1** | **13** | **1** | **2** | **231** | **18** | **0** | **3** | **2** | **0** | **720** |
| **PREVIOUS YEAR TOTAL** | 11 | | | | | | | | | | | | | | | |

**All reports and information obtained from individual reports will be kept confidential as required by Section 709(e) of Title VII.**
**WILLFULLY FALSE STATEMENTS ON THIS REPORT ARE PUNISHABLE BY LAW, U.S. CODE, TITLE 18.SECTION 1001.**

**LFUCG MWDBE PARTICIPATION FORM**
**Bid/RFP/Quote Reference #** 28-2015 Traffic Video Distribution and Management System

The MWDBE 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.

| MWDBE Company, Name, Address, Phone, Email | Work to be Performed | Total Dollar Value of the Work | % Value of Total Contract |
|---|---|---|---|
| 1. EHI Consultants<br>Ed Holmes<br>333 W. Vine St - #300<br>Lexington, KY 40507<br>859-425-4881<br>info@ehiconsultants.org | Public engagement and education campaign. Raise brand awareness for the VDMS. | Estimated now at roughly $20,000 | Estimated now at 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.

Gresham, Smith and Partners
**Company**

**Company Representative**

July 13, 2015
**Date**

Principal-in-Charge
**Title**

Page 19 of 29

**LFUCG STATEMENT OF GOOD FAITH EFFORTS**
**Bid/RFP/Quote #** 28-2015 Traffic Video Distribution and Management System

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 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 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 of subcontracting opportunities

_____ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms

_____ Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine 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 to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

_____ Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not

less that seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

_____ Followed up initial solicitations by contacting MWDBEs to determine their level of interest.

_____ Provided the interested MWBDE firm with adequate and timely information about the plans, specifications, and requirements of the contract.

_____ Selected portions of the work to be performed by MWDBE firms 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 participation, even when the prime contractor may otherwise perform these work items with its own workforce

_____ Negotiated in good faith with interested MWDBE firms 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 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 quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.

_____ Made an effort to offer assistance to or refer interested MWDBE firms 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 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 participation.

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. Documentation of Good Faith Efforts are to 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.

| | |
|---|---|
| Gresham, Smith and Partners |  |
| **Company** | **Company Representative** |
| July 13, 2015 | Principal-in-Charge |
| **Date** | **Title** |

## 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, 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.

Signature

July 13, 2015

Date

ACORD®

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 7/6/2015

**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 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).**

| | |
|---|---|
| PRODUCER<br>Crow Friedman Group<br>A Risk Strategies Company<br>104 Woodmont Blvd.<br>Nashville, TN 37205<br><br>www.risk-strategies.com | CONTACT NAME:<br>PHONE (A/C, No, Ext): 615-383-0072 FAX (A/C, No): 615-297-4020<br>E-MAIL ADDRESS: |
| INSURED<br>Gresham Smith and Partners<br>511 Union Street, Suite 1400<br>Nashville TN 37219 | INSURER(S) AFFORDING COVERAGE — NAIC #<br>INSURER A : XL Specialty Insurance Company — 37885<br>INSURER B :<br>INSURER C :<br>INSURER D :<br>INSURER E :<br>INSURER F : |

**COVERAGES** **CERTIFICATE NUMBER:** 25474966 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSD | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| | COMMERCIAL GENERAL LIABILITY | | | | | | EACH OCCURRENCE | $ |
| | ☐ CLAIMS-MADE ☐ OCCUR | | | | | | DAMAGE TO RENTED PREMISES (Ea occurrence) | $ |
| | | | | | | | MED EXP (Any one person) | $ |
| | | | | | | | PERSONAL & ADV INJURY | $ |
| | GEN'L AGGREGATE LIMIT APPLIES PER: | | | | | | GENERAL AGGREGATE | $ |
| | ☐ POLICY ☐ PRO-JECT ☐ LOC | | | | | | PRODUCTS - COMP/OP AGG | $ |
| | ☐ OTHER: | | | | | | | $ |
| | AUTOMOBILE LIABILITY | | | | | | COMBINED SINGLE LIMIT (Ea accident) | $ |
| | ☐ ANY AUTO | | | | | | BODILY INJURY (Per person) | $ |
| | ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS | | | | | | BODILY INJURY (Per accident) | $ |
| | ☐ HIRED AUTOS ☐ NON-OWNED AUTOS | | | | | | PROPERTY DAMAGE (Per accident) | $ |
| | | | | | | | | $ |
| | ☐ UMBRELLA LIAB ☐ OCCUR | | | | | | EACH OCCURRENCE | $ |
| | ☐ EXCESS LIAB ☐ CLAIMS-MADE | | | | | | AGGREGATE | $ |
| | ☐ DED ☐ RETENTION $ | | | | | | | $ |
| | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N | | | | | | ☐ PER STATUTE ☐ OTH-ER | |
| | ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N / A | | | | | | E.L. EACH ACCIDENT | $ |
| | (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below | | | | | | E.L. DISEASE - EA EMPLOYEE | $ |
| | | | | | | | E.L. DISEASE - POLICY LIMIT | $ |
| A | Professional Liability | | | DPR9718061 | 8/1/2014 | 8/1/2015 | Each Claim<br>Annual Aggregate | $1,000,000<br>$3,000,000 |

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**

**CERTIFICATE HOLDER**

Specimen
For Proposal Only
Cancellation Does Not Apply

**CANCELLATION**

**SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.**

**AUTHORIZED REPRESENTATIVE**

Michael Christian

Client#: 3609 GRESSMI

**ACORD** TM

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/29/2015

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 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).

| PRODUCER | CONTACT NAME: Jeffrey Corvin | |
|---|---|---|
| The Crichton Group<br>3011 Armory Drive<br>Suite 250<br>Nashville, TN 37204 | PHONE (A/C, No, Ext): 615 687-2918 | FAX (A/C, No): 615 687-2919 |
| | E-MAIL ADDRESS: jcorvin@thecrichtongroup.com | |

| INSURER(S) AFFORDING COVERAGE | NAIC # |
|---|---|
| INSURER A : Hartford Casualty Ins. Company | 29424 |
| INSURER B : Twin City Fire Ins. Company | 29459 |
| INSURER C : Hartford Fire Ins. Company | 19682 |
| INSURER D : | |
| INSURER E : | |
| INSURER F : | |

INSURED
Gresham, Smith and Partners
1400 Nashville City Center
511 Union Street
Nashville, TN 37219

**COVERAGES** **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSR | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| A | GENERAL LIABILITY | | | 20UUNTW0356 | 07/01/2015 | 07/01/2016 | EACH OCCURRENCE | $1,000,000 |
| | X COMMERCIAL GENERAL LIABILITY | | | | | | DAMAGE TO RENTED PREMISES (Ea occurrence) | $300,000 |
| | CLAIMS-MADE X OCCUR | | | | | | MED EXP (Any one person) | $10,000 |
| | | | | | | | PERSONAL & ADV INJURY | $1,000,000 |
| | | | | | | | GENERAL AGGREGATE | $2,000,000 |
| | GEN'L AGGREGATE LIMIT APPLIES PER: | | | | | | PRODUCTS - COMP/OP AGG | $2,000,000 |
| | POLICY X PRO-JECT X LOC | | | | | | | $ |
| B | AUTOMOBILE LIABILITY | | | 20UUNTW0356 | 07/01/2015 | 07/01/2016 | COMBINED SINGLE LIMIT (Ea accident) | $1,000,000 |
| | X ANY AUTO | | | | | | BODILY INJURY (Per person) | $ |
| | ALL OWNED AUTOS / SCHEDULED AUTOS | | | | | | BODILY INJURY (Per accident) | $ |
| | X HIRED AUTOS / X NON-OWNED AUTOS | | | | | | PROPERTY DAMAGE (Per accident) | $ |
| | | | | | | | | $ |
| A | X UMBRELLA LIAB X OCCUR | | | 20XHUPB5535 | 07/01/2015 | 07/01/2016 | EACH OCCURRENCE | $5,000,000 |
| | EXCESS LIAB CLAIMS-MADE | | | | | | AGGREGATE | $5,000,000 |
| | DED X RETENTION $10,000 | | | | | | | $ |
| C | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N | | | 20WEAK4351 | 07/01/2015 | 07/01/2016 | X WC STATU-TORY LIMITS / OTH-ER | |
| | ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? | N / A | | | | | E.L. EACH ACCIDENT | $1,000,000 |
| | (Mandatory in NH) | | | | | | E.L. DISEASE - EA EMPLOYEE | $1,000,000 |
| | If yes, describe under DESCRIPTION OF OPERATIONS below | | | | | | E.L. DISEASE - POLICY LIMIT | $1,000,000 |
| | | | | | | | | |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

**"For proposal purposes only"**

**Any person or organization is included as an Additional Insured with respect to General Liability for Bodily Injury, Property Damage or Personal and Advertising Injury caused, in whole or in part, by acts or omissions or the acts or omissions of those acting on behalf of the Named Insured in the performance of (See Attached Descriptions)**

**CERTIFICATE HOLDER**

Gresham, Smith and Partners
1400 Nashville City Center
511 Union Street
Nashville, TN 37219

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Robert B Jackson







JGC

## DESCRIPTIONS (Continued from Page 1)

**ongoing operations; in connection with premises owned by or rented to the Insured; or in connection with Insured's work and included within the Products-Completed Operations hazard, but only if the written contract or agreement requires the insured to provide this coverage to the Additional Insured.**

**General Liability is primary and non-contributory to any insurance carried by the person or organization, if the written contract or written agreement requires the Named Insured's General Liability insurance to be primary or primary and non-contributory.**

**If an architect, engineer or surveyor is included as an Additional Insured, this insurance does not apply to the rendering of, or failure to render, professional services by or for the Named Insured.**

**The General Liability Insurer waives any right of recovery it may have against the Additional Insured, when the Named Insured has agreed in a written contract, executed prior to a loss, requiring such waiver and caused in whole or in part by the Named Insured's operations, work, leased premises, or leased equipment.**

**The Workers' Compensation policy includes a Waiver of Subrogation in favor of the Certificate Holder only to the extent that the Named Insured performs work under a written contract that requires the Certificate Holder to obtain this agreement from the Insurer, and where permitted by law.**

**The Workers' Compensation policy includes statutory coverage for all states, EXCEPT: ND, OH, WA and WY.**

**Any person or organization required to be included as Additional Insured for Automobile Liability is included to the extent they qualify as an Insured under the policy. A Waiver of Subrogation is included under Automobile Liability in favor of any person or organization that is required in a written contract, executed prior to a loss, to be provided a Waiver of Subrogation under Automobile Liability.**

**Subject to all of the terms, conditions, exclusions and definitions of the above referenced policies as issued by the carrier(s).**

**SAGITTA 25.3 (2010/05) 2 of 2**
**#S384947/M384660**

## Addendum

Lexington-Fayette Urban County Government
DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray
Mayor

William O'Mara
Commissioner

**ADDENDUM #1**

Bid Number: **#RFP 28-2015**

Date: June 30, 2015

Subject: Traffic Video Distribution and Management System

Address inquiries to:
Sondra Stone
(859) 258-3320

**TO ALL PROSPECTIVE SUBMITTERS:**

Please be advised of the following clarifications to the above referenced RFP:

1. Q: As part of this RFP, is the selected bidder expected to purchase / deliver a video wall and video distribution system as part of this contract? **The virtual video wall (VDMS), not an actual video wall, should be implemented as part of this RFP.**

2. Q: As part of this RFP, is the selected bidder expected to purchase / deliver only a video distribution system as part of this contract that integrates successfully with the current video wall in use with the operations folks/Center? **The existing video wall has reached its useful life. We would like to transition to a virtual video wall concept.**

3: Q: How many of the existing Vicon cameras/codecs will be replaced as part of this contract to function with the new video distribution system as part of this contract? **Selected consultant needs to advise us on this issue.**

4. Q: Will all cameras be integrated as IP cameras for the new video distribution system? **Yes.**

5. Q: Will all of the existing communications infrastructure be replaced to the existing cameras as part of this contract or via a separate contract; will those be converted to fiber or IP devices before, during or after the successful conclusion of this contract for the new video distribution system? How many devices will remain on existing coax/analog connections during the life of this video distribution contract? **All cameras to use the VDMS will be IP. No analog connections will be expected to be part of the VDMS.**

6. Q: Will O&M be required for the video distribution system contract? If so, how long will the operation and maintenance period be required for the video distribution system as part of this contract? **No.**

200 East Main Street • Lexington, KY 40507 • (859) 425-2255 • www.lexingtonky.gov
HORSE CAPITAL OF THE WORLD

7. Q: Requirement: The VDMS system shall be designed to handle distribution of traffic video feeds for a maximum of 200 closed circuit television (CCTV) cameras to be distributed and accessed by LFUCG, first responders, news-media and the public via a webpage (virtual video wall) and mobile application.

   a. What type of camera feeds are these? H.264, MPEG2, MPEG4, etc? Are any of these feeds analog? **H.264. No.**
   b. What are the manufacturers and type of cameras in your system? **Vicon.**
   c. Are these cameras coming into an existing video management or ATMS system where they are available for the VDMS? **No.**
   d. If you have encoders, where are they located? What are the manufacturer and models? **They are located in our server room. Vicon.**

8. Q: Requirement: Hardware, Software, Communication links, access to the LFUCG webpage, access to facilities, personnel and other systems, reliable and viable internet service provider interface. Deliverables: High Level Design, Hardware and Software Specification, Virtual Video Wall and Camera Monitoring Page

   a. What hardware, software is being referred to in this requirement? If a company already provides an off-the-shelf web-based software and proven hardware platform, can that company provide these to fulfill the requirements of this section? **We need guidance on what hardware/software is required. Off-the-shelf would be one option.**

9. Q: Requirement: Selection Criteria and RFP Submittal Process Respondents must be pre-qualified with Kentucky Transportation Cabinet (KYTC) in Intelligent Vehicle/Highway Systems to provide consultant design services.

   **a.** How can a company be pre-qualified with the Kentucky Transportation Cabinet (KYTC)? **Contractors must apply for a Certificate of Eligibility to qualify to bid on and accept work on projects sponsored by the Kentucky Transportation Cabinet and Commonwealth of Kentucky as per KRS 176.130. More information may be obtained at http://transportation.ky.gov/Construction-Procurement/Pages/Prequalification.aspx.**

   **LFUCG will be holding a class/workshop to aid Contractors with the necessary steps and paperwork to complete for pre-qualification and a Certificate of Eligibility.**

   **The next class will be held July 16, 2015, 4:00-6:00 pm, at 200 E Main St, Rm B109, Lexington, KY. You may register for the workshop on-line at : http://kysbdc.ecenterdirect.com/Conferences.action?CenterID=21.**

10. Q: There is no pricing page included in this RFP. Are we to provide our own such that it matches the requirements laid out in the RFP? **This is a qualifications based selection. The LFUCG will negotiate pricing with chosen Contractor/Vendor.**

11. Q: Does the DBE/MBE company need to be from the Lexington area or within the State of Kentucky? Or, can a company provide a DBE/MBE firm that resides in another state? **The DBE company can reside in another state but must be certified in the State of Kentucky.**

Todd Slatin, Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

COMPANY NAME: Gresham, Smith and Partners

ADDRESS: 101 South Fifth Street, Suite 1400 Lousiville, KY 40202

SIGNATURE OF BIDDER: _____

Marketing Number: 15200706061
Marketing Team: Sallet, Young, Salaway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