

BID SIGNATURE PAGE

Type or Print the following information.

PROSPECTIVE CONTRACTOR'S INFORMATION				
Company:	Geo-Comm, Inc.			
Address:	601 West St. Germain Street			
City:	St. Cloud	State:	MN	Zip Code: 56301
Business Designation:	<input type="checkbox"/> Individual <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Public Service Corp <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Nonprofit			
Minority and Women-Owned Designation*:	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> American Indian <input type="checkbox"/> Service Disabled Veteran <input type="checkbox"/> African American <input type="checkbox"/> Hispanic American <input type="checkbox"/> Women-Owned <input type="checkbox"/> Asian American <input type="checkbox"/> Pacific Islander American			
AR Certification #: _____ * See <i>Minority and Women-Owned Business Policy</i>				

PROSPECTIVE CONTRACTOR CONTACT INFORMATION			
<i>Provide contact information to be used for bid solicitation related matters.</i>			
Contact Person:	Ron Helterbrand	Title:	Territory Sales Manager
Phone:	(817) 657-2449	Alternate Phone:	(320) 281-2193
Email:	rhelterbrand@geo-comm.com		

CONFIRMATION OF REDACTED COPY
<input type="checkbox"/> YES, a redacted copy of submission documents is enclosed. <input checked="" type="checkbox"/> NO, a redacted copy of submission documents is <u>not</u> enclosed. I understand a full copy of non-redacted submission documents will be released if requested.
<p><i>Note: If a redacted copy of the submission documents is not provided with Prospective Contractor's response packet, and neither box is checked, a copy of the non-redacted documents, with the exception of financial data (other than pricing), will be released in response to any request made under the Arkansas Freedom of Information Act (FOIA). See Bid Solicitation for additional information.</i></p>

ILLEGAL IMMIGRANT CONFIRMATION
<p>By signing and submitting a response to this <i>Bid Solicitation</i>, a Prospective Contractor agrees and certifies that they do not employ or contract with illegal immigrants. If selected, the Prospective Contractor certifies that they will not employ or contract with illegal immigrants during the aggregate term of a contract.</p>

ISRAEL BOYCOTT RESTRICTION CONFIRMATION
<p>By checking the box below, a Prospective Contractor agrees and certifies that they do not boycott Israel, and if selected, will not boycott Israel during the aggregate term of the contract.</p> <p><input checked="" type="checkbox"/> Prospective Contractor does not and will not boycott Israel.</p>

An official authorized to bind the Prospective Contractor to a resultant contract must sign below.

The signature below signifies agreement that any exception that conflicts with a Requirement of this *Bid Solicitation* will cause the Prospective Contractor's bid to be disqualified:

Authorized Signature: <u>Jody Sayre</u>	Title: Vice President of Marketing and Channel Management
Printed/Typed Name: <u>Jody Sayre</u>	Date: <u>9/10/2020</u>



September 10, 2020

Arkansas GIS Office
Attn: Jonathan Duran, Deputy Director
1 Capitol Mall, Ste 6D
Little Rock, AR 72201
Jonathan.duran@arkansas.gov
(501) 682-4432

Dear Mr. Duran:

Re: NG9-1-1 Gap Analysis/Data Assessment Invitation for Bid

Geo-Comm, Inc. (GeoComm) respectfully submits a response to the State of Arkansas Invitation for Bid referenced above.

The enclosed proposal overviews service offerings to successfully work with you to execute a GIS data readiness assessment and gap analysis to determine and document specific needs or shortfalls in the relevant Geographic Information System (GIS) data. The response highlights our experience with public safety GIS data and our commitment to your success. This proposal is based on 25 years as an industry provider specializing in public safety GIS technology and services for Public Safety.

As an NG9-1-1 leader in the public safety industry, GeoComm is a well-qualified firm and looks forward to a partnership with the State in the future. Please do not hesitate to contact us, Territory Sales Manager Ron Helterbrand or GeoComm Vice President of Sales Greg Spadorcio, with any questions throughout this evaluation process. Our contact information is below.

Ron Helterbrand
rhelterbrand@geo-comm.com
(817) 657-2449

Greg Spadorcio
rspadorcio@geo-comm.com
(320) 281-2183

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Ron Helterbrand".

Ron Helterbrand
Territory Sales Manager

A handwritten signature in blue ink that reads "Greg Spadorcio".

Greg Spadorcio
Vice President of Sales



**Next Generation 9-1-1 Gap Analysis/
Data Assessment Invitation for Bid**
Proposal for the State of Arkansas

September 11, 2020

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Executive Summary

Introduction

As part of the State of Arkansas' current initiative to create and maintain Next Generation 9-1-1 (NG9-1-1) Geographic Information System (GIS) data, a data readiness and gap analysis to determine and document specific needs or shortfalls in applicable GIS data will be critical to the State achieving its NG9-1-1 readiness goals.

Geo-Comm, Inc. ("GeoComm"), a highly experienced public safety GIS vendor working with clients across the nation to prepare for NG9-1-1 operations, proposes to complete a statewide GIS data analysis for the Arkansas 911 Board (Board). The analysis will provide an overview of issues related to the accuracy and synchronization of the statewide GIS map data aggregated by the Arkansas GIS Office, Master Street Address Guide (MSAG) (where available), and Automatic Location Identification (ALI) database (where available), as well as an overview of each layer's readiness for NG9-1-1 operations. The results will be compiled into a report which will detail the findings and provide recommendations to guide the GIS Office and the Board to develop and maintain NG9-1-1 GIS data for your current three-year project and beyond.

In addition, GeoComm will provide an implementation plan outlining GeoComm's recommended approach to achieving the next steps outlined in the gap analysis report.

GeoComm, Inc: Experienced NG9-1-1 GIS Subject Matter Expert

In undertaking this NG9-1-1 GIS data project, it will be beneficial for you to partner with a vendor who will collaborate with you, who can convey a deep understanding of industry GIS data standards, and successfully provide GIS data assessments and recommendations. We have carefully reviewed the Invitation for Bid (IFB) to understand your goals and believe we are well-suited to be the trusted partner you need to successfully meet your NG9-1-1 GIS data readiness assessment and gap analysis project goals. By partnering with GeoComm, you have the benefit of partnering with:

- A collaborative vendor
- A vendor with deep public safety GIS data standards and knowledge
- A vendor experienced engaging GIS stakeholders across states and regions
- A vendor proposing a project team who has a recently successfully completed similar gap analysis projects for statewide agencies, including the Pennsylvania Emergency Management Agency (PEMA), ahead of schedule and within budget, and who is currently undertaking a nearly identical project for the State of Wisconsin. The experience garnered during these projects provides GeoComm a unique perspective which can be applied to your project for outcomes exceeding your expectations.

As an industry leading expert in the areas of focus you have expressed in the IFB, we believe we are qualified to partner with you to successfully accomplish these goals and have partnered with other states to successfully provide these exact services.

This partnership, between the Board and GeoComm, will strengthen the deployment approach with the perspectives of subject matter experts and GIS professionals with decades of industry experience. It will ultimately ensure your project is executed on time and within budget.

Conclusion

The enclosed proposal outlines a project approach to successfully accomplish the tasks you have outlined within the IFB. The proven project approach is based on GeoComm's extensive industry experience in successfully completing projects similar in scope to that which the Board is seeking to execute. Upon project completion, the State of Arkansas will have a clear understanding of the condition of your public safety GIS data, a clear understanding of the steps needed to bring your GIS data up to NG9-1-1 industry standards, and a clear understanding of the roles your stakeholders will take in the process to achieve NG9-1-1 GIS data readiness.

2 **GeoComm Background and Experience**

GeoComm was founded in Minnesota on May 18, 1995 to provide local governments with turnkey emergency 9-1-1 software and GIS services. Over the subsequent 25 years, the company has grown to serve emergency professionals in over 1,000 Public Safety Answering Points (PSAPs) throughout the United States, helping to keep more than 100 million people safe. Today, GeoComm has a national reputation as a leading provider of public safety GIS software solutions and services.

GeoComm is uniquely qualified to meet the Board's NG9-1-1 GIS data goals. With extensive project experience in the NG9-1-1 industry, a project team of experts responsible for shaping NG9-1-1 GIS data standards, we possess the most knowledgeable, experienced, and well-rounded project team of any vendor in the industry.

Since being founded, we have assisted our customers to implement public safety grade GIS solutions that include data analysis (Gap Analysis), data development, maintenance services, mapping and dispatch applications, and NG9-1-1 core components such as Emergency Call Routing Function (ECRF), Location Validation Function (LVF), Spatial Interface (SI) and data validation solutions to offer the best possible emergency services. Our professional staff has diverse, comprehensive industry experience from their public safety involvement dating back to the advent of basic 9-1-1. This experience has grown substantially as we assisted hundreds of jurisdictions across the nation to deploy Enhanced 9-1-1 (E9-1-1) software and services. It continues to evolve today through innovation, customer engagements and active participation in industry groups who are helping to shape the future of NG9-1-1.

State and Local Government Experience

GeoComm's experience serving local, regional, and state governments is extensive. We have been dedicated to providing public safety 9-1-1 software and GIS solutions to state, regional, and local governments since our inception in 1995. GeoComm is an experienced provider of state-level NG9-1-1 GIS data professional services and solutions, first beginning in 2012. Since that time, we have expanded our growing list of customers whose NG9-1-1 programs we support, including:

- Maine
- New York
- Vermont
- North Carolina
- Pennsylvania
- North Dakota
- South Dakota
- Iowa
- Kansas
- Texas
- California
- Washington
- Oregon
- Wyoming
- Wisconsin

Of specific similarity to the project proposed to the Board are the projects we executed with the following clients:

- Pennsylvania
- Iowa
- North Dakota
- South Dakota
- North Carolina
- Texas
- California
- Washington
- Wisconsin
- GeoComm was awarded the State of Missouri Gap Analysis Project in August 2020

In each of the projects above, our dedicated team of GIS and Implementation professionals worked to achieve NG9-1-1 GIS data readiness across the state.

Next Generation 9-1-1

Over the last several years, GeoComm has become a proven provider of end-to-end GIS systems tailored to meet the needs of public safety agencies moving to NG9-1-1. GeoComm offers NG9-1-1 specific software and services, including NG9-1-1 GIS Gap Analysis, ongoing GIS data assessment and development; GIS workflow consulting; software to maintain, manage, and provision NG9-1-1 GIS data; the ECRF and LVF elements of the ESInet (Emergency Services IP Network), MSAG conversion services and geocoding services as well as tactical mapping for emergency responders and 9-1-1 Centers and statewide common operating picture mapping applications.

GeoComm's solutions provide the tools necessary to geospatially route 9-1-1 calls, speed and enhance emergency response, improve data accuracy and quality, accelerate communications, and provide mission critical GIS-based decision support. GeoComm was first to demonstrate geospatial wireless call routing in 1999 at the APCO (Association of Public-Safety Communications Officials) International Conference in Minneapolis, Minnesota. This groundbreaking experience has helped shape our NG9-1-1 solutions portfolio and makes GeoComm the most experienced and dedicated solutions provider in the industry today.

Public Safety GIS and Project Management Consulting Services

GeoComm's GIS Subject Matter Experts (SME) and Project Management team provides exceptional, client-specific consulting and project management services to assist public safety agencies in making informed decisions for developing and/or improving GIS services for their communities. This team is composed of industry-recognized professionals and subject matter experts who have successfully completed various projects across the country. GeoComm listens objectively to the goals and requirements of our client's specific project. Then, we outline tailored recommendations and practical implementation steps to meet our client's project goals.

Esri Partnership

GeoComm is an Esri Platinum tier business partner (one of less than 20 globally). With thousands of business partners and millions of users worldwide, Esri is the world-leading GIS platform technology provider. Within the United States, most cities, counties, and states rely daily on the Esri platform to meet a variety of geospatial needs across state and local government enterprise.

Public Safety GIS Applications

GeoComm develops software products for quickly accessing GIS data, viewing map data, and editing regional data sets efficiently. GeoComm has been at the forefront of integrating GIS into other public safety systems for years – it is what we do. The products we offer are considered “best of breed” in the public safety industry and integrate with key NG9-1-1 systems to on premise or cloud-based Customer Premise Equipment (CPE) and Computer Aided Dispatch (CAD) systems. Our products include:

- Enterprise Public Safety GIS Data Management
 - GeoComm Maintainer for Desktop Data Management (GIS data creation and editing tool specifically tailored for public safety data management)
 - GeoComm GIS Data Hub for GIS data validation, merging, reporting and provisioning
 - GeoComm Contributor (cloud-based editing and feedback tools for non-GIS users)
 - GeoComm Resolver (workflow to enable GIS analysts to focus on the highest priority areas for data improvement (error types/locations))
 - GeoComm Submitter (packaging tool for submitting GIS data to the GIS Data Hub)
 - GeoComm Spatial Interface (SI)
- GeoComm Dispatch Map Tactical PSAP Mapping
 - CAD system integration
 - Vehicle tracking (AVL)
- GeoComm Maps Tactical PSAP Mapping
 - CAD system integration
 - Vehicle tracking (AVL)
- GeoLynx Mobile Tactical Responder Mapping
 - GeoLynx Mobile MDC Edition
- GeoComm ECRF and LVF for Emergency Call Routing Function and Location Validation Function respectively
- MCS – MSAG Conversion Services
- GCS – Geocoding Services

3 **Successful Project History**

GeoComm has extensive experience working with clients similar in size to the Board to successfully execute projects similar to the Board's project. Our experience is unrivaled in the industry; we have amassed a deep breadth of knowledge, expertise, and proven success not found elsewhere. This experience will directly benefit the Board, knowing GeoComm has the skills and know-how required to successfully and efficiently collaborate with you to achieve NG9-1-1 GIS data readiness across the Board, on time and within budget.

GeoComm Relevant Projects

The following pages describe three projects GeoComm successfully completed which directly relate the project proposed to the Board.

Pennsylvania Emergency Management Agency | Statewide GIS Data Analysis

GeoComm was contracted to complete an NG9-1-1 Statewide GIS Data Gap Analysis project for the Pennsylvania Emergency Management Agency (PEMA). As the Commonwealth of Pennsylvania transitions to a NG9-1-1 environment, the need for a robust GIS environment at local, regional, and statewide agencies dramatically increases. PEMA in consultation with the Pennsylvania GIS community, recognized the first step in their NG9-1-1 transition was to complete a Statewide GIS Data Gap Analysis.



GeoComm worked with each of the 67 counties throughout Pennsylvania where they received the GIS data for each of the counties and completed field mapping. GeoComm then utilized GIS Data Hub to complete a GIS data analysis for each of the counties GIS data and generate a report outlining the quality of the data (Gap Analysis). Conference calls were then conducted with each of the counties to overview the results and outline next steps for data improvement.

In addition, an educational campaign initiative in each of the seven regions throughout Pennsylvania was conducted. The educational sessions provided local GIS agencies with information on:

- NG9-1-1 GIS standards
- GIS data requirements
- A high-level overview of the county GIS data analysis
- Provided workflow samples highlighting the importance of continual GIS data improvement and maintenance

The information GeoComm provided PEMA throughout this project empowered them with a clear path for achieving an accurate and up-to-date statewide GIS dataset.

GeoComm's key assigned in-house staff included Project Manager Jessica Frye who oversaw the project efforts, with support by a team of GIS Specialist and GIS Managers, and subcontractor AppGeo who supported the educational program. GeoComm kicked off the project May 2019 and completed the project December 2019, six months ahead of Schedule.

Customer Contact

Jeff Boyle: Pennsylvania Emergency Management Agency
1310 Elmerton Avenue, Harrisburg, PA 17110
Phone: 717-651-2218
Email: jeffboyle@pa.gov

State of South Dakota | End-to-End NG9-1-1 GIS Solution

In 2014, the State of South Dakota was seeking a complete, end-to-end GIS solution tailored to meet the rigorous demands of NG9-1-1. The State required the solution to include a single seamless, gapless GIS dataset suitable for use within the State's NG9-1-1 system for 9-1-1 call routing and location validation. It also had to incorporate daily GIS data changes from a variety of disparate sources into the authoritative statewide GIS dataset and provision those updates into a standards-based ECRF and LVF system. Under a multi-year contract, the State selected GeoComm to provide NG9-1-1 GIS Managed Services that include:



- **NG9-1-1 GIS Managed Services:** Existing GIS data from individual counties was combined into a new statewide NG9-1-1 GIS dataset and on-going daily updates from locally authoritative sources are processed into the statewide GIS dataset; this prepares critical GIS updates for core NG9-1-1 call routing and location validation systems
- **QA/QC Services:** A formal QA/QC plan was developed to document the overall approach to quality control; locally-maintained GIS data was analyzed to assess its suitability for use within the NG9-1-1 system
- **NG9-1-1 GIS Consulting:** GeoComm's GIS Project Managers worked with the State to develop a strategy for ensuring timely and accurate local input of GIS data updates into the NG9-1-1 system
- **GIS Data Development Services:** A wireless cell sector layer was developed based on the wireless carrier routing sheet provided to GeoComm from the State
- **GIS Data Aggregation Services:** After the GIS data was developed and remediated, automated procedures were implemented to assimilate the various diverse GIS datasets into a seamless, statewide GIS dataset
- **GeoComm GIS Data Software Tools:** Implemented for use in the State's overall GIS data maintenance workflow to enable authorized users to contribute any validated changes to the statewide dataset.

The initial project provided the State of South Dakota with a long term professional managed and operated NG9-1-1 GIS Solution. Today, GeoComm continues to collaborate with the State and local entities to ensure their GIS data is current and meets NG9-1-1 requirements. The State uses GIS Data Hub to successfully accomplish NG9-1-1 GIS data QC, reporting, validation, and aggregation tasks.

GeoComm's key assigned in-house staff include Jessica Frye, Project Manager, with support by a team of GIS Specialist and GIS Managers. The project kicked off in November 2014 and the final report was delivered on time in January 2016 which completed the implementation portion of the project. The remaining portion of the project contract consists of ongoing maintenance.

Customer Contact

Maria King: Assistant Program Manager
118 West Capitol Avenue, Pierre, SD 57501
Phone: 605-773-8145
Email: maria.king@state.sd.us

Iowa Homeland Security and Emergency Management Department | NG9-1-1 GIS Data Consulting Services

GeoComm has a long history of providing 9-1-1-related GIS services to local counties and jurisdictions in Iowa and has more recently been instrumental in the development of an NG9-1-1 GIS system for the State. In 2015, GeoComm first worked with the Iowa Homeland Security and Emergency Management Department (HSEMD) to establish a set of NG9-1-1 GIS standards to normalize locally-maintained GIS datasets across the State.



As part of this process we performed an extensive GIS data analysis on each of the 99 Iowa counties' GIS data. We worked with each of the counties to assess their existing GIS data and determined whether it could be used in an NG9-1-1 system and would meet established minimum accuracy requirements. Once the initial GIS data review was completed, we recommended ways to fix issues with the existing GIS data and ways the GIS data could be maintained.

The GIS data layers from the local 9-1-1 entities were then combined into a single, statewide GIS dataset. As NG9-1-1 efforts continued, we worked with HSEMD to develop new workflows at the State and local levels and develop a quality assurance/quality control (QA/QC) plan to validate the accuracy and integrity of GIS data. The newly developed NG9-1-1 GIS standards were rolled out to local jurisdictions throughout the State in the form of an educational campaign. This campaign was co-hosted between GeoComm and HSEMD and contained series of informational webinars to educate local stakeholders about NG9-1-1 and the GIS standards being developed in the State of Iowa.

This project developed a set of authoritative NG9-1-1 GIS standards which is used as the foundation for the statewide GIS dataset development. Today, using GIS Data Hub, we work with the State and local authorities to continually transform, QC individual datasets, aggregate into a statewide dataset, QC the statewide dataset, and report on data quality for the State's future NG9-1-1 system.

GeoComm's key assigned in-house staff included GIS Project Manager Deb Rozeboom, ENP, GISP, ENP with support by a team of GIS Specialist and GIS Managers. (Note that Ms. Rozeboom's current role at GeoComm is a GIS Solutions Engineer.) GeoComm kicked off the project in 2015. The contract continues through 2021.

Customer Contact

Blake DeRouchey: E9-1-1 Program Manager
Iowa HSEMD Joint Forces Headquarters
6100 NW 78th Ave; Johnston, IA 50131
Phone: (515) 323-4232
Email: blake.derouchey@iowa.gov

4

Staff Qualifications

Project Management

GeoComm's teams utilize formalized project management processes with all projects. An emphasis on project management has become integral to our NG9-1-1 project success. We have assembled a project team with experienced, skilled industry professionals who are at the forefront of deploying NG9-1-1 GIS across the nation. Our State of Arkansas project team will be led by GeoComm GIS Project Manager Jessica Frye, ENP. Ms. Frye will utilize her years of industry experience to ensure the Board's project receives superior oversight, keeping the project on time and within scope and budget. As a project manager and subject matter expert, Ms. Frye has played a pioneering role in assisting customers develop NG9-1-1 GIS data standards.

Ms. Frye will serve as the primary contact for the Board and will be available as needed. Her project management efforts will be overseen by GeoComm's director of Project Management Christy Hayes, PMP, ENP, with executive level support from the Vice President of Client Services, Todd Pieper, ENP. Ms. Hayes and Mr. Pieper will ensure the other projects Ms. Frye is dedicated to will not impact her ability to successfully oversee the Board's project.

They will maintain clear lines of communication both internally and with the Board to ensure any potential impacts to resource availability are identified immediately and mitigated to maintain Ms. Frye's availability to the Board throughout the project.

In addition, the project will be supported by GeoComm GIS Solutions Engineer, Deb Rozeboom, ENP, PMP, GIS, in a Subject Matter Expert capacity with over 16 years of experience. Ms. Rozeboom has been at the forefront of National Emergency Number (NENA) standards development and will apply her deep knowledge of the evolving standards to your project.

Resumes for Ms. Frye and Ms. Rozeboom are provided on the following pages.

Jessica Frye, ENP

GIS Project Manager

Jessica has immense project experience specific to public safety, GIS and NG9-1-1. Jessica has seven (7) years' experience in GIS project management, sales and program management in the private sector, and over a decade of experience in implementation and management of public safety GIS services in the government sector. She served on the Governor appointed Kansas 911 Coordinating Council from June 2011 to December 2012 establishing the Council's GIS Subcommittee to focus on preparing jurisdictional GIS data for NG9-1-1.

Additionally, Jessica also served as the GIS Coordinator for the Kansas Adjutant General's Department managed multiple departmental, statewide and regional projects for homeland security and emergency management, and supported numerous local, state, and federal emergency response efforts.

Jessica's experience includes:

- Coordinating and supervising over 100's of ArcGIS-based, public safety GIS projects
- Developing and implementing GIS data standards for E9-1-1 and NG9-1-1
- Developing and documenting workflows, standard operating procedures, and guidelines for customers
- Ensuring GIS data quality control standards are met
- Efficiently managing the progress and quality control of new and continuing GIS 9-1-1 based projects
- Creating and maintaining GIS map data for use within Enhanced 9-1-1 (E9-1-1) and NG9-1-1 software programs
- Proficiency in ArcGIS Desktop and Server
- Designing, creating, and maintaining ArcGIS geodatabases

Project Experience

- State of Wisconsin: NG9-1-1 GIS Consulting Services for statewide GIS data analysis, standards development, and education
- Commonwealth of Pennsylvania: GIS Data Standard and Best Practices Development and Commonwealth-wide GIS Data Analysis
- State of North Carolina: NG9-1-1 GIS Data Quality Control, Aggregation, and NG9-1-1 Provisioning
- State of South Dakota: NG9-1-1 GIS Data and Seamless Base Map Project
- State of Iowa: NG9-1-1 Data and Seamless Base Map Project
- Kansas Statewide: NG9-1-1 GIS Data Gap Analysis and Quality Control

Professional Experience

Geo-Comm, Inc. | 2016 - Present
St. Cloud, Minnesota

- GIS Project Manager

Alexander Open Systems | 2012-2016
Overland Park, Kansas

- GIS Design Architect
- GIS Program Manager (Director of GIS Solutions)

State of Kansas Adjutant General's Department | 2002-2012

Topeka, Kansas

- Geographic Information Systems Coordinator

Education

University of Toledo

Toledo, Ohio

- Bachelors of Arts; Geography and Planning
- Post Graduate Course Work

Certifications

- National Emergency Number Association, Emergency Number Professional

Memberships

- National Emergency Number Association (NENA)
- Kansas Association of Mappers
- Illinois GIS Association
- National Association of Professional Women

Awards

- Special Achievement in GIS Award – Esri, Inc.
- Women of Excellence Award in the area of Operations – YWCA

Deb Rozeboom, ENP, PMP, GISP

GIS Solutions Engineer

Deb is a public safety GIS subject matter expert with 16 years' experience and has been actively involved in hundreds of public safety GIS projects during her tenure with GeoComm. As a GIS Solutions Engineer, Deb is responsible for strategizing GIS solutions and services to support 9-1-1 authorities. Using problem-solving skills and technical knowledge, Deb is responsible for designing a project approach to address customer needs and align with system requirements and industry standards.

Deb has achieved PMP, GISP, and ENP certifications, and is actively involved in National Emergency Number Association (NENA) workgroups and document review.

Deb's experience includes:

- Defining requirements and designing project approach for GIS systems and services projects covering NG9-1-1 Core Services, CAD/CPE mapping, cloud-based GIS data hosting, and GIS data analysis and development.
- Project management and consulting on projects involving GIS data development, GIS data maintenance, workflow analysis, addressing projects, training, GIS data analysis, and software implementation. These projects cover a range of magnitude from single city or county projects to large urban regions, states, and federal government.
- State and regional level GIS data assessments and drafting recommendations reports for strategic planning for NG9-1-1 deployment.
- Defining project goals and ensuring timely and accurate communication to all stakeholders in pursuit of those goals.
- Conducting outreach, presentations, and educational sessions around public safety GIS functionality in CAD, E9-1-1, and NG9-1-1 systems
- Creating GIS schema recommendations to meet NG9-1-1 GIS data standards, and system requirements.
- Assisting in the systemization of data analysis procedures for compliance with 9-1-1 industry guidelines and standards
- Designing workflow documents and training programs designed to the customer's unique specifications
- Coordinating and supervising GIS 9-1-1 based projects
- Efficiently managing the progress and Quality Control of new and continuing GIS 9-1-1 based projects
- Managing teams of GIS Specialists, Analysts, and Coordinators in the delivery of services and solutions.
- Supervising team of Video Map technicians creating data for use in MAF/TIGER Accuracy Improvement Project
- Communicating with county officials with regard to contract scope and project details
- Working with customers to ensure the projects are completed on time and to the customer's satisfaction
- Performing map layers quality control tests to ensure data accuracy

Professional Experience

GeoComm | 2004-present

St. Cloud, Minnesota

- GIS Solutions Engineer
- General Manager
- GIS Project Manager
- GIS Consultant
- GIS Supervisor
- GIS Specialist
- Video Mapping Supervisor

Education

St. Cloud State University

St. Cloud, Minnesota

- Masters Certificate in GIS
- Bachelor of Science in Ecology and Field Biology

Esri System Design Workshop

St. Cloud, Minnesota

- System Architecture Design Strategies Three Day Training | October 2011

Memberships and Certifications

- Certified NENA ENP
- Certified PMP
- Certified GISP
- Co-Chair, NENA NG9-1-1 GIS Data Model v.2 Workgroup (kickoff 2020)
- Member, NENA NG9-1-1 GIS Data Model Workgroup
- Member, NENA Information Document for 2 GIS Data Stewardship for 3 Next Generation 9-1-1 (NG9-1-1) - PSAP Boundary Workgroup
- Member, NENA Information Document for 2 GIS Data Stewardship for 3 Next Generation 9-1-1 (NG9-1-1) - RCL Workgroup
- Member, NENA Next Generation 9-1-1 (NG9-1-1) United States Civic Location Data Exchange Format (CLDXF) Standard V2 workgroup

Project Experience

- State of California, Cal OES NG9-1-1 Implementation | Current
- Oregon State Police GIS Data Development and Maintenance | Current
- GIS/MSAG Data service delivery for 19 Oregon Counties | 2016-2019
- National Capital Region GIS Data Analysis and Recommendations Report | 2015
- Association of Central Oklahoma Governments (ACOG) Management of Regional PSAP Software Implementation Project | 2015
- Jefferson County Emergency Communications Authority (JCECA), Colorado | 2015
- Mid-America Regional Council, Missouri | 2015
Management of Software Systems and GIS Services Project
- Iowa Homeland Security and Emergency Management Department | 2015
NG9-1-1 GIS Consulting
- Denco Area 9-1-1 District, Texas | 2014
NG9-1-1 GIS Consulting
- Texas Commission on State Emergency Communications | 2014
NG9-1-1 GIS Consulting
- New York Office of Information Technology Services | 2014
Management of Statewide Software System Implementation Project
- Space and Naval Warfare Systems Center Atlantic | 2012-Current
Department of Defense Addressing and E9-1-1 data creation, workflow development, and training
- Luzerne County, Pennsylvania | August 2011
MSAG Creation
- Scott County, Iowa | June 2010
GIS Workflow Development and Training

Performance Excellence

- Professional presenter at
 - Esri User Conference
 - NENA National Conference
 - APCO International Conference
 - IWCE International Conference
 - URISA GIS Pro Conference
 - Western Regional APCO Conference
 - State NENA and APCO conferences: CA, OR, WA, ID, TX, AZ, WI
 - State GIS conferences: CalGIS, NWGIS, ORURISA, WAURISA

Key Personnel

In addition to the assigned Project Manager, GeoComm’s project team is comprised of professionals from GeoComm’s Client Services division. This partnership, between the Board and GeoComm will strengthen the deployment approach with the perspectives of subject matter experts who have helped lead other NG9-1-1 GIS data readiness projects. The project team of GIS professionals with decades of industry experience will ultimately ensure your project is executed on time and within budget.

The project teams are outlined in the tables below. All assigned resources will ultimately report to the GIS Project Manager. Ms. Frye, who will have control over resource allocation to ensure the project is successfully completed.

GeoComm Key Personnel	Role	Similar Projects
Jessica Frye GIS Project Manager	Project Manager/lead on developing education, training, reporting	<ul style="list-style-type: none"> Wisconsin Statewide Gap Analysis Project Manager PEMA Statewide Gap Analysis Project Manager State of Iowa NG9-1-1 GIS Consulting
Deb Rozeboom GIS Solutions Engineer	Subject Matter Expert, supporting the ongoing project efforts of the team, leveraging her vast knowledge of NENA industry standards development involvement	<ul style="list-style-type: none"> State of California NG9-1-1 Implementation Oregon State Police GIS Data Development and Maintenance State of Iowa NG9-1-1 GIS Consulting Texas Commission on State Emergency Communications (CSEC) GIS Consulting
GeoComm Project Management Division with 6 Project Managers	Support ongoing project efforts of the key team members as necessary. Including project support and peer review.	
GeoComm GIS Project and Maintenance Bureau with 20 Staff Members	Support ongoing project efforts of the key team members as necessary. Including project support and peer review.	
GeoComm West Coast Office with 5 Staff Members	Support ongoing project efforts of the key team members as necessary. Including project support and peer review.	

In addition, a project sponsor will be appointed from within GeoComm’s Executive Team. The project sponsor will:

- Serve as a point of escalation for the project in the event changes need to be made to the project scope, timeline, or budget
- Have the authority to obtain new or additional resources for the project
- Serve as a point of contact to provide support to the Project Manager

Professional Certifications

GeoComm’s commitment to the industry and to NG9-1-1 is also evidenced in our commitment to having team members trained and certified as Emergency Number Professionals (ENPs), GIS Professionals (GISP), and Project Management Professionals (PMP). These certifications further enhance the unrivaled industry experience GeoComm brings to each project.

The following table depicts certifications held by GeoComm staff.

Staff	ENP	GISP	PMP
Jessica Frye	X		
Jessica Beierman	X	X	X
Matt Besser	X		
Gina Cornelius			X
Nathan Ekdahl	X		
Brianna Furey		X	
Stacen Gross	X		
Christy Hayes	X		X
Ron Helterbrand	X		
Anita Kask	X		
Jessica Koenig	X		X
John Krafft		X	
Tuan Le	X		
Sean Lehman	X	X	
Dustin Marlow		X	
Heidi Ness	X		
Todd Pieper	X		
Deb Rozeboom	X	X	X
Jodi Wroblewski			X

GeoComm Industry Leadership Experience

GeoComm is actively engaged in various industry organizations as members, sponsors, and workgroup participants and leaders. Our focus and commitment to the industry is strong and is evidenced by this continual involvement at a collaborative standards level.

9-1-1 Industry Associations Involvement

GeoComm is actively involved in the following 9-1-1 associations.

Association/Influencers	GeoComm Involvement
Association of Public Safety Communication Officials (APCO)	Participation as an exhibitor and presenter at the annual conference. Attendance at the Emerging Technology Forum. GeoComm staff members serve on State Level Executive Boards and function as the Chapter Commercial Advisory Member (CCAM).
Esri	<p>In March 2011, GeoComm became an Esri Platinum Tier Partner. Platinum Tier Partners, the highest of three tiers in the partner network, are recognized for developing and delivering industry-leading GIS solutions and services on the ArcGIS software platform.</p> <p>As a Platinum Tier Partner, GeoComm maintains a high level of collaboration with Esri and allows us to be involved with the direction for their future product development.</p> <p>Through the Esri Platinum Partnership, GeoComm is involved with the Esri Partner Conference, Esri User Conference, Business Partner Conference, Developer's Conference, National Security Public Safety Summit, Technical and Business Meetings, Regional GIS meetings, and CTO Committee.</p>
iCERT (Industry Council for Emergency Response Technologies)	<p>GeoComm has been an iCERT member since 2009. GeoComm serves on the Innovation and Technology Committee. In addition, through our involvement in iCERT, we support efforts to:</p> <ul style="list-style-type: none"> • Assure adequate funding for 9-1-1 • Conduct scientific research which benefits the public by implementing improved emergency response technology • Bring together industry leaders to maximize the value of research and development investment • Represent the industry before the public and governmental bodies • Work with officials from organizations such as the NENA, National Association of State 9-1-1 Administrators (NASNA), and APCO
NENA (National Emergency Number Association)	<ul style="list-style-type: none"> • NENA member • NENA Next Generation Partner Program member • Participation as a presenter and attendee of NENA's 9-1-1 Goes to Washington, Joint committee meeting, and Standards and Best Practice Conference • Participation as an exhibitor and presenter at the annual conference GeoComm has participated in, tested software, led, and co-organized multiple NENA sponsored Industry Collaboration Events (ICE).

Association/Influencers	GeoComm Involvement
	<ul style="list-style-type: none"> • Member of several past and current NENA workgroups, including: <ul style="list-style-type: none"> ○ Site Structure Address Point Workgroup Participant ○ GIS Data Stewardship for NG9-1-1 Workgroup Participant ○ GIS Stewardship for NG9-1-1: Road Centerlines WG Participant ○ DM-GIS Stewardship for NG9-1-1 Emergency Service Boundaries Co-chair ○ PSAP Logistics – Request for Proposals Co-chair ○ GIS Data Transition Co-chair ○ ECRF/LVF Workgroup Chair ○ Additional Data Workgroup Co-chair ○ GIS Data Model for NG9-1-1 Workgroup Participant ○ NG9-1-1 GIS Data Model Standard v.2 workgroup co-chair ○ NG9-1-1 PSAP Systems Workgroup Participant ○ NG9-1-1 i3 Architecture Workgroup Participant ○ NG9-1-1 Management Considerations for Emergency Incident Data Document (EIDD) Interoperability Joint NENA/APCO Workgroup Participant
NG9-1-1 Institute	GeoComm is a Bronze NG9-1-1 Institute Supporter. GeoComm attends the Technology Showcase and 9-1-1 Honor Awards and serves on the Events Committee.
NSGIC (National States Geographic Information Council)	GeoComm is a Gold NSGIC Sponsor. GeoComm has worked with NSGIC to provide educational webinars to the NSGIC membership and attends the Annual Conference, Midyear conference, and serves on the NG9-1-1 Committee.
URISA (Urban and Regional Information Systems Association)	GeoComm attends and presents at the GIS-Pro Conferences. In addition, GeoComm has several staff members that serve on the NG9-1-1 Task Force. GeoComm is also working with URISA membership to create a workshop for the URISA GIS Pro 2020 conference that will address NG9-1-1 GIS topics such as addressing, industry standards, jurisdictional boundaries, and more.

Public Safety Industry Event Participation

GeoComm’s Industry Event Participation extends nationwide and into nearly every state NENA and/or APCO chapter. In addition, GeoComm participates in 9-1-1 Goes to Washington, the Annual NENA Conference, the International APCO Conference, and the Esri User Conference. This broad participation provides us with not only specific local understanding but allows us to synthesize a picture of GIS data requirements nationwide.

5

Scope of Work

Introduction

As a company specializing in GIS for use within mission-critical public safety systems, GeoComm knows the importance of accurate GIS data. We understand the GIS data needs for NG9-1-1. Of equal importance are the quality of the MSAG and ALI database and the synchronization of these databases with the GIS data. Higher accuracy and synchronization are crucial for location validation, call routing, call handling, call delivery, and emergency response within NG9-1-1.

Not only has GeoComm been supporting NG9-1-1 implementations with GIS services and software from the advent of NG9-1-1, we have built some of the systems which consume the NG9-1-1 GIS data, such as the ECRF which resolves the caller location and the requested service to an endpoint that the emergency call shall be forwarded to.

For the State's Gap Analysis project, various reviews will be completed on the aggregated statewide layers to identify issues which could adversely affect call routing and emergency response; for example, wireline 9-1-1 calls validating in the wrong location, emergency service personnel being directed to the wrong location, and/or emergency calls being routed to the wrong PSAP. These reviews are aligned with GIS data accuracy standards and GIS-MSAG-ALI database synchronization guidelines both published and under development by the NENA. Results will be summarized in a final recommendations report which will assist the State in resolving errors identified throughout the analyses.

Project Approach

GeoComm proposes to work closely with the State throughout this project. We will partner with you to accomplish the following project phases:

- Phase One: Project Initiation
- Phase Two: GIS and 9-1-1 Data Assessment
- Phase Three: Findings Report and Future Recommendations

Each phase will be guided by GeoComm's proven project management techniques which drive successful project implementations. We follow established project management practices based on the Project Management Institute (PMI). By partnering with GeoComm, you will know the status of your project, that deliverables are being met, and have confidence your objectives are being carried through.

GeoComm will leverage internal tools and processes to successfully complete your data assessment. The primary tool GeoComm's staff will utilize will be GIS Data Hub. GIS Data Hub is GeoComm's automated GIS QC, validation, reporting, and data merging application. For the State's project, your GIS data layers will be loaded into the system and processed against NENA-specific QC checks as well as additional checks customized to your needs.

While this proposal does not include GIS Data Hub, rather GIS Data Hub is the tool GeoComm staff will use to complete the proposed assessment, the State may consider future use of GIS Data Hub for ongoing GIS data validation, QC, reporting, and merging tasks at the state and/or local level. Additional details about GIS Data Hub are available upon request.

Today, GIS Data Hub is used by our clients across the nation at local, regional, and state levels to execute ongoing GIS data validation, QC, reporting, and merging tasks.

Phase One: Project Initiation

A project initiation meeting will be conducted (via teleconference) by Ms. Frye, GeoComm's GIS Project Manager to engage project stakeholders from the State.

During the Project Initiation meeting, GeoComm will provide an overview of the project approach, including tasks to be completed and anticipated project timeline. We will also work with the State to define mutual project expectations and goals.

Phase Two: GIS and 9-1-1 Data Assessment

GeoComm proposes to execute an assessment of the five NENA Standard "REQUIRED" data layers as outlined in the solicitation. In addition, GeoComm will analyze additional layers not required of the NENA standard, including layers NENA designates as strongly recommended and recommended layers. The assessment will include:

- GIS Data Schema Review
- Road Centerline Layer Review
- Emergency Service, PSAP, and Provisioning Boundary Layers Review
- Site/Structure Layer Review
- GIS/MSAG/ALI Synchronization Review
- Synchronization Review with Standardization

The analysis will address various relevant NG9-1-1 aspects, including data quality, completeness and comprehensiveness, readiness, interoperability, and adherence to NG9-1-1 GIS data standards, as well as accuracy and synchronization issues within the State's GIS map data, MSAG, and ALI database.

A description of each assessment follows.

GIS Data Schema Review

GeoComm will review the data schema the State’s GIS layers to determine conformance with the State’s existing GIS data standards, industry best practices, and compliance with evolving NENA standards for NG9-1-1 GIS data. A side-by-side comparison of the existing and recommended GIS data structure will be provided, similar to the table below.

ROAD CENTERLINES								
NENA STANDARD FOR NG9-1-1 GIS DATA MODEL					CUSTOMER GIS DATA RECEIVED			CHANGE NEEDED
DESCRIPTIVE NAME	FIELD NAME	M/C/O	TYPE	WIDTH	FIELD NAME	TYPE	WIDTH	CHANGE TYPE
STREET NAME	St_Name	M	E	60	STREET	TEXT	100	SHRINK FIELD TO 60
STREET NAME POST TYPE	St_PosTyp	C	E	50	POSTTYPE	TEXT	10	LENGTHEN FIELD TO 50
INCORPORATED MUNICIPALITY LEFT	IncMuni_L	M	E	100	CITY_L	TEXT	100	NO CHANGE NEEDED
INCORPORATED MUNICIPALITY RIGHT	IncMuni_R	M	E	100	CITY_R	TEXT	100	NO CHANGE NEEDED
MSAG COMMUNITY NAME LEFT	MSAGComm_L	C	P	30	N/A	N/A	N/A	ADD FIELD AND POPULATE
MSAG COMMUNITY NAME RIGHT	MSAGComm_R	C	P	30	N/A	N/A	N/A	ADD FIELD AND POPULATE

Road Centerline Layer Review

GeoComm will review the provided road centerline layer to identify:

- Inaccuracies, incompleteness, and inconsistencies in street name and address range attributes
- Road centerlines that are unbroken at true intersections, Emergency Service, PSAP, Provisioning, and community boundaries
- Road centerlines line direction consistency
- Road centerlines that are potentially incorrectly broken at overpasses/underpasses and ramps for routing purposes (if resources are provided)

Emergency Service, PSAP, and Provisioning Boundary Layers Review

GeoComm will review the provided Emergency Service, PSAP, and Provisioning boundary layers to identify:

- Inaccuracies, incompleteness, and inconsistencies in attributes
- Boundary gaps and overlaps
- Duplicate boundaries

Site/Structure Layer Review

GeoComm will review the provided primary site/structure layer to identify:

- Duplicate addresses
- Inaccuracies, incompleteness, and inconsistencies of address attributes
- Addresses not synchronized with the road centerline layer

Synchronization Review

First, the synchronization of the ALI database and GIS map data layers will be reviewed. This will provide a list of all ALI database records that do not find a match in either the address points or road centerline layers.

Second, GeoComm will evaluate the synchronization of the MSAG and the GIS map data looking at the high and low values in the MSAG. This review may produce a list of inconsistencies or possible errors that indicate either the GIS data or the MSAG (or both) need to be updated to be in sync.

Phase Three: Findings Report, Recommendations, and Planning

Findings Report and Future Recommendations

After the reviews are complete, the results and a list of errors will be compiled into a statewide overview report. It will also present specific recommendations for increasing the quality and synchronization of data across the state and ensuring its suitability for NG9-1-1. The final report will include the following:

- Executive summary
- Findings report including QC results and schema comparisons
- Next step recommendations for data synchronization per State and NENA standards
- Next step recommendations for resolution of GIS errors detected including error priorities.
- State GIS data management role and responsibility recommendations for management of key boundary layers.
- Suggested implementation plan for executing the recommendations in alignment with future procurement of NG core services.
- Considerations around the State's ongoing PSAP consolidation study, and how GeoComm may support the effort, as necessary

The final report will be presented by the GeoComm GIS Project Manager during a virtual meeting with State representatives.

Implementation Plan

As an option, the final presentation will include discussion regarding the following future tasks as part of an overall implementation plan:

- *Local GIS Data Remediation* – communicating results back to local GIS data authorities, and priorities for resolving identified discrepancies in existing GIS data
- *Local GIS Data Development* – working with local GIS data authorities on developing missing GIS data layers recommended for NG9-1-1
- *GIS Maintenance Workflow Development* – establishing systematic maintenance procedures for keeping the NG9-1-1 GIS dataset current, including ongoing QC and reporting to local GIS authorities.

6

Official Bid Price Sheet

OFFICIAL BID PRICE SHEET

ITEM	DESCRIPTION	QTY	UNIT OF MEASURE	UNIT PRICE	EXTENDED AMOUNT
1*	<p><u>REQUIRED:</u></p> <p>(a) Assessment of the current state of NG9-1-1 applicable datasets for the State of Arkansas.</p> <p>(b) Report of findings and a set of future recommendations based on the assessment.</p>	1	each	\$27,652	\$27,652

ITEM	DESCRIPTION	QTY	UNIT OF MEASURE	UNIT PRICE	EXTENDED AMOUNT
2**	<p><u>OPTIONAL:</u></p> <p>Implementation plan outlining specific steps necessary for executing and/or achieving the future recommendations identified in the report of findings.</p>	1	each	\$1,221	\$1,221

*Item 1 will be used to determine lowest cost.

**Item 2 will not be used to determine lowest cost.

7 Contractor Performance Measures

CONTRACTOR PERFORMANCE MEASURES

The Contractor’s performance will be evaluated based on the criteria outlined in the table below.

Criteria	Standard	Damages
Assessment	Contractor completes assessment within the time frame mutually agreed upon with the GIS Office.	\$100 for each calendar day beyond the date agreed upon by the GIS Office and the Contractor whereby the Contractor fails to complete the assessment. Contractor will credit damages applied to the submitted monthly invoices.
	Contractor addresses all of the components required in the Competitive Bid	\$100 for each component the Contractor fails to assess as stated in the Competitive Bid. Contractor will credit damages applied to the submitted monthly invoices.
Report	Contractor provides accurate and complete report within the time frame mutually agreed upon with the GIS Office and includes all components as stated in the Competitive Bid.	\$100 for each calendar day beyond the date agreed upon by the GIS Office and the Contractor whereby the Contractor fails to provide a complete and accurate report to GIS. Contractor will credit damages applied to the submitted monthly invoices.

Arkansas state law requires that all contracts for services include performance standards for measuring the overall quality of services provided that a Contractor **must** meet to avoid assessment of damages. The GIS Office may be open to negotiations of performance standards prior to contract award, prior to the commencement of services, or at times throughout the contract duration. Performance standards will continue throughout the aggregate term of the contract.

The State has the right to modify, add, or delete performance standards throughout the term of the contract, should the State determine it is in its best interest to do so. Any changes or additions to performance standards will be made in good faith and

may include the input of the contractor to establish standards that are reasonably achievable. All changes made to the performance standards will become an official part of the contract.

Failure to meet the minimum performance standards as specified will result in the assessment of damages. In the event a performance standard is not met, the Contractor will have the opportunity to defend or respond to the insufficiency. The State has the right to waive damages if it determines there were extenuating factors beyond the control of the contractor that hindered the performance of services. In these instances, the State has final determination of the performance acceptability. Should any compensation be owed to the State agency due to the assessment of damages, Contractor **shall** follow the direction of the State agency regarding the required compensation process.

Maintaining the project timeline will be contingent upon required resource delivery from the State. Any delays in the project due to delayed resource delivery from the State would need to be address during the contract negotiations as it relates to penalties listed in the contract. GeoComm will provide client project responsibilities (required data submissions) as part of the initial project planning phases. GeoComm looks forward to discussing project timelines and deadlines with the Board.

8 Equal Opportunity Policy

A copy of GeoComm's Equal Opportunity Policy is provided on the following pages.



Affirmative Action Program

Policy

General Description

Description:

Equal Employment Opportunity (EEO) Policy

GeoComm will provide equal employment opportunity without regard to race, creed, color, religion, sex, national origin, citizenship status, age, disability, marital status, familial status, sexual orientation, veteran status, public assistance status, or any other status protected by applicable law.

The policy applies to all areas of employment, including recruitment, hiring, training and development, promotion, transfer, termination, layoff, compensation benefits, social and recreational programs, and all other conditions and privileges of employment in accordance with applicable federal, state, and local laws.

It is the policy of GeoComm to comply with all the relevant and applicable provisions of the Americans with Disabilities Act (ADA). GeoComm will not discriminate against any qualified employee or job applicant with respect to any terms, privileges, or conditions of employment because of a person's physical or mental disability. GeoComm also will make reasonable accommodation wherever necessary for all employees or applicants with disabilities, provided the individual is otherwise qualified to safely perform the duties and assignments connected with the job.

Equal employment opportunity notices are posted as required by law. This notice summarizes the rights of employees to equal opportunity in employment, and lists the names and addresses of the various government agencies that may be contacted in the event any person believes he or she has been discriminated against.

I have appointed **Rob Ruprecht, Talent Director**, to manage the company's Equal Employment Opportunity ("EEO") program. This person's responsibilities include monitoring all EEO activities and reporting the effectiveness of the company's Affirmative Action program as required by law. Appointed individuals will receive and review reports on the progress of the program. Any employee or applicant may inspect our Affirmative Action Plan and information related to our EEO program during normal business hours. Please contact the EEO manager listed above for further information.

Any employee or applicant for employment who believes s/he has been treated in a way that violates this policy should contact any of the GeoComm Key Contacts listed in this Policy or any

other management representative, including me. The company will take immediate action to investigate and address allegations of discrimination or harassment confidentially and promptly.



John Bryant
President/CEO

Policy Provisions

1. Description of Organization

Description:

Geo-Comm, Inc. (GeoComm) has a national reputation as a leading provider of public safety GIS systems that route emergency calls to the appropriate call center, map the caller's location on call taker or dispatcher maps, and guide emergency responders to the scene of the accident on mobile displays within police, fire and ambulance vehicles. Our NG9-1-1 GIS solutions provide GIS data quality control, transformation, and aggregation services as well NG9-1-1 system emergency call routing.

Our Mission

When seconds matter, we help save lives and protect property by providing essential, innovative, location-based solutions to public safety professionals.

2. GeoComm Key contacts

Description:

John Bryant, President/CEO
320-240-0040
jbryant@geo-comm.com

Heather Hoskins, VP of Finance & Admin.
320-240-0040
hhoskins@geo-comm.com

Rob Ruprecht, Talent Director
320-240-0040
rruprecht@geo-comm.com

Renee Theisen, HR Specialist
320-240-0040

rtheisen@geo-comm.com

Scope and Exceptions:

3. Definitions Used in this Policy

Description:

Individual with a Disability: any person who has a physical, sensory, or mental impairment which “materially” (Minnesota) or “substantially” (federal) limits one or more major life activities, or has a record of or is regarded as having such an impairment. "Individual with a Disability" does not include an alcohol or drug abuser whose current use of alcohol or drugs renders that individual a direct threat to property or the safety of others.

American Indian or Alaska Native - a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Asian - A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American - A person having origins in any of the black racial groups of Africa.

Hispanic or Latino - A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Native Hawaiian or Other Pacific Islander - A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Minority – Any person who identifies as being American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, or in any combination of these identifiers, or someone who identifies as White and as any of the other identifiers.

Job Groups: Although companies are not limited to using these broad job groups as the only means of analyzing their workforce, we use the following as guidelines:

- **Managers and Administrators:** Administrative personnel set broad policies, exercise overall responsibility for execution of these policies, and direct individual departments or special phases of an organization's operations. This category includes: officials, executives, middle management, plant managers, department managers, and superintendents, salaried supervisors who are members of management, purchasing agents, and buyers. Unless specifically listed under officials and managers or craft (skilled), first line supervisors, who engage in the same activities as the employees they supervise, should not be reported under this category.
- **Professionals and Technicians:** Professionals are considered to be persons working in occupations requiring either college graduation or comparable work experience. Technicians are those whose work requires a combination of basic scientific knowledge and manual skills such as can be attained through two-year technical or community college degrees or equivalent on-the-job training.
- **Sales Workers:** Occupations engaged wholly or primarily in direct selling. This includes: advertising agents and sales agents, insurance agents and brokers, real estate agents and brokers, sales agents and sales clerks, grocery clerks, cashiers/checkers.
- **Office and Clerical:** All clerical work regardless of the level of difficulty in which activities are predominantly non-manual (though some manual work not directly involved with altering or transporting the products is included). This includes: bookkeepers, collectors, messengers, and office helpers, office machine operators, shipping and receiving clerks, stenographers, typists, secretaries, and telephone operators.
- **Skilled Crafts:** Manual workers of a relatively high skill level who have a thorough and comprehensive knowledge of the process involved in their work. They exercise considerable independent judgment and usually receive an extensive period of training. This includes: building trades, hourly paid foremen and lead-workers who are not members of management, mechanics and repairmen, skilled machinery occupations, electricians. Exclude learners and helpers of craft workers (apprentices).
- **Operatives: (Semi-skilled):** Workers who operate machines or processing equipment or perform other factory-type duties of an intermediate skill level which can be mastered in a few weeks and requires only limited training. This includes: apprentices, operatives, attendants, delivery and route drivers, truck and tractor drivers, dressmakers, weavers, welders. Include craft apprentices in such fields as auto mechanics, printing, metalwork, carpentry, plumbing and other building trades.
- **Laborers: (Unskilled):** Workers in manual occupations which generally require no special training. They perform elementary duties which may be learned in a few days and which require the application of little or no independent judgment. This includes: garage laborers, car washers, gardeners, and lumber workers, laborers performing lifting, digging, mixing and loading.
- **Service Workers:** Workers in both protective and no protective service occupations. This includes: attendants, clean-up workers, janitors, guards, police, fire fighters, waiters and waitresses.

Underutilization: The Minnesota Department of Human Rights defines underutilization in a job group if the number of women or people of color in a job group are less than what is expected based on the availability percentage data adopted for the analysis.

The Department uses the “WHOLE-PERSON RULE” in determining underutilization.

Declaration of underutilization does not indicate discrimination has occurred in a company; rather, it is an opportunity to enable a company to apply good faith efforts to ensure equal employment opportunities continually occur in the business.

4. Assignment of Responsibility for Affirmative Action Program

Description:

The following responsibilities of the Equal Employment Opportunity (EEO) manager are required under the [Minnesota Rules 5000.3430](#) and make [Minn. Stat. §363A.36](#) specific. Please refer to the Rules for detailed responsibilities.

GeoComm’s Talent Director is designated as the company’s EEO manager and is tasked with monitoring all employment activity to ensure that our EEO/AA policies are being carried out. The EEO/AA manager has been given the necessary staffing and support from senior management to fulfill the duties of the position. These duties include, but are not limited to, the following:

1. Develop an EEO policy statement and Affirmative Action Plan (“AAP”) that are consistent with the company’s EEO policies and establish our affirmative action goals and objectives.
2. Develop and implement internal and external strategies for disseminating the company’s AAP and EEO policies.
3. Conduct and/or coordinate EEO/AA training and orientation.
4. Ensure that our managers and supervisors understand it is their responsibility to take action to prevent the harassment of employees and applicants for employment.
5. Ensure that all minority, female, and disabled employees are provided equal opportunity as it relates to organization-sponsored training programs, recreational/social activities, benefit plans, pay and other working conditions.
6. Implement and maintain EEO audit, reporting, and record-keeping systems in order to measure the effectiveness of our Affirmative Action Plan/Program and to determine whether our goals and objectives have been attained.
7. Coordinate the implementation of necessary affirmative action to meet compliance requirements and goals.
8. Serve as liaison between our organization and relevant governmental enforcement agencies.
9. Coordinate the recruitment and employment of women, people of color, and individuals with disabilities, and coordinate the recruitment and utilization of businesses owned by women, people of color, and individuals with disabilities.

10. Coordinate employee and company support of community action programs that may lead to the full employment of women, people of color, and individuals with disabilities.
11. Keep management informed of the latest developments in the area of EEO.

5. Internal and External Dissemination of Affirmative Action Policy and Plan

Description:

The following accountabilities are found under the [Minnesota Rules 5000.3440](#) and [Minnesota Rules 5000.3552](#) Please refer to these Rules for detailed responsibilities of dissemination.

Internal Dissemination

1. Our EEO policy statement is included in our Employee Handbook.
2. We will publicize our EEO policy on the Company's internal systems and provide hard copies of policies to new hires upon request.
3. Schedule special meetings to discuss the policy and explain individual employee responsibilities.
4. We will discuss the policy thoroughly during both employee orientation and management training programs.
5. If applicable we will meet with union officials to provide notice of our EEO policy and ask for their cooperation in implementing the policy. *Not Applicable to GeoComm.*
6. If applicable we will include non-discrimination clauses in all of our union agreements and review all contractual provisions to ensure they are non-discriminatory. *Not Applicable to GeoComm.*
7. We will post in the Human Resources portal any documents explaining our EEO programs and reports.
8. Our EEO policy statement and non-discrimination posters will be permanently posted and conspicuously displayed in areas available to employees and applicants for employment.
9. When employees are featured in product or consumer advertising, employee handbooks, or similar publications, we will include images of male and female employees, employees of color, and disabled employees.
10. Communicate at least annually to employees the existence of our affirmative action program and make available the elements of its program as well as enable prospective employees to know and avail themselves of all of our program's benefits.
11. All personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes are trained to ensure that the goals and commitments in the company's affirmative action program are implemented.

External Dissemination

1. We will notify all recruiting sources of the company's EEO policy, stipulating that these sources actively recruit and refer women and people of color for all positions listed.
2. We will hold formal briefing sessions with representatives from recruiting sources. As an integral part of these briefings, we will include facility tours; clear and concise explanations of current and future job openings; position descriptions; worker specifications; explanations of the company's selection process; and, recruiting literature. We will make formal arrangements regarding applicant referrals, and follow-up with referral sources regarding the disposition of applicants.
3. Any disabled employees who wish to participate in career days, youth motivation programs, and related community activities will be given opportunity to do so.
4. Any recruiting efforts at schools will include specific outreach to disabled students.
5. We will make an effort to participate in work study programs with rehabilitation facilities and schools that specialize in the training or educating disabled individuals.
6. We will use all available resources to continue or establish on-the-job training programs.
7. We will incorporate the equal opportunity clause into all purchase orders, leases, and contracts.
8. We will send written notification of the company's EEO policy to all sub-contractors and request cooperative action from them.
9. We will notify community agencies, community leaders, secondary schools, colleges, and organizations that promote women, people of color, and disabled individuals regarding the company's EEO policy when asking them to assist in recruiting.
10. When employees are featured in consumer or help wanted advertising, we will include images of male and female employees, employees of color, and disabled employees.
11. We will communicate the existence of our EEO policy to prospective employees and provide sufficient information to enable prospective employees to avail themselves of the policy's benefits.

6. Internal Audit and Reporting Systems

Description:

The following accountabilities are found under the [Minnesota Rules 5000.3490](#) and [Minnesota Rules 5000.3580](#). Please refer to the Rules for detailed responsibilities. Our EEO manager has responsibility for implementing and monitoring our affirmative action programs. Department heads, managers, and supervisors are responsible for providing the EEO manager with information and/or statistical data as necessary to measure our good faith efforts to implement our programs.

At least annually, internal audit reports will be prepared in table format and dated. Data collected for these reports will include applicant flow, new hires, promotions, transfers, and terminations (voluntary and involuntary) by job group. Figures for each personnel process must show a breakdown by sex, minority classification, and disability status. Reports will be shared with Executive Team during budgeting process so that problem areas can be discussed when discussing personnel.

We will retain all audit data and other applicable documentation and information available as required by law to the Minnesota Department of Human Rights and other government agencies.

Also, once a year we will submit to the Minnesota Department of Human Rights, on or before, the anniversary date of our Workforce Certificate of Compliance, our **Annual Compliance Report** as required under Minnesota Administrative Rule 5000.3580 for the company's regular workforce.

7. Workforce Analysis

Description:

Workforce Analysis details can be found under [Minnesota Administrative Rule 5000.3450](#). Please refer to this rule for detailed responsibilities. See <http://mn.gov/mdhr/certificates/forms-worksheets/> for instructions.

Availability/Utilization/Underutilization Analysis

The affirmative action plan must include a workforce analysis based on data that is no more than one year old, including a listing of each job title as it appears in your payroll records ranked from the lowest to the highest paid in each department. If there are separate work units or lines of progression within a department, a separate list must be provided for each work unit, or line, including unit supervisors.

8. Goals and Timetables

Description:

Provisions for goals and timetables can be found under [Minnesota Administrative Rule 5000.3460](#). In determining levels of goals, consider the factors identified in the Workforce Analysis you completed above.

During this plan year, it is GeoComm, Inc. goal to make a good faith effort to meet or exceed the availability percentage for women or people of color in all job groups, within our availability/utilization/underutilization analysis. We will continue good faith efforts to recruit and retain individuals with disabilities in all levels of our workforce.

9. Problem Area Identification

Description:

GeoComm is required to analyze your current processes to ensure that no barriers to the employment of women, people of color, or individuals with disabilities are created or maintained by company's personnel processes. See [Minnesota Administrative](#)

[Rule5000.3470.](#)

GeoComm, Inc. periodically conducts an in-depth analysis of its total employment process to determine whether and where impediments to equal employment opportunity may exist. We evaluate:

1. Workforce composition by job group: We have identified any underutilization in our availability/utilization/underutilization analysis (AUUA) and set goals to remedy any underutilization.
2. Personnel activity: We will use statistical methods to analyze our personnel activities, including applicant flow, hires, promotions, terminations and other personnel actions, to determine if there are selection disparities between men and women, people of color, nonminority (and within specific racial groups, if appropriate), or disabled and nondisabled applicants or employees. We have taken corrective action to remove any barriers to hiring or retaining women, people of color, or individuals with disabilities.
3. Compensation system: We will routinely review our compensation system, including rates of pay and bonuses, to determine whether there is any gender, race, ethnicity, or disability-based disparities. If any disparities are identified, we take prompt action to resolve the disparity. In offering employment to individuals with disabilities, we will not reduce the amount of compensation offered because of any disability income, pension, or other benefit the applicant or employee receives from another source.
4. Personnel procedures: We will routinely review all of our personnel procedures and processes, including selection, recruitment, referral, transfers and promotions, seniority provisions, apprenticeship/internship programs and company-sponsored training programs and other company activities to determine if all employees or applicants are fairly considered.
5. Any other areas that might impact the success of our Affirmative Action Program: We continually analyze any other areas that may impact our success, such as accessibility of our facility to the available workforce, the attitude of our current workforce towards EEO, proper posting of our EEO policy and required governmental posters, proper notification of our subcontractors or vendors, and retention of records in accordance with applicable law. We take prompt action to remedy any problems in these areas through training of staff or other methods.

10. Action-Oriented Programs

Description:

Measures to Facilitate Implementation of Equal Employment Opportunity Policy and Affirmative Action Programs for Women, People of color and Individuals with disabilities. See [Minnesota Administrative Rule 5000.3480.](#)

Selection Process

GeoComm, Inc. will evaluate our selection process to ensure that there is a commitment to the affirmative action program and its implementation.

Schedule for Review of Job Requirements: We will annually review all job requirements to ensure that these requirements do not tend to screen out qualified individuals with disabilities. We will determine whether these requirements are job-related and are consistent with business necessity and the safe performance of the job, and we will remove any requirements that do not meet these criteria.

Pre-Employment Medical Examination: N/A

Accommodations to Physical and Mental Limitations of Employees

We will make reasonable accommodations to the physical and mental limitations of an employee or applicant unless such an accommodation would impose an undue hardship on the conduct of the business.

Recruitment of Employees

1. All solicitation or advertisements for employees will state that applicants will receive consideration for employment regardless of their race, color, creed, religion, national origin, sex, sexual orientation, disability, age, marital status, or status with regard to public assistance.
2. If we place help-wanted advertisements, we will not indicate a preference, limitation, or specification based on sex, age, national origin, or other protected characteristic, unless that characteristic is a bona fide occupational qualification for a particular job. We will not allow any employment agency with which we work to express any such limitation on our behalf, and we will require that these agencies share our commitment to Equal Employment Opportunity.
3. All positions for which we post or advertise externally will be listed with State of Minnesota Workforce Centers or similar governmental agencies.
4. We will request the Minnesota Department of Employment and Economic Development to refer qualified individual with disabilities for employment consideration under our affirmative action programs in accordance with [Minnesota Administrative Rule 5000.3557](#).
5. As necessary to ensure that potential candidates are aware of job openings, we will contact community organizations focused on the employment of women, people of color, and individuals with disabilities (including state vocational rehabilitation agencies or facilities, sheltered workshops, college placement offices, education agencies, or labor organizations).
6. We will keep documentation of all contacts made and responses received, in connection with paragraphs 4 and 5 above, whether formal or informal. We will make every effort to give these agencies a reasonable amount of time to locate and refer applicants.
7. We will work with relevant technical schools and colleges and attend job fairs to find applicants.

8. We will take additional steps to encourage the employment of women, people of color and individuals with disabilities who are not currently in the workforce, such as providing part-time employment, internships, or summer employment programs.

Training Programs

People of color, female and employees with disabilities will be afforded full opportunity and will be encouraged to participate in all organization sponsored educational and training programs.

We will seek the inclusion of qualified people of color, female and disabled employees in any apprenticeship/internship program in which we participate.

Promotion Process

GeoComm, Inc. promotion process has been developed and documented and only legitimate qualifications are considered in our promotion decisions. We will conduct adverse impact analyses to ensure that women, people of color, and employees with disabilities are promoted at rates substantially similar to men, non-people of color, and individuals without disabilities.

Termination Process

We use progressive discipline before terminating employees, where appropriate. All employees are made aware of our discipline process. We will conduct adverse impact analyses to ensure that women, people of color, and employees with disabilities do not leave our company at rates substantially dissimilar to those of men, non-people of color, and employees without disabilities.

Religion and National Origin Discrimination and Accommodation for Religious Observance and Practice

As a part of our commitment to Equal Employment Opportunity for all, we have made a specific effort to ensure that national origin and religion are not factors in recruitment, selection, promotion, transfer, termination, or participation in training. The following activities are undertaken to ensure religion and national origin are not used as a basis for employment decisions:

1. Recruitment resources are informed of our commitment to provide equal employment opportunity without regard to national origin or religion.
2. Our employees are informed of our policy and their duty to provide equal opportunity without regard to national origin or religion.
3. Employment practices exist and are reviewed to ensure that we implement equal employment opportunity without regard to national origin or religion.

4. The religious observances and practices of our employees are accommodated, except where the requested accommodation would cause undue hardship on the conduct of our business.
5. We do not discriminate against any qualified applicant or employee because of race, color, creed, disability, age, sex, sexual orientation, citizenship status, marital status, or status with regard to public assistance in implementing the policy concerning non-discrimination based on national origin or religion.

Sex Discrimination Guidelines

We incorporate the following commitments into this AAP to ensure that all laws related to the prohibition of discrimination based on sex are followed:

1. Employment opportunities and conditions of employment are not related to the sex of any applicant or employee. Salaries are not related to or based upon sex.
2. Women are encouraged to attend all training or development programs to facilitate their opportunities for promotion, and to apply for all positions for which they are qualified.
3. We do not deny employment to women or men with young children and do not penalize, in conditions of employment, women or men who require time away from work for parental leave.
4. Appropriate physical facilities are provided to both sexes.

Prevention of Harassment and Discrimination

Our company has developed policies prohibiting the harassment of or discrimination against any employee because of any characteristic protected under civil rights laws. Executive Team will distribute these policies routinely to current employees and incorporate these policies as a part of new employee orientation. Employees are made aware of contact persons to report any violation of these policies.

11. Anti-Harassment Policy

Description:

The following is from GeoComm's Employee Handbook:

GeoComm intends to provide a work environment that is pleasant, healthful, comfortable, and free from intimidation, hostility or other offenses which might interfere with work performance. Harassment of any sort (verbal, physical, sexual, visual, etc.) will not be tolerated.

What Is Harassment?

Harassment can take many forms. It may be, but is not limited to: words, signs, jokes, pranks, intimidation, physical contact, or violence. Harassment is not necessarily sexual in

nature. Bullying is also a form of harassment.

Sexually harassing conduct may include unwelcome sexual advances, requests for sexual favors, or any other verbal or physical contact of a sexual nature that prevents an individual from effectively performing the duties of their position or creates an intimidating, hostile, or offensive working environment, or when such conduct is made a condition of employment or compensation, either implicitly or explicitly.

Responsibility

All GeoComm employees, and particularly managers, have a responsibility for keeping our work environment free of harassment. Any employee aware of an incident of harassment, whether by witnessing the incident or being told of it, must report it to their immediate manager, or any management representative with whom they feel comfortable.

When management becomes aware harassment might exist, they are obligated by law to take prompt and appropriate action, whether or not the victim wants the company to do so.

Reporting

Any incidents of harassment or policy violations must be immediately reported to either a manager, Human Resources, VP of Finance & Admin. or President/CEO. Appropriate investigation and disciplinary action will be taken. All reports will be promptly investigated with due regard for the privacy of everyone involved. Any employee found to have harassed a fellow employee or subordinate will be subject to severe disciplinary action or possible discharge. GeoComm will also take any additional action necessary to appropriately remedy the situation. In case of policy violation, the Talent Director will report in an agreed upon frequency (based on severity of issue) to VP of Finance and Administration and President/CEO until resolution is complete. No adverse employment action will be taken for any employee making a good faith report of alleged harassment or policy violation.

GeoComm accepts no liability for harassment of one employee by another employee. The individual who makes unwelcome advances, threatens, or in any way harasses another employee is personally liable for such actions and their consequences. GeoComm will not provide legal, financial, or any other assistance to an individual accused of harassment if a legal complaint is filed.

Employees uncomfortable with reporting incidents of harassment to GeoComm leaders or dissatisfied with the resolution of any harassment problems may wish to contact the Minnesota Department of Human Rights at 1-800-657-3704 or TDD 651-296-1283.

12. Problem Resolution Policy

Description:

In any organization, dissatisfaction may arise because an employee does not know, understand, or agree with certain policy interpretations or management decisions. Such dissatisfactions are commonly referred to as grievances. At GeoComm, we believe that if any employee has a grievance concerning his/her wages, hours of work, or other terms or conditions of employment, the matter should receive attention from management.

An employee who feels aggrieved is urged to take the matter up immediately with his/her manager. Your manager is required to investigate your grievance and provide you a response or decision within a reasonable period of time. This investigation may consist of, but is not limited to, gathering information from other employees involved, reviewing company policy, and any other action necessary to understand the matter completely.

If you are not satisfied with the response/decision from your immediate manager, you are encouraged to notify the next level of management in writing. This next level of supervision will have a reasonable period of time in which to investigate the matter and respond to you in writing.

If, after these steps are taken, you believe inadequate action has been taken to resolve your complaint, contact Human Resources or the VP of Finance & Admin.. It is the policy of this organization to respond to any and all complaints, and to take immediate and necessary actions to resolve the issue.

There will be no adverse action taken against a complaining employee as a result of making the complaint, regardless of the outcome of the investigation.

If you have a problem which is more specifically addressed by the Anti-Harassment Policy, please follow the procedure described in the Anti-Harassment Policy section.