GIS CLOUD MIGRATION & HOSTING

AGENCY

Ottawa County Ohio GIS Group

SUBMIT TO

Jennifer J Widmer

jwidmer@co.ottawa.oh.us

Ottawa County Courthouse

315 Madison Street, Room 202

Port Clinton, OH 43452

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PURPOSE OF REQUEST

The Ottawa County GIS group is seeking a consultant to migrate and provide management/support for a cloud-based server for their GIS system. The goal of this project is for the selected consultant to enter into a contract with the Ottawa County GIS group for ongoing cloud database maintenance and compatibility, patches and updates with the County's ESRI Enterprise system. This cloud system will have automatic backups and redundancies in place for data preservation and security. It will be expected that a consultant will provide ongoing support in regards to overall system updates and troubleshooting for cloud compatibility with the County GIS system. Web based applications for public consumption and internal data maintenance will be accessible to minimize downtime and prioritize speed.

Support hour options should be explained in the proposal. 24/7 support is not necessary at this time but continuous system monitoring is expected.

All work must be done in the United States and shall not be subcontracted to any entity or country outside of the United States.

Interested parties must be an ESRI partner as well as be certified through the Cloud vendor or choice, and have support personnel who are certified database administrators.

SCOPE OF WORK

Migration to Cloud Based Database
The Ottawa County GIS system is currently utilizing SQL Express on an on-prem virtual machine and DMZ proxy server for security purposes. The GIS group is looking to migrate this setup to a cloud based database that is compatible with current versions of ESRI's Enterprise software. There is no preference between cloud database providers although the County has had issues signing contracts with Amazon in the past. The consultant will need to suggest which provider they would like to use and why. Ease of scalability and security measures will be priorities in the decision between providers. Challenges arising from converting from SQL Express should also be considered and expressed in the proposal.

Storage is currently a major concern for the County as the GIS system is becoming more and more utilized and depended upon. The cloud platform should be easily scalable to account for an increase in data. The County will also need a breakdown of the data storage utilization of each department for cost sharing and internal reporting. An explanation of the adaptability for increasing the amount of storage should be included in the proposal.

Ongoing Database Support
Once the system has successfully migrated to a cloud solution a separate consulting contract will be entered into between the County GIS group and the chosen consulting company for ongoing database support including ongoing maintenance, security patches, and system version updates. The consultant will also be responsible for maintaining the County's security certification for the published domain used for online applications. The consultant will outline the level of customer service support that can be provided by the County for any system connectivity or editing issues.   This contract will cover 5 years at which time another RFP process will repeat. The County is expecting to enter an ongoing maintenance contract during the 5 year period with the vendor in which the County can terminate with 30 days notice. An annual review of the support service will be conducted internally in addition to with the vendor.

Deployment of ESRI Enterprise and Ongoing Version Updates
The Ottawa County GIS group has been utilizing ESRI software for decades. The main goal of this project is to design and maintain an ESRI Enterprise environment in the cloud for scalability and ease of use for data maintenance users and public applications. The cloud database connection to the ESRI Enterprise instance along with the update of new versions of Server for ArcGIS and ArcGIS Portal will be expected from the consultant. Approval for version upgrade will need to be obtained by the consultant from a county project manager before the deployment of these new versions for the purpose of expected version changes and potential compatibility issues. Current web GIS applications will need to be maintained in the new environment from the beginning of standing up the new solution.

Third Party Integrations
All solutions must be compatible with existing vendors that interact with the department's GIS products. These vendors are listed under the Existing Architecture sections of this document.

GOALS AND PRIORITIES

The following aspects highlight what the County considers to be crucial design criteria for a migrated system. Proposals should focus on how the consultant can ensure these are addressed and give examples of projects with similar goals and priorities.

- System that is easily scalable with growing data storage needs and with the intention of adding more departments and jurisdictions as users to the system
- Speed and ability to handle many users and requests
- Ease of updates
- Backups and security
- Maintenance customer service and quick support ticket response
- Monitoring of system crashes and notification system
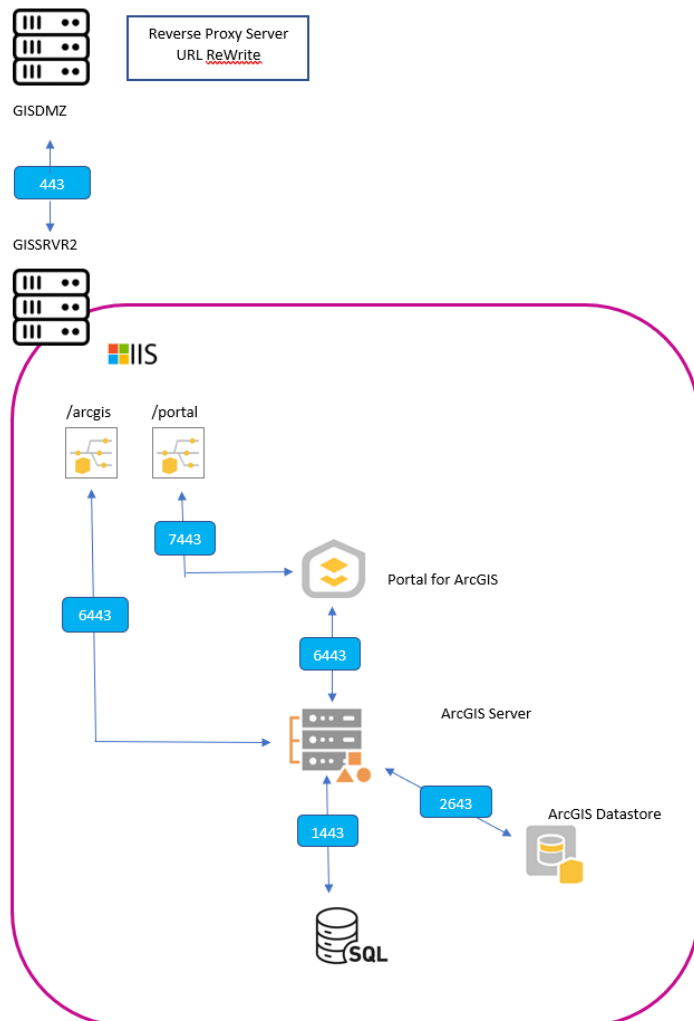
EXISTING ARCHITECTURE
Current Server and GIS System Architecture

Current Software Deployment Versions

PRODUCT	VERSION
ArcGIS Server	11.2
Portal for ArcGIS	11.2
Database	SQL Express 2022 Version 18.12.1
Internet Security Certification GoDaddy	Wildcard Certification

Also note our ESRI Enterprise system is federated.

Basic System Network Diagram

Department Specific GIS Initiative Descriptions

The Ottawa County GIS group consists of 3 main county departments that have worked together to share and collaborate on GIS services. These 3 departments serve as the decision-making body for County GIS initiatives and mapping services. In addition to these 3 departments there are currently 2 member level departments who have been added to the system for mapping projects with the system support provided by the group. It is the desire of the group to expand to include other departments and look into the possibility of adding other public entities within Ottawa County.

Auditor's Office

Department overview and business goals

The County Auditor's Office houses the parcel dataset for the County along with related property and taxation feature layers. This office has been using GIS for decades and is part of the main group. Parcel data is joined to the CAMA valuation and property characteristic data that is made available to the public via the Auditor's property search website. This data is crucial to the valuation and transfer of property through the county. The county land use and soils layers are also crucial for the office as the basis for agricultural farmland tax discounts. Appraisal staff also utilize GIS for appraisal purposes including imagery, field verification of new construction, and change detection. The Auditor's office also aids in base layers and data maintenance for the Sheriff's office 911 dispatch program.

Main Datasets include the following.
- Parcels
- New Construction Review
- EMA/ EMS Districts
- Voting Precincts and Ohio Districts
- Address Points
- School Districts
- Corporation Limits
- Township Boundaries
- Neighborhoods
- Land Use
- Soils

Expansion Goals

The County Auditor's Office would like to increase its web presence and enhance current parcel viewing applications for both internal and public applications. We would also like to conduct more analysis in terms of the locations of short-term rentals and appraisal neighborhoods. Expanding the overall GIS program to include more departments including the Health Department, Emergency Management Agency, the Ottawa County Improvement Corporation, and the Erie Ottawa Regional Airport Authority.

Engineer's Office

Department overview and business goals

GIS has been used in some form in this office since the mid 1990's. Our web app went live online around November / December 2014.The Ottawa County Engineer oversees the various roads and bridges in Ottawa County. We also are the depository for survey maps, subdivision plats and the respective improvement plans. We also hold, maintain and develop road plans for the various county and township roads in Ottawa County. There are many other miscellaneous permits concerning the mentioned roads that this office administers. Our goal for GIS is to continue to update our current GIS map / web app that combines and organizes nearly all of this information in one location for ease of access.

Main Datasets include the following.
Benchmarks, Section Corners, Easements, Surveys, Subdivisions / Condos, Bridges, Culverts, Drainage Areas, Maintenance Ditches, Permits (Multiple Types), Request and Investigations, Township Requests, Municipality Permissive Roads, Traffic Counts, Road Stationing, Misc. Drainage.

Expansion Goals

One goal is to separate our current subdivision and condominium data into separate layers. We would also like to eventually create a comprehensive way to index our road plans and respective roadside drainage plans.

Current web applications

We have two; the first is for general public and surveying / engineering firms to use for project control, the second is for internal office use which is our digital file cabinet.

Future goals and objectives

To continue to update and maintain the current system and even enhance some of the current features as deemed necessary. To develop the above-mentioned roads / drainage layer. To develop additional layers and datasets as desired for future applications. We would also like to develop the ability to collect and possibly update data in the field through use of GPS and tablets for the recording of culverts, ditches, inlets / outlets, and other aspects of our wide range of infrastructure.

Sanitary Engineering Department

Department Overview and Goals

The Sanitary Engineering Department utilizes Geographic Information Systems (GIS) as a core component in managing, maintaining, and analyzing public wastewater and regional water infrastructure assets across Ottawa County. The department's primary business goals include ensuring regulatory compliance, improving operational efficiency, supporting asset management, and enhancing responsiveness to service requests and field operations. GIS plays an essential role in achieving these goals by providing accurate, up-to-date spatial data

and enabling informed decision-making. Aid field personnel in completing the departments responsibilities in marking utilities as part of the OHIO 811 system.

History of GIS Use

GIS has been actively used within the department for 16 years, initially focused on mapping sewer and water infrastructure and documenting field observations. What began as basic asset mapping has matured into an enterprise-level system integrated with engineering workflows, inspections, and maintenance operations. The expansion has required a newly formalized GIS role to assist in integrating GIS into daily operations, long-term planning, and project tracking.

Maintained Datasets

Core datasets include:

- Regional Water Distribution System (Valves, fire hydrants, water meters..etc)
- Wastewater Collection System for Danbury and Portage-Catawba Island (PCI) (Sewer mains, manholes, valves, grinder pumps, service lines, and pump stations…etc)
- CityWorks - Service requests, Work Order and Inspections
- Feature-Linked as-built drawings, tap sheets, etc

Dataset Expansion

Future datasets of interest:

- Marblehead and Johnson's Island water system
- SCADA/telemetry data
- Pump station and sensor data to monitor infiltration/inflow to reduce treatment costs
- Asset inventory and maintenance documentation-predictive maintenance
- Vertical assets of wastewater and water treatment plants

Current GIS Applications

- **Field Inspection Map**: Supports daily field collection with Trimble GPS units
- **Internal Asset Viewer**: Used for planning, QA/QC, and public inquiries

The team is also transitioning from Collector to Field Maps, enhancing mobile data collection and syncing with Trimble GPS units for improved spatial accuracy.

Future Objectives

- Migrate GIS infrastructure to a scalable cloud platform
- Enable versioned editing workflows and automated QA checks
- Integrate real-time data feeds and build predictive maintenance models

Looking ahead, the department's GIS objectives include migrating to a cloud-based environment for better scalability and reliability, implementing versioning and automated quality control checks, and building custom applications to streamline project tracking and reporting.

Ultimately, the department seeks to make GIS a fully integrated, cross-functional tool that supports engineering, operations, permitting, and public outreach initiatives.

Soil and Water Conservation District
The Ottawa County Soil and Water Conservation District currently uses GIS software provided by Homeland Security for internal mapping projects for conservation planning and monitoring as well as mobile worker licenses through the County GIS group for field work and data collection using Survey123 and Field Maps.

Ottawa Regional Planning Commission
Regional planning is currently using web applications to edit the Zoning feature class and lookup properties in relation to the FEMA flood dataset. This office also assigns and updates addresses for the Townships within the County.

Priorities and Future Goals
There are various departments within the County who are interested in expanding their use of GIS. The County is also interested in adding more departments to the system as well as considering how to add Townships and Municipalities who are outside of the County network. Therefore we are very concerned about the amount of storage, system scalability and cyber security of our GIS program.

Aside from the utilization of ESRI software, other vendors are involved in the GIS system as providers of information services and products. See chart below.

VENDOR	SERVICE DESCRIPTION
EagleView	Imagery provider, image service included
Schneider Geospatial	Auditor's office website vendor
iWorq	Building inspection permitting, map service access only
DDTI AccuGlobe	911 Dispatch, ODOT LBRS
ISSG	Auditor's Office CAMA provider
City Works	Sanitary Engineering utility management

PROJECT TIMELINE

Step	Expected Date/Range
Proposals Due	Friday August 29, 2025 4pm EST
Selected Vendors Contacted	Friday September 19, 2025
Interviews	October 14th and October 16th
Final Selection	October 31st 2025
Migration	TBD
System Live Beginning of Support Contract	TBD

VENDOR REQUIREMENTS

It is expected that candidates will have extensive experience deploying and maintaining ESRI products for local and state governments. Interested parties must be an ESRI partner as well as be certified through their Cloud vendor of choice, and have support personnel who are certified database administrators.

Candidates should also have proof of liability insurance totaling $1 million.

All work must be done in the United States and shall not be subcontracted to any entity or country outside of the United States.

PROPOSAL SECTIONS

Four physical copies of the proposal should be submitted to the Ottawa County Courthouse by DATE

Interested vendors must submit the following in their sealed proposal:

- Company profile and experience
- Company address and location of employees who will be supporting the project
- List of personnel dedicated to project along with their credentials
- Provide recommended cloud provider preference and why
- ESRI partnership status and cloud solutions certifications
- Total Proposed Cost
  - Migration cost
  - Monthly maintenance cost and level of technical support
- Project timeline including key milestones and deliverables for proposed plan
- Process for customer tickets/ support
- Include five (5) references from current and past clients for GIS Services (examples of work similar to this request is preferred)
- Clearly describe any exceptions with this Request for Proposals
- Describe proposed system design changes and provide clear and substantial support for recommendation(s)
- Proof of liability insurance (If your firm is selected for this project a certificate of insurance will be required showing Ottawa County as an additional insured.)

Potential Vendors who make it past the proposal stage will be scheduled for an interview with the County GIS Group for final selection.

APPENDIX A
Indemnification Clause

Indemnity

Consultant agrees to indemnify and hold harmless Ottawa County of and from any and all claims, demands, losses, causes of action, damage, lawsuits, judgments, including attorneys' fees and costs, arising out of or relating to the work of Contractor.

SYSTEM DIAGRAMS
GIS Network Diagram