



Geographic Information Services

Visualizing data to make faster and better decisions

Client focused, results oriented

Cornerstone's Geographic Information System (GIS) services focus on enabling our clients to better manage their data and information, resulting in faster, more informed decisions about their sites, facilities and operations.

Using a collaborative approach, we partner with our clients to understand their data, collection and management processes, and goals. By understanding our clients' data management strategy and vision, we are able to apply our knowledge and capabilities to provide GIS deliverables that simplify data management and enable better visualization of what's happening at their site in three dimensions and over time.

With the right blend of data process improvements and modern technology, we significantly reduce the number of steps in a client's data collection and analysis process, resulting in cost-effective solutions with lasting value.

Our experience includes:

Data collection – More efficiently and accurately capturing data in the field and adding value to current data by adding physical location attributes like latitude and longitude. This is often referred to as "spatially enabling."

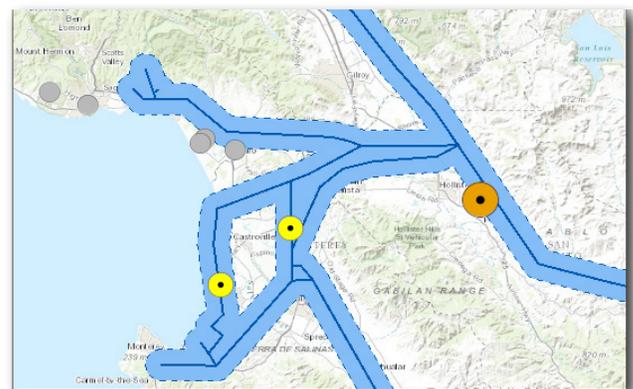
Data visualization – Viewing the "spatially enabled" data, in layers on a map, to reveal spatial patterns and relationships in 2-dimensions, 3-dimensions, and an often unrecognized 4th dimension (time).

Data analysis – Analyze relationships in the data and use the analysis to see how many of a certain feature are near an area of interest, improve efficiencies, or see how data is changing over time. Examples include creating more efficient driving routes for a fleet, viewing liquid levels in a well over time, looking at volume differences in landfill topography over time, or well depths and their distance to the liner.

Data management – Organize, standardize, and enable quick access to data.

What sets Cornerstone apart?

- **Client centered** – What is good for the client is good for Cornerstone. We put our clients' needs ahead of our own, ensuring lifetime relationships.
- **Innovative solutions** – Listening to our clients and using modern software allows us to develop more efficient processes that improve our clients' bottom line and business standing.
- **Wide array of expertise** – Staff includes both CAD and GIS experts and scientists, engineers, and practitioners. Our experience aside from GIS allows us to quickly relate to client needs and deliver efficient spatial data processes, 3D modeling analysis/visualization, and web mapping services.
- **Transportation experience** – Many of our staff previously worked for material hauling companies, translating to network analysis capabilities that allow us to evaluate vehicle fleet operations to find more efficient ways to collect and deliver material.
- **Integration with site engineering** – Because we are engineers using GIS, our work improves design, cost estimating, field surveying, record drawing management, and long-term site operations.



Map showing landfills near natural gas pipeline

GIS Services Provided

Spatial Data Management, Analysis and Visualization

- Standardize, organize, analyze, visualize client data
- High quality maps and models that empower our client's ability to make faster, more informed decisions

GIS Consulting

- Advice to those performing GIS tasks and/or building in-house GIS systems

GIS and CAD Integration

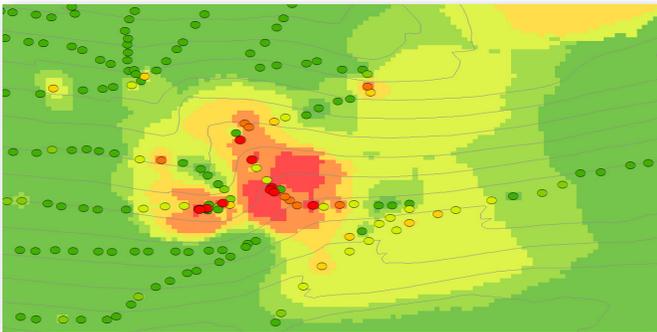
- Tailored, integrated solutions, using both CAD and GIS capabilities

Environmental Planning and Compliance

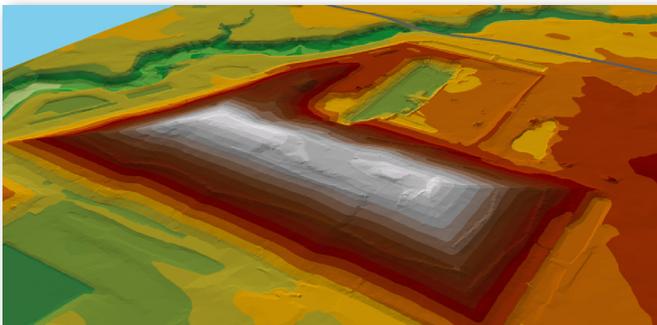
- Use GIS to improve environmental assessments at local, state and national levels
- Assist clients with tracking data for compliance with state and federal regulations

Mobile Workflows

- Help clients to use mobile devices to ensure quicker and more accurate transfer of field data into maps and reports



Heat map showing hot spots - high methane concentrations



3D model of a landfill and its surrounding area

Recent Cornerstone Experience

Cornerstone prides itself on establishing close and productive relationships with its clients. A few recent examples of our GIS projects include:

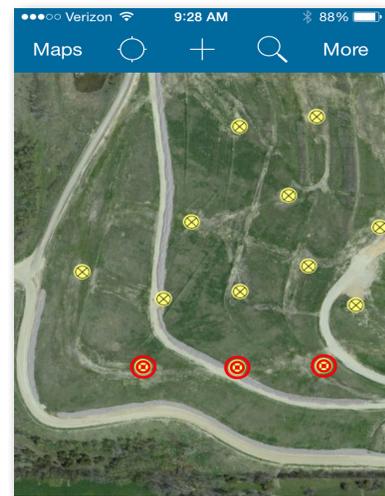
Confidential Client (OR) – Provide quarterly conversions of methane surface emission monitoring (SEM) data from the field to a map for easy visualization at the time of collection.

Confidential Client (MI) – Converted more than nine years of a landfill's asbestos disposal data from spreadsheets to 2-dimensional points on a map, to enable visualization of locations by year.

University of Wisconsin System (WI) – Use GIS to track environmental impacts and depict data for analysis from proposed projects on campuses located across the state, including mapping surface water and wetlands, endangered resources, and areas of remediation.

Pellitteri Waste Systems (WI) – Assisted in completing the environmental analysis required to meet state regulations for siting of a solid waste transfer station, including wetlands, drinking water supply wells, historical and archaeological sites, land use, and zoning.

Confidential Client (CA) – Developed a 3-D model and surfaces of a landfill to better visualize liner, existing topography, LFG well and horizontal collectors, and leachate data, so the client could make better and faster decisions on locating additional LFG collectors.



Use a mobile device to capture landfill gas information