Virtual Alabama

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What is Virtual Alabama?

Virtual Alabama is a mapping application developed by the Alabama Department of Homeland Security (ADHS). It is a common operating platform built on the Google Earth Enterprise Client, meaning it functions like the freely available Google Earth software. The purpose of the program is to leverage existing state asset imagery and infrastructure data into a visualization tool that is affordable, scalable, maintainable, and capable of employing the power of existing and evolving Internet based applications. Access to Virtual Alabama requires a user account and is limited to state and local employees.

What are the goals of Virtual Alabama?

The primary goal of Virtual Alabama is to utilize existing imagery and data sets in order to create efficiencies and cost savings. Leveraging the data already available on a state and local level eliminates costly acquisition of new data. ADHS relies heavily on state and local partnerships to provide previously acquired data. Another goal is to provide a common, user-friendly interface for those using the application. Virtual Alabama provides a common experience for users across the state, allows for centralized data management and deployment, and reveals areas of data deficiency. A third goal is to maintain a forum to provide information about upcoming data acquisitions and facilitate cost sharing opportunities among state and local agencies and the federal government.

Who is utilizing Virtual Alabama?

- Homeland Security
- Emergency Management and Fire Services
- Public Safety
- City and County Government
- Economic Development/Planning
- Natural Resource Management
- Environment Agencies
- Law Enforcement and Forensics
- Education
- Agriculture
- Transportation
- Military
What information can I find in Virtual Alabama?

Virtual Alabama provides imagery that is often of higher quality than that available to regular Google Earth users. To determine the data available for a particular county, visit the Virtual Alabama web page (link below), click ‘Virtual Alabama’, and select ‘Current Data in the System’ from the drop down menu. Available data layers include roads, topographic maps, USGS Digital Orthorectified Quadrangles, river and stream gauges, and NRCS STATSGO maps. Other available data layers include county parcels, utilities information, traffic and facility cams, 3D building models, emergency management and services, and environmental information from ADEM and the University of Alabama in Huntsville.

Real-time activities associated with Virtual Alabama:

- Common operational picture
- Identification of assets and vulnerabilities
- Emergency evacuation routing
- Visualization of risks
- Situational awareness/understanding
- Plume modeling and real-time sensor feeds
- Vehicle and asset tracking
- Implementation of protective measures during events
- Critical infrastructure mapping
- Damage assessment
- Student density
- Traffic cam monitoring

How can I utilize Virtual Alabama?

In addition to the having access to the shared data layers, users of Virtual Alabama can utilize the Google Earth components to manage their own data. The ‘GPS Import’ feature provides the ability to download waypoints, tracks, and routes created with a Garmin or Magellan GPS unit. Virtual Alabama supports the import of other data formats including ESRI, MapInfo, MicroStation, GeoTIFF, and ERDAS Imagine, among others. Data layers developed with the three basic map features of points, lines, and polygons can be created directly within the application. Other tools include a ruler for measuring distance, perimeter, acreage, or a circle and a ‘Record a Tour’ feature for recording a guided experience of navigated terrain and content.

How can I request a Virtual Alabama Account?

To learn more about Virtual Alabama or to request an account, visit www.virtual.alabama.gov.

For more information about geospatial technologies, visit www.alabamagps.com.