



ARIZONA GEOGRAPHIC
INFORMATION COUNCIL

Summary

AZGeo: Arizona's State Spatial Data Infrastructure

Introduction

AZGeo is Arizona's state Spatial Data Infrastructure (SDI), a collection of geospatial data, metadata, services, and authoritative agencies that support informed decision-making, research, and innovation. It is a collaborative effort among state agencies, local governments, and other partners to share and manage geospatial data and information in a consistent and coordinated manner.

Importance of a State SDI and Examples:

A state SDI plays a critical role in supporting a wide range of activities and decision-making processes that affect the lives of citizens and the functioning of government. There are key framework data layers within the SDI that provide the foundation for most geospatial mapping, analysis and decision making. These common datasets are addresses, road centerlines, government units, cadastral, imagery, elevation and hydrology. The maturity of these data impacts decision making across jurisdictions and sectors, and it is essential for the geospatial community to work collaboratively to maintain and sustain these data for the health of Arizona's SDI. Here are a few examples of how the state SDI supports the geospatial community in Arizona:

- **Public Safety:** The Arizona 9-1-1 Office leverages AZGeo to validate and aggregate address points and road centerline data across the state. The data is used to validate 9-1-1 calls and route the calls to the correct Public Safety Answering Point (PSAP). AZGeo supports the state's efforts to modernize the public safety infrastructure known as Next Generation 9-1-1. This data improves the state's SDI with address points and road centerlines, which support national

initiatives such as the National Address Database (NAD) and All Roads Network of Linear Referenced Data (ARNOLD). This effort is further supported by the Arizona Department of Transportation's (ADOT) Data Supply Chain tool within AZGeo.

- **Natural Resources:** The AGIC Natural Resources Workgroup is a collaboration of state, federal and local government agencies and organizations working together to improve the coordination of natural resource related and hydrographic data in Arizona. They are using AZGeo as a collaborative platform for their pilot project to update the National Hydrography Dataset (NHD) to serve Arizona stakeholders better. The Collaborative Conservation Mapping Project, The Cienega Timeline Project, and AGIC Protected Areas Database (PAD) Project all aim to create a searchable geospatial database to help collaborative groups and support organizations/entities more easily connect for shared learning and problem-solving, making decisions about conservation, recreation, or land use planning. The State SDI, like AZGeo, helps to provide accurate, up-to-date, and consistent geospatial data, metadata, services, and people that work together to support the decision-making process of these projects.
- **Transportation and Infrastructure:** ADOT is leveraging AZGeo to support its business use cases, including the All Roads Network of Linear Referenced Data (ARNOLD), data analytics, education & outreach. ARNOLD is a comprehensive data set that tracks transportation assets such as roads, bridges, signs, and traffic signals. Data analytics allows for better decision-making by providing accurate and up-to-date data. Education & outreach allows ADOT to share information with the public and other stakeholders. AZGeo provides ADOT with a consistent and coordinated way to share and manage geospatial data. AZGeo is also the data hub that ADOT uses for crowd-sourcing data from local agencies, such as roadway ownership and functional classification.
- **Economic development:** The Arizona Commerce Authority (ACA) is leveraging AZGeo for its business use cases, including broadband mapping and the Arizona Sun Cloud initiative. Broadband mapping is used to identify areas where internet connectivity is lacking. The Arizona Sun Cloud initiative is a data portal for

sharing transportation and socioeconomic data describing the Sun Corridor megaregion, extending from Phoenix to Mexico. The Sun Cloud portal enhances the work that supports transportation planning efforts and access to socioeconomic data, thus strengthening the mega regional planning process, saving money, improving outcomes, and fostering the coordination of diverse priorities more effectively.

Conclusion:

AZGeo is Arizona's state spatial data infrastructure that plays a vital role in supporting informed decision-making, outreach, research, and innovation in the geospatial community. Access to accurate and up-to-date geospatial data and information can support various activities, including emergency management, natural resource management, transportation and infrastructure, economic development, education, and research.