Critical Information Database and Dashboard **FY2022 Request: $800,000**
Reference No: AMD 63328

AP/AL: Appropriation
Project Type: Research / Studies / Planning
Category: Natural Resources
Location: Statewide
House District: Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40)
Contact: Cheri Lowenstein
Estimated Project Dates: 07/01/2021 - 06/30/2026
Contact Phone: (907)465-2422

Brief Summary and Statement of Need:
This project will create a Critical Information Database and Dashboard (CIDD) so that the State of Alaska is better prepared to respond to crisis situations and can make data-driven decisions. This will provide a database that can be used across government entities to ensure use of authoritative data and best available data to make decisions during a crisis.

Funding:	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	Total
1002 Fed Rcpts	$600,000						$600,000
1004 Gen Fund	$200,000						$200,000
Total:	$800,000	$0	$0	$0	$0	$0	$800,000

☐ State Match Required ☐ One-Time Project ☐ Phased - new ☐ Phased - underway ☑ Ongoing
0% = Minimum State Match % Required ☑ Amendment ☐ Mental Health Bill

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Prior Funding History / Additional Information:

Project Description/Justification:
Powerful geographic information systems are now available that quickly render digital geospatial data into map products and information dashboards. These systems can facilitate near-real time performance of a wide range of relevant geospatial analyses. These systems can be used to access and process digital geospatial data and can be instantly transmitted from wherever it's maintained to any place where it’s needed. These characteristics make geographic information technologies, combined with appropriate sets of geospatial information, an invaluable tool for the handling, display, and analysis of information for any emergency response situation.

Timely, accurate information, easily accessed and capable of being shared across federal, state, and local political jurisdictions is fundamental to the decision-making capability of those tasked with economic development, environmental management, education, health, public safety, human services, infrastructure management, planning, zoning, real property records management, elections and redistricting, and disaster preparedness and response. Without the real-time ability to quickly visualize activity patterns, map locations, and understand the multi- layered location-based context of

emergency situations, efficient response and mitigation actions cannot be achieved. As never before, it has become clear that in emergency situations of whatever origin, efficient response is dependent on rapid access to and application of many types of current and accurate geospatial information. Critical information such as:

- Critical infrastructure, including telecommunications; electrical power systems; gas and oil production and storage facilities; utilities; banking and finance; water and wastewater systems; hazardous material sites; airports/airstrips
- Aerial imagery, transportation systems, elevation, administrative boundaries, land and property ownership, hydrography, addressing, cultural resources, natural resources
- Emergency services, evacuation routes, educational facilities, commercial facilities, health and medical facilities, human and social services facilities, state facilities
- Disaster preparedness data related to earthquakes, tsunamis, landslides, flooding

However, the current status of a critical information database and *implementation* of such a database, across government agencies, necessary to fully coordinate an effective response to threats in Alaska does not exist. It is critical that as a State we take the necessary steps to assure that strategic information assets relative to health and human safety and economic security particularly geospatial information assets are created, are maintained for currency and accuracy, are readily available to those who need them, and are interoperable. As we move forward to improve and support planning and management activities, the contribution of geospatial information and technologies in support of critical decision- making should be fully utilized.
The objective of the proposed work is to create a Critical Information Database and Dashboard (CIDD) so that the State of Alaska is better prepared to respond to crisis situations and can make data-driven decisions. CIDD will benefit those responsible for making decisions related to public health and safety, natural disasters, and emergency response – both natural and man-made – as a tool that gives them rapid access to critical information. Every Alaskan could potentially benefit from CIDD through better preliminary preparation and more efficient response by state and local officials that have access to the system, especially during emergency events.

Critical Information Database and Dashboard (CIDD): a secure, innovative web-based Geospatial Information System (GIS) designed to provide up-to-date information on critical infrastructure and data assets in Alaska. CIDD contains tools for searching data, data analysis, and mapping that can easily and quickly support decision makers in various critical planning, assessment and emergency functions. The tools will require minimal training and allows users to identify resources quickly. CIDD will have pre-made maps, apps, surveys and tools (i.e., damage and impact assessment tools) that are uniquely designed for emergency response situations. CIDD will also allow for fast data loading by data owners or collectors, allowing new data – including event data – to be uploaded from anywhere by any authorized person and made available to system users in minutes. This database will have varying levels of security access points to ensure protection of confidential or sensitive geospatial data assets.

Benefits:

- Provide a database that can be used across government entities to ensure use of authoritative data and best available data to make decisions during a crisis or emergency response situation. One of the largest benefits is ensuring that all entities working together during a crisis situation are using the same data and information to make life-dependent decisions.

- Catalog of existing data sets to conduct a gap analysis: this process would include a gap analysis of geospatial data across Alaska and would directly benefit Administrative Order 320 which included recommendations for how GIS technologies can improve 9-1-1 services in Alaska and would address synthesis of roads and addressing data, as well as the proposed gap analysis.
- Improve data sharing practices: establish data sharing agreement with partnering organizations
- Provide clarity about data ownership: establish policies regarding authoritative data, ownership, and data sharing processes across organizations
- Consistent standards, policies and practices with regards to data quality: this process will identify data quality issues and provide guidance to best practices
- Reduction in operating costs: reduce duplication of effort across government agencies with regards to data acquisition, storage, management, and personnel. Improve efficiency and automation of workflows with the concept of build once and use many times.
- National presence: This has been implemented in other states including New York and Florida, which has made it possible to actively participate in national efforts to create and promote a national spatial data infrastructure. It has allowed New York to apply for and receive federal funds to enhance the program and created opportunities to work with and learn from other states on issues of mutual concern.
- Establish State leadership under the State of Alaska Geospatial Information Officer who currently provides coordination across all government agencies and Alaska stakeholders via the Alaska Geospatial Council which includes state, borough, municipal, federal, tribal, private, and non-government organizations

Current and accurate information about the State's critical infrastructure is not consistently available or shareable among relevant agencies. The State should invest in appropriate measures to catalog and manage geospatial data assets, so that we can fully realize the potential this technology and what it brings to decision making.

Line Item	Amount	Items
1000 Personal Services	$200,000	
2000 Travel	$25,000	
3000 Services	$250,000	Contract GIS programming, Imagery subscription
4000 Commodities	$325,000	IT hardware
Total Request	**$800,000**	

Position Detail:

Add two new GIS Analyst III, range 19