### ARKANSAS GEOGRAPHIC INFORMATION OFFICE

### **Enabling Laws**

Act 112 of 2010 A.C.A § 15-21-501 et seq.

# **History and Organization**

The Arkansas Geographic Information Office (AGIO) was created in 2001 as a division of the Department of Information Services (DIS) by the passage of ACT 1250. Its purpose is to coordinate the development and maintenance of geographic information systems (GIS) data throughout the state. The AGIO coordinates with all levels of government, private and non-profit sectors to reduce duplication of effort. The office works in conjunction with the Arkansas Geographic Information Systems Board. In 2009, the AGIO became a state agency with the passage of ACT 244 (HB 1356 of 87th General Assembly).

The Office operates GeoStor, Arkansas' GIS clearinghouse, where the state's GIS data is published for users. The Office works closely with County Assessors who are mapping real estate tax parcels, County Judges and E9-1-1 coordinators who are mapping the road centerline file and with county floodplain managers in support of FEMA's Flood Map Modernization Program. The Office is also responsible for maintaining the aerial imagery program that procures aerial imagery of the state.

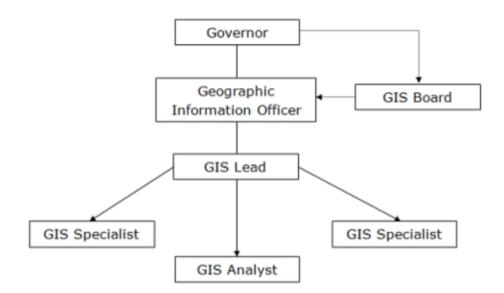
The parcel mapping focuses on the development of tax parcels that are listed in the counties' computer-assisted mass appraisal system. Parcel mapping improves the efficiency of the Assessor reappraisal process. The data aids the Assessors in discovering taxable real estate. The data is used by the banking industry, Realtors, surveyors, floodplain administrators and others to view information about properties. One of the most valuable uses of the data is for economic development where prospects can research and evaluate potential sites for development without having to conduct an initial visit.

The road centerline program compiles a standardized road centerline map layer that can be used by all levels of government, the private sector and individuals. The data is one of the most commonly needed datasets by GIS users. The AGIO helps the County E9-1-1 offices with the technical facets of creating and maintaining centerline data. The data can be used to locate people, places and events along the roads by correlating them to a physical address. The AGIO assembles a statewide version of the data by incorporating updates from individual counties as roads are changed or new roads are built. The layer is heavily used following disaster and emergency response events. This layer in combination with address point coordinates is used to drive the state's Streamlined Sales Tax database that supports collection and accurate distribution of county and city sales tax. The system added over \$7 million in sales tax revenue to the state in 2009.

The AGIO plays a supportive role in FEMA's Flood Map Modernization Program by providing local and statewide GIS data used for the digital flood insurance rate maps. It also ensures the quality of the data based on FEMA's guidelines and standards. The AGIO also assists county floodplain managers with GIS data requirements.

The aerial imagery is a special type of photography that is corrected for terrain distortion and encoded with the latitude and longitude coordinates. This enables the data to be used in a number of applications. Because a picture is worth a thousand words, this data is the most popular GIS data published by the agency. It is used by County Assessors to locate and discover real estate, by County E9-1-1 office to map roads, by numerous state agencies for a variety of purposes and by private sectors including real estate, land surveying, engineering, utilities, agriculture and forestry. The AGIO procured this statewide image database in 2001 and 2006 with General Improvement funding. The data is also provided to commercial Internet search engines so that GIS users worldwide can access it, and entrepreneurs can potentially make more informed business decisions.

The AGIO continues to work with Arkansas counties, state and federal agencies to ensure the accuracy and self-maintenance of GIS data about Arkansas for decision makers.



# **Agency Commentary**

The Arkansas Geographic Information Office acts as the functional arm of the Arkansas Geographic Information Systems (GIS) Board. The agency coordinates the development and maintenance of statewide GIS data with cities, counties, state agencies, the federal government, non-profit and private sectors. This activity reduces duplication of effort and ensures GIS data about Arkansas is readily available for decision makers. The data is made available through GeoStor the state's online GIS platform. The agency provides administrative and technical support to the Board.

The agency's long-range plan calls for investing in the most important GIS databases needed in Arkansas. The priorities represent the most commonly used base maps. These layers are used by multiple agencies, local government and private sector and are used for emergency response, natural resource management, regulatory oversight, allocation of streamlined sales tax revenue and generate real estate revenue. The agency uses the data to support the Department of Finance and Administration, Excise Tax Division in the Streamlined Sales and Use Tax program that collects and allocates sales tax at the delivery point. Points of delivery are determined by the GIS databases. The agency's request is for the state to invest in getting these critical layers created and maintained. Nearly every function in state government can be mapped and analyzed geographically if the data is available. This data is needed statewide to support statewide decision making.

The agency requests three (3) additional positions; one (1) Administrative Specialist and two (2) Analyst positions. This will increase Regular Salaries and Personal Services Matching to a total of \$144,136 each year of the biennium. The Administrative Specialist position is requested to support the administrative functions of the agency in conjunction with DFA-Service Bureau such as accounting, payroll processing, personnel related actions, procurement and budgeting. Two (2) analyst positions are requested to support and maintain the road centerline, parcel and city boundaries databases. There is a backlog in receiving, processing and publishing the data with the 2 positions currently staffed. This data is used to maintain the Streamlined Sales & Use Tax database. Without proper maintenance and support the Streamlined Sales Tax revenue is at risk.

The agency requests funding for the following priority GIS data layers, \$1,116,667 in each year to procure high resolution aerial imagery over one-third of the state. This will allow complete coverage of the state on a three year cycle. \$2,147,600 is requested for professional services to complete digital tax parcel mapping in the counties. This data is needed to support county real estate reappraisal cycles which fund public education. \$125,000 is requested in operating expense to assist counties in updating the E9-1-1 road centerline map; and \$9,500 requested for agency operating expenses. All of the base map layers requested for funding are used to support locating points of delivery for Streamlined Sales revenue and generating real estate reappraisal revenue for public education.

# **Audit Findings**

# DIVISION OF LEGISLATIVE AUDIT AUDIT OF: OFFICE OF GEOGRAPHIC INFORMATION SERVICES

Findings Recommendations

A separate report for this Agency was not issued. However, financial activity for the Agency was included in the audit of the State's CAFR for the year ended June 30, 2009.

# **Employment Summary**

	Male	Female	Total	%
White Employees	4	1	5	100 %
Black Employees	0	0	0	0 %
Other Racial Minorities	0	0	0	0 %
Total Minorities			0	0 %
Total Employees			5	100 %

# **Publications**

### A.C.A. 25-1-204

	Statutory	Requ	ired for	# of	Reason(s) for Continued
Name	Authorization	Governor	General Assembly	Copies	Publication and Distribution
Annual Report to Joint Committee on Advanced Communications & Information Technology	A.C.A 15-21-503 (i)	Y	Y	40	A.C.A. 15-21-503 (i)

# **Department Appropriation Summary**

#### **Historical Data**

	2009-20	10	2010-20	11	2010-20	11			2011-20	12					2012-20	13		
Appropriation	Actual	Pos	Budget	Pos	Authorized	Pos	Base Level	Pos	Agency	Pos	Executive	Pos	Base Level	Pos	Agency	Pos	Executive	Pos
56W Flood Map - Federal	112,585	0	122,500	0	122,500	0	116,500	0	122,500	0	122,500	0	116,500	0	122,500	0	122,500	0
56X GeoStor & Framework	90,745	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0
56Y Geographic Information Systems	721,294	5	734,126	5	783,929	5	732,587	5	4,275,490	8	789,199	6	732,587	5	4,275,490	8	789,199	6
Total	924,624	5	1,106,626	5	1,156,429	5	1,099,087	5	4,647,990	8	1,161,699	6	1,099,087	5	4,647,990	8	1,161,699	6
Funding Sources		%		%				%		%		%		%		%		%
Fund Balance 4000005	118,093	11.4	110,115	9.0			110,115	9.1	110,115	2.3	110,115	8.7	110,115	9.1	110,115	2.3	110,115	8.7
General Revenue 4000010	721,294	69.7	734,126	60.3			732,587	60.6	4,275,490	89.9	789,199	62.1	732,587	60.6	4,275,490	89.9	789,199	62.1
Federal Revenue 4000020	60,352	5.8	122,500	10.1			116,500	9.6	122,500	2.6	122,500	9.6	116,500	9.6	122,500	2.6	122,500	9.6
Trust Fund 4000050	135,000	13.0	250,000	20.5			250,000	20.7	250,000	5.3	250,000	19.7	250,000	20.7	250,000	5.3	250,000	19.7
Total Funds	1,034,739	100.0	1,216,741	100.0			1,209,202	100.0	4,758,105	100.0	1,271,814	100.0	1,209,202	100.0	4,758,105	100.0	1,271,814	100.0
Excess Appropriation/(Funding)	(110,115)		(110,115)				(110,115)		(110,115)		(110,115)		(110,115)		(110,115)		(110,115)	
Grand Total	924,624		1,106,626				1,099,087		4,647,990		1,161,699		1,099,087		4,647,990		1,161,699	

# **Agency Position Usage Report**

		FY20	08 - 2	009				FY20	09 - 20	)10				FY20:	10 - 2	011			
Authorized		Budgete	d	Unbudgeted		Authorized		Budgeted U		Budgeted		Unbudgeted		Authorized		Budgeted		Unbudgeted	
in Act	Filled	Unfilled	Total	Total	Authorized Unused	in Act	Filled	Unfilled	Total	Total	Authorized Unused	in Act	Filled	Unfilled	Total	Total	Authorized Unused		
0	0	0	0	0	0.00 %	5	5	0	5	0	0.00 %	5	5	0	5	0	0.00 %		

Agency was established by Legislative action based upon Executive Recommendation (Act 296 of 2009).

### **Analysis of Budget Request**

**Appropriation:** 56W - Flood Map - Federal

**Funding Sources:** FNM - Federal Funds

The Agency requests continuation of this program which provides services in support of the Federal Emergency Management Agency (FEMA) Map Modernization Management. FEMA requests each state to coordinate the geographic information system data development to support the creation of the digital flood map.

Upon the dissolution of the Office of Information Technology (OIT) by Acts 751 and 794 of 2007, this appropriation was transferred to the Department of Information Systems. In 2009, this appropriation was transferred to the Arkansas Geographic Office with the passage of Act 296 of 2009.

For FY12 and FY13 the agency requests a reallocation of resources of \$102,000 from the Data Processing line item to Operating Expenses line item due to a change in State accounting procedures for support and maintenance of the flood mapping databases. The agency requests restoration of the Capital Outlay line item of \$6,000 to upgrade computers and other related equipment associated with the Flood Map Project.

The Executive Recommendation provides for the Agency Request.

# **Appropriation Summary**

**Appropriation:** 56W - Flood Map - Federal **Funding Sources:** FNM - Federal Funds

#### **Historical Data**

		2009-2010	2010-2011	2010-2011		2011-2012			2012-2013	
Commitment Iter	n	Actual	Budget	Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Operating Expenses	5020002	15,190	4,300	4,300	4,300	106,300	106,300	4,300	106,300	106,300
Conference & Travel Expenses	5050009	6,679	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200
Professional Fees	5060010	41,250	0	0	0	0	0	0	0	0
Data Processing	5090012	44,367	102,000	102,000	102,000	0	0	102,000	0	0
Capital Outlay	5120011	5,099	6,000	6,000	0	6,000	6,000	0	6,000	6,000
Total		112,585	122,500	122,500	116,500	122,500	122,500	116,500	122,500	122,500
Funding Sources	5									
Fund Balance	4000005	52,258	25		25	25	25	25	25	25
Federal Revenue	4000020	60,352	122,500		116,500	122,500	122,500	116,500	122,500	122,500
Total Funding		112,610	122,525		116,525	122,525	122,525	116,525	122,525	122,525
Excess Appropriation/(Funding)		(25)	(25)		(25)	(25)	(25)	(25)	(25)	(25)
Grand Total		112,585	122,500		116,500	122,500	122,500	116,500	122,500	122,500

# **Change Level by Appropriation**

**Appropriation:** 56W - Flood Map - Federal

**Funding Sources:** FNM - Federal Funds

### Agency Request

	Change Level	2011-2012	Pos	Cumulative	% of BL	2012-2013	Pos	Cumulative	% of BL
BL	Base Level	116,500	0	116,500	100.0	116,500	0	116,500	100.0
C04	Reallocation	0	0	116,500	100.0	0	0	116,500	100.0
C08	Technology	6,000	0	122,500	105.2	6,000	0	122,500	105.2

### **Executive Recommendation**

	Change Level	2011-2012	Pos	Cumulative	% of BL	2012-2013	Pos	Cumulative	% of BL
BL	Base Level	116,500	0	116,500	100.0	116,500	0	116,500	100.0
C04	Reallocation	0	0	116,500	100.0	0	0	116,500	100.0
C08	Technology	6,000	0	122,500	105.2	6,000	0	122,500	105.2

	Justification
C04	The agency requests a reallocation of resources to properly classify \$102,000 for FY12 and FY13 from Data Processing to Operating Expenses associated with support and maintenance of the flood mapping databases.
C08	The agency requests \$6,000 in Capital Outlay from the prior biennium allocation be restored to upgrade computers and related equipment associated with the Federal Flood Map Project. Reference to this effort can be found in the agency's 2011-2013 IT Plan under Operations Hardware & Software Plan.

# **Analysis of Budget Request**

**Appropriation:** 56X - GeoStor & Framework

**Funding Sources:** TGS - Geographic Information Systems Fund

The Geographic Information Systems Fund consists of funds approved by the General Assembly, contributions, federal funds, and any other funds allowable by law. This fund is used to carry out the duties, responsibilities, and authority of the Arkansas Land Board; and create, update, and maintain GeoStor, the Arkansas Spatial Data Infrastructure.

Upon the dissolution of the Office of Information Technology (OIT) by Acts 751 and 794 of 2007, this appropriation was transferred to the Department of Information Systems. In 2009, this appropriation was transferred to the Arkansas Geographic Information Office with the passage of Act 296 of 2009.

The Agency requests Base Level appropriation for GeoStor and Framework for both years of the biennium.

The Executive Recommendation provides for the Agency Request.

# **Appropriation Summary**

**Appropriation:** 56X - GeoStor & Framework

**Funding Sources:** TGS - Geographic Information Systems Fund

### **Historical Data**

		2009-2010	2010-2011	2010-2011		2011-2012			2012-2013	
Commitme	ent Item	Actual	Budget	Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Geostor & Framework	5900047	90,745	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Total		90,745	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Funding S	Sources									
Fund Balance	4000005	65,835	110,090		110,090	110,090	110,090	110,090	110,090	110,090
Trust Fund	4000050	135,000	250,000		250,000	250,000	250,000	250,000	250,000	250,000
Total Funding		200,835	360,090		360,090	360,090	360,090	360,090	360,090	360,090
Excess Appropriation/(I	Funding)	(110,090)	(110,090)		(110,090)	(110,090)	(110,090)	(110,090)	(110,090)	(110,090)
Grand Total		90,745	250,000		250,000	250,000	250,000	250,000	250,000	250,000

### **Analysis of Budget Request**

**Appropriation:** 56Y - Geographic Information Systems

**Funding Sources:** HUA - Miscellaneous Agencies Fund

The Office of Geographic Information Systems was established as a part of the Office of Information Technology as an integral component of the Initiative for Statewide Technology Advancement (GISTA) and Arkansas' Electronic Government to provide services and data to cities, counties, state and federal agencies, private businesses, and citizens. It provides technology transfer and educational services to all users of GeoStor and enables specific county level projects to become more integrated within GeoStor. The Arkansas Spatial Data Infrastructure (ASDI) is a public resource that provides storage and easy access to essential statewide geographically linked information such as maps, boundaries, aerial photography, facilities, and natural resources.

Upon the dissolution of the Office of Information Technology (OIT) by Acts 751 and 794 of 2007, this appropriation was transferred to the Department of Information Systems. In 2009, the Arkansas Geographic Information Office (AGIO) became a state agency with the passage of Acts 244 and 296 of 2009.

This appropriation is funded by general revenue.

Base Level salaries and matching do not include appropriation for a Cost of Living Adjustment or Career Service Payments.

The Agency requests a change level of \$3,542,903 in FY12 and FY13. This request includes three (3) new positions, one (1) Administrative Specialist II and two (2) GIS Analyst positions. The increase in Regular Salaries and Personal Services Matching is \$144,136 each year. The Administrative Specialist position is requested to support the administrative and personnel functions of the agency in conjunction with DFA-Service Bureau including accounting, payroll processing, procurement, and budgeting. Two (2) analyst positions are requested to support and maintain the road centerline and parcel and city boundaries databases. There is a backlog in receiving, processing, and publishing the data with the 2 currently staffed positions. This data is used to maintain the Streamlined Sales & Use Tax database.

The Agency requests \$134,500 each year for the Operating Expenses line item. This includes an increase of \$9,500 for telecommunications, software licenses, and computer equipment for the three new positions. An increase of \$125,000 for Miscellaneous Technical Services is requested to assist counties with updating the road centerline database. The maps originate from the county judges or their E9-1-1 addressing authorities who use them for emergency responders. The maps are provided to the State for incorporation into GeoStor, the state's geographic information system (gis). The maps are used by a variety of state agencies for locating people, places, and assets. The maps also support the Streamlined Sales and Use Tax database by locating the source jurisdiction for sales tax collection. The Agency requests \$3,264,267 each year for the Professional Fees line item. Of the \$3,264,267, \$1,116,667 is for digital orthography. This is to procure 1 foot resolution data for one-third of the state each year. This will ensure imagery will not be over three years old for use by county assessors in real estate appraisal. At the local level it can be used by emergency responders, road and bridge maintenance, and voter redistricting. At the state level it can be used for economic development, forestry, agriculture, tourism, and other purposes. \$2,147,600 is

requested to procure digital tax parcel maps in partnership with county assessor offices. The Agency would partner with counties which do not have the resources to complete the data by providing 70% of expense. The tax parcel maps can be used by bankers, realtors, surveyors, floodplan administrators, economic developers, and others who make decisions involving real estate.

Executive Recommendation provides for Base Level and one (1) GIS Analyst position. The request for Professional Fees is recommended from the General Improvement Fund.

# **Appropriation Summary**

**Appropriation:** 56Y - Geographic Information Systems **Funding Sources:** HUA - Miscellaneous Agencies Fund

#### **Historical Data**

		2009-2010	2010-2011	2010-2011		2011-2012			2012-2013	
Commitment Ite	m	Actual	Budget	Authorized	Base Level	Agency	Executive	<b>Base Level</b>	Agency	Executive
Regular Salaries	5010000	363,436	363,843	362,596	362,543	470,804	405,760	362,543	470,804	405,760
#Positions		5	5	5	5	8	6	5	8	6
Extra Help	5010001	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
#Extra Help		1	2	2	2	2	2	2	2	2
Personal Services Matching	5010003	94,192	97,228	93,842	96,989	132,864	110,384	96,989	132,864	110,384
Operating Expenses	5020002	248,260	257,055	311,491	257,055	391,555	257,055	257,055	391,555	257,055
Conference & Travel Expenses	5050009	9,406	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Professional Fees	5060010	0	0	0	0	3,264,267	0	0	3,264,267	0
Data Processing	5090012	0	0	0	0	0	0	0	0	0
Capital Outlay	5120011	0	0	0	0	0	0	0	0	0
Total		721,294	734,126	783,929	732,587	4,275,490	789,199	732,587	4,275,490	789,199
Funding Sources	s									
General Revenue	4000010	721,294	734,126		732,587	4,275,490	789,199	732,587	4,275,490	789,199
Total Funding		721,294	734,126		732,587	4,275,490	789,199	732,587	4,275,490	789,199
Excess Appropriation/(Funding)		0	0		0	0	0	0	0	0
Grand Total		721,294	734,126		732,587	4,275,490	789,199	732,587	4,275,490	789,199

FY11 Budget amount in Regular Salaries and Personal Services Matching exceeds the authorized amount due to salary and matching rate adjustments during the 2009-2011 bienium.

# **Change Level by Appropriation**

**Appropriation:** 56Y - Geographic Information Systems **Funding Sources:** HUA - Miscellaneous Agencies Fund

### Agency Request

	Change Level	2011-2012	Pos	Cumulative	% of BL	2012-2013	Pos	Cumulative	% of BL
BL	Base Level	732,587	5	732,587	100.0	732,587	5	732,587	100.0
C01	Existing Program	3,408,403	3	4,140,990	565.3	3,408,403	3	4,140,990	565.3
C08	Technology	134,500	0	4,275,490	583.6	134,500	0	4,275,490	583.6

#### **Executive Recommendation**

	Change Level	2011-2012	Pos	Cumulative	% of BL	2012-2013	Pos	Cumulative	% of BL
BL	Base Level	732,587	5	732,587	100.0	732,587	5	732,587	100.0
C01	Existing Program	56,612	1	789,199	107.7	56,612	1	789,199	107.7
C08	Technology	0	0	789,199	107.7	0	0	789,199	107.7

Justification	
C01	The agency requests three (3) additional positions; one (1) Administrative Specialist and two (2) Analyst positions. This will increase Regular Salaries and Personal Services Matching a total of \$144,136 each year of the biennium. The Administrative Specialist position is requested to support the administrative functions of the agency in conjunction with DFA-Service Bureau such as accounting, payroll processing, personnel related actions, procurement and budgeting. Two (2) analyst positions are requested to support and maintain the road centerline, parcel and city boundaries databases. There is a backlog in receiving, processing and publishing the data with the 2 positions currently staffed. This data is used to maintain the Streamlined Sales & Use Tax database. Without proper maintenance and support the Streamlined Sales Tax revenue is at risk. The agency requests \$3,264,267 for FY12 and FY13. Of the \$3,264,267, \$1,116,667 is for digital orthophotography. This is to procure 1 foot resolution data for one-third of the state each year. This will ensure imagery will not be over three years old for use by county assessors in real estate appraisal. At the local level it will be used by emergency responders, road and bridge maintenance, voter redistricting, and election administering. At the state level it will be used for economic development, forestry, agriculture, tourism, and many other purposes. \$2,147,600 is requested to procure digital tax parcel maps in partnership with County Assessor Offices. The agency would partner with counties which do not have the resources to complete the data, by providing 70% of the expense to create the data. The tax parcel map can be used by bankers, realtors, surveyors, floodplain administrators, economic developers, and others who make real estate decisions. The maps are an important tool for the reappraisal process which directly benefits public education funding.
C08	The agency requests an increase of \$9,500 in Operating Expenses for telecommunications, software licenses, and computer equipment for the three new positions. An increase of \$125,000 in Operating Expenses for Miscellaneous Technical Services is requested to assist counties with updating the road centerline database. The maps originate from the County Judges or their E9-1-1 addressing authorities which use them for emergency responders. Roads are realigned, renamed, and new ones built constantly throughout the state. Maintaining the map data and providing it to the State where it is incorporated into GeoStor, the state's geographic information system (gis) platform. The maps are used by a variety of state agencies for locating people, places, and assets. The maps also directly support the Streamlined Sales & Use Tax initiative by locating the source jurisdiction for correct sales tax collection.