# ARKANSAS GEOGRAPHIC INFORMATION SYSTEMS OFFICE

### **Enabling Laws**

Act 206 of 2016 Act 8 of 2015 (Transfer of the Division of Land Surveys) A.C.A §15-21-501 - A.C.A. §15-21-505

### **History and Organization**

The Arkansas Geographic Information Systems Office (AGISO) 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 AGISO 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 AGISO became a state agency with the passage of Act 244 (HB 1356 of 87th General Assembly). The First Extraordinary Session of 2015 saw the merger of the Division of Land Surveys into the agency.

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, E9-1-1 coordinators and City Mayors. 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 AGISO 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 AGISO 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

ARKANSAS GEOGRAPHIC INFORMATION SYSTEMS OFFICE - 0472

distribution of county and city sales tax. The system added over \$13 million in sales tax revenue to the state in 2015.

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 AGISO 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 agency maintains the city boundary GIS record for the state and is required to coordinate with the cities on any city boundary change. In January of each year the agency is required by law to report city boundary changes to the U.S. Census Bureau.

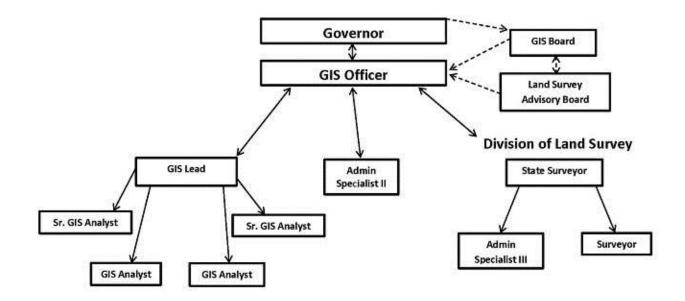
The AGISO continues to work with Arkansas counties, state and federal agencies to ensure the accuracy and self-maintenance of GIS data about Arkansas for decision makers.

#### **Arkansas Division of Land Surveys**

The Division is responsible for the restoration of the U.S. General Land Office original corner monuments of Arkansas. This includes documenting and publishing detailed certificates of the corner locations for future generations. There are over 16,000 certified corner records in the archive and more are restored each year.

The Division establishes uniform professional surveying and mapping standards, administers the rules by referring evidence of violations to the State Board of Professional Engineers and Professional Surveyors under ACA 15-21-206.

The Division is responsible for receiving, filing and publishing land survey plats of Arkansas for public inspection. Arkansas is among the first in the nation to provide access to a digital archive of land survey plats. This is in keeping with ACA 17-48-106. This remarkable system continues to grow with over 172,000 records. The land survey plats are filed in accordance with ACA 17-48-106.



### **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 to 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 when GIS data is available. This data is needed statewide to support statewide decision making.

The agency requests an increase of \$127,907 each year of the biennium. The increase includes \$121,444 in Regular Salaries and Personal Services Matching for two new Sr. GIS Analyst positions, and \$6,463 restoration of the Extra Help and Personal Services Matching.

The agency and DFA have partnered for ten years on the development and maintenance of the Streamlined Sales and Use Tax databases that are required by the national agreement. These databases are used to accurately place the source jurisdiction for collection of sales tax using GIS data of physical addresses and ZIP+4 locations. During the ten year period DFA has used two Sr. GIS Analysts under contract and funded by DFA. The contractors have been housed and under direct supervision of the GIS Office. The GIS Office has provided the workspace, software licenses, computers and other infrastructure needed to complete the work. The work involves accurately mapping addresses and assigning codes for the correct tax jurisdiction. Over this period the agency has supported the creation of physical address point data in 70 of the 75 counties. These data are coordinated with the Emergency 9-1-1 Coordinators at the local level. These positions will aid in getting the remainder of the state completed. The agency also maintains the municipal boundary map of cities. When any city annexes new territory, the physical addresses and ZIP+4 locations in the new territory must be assigned the correct tax jurisdiction code. The workload to maintain the statewide file of over 1.44 million physical address and over half a million ZIP+4 records requires two full time positions. The foremost benefit of creating and maintaining this GIS data is to save lives by having accurate address coordinates for Emergency 9-1-1 response. The secondary benefit is the accurate allocation of sales tax revenue to the proper jurisdictions.

The GIS Office proposes to convert the contract positions to Full Time Employee positions. This conversion will save the state \$54,367 in the first year and we project a \$402,030 savings over a ten year period.

The Extra Help restoration is requested to improve the accuracy and quality of the Section Township and Range corner database. The Extra Help would perform data entry on corner records from information gathered by the State Surveyor of the Division of Land Surveys. These records include latitude and longitude of corners recovered.

The agency has gained efficiencies in operational areas and therefore does not require any increase in operating expense.

### Audit Findings

#### DIVISION OF LEGISLATIVE AUDIT AUDIT OF : ARKANSAS GEOGRAPHIC INFORMATION SYSTEMS OFFICE

#### FOR THE YEAR ENDED JUNE 30, 2014

None

Findings

Recommendations

None

### State Contracts Over \$50,000 Awarded To Minority Owned Businesses Fiscal Year 2016

None

ARKANSAS GEOGRAPHIC INFORMATION SYSTEMS OFFICE - 0472 Shelby Johnson, State Geographic Information Officer

# **Employment Summary**

	Male	Female	Total	%
White Employees	5	3	8	100 %
Black Employees	0	0	0	0 %
Other Racial Minorities	0	0	0	0 %
Total Minorities Total Employees			0 8	0 % 100 %

# Publications

#### A.C.A. 25-1-201 et seq.

	Statutory	Requi	Required for		Reason(s) for Continued	Unbound Black & White Copies	Cost of Unbound Copies Produced	
Name	Authorization	Governor	General Assembly	# of Copies	Publication and Distribution	Produced During the Last Two Years	During the Last	
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)	0	0.00	

# **Department Appropriation Summary**

		н	istorical Da	Ita						Ager	icy Request	and E	xecutive Re	ecomm	nendation			
	2015-20	16	2016-20	17	2016-20	17	2017-2018								2018-20	19		
Appropriation	Actual	Pos	Budget	Pos	Authorized	Pos	Base Level	Pos	Agency	Pos	Executive	Pos	Base Level	Pos	Agency	Pos	Executive	Pos
56X GeoStor & Framework	85,496	0	850,000	0	850,000	0	850,000	0	850,000	0	850,000	0	850,000	0	850,000	0	850,000	0
56Y Geographic Information Systems	1,177,661	9	1,143,680	10	1,157,286	10	1,147,869	10	1,275,776	12	1,275,776	12	1,147,869	10	1,275,776	12	1,275,776	12
86X Parcel Mapping Grant	113,979	0	1,333,300	0	1,333,300	0	1,333,300	0	1,333,300	0	1,333,300	0	1,333,300	0	1,333,300	0	1,333,300	0
Total	1,377,136	9	3,326,980	10	3,340,586	10	3,331,169	10	3,459,076	12	3,459,076	12	3,331,169	10	3,459,076	12	3,459,076	12
Funding Sources		%		%				%		%		%		%		%		%
Fund Balance 4000005	270,926	16.0	313,504	8.5	5		373,504	9.9	373,504	9.6	373,504	9.9	433,504	11.3	433,504	11.0	433,504	11.3
General Revenue 4000010	1,177,661	69.7	1,143,680	30.9			1,147,869	30.5	1,275,776	32.8	1,147,869	30.5	1,147,869	30.0	1,275,776	32.3	1,147,869	30.0
Trust Fund 4000050	242,053	14.3	1,393,300	37.7	7		1,393,300	37.0	1,393,300	35.8	1,393,300	37.0	1,393,300	36.4	1,393,300	35.3	1,393,300	36.4
Other 4000370	0	0.0	850,000	23.0			850,000	22.6	850,000	21.8	850,000	22.6	850,000	22.2	850,000	21.5	850,000	22.2
Total Funds	1,690,640	100.0	3,700,484	100.0	)		3,764,673	100.0	3,892,580	100.0	3,764,673	100.0	3,824,673	100.0	3,952,580	100.0	3,824,673	100.0
Excess Appropriation/(Funding)	(313,504)		(373,504)				(433,504)		(433,504)		(305,597)		(493,504)		(493,504)		(365,597)	
Grand Total	1,377,136		3,326,980				3,331,169		3,459,076		3,459,076		3,331,169		3,459,076		3,459,076	

# Agency Position Usage Report

FY2014 - 2015 FY2015 - 2016							16	FY2016 - 2017									
Authorized		Budgete	d	Unbudgeted	% of	Authorized		Budgetee	1	Unbudgeted	% of	Authorized		Budgeted		Unbudgeted	% of
in Act	Filled	Unfilled	Total	Total	Authorized Unused	in Act	Filled	Unfilled	Total	Total	Authorized Unused	in Act	Filled	Unfilled	Total	Total	Authorized Unused
7	6	0	6	1	14.29 %	8	9	3	12	-4	-12.50 %	10	9	1	10	0	10.00 %

Total Budgeted positions exceed Authorized in FY16 due to the transfer of the Division of Land Surveys from the Arkansas Agriculture Department by Act 8 of the First Extraordinary Session of 2015.

# 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.

The Agency requests Base Level appropriation of \$850,000 each year for the 2017-2019 Biennium.

The Executive Recommendation provides for the Agency Request.

# **Appropriation Summary**

Appropriation:56X - GeoStor & FrameworkFunding Sources:TGS - Geographic Information Systems F

TGS - Geographic Information Systems Fund

		H	listorical Data	a		Agency Red	uest and Exec	cutive Recomm	endation	
		2015-2016	2016-2017	2016-2017		2017-2018			2018-2019	
Commitment	Item	Actual	Budget	Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Geostor & Framework	5900047	85,496	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000
Total		85,496	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000
Funding Sou	rces									
Fund Balance	4000005	156,947	313,504		373,504	373,504	373,504	433,504	433,504	433,504
Trust Fund	4000050	242,053	60,000		60,000	60,000	60,000	60,000	60,000	60,000
Other	4000370	0	850,000		850,000	850,000	850,000	850,000	850,000	850,000
Total Funding		399,000	1,223,504		1,283,504	1,283,504	1,283,504	1,343,504	1,343,504	1,343,504
Excess Appropriation/(Fundi	ng)	(313,504)	(373,504)		(433,504)	(433,504)	(433,504)	(493,504)	(493,504)	(493,504)
Grand Total		85,496	850,000		850,000	850,000	850,000	850,000	850,000	850,000

# 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 Act 244 of 2009.

This appropriation is funded by general revenue.

Base Level Regular Salaries and Personal Services Matching include the continuation of the previously authorized 2017 Salaries and Career Service Payments for eligible employees. Personal Services Matching includes the monthly contribution for State employee's health insurance for a total State match per budgeted employee of \$420 per month. Base Level salaries and matching do not include appropriation for a Cost of Living Adjustment or Merit Pay Increases.

The Agency requests a Change Level increase of \$127,907 each year of the 2017-2019 Biennium as follows:

- Regular Salaries and Personal Services Matching of \$121,444 for two new Senior GIS Analyst Grade C124 positions. The two positions are needed to assist with the maintenance of the Streamlined Sales and Use Tax databases.
- Extra Help and Personal Services Matching of \$6,463 for the restoration of the Extra Help position. The Extra Help will be necessary to improve the accuracy and quality of the Section Township and Range corner database. The Extra Help will perform data entry on corner records from information gathered by the State Surveyor of the Division of Land Surveys. The records include latitude and longitude of corners recovered.

The Executive Recommendation provides for Base Level funding and \$127,907 of appropriation only for Regular Salaries and Personal Services Matching for the two Senior GIS Analyst positions and Extra Help.

# **Appropriation Summary**

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

Funding Sources: HUA - Miscellaneous Agencies Fund

Historical Data

Agency Request and Executive Recommendation

		2015-2016	2016-2017	2016-2017		2017-2018			2018-2019	
Commitment Iter	n	Actual	Budget	Authorized	Base Level	Agency	Executive	Base Level	Agency	Executive
Regular Salaries	5010000	641,423	594,505	602,751	595,205	685,959	685,959	595,205	685,959	685,959
#Positions		9	10	10	10	12	12	10	12	12
Extra Help	5010001	0	0	0	0	6,463	6,463	0	6,463	6,463
#Extra Help		0	0	0	0	1	1	0	1	1
Personal Services Matching	5010003	200,431	182,083	187,443	185,572	216,262	216,262	185,572	216,262	216,262
Operating Expenses	5020002	268,712	245,742	245,742	245,742	245,742	245,742	245,742	245,742	245,742
Conference & Travel Expenses	5050009	14,195	14,350	14,350	14,350	14,350	14,350	14,350	14,350	14,350
Professional Fees	5060010	52,900	107,000	107,000	107,000	107,000	107,000	107,000	107,000	107,000
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		1,177,661	1,143,680	1,157,286	1,147,869	1,275,776	1,275,776	1,147,869	1,275,776	1,275,776
Funding Sources	;									
General Revenue	4000010	1,177,661	1,143,680		1,147,869	1,275,776	1,147,869	1,147,869	1,275,776	1,147,869
Total Funding		1,177,661	1,143,680		1,147,869	1,275,776	1,147,869	1,147,869	1,275,776	1,147,869
Excess Appropriation/(Funding)		0	0		0	0	127,907	0	0	127,907
Grand Total		1,177,661	1,143,680		1,147,869	1,275,776	1,275,776	1,147,869	1,275,776	1,275,776

# Change Level by Appropriation

Appropriation:56Y - Geographic Information SystemsFunding Sources:HUA - Miscellaneous Agencies Fund

#### Agency Request

Change Level		2017-2018 Pos		Cumulative	% of BL	2018-2019	Pos	Cumulative	% of BL
BL	Base Level	1,147,869	10	1,147,869	100.0	1,147,869	10	1,147,869	100.0
C02	New Program	127,907	2	1,275,776	111.1	127,907	2	1,275,776	111.1

**Executive Recommendation** 

	Change Level	2017-2018	Pos	Cumulative	% of BL	2018-2019	Pos	Cumulative	% of BL
BL	Base Level	1,147,869	10	1,147,869	100.0	1,147,869	10	1,147,869	100.0
C02	New Program	127,907	2	1,275,776	111.1	127,907	2	1,275,776	111.1

#### Justification

CO2 The GIS Office proposes to convert the contract positions to Full Time Employee positions. This conversion will save the state \$54,367 in the first year and we project a \$402,030 savings over a ten year period. The Extra Help restoration is requested to improve the accuracy and quality of the Section Township and Range corner database. The Extra Help would perform data entry on corner records from information gathered by the State Surveyor of the Division of Land Surveys. These records include latitude and longitude of corners recovered. The agency has gained efficiencies in operational areas and therefore does not require any increase in operating expense.

#### CARRY FORWARD OF ANY REMAINING FUND BALANCES FROM FISCAL YEAR 2016 TO FISCAL YEAR 2017

Agency:	Arkansas Geographic In	formation Systems Of	fice					
Program:	Geographic Information	Systems						
Act #:	730 of 2015		S	Section(s) #: 2 & 0	6			
Estimated	Carry Forward Amount	\$	55,000.00	Funding Source	: General Revenue			
Accounti	ng Information:							
Business	Area: 0472	Funds Center:	56Y	Fund:	HUA	Functional Area:	ADMN	

Current law requires a written statement be submitted to the DFA Office of Budget stating the reason(s) to carry forward funding for a program or a specific line item within a program remaining on June 30th of a fiscal year.

#### Justification for carry forward of fund balance:

Carry forward funds are requested for operating and maintaining the Arkansas Spatial Data Infrastructure, creating, updating, maintaining and disseminating framework spatial data as defined by Arkansas Code 15-21-502.

Actual Funding Carry Forward Amount \$ 84,695.00

#### Current status of carry forward funding:

Carry forward funds are requested for operating and maintaining the Arkansas Spatial Data Infrastructure, creating, updating, maintaining and disseminating framework spatial data as defined by Arkansas Code 15-21-502.

Shelby Johnson

09-27-2016

State Geographic Information Officer

Date

# Analysis of Budget Request

**Appropriation:**86X - Parcel Mapping Grant

Funding Sources:TGS - Geographic Information Systems Fund

This appropriation is used to update the statewide digital parcel data map. It is used to initiate parcel automation, accelerate the completion of parcel automation, and support improvements in those counties which have completed automation. Grants under this program are funded as follows, state funding of up to 60% of the cost of approved projects and the balance of the cost from required matching funds from the county.

The Agency requests Base Level appropriation of \$1,333,300 each year for the 2017-2019 Biennium.

The Executive Recommendation provides for the Agency Request.

#### **Appropriation Summary**

Appropriation:86X - Parcel Mapping GrantFunding Sources:TGS - Geographic Information Systems Fund

**Historical Data** Agency Request and Executive Recommendation 2015-2016 2016-2017 2016-2017 2017-2018 2018-2019 **Commitment Item** Actual Budget Authorized Base Level Agency Executive Base Level Agency Executive Statewide Parcel Map Grant Prog 5900046 113,979 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 Total 113,979 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 **Funding Sources** 4000005 113,979 0 0 0 Fund Balance 0 n Trust Fund 4000050 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 0 Total Funding 113,979 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300 Excess Appropriation/(Funding) 0 0 0 Ω 1,333,300 1,333,300 Grand Total 113,979 1,333,300 1,333,300 1,333,300 1,333,300 1,333,300