Georgia Data Analytic Center (GDAC)
FY 2022 Annual Report
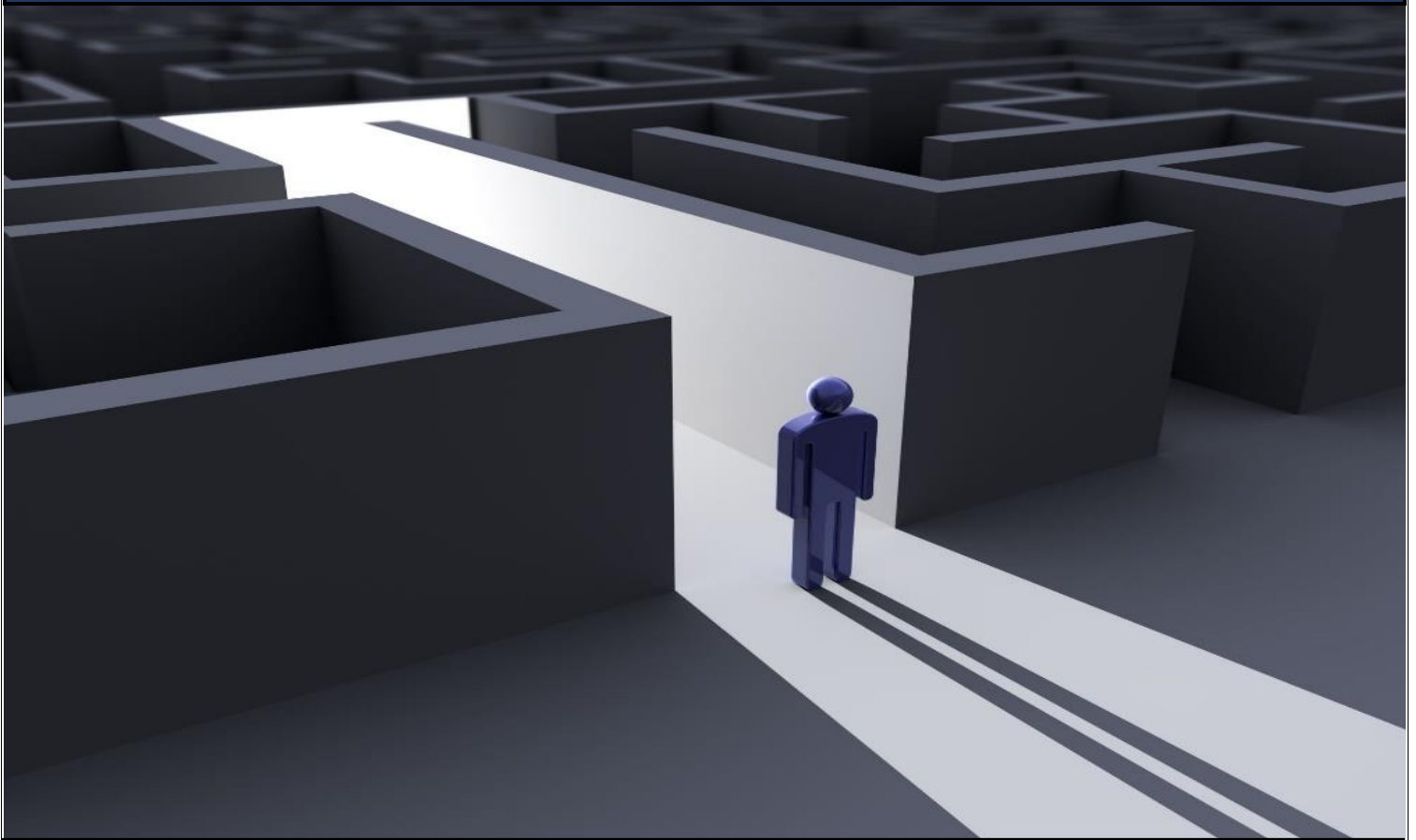
TABLE OF CONTENTS

Executive Summary

Pursuant to O.C.G.A. 45-12-150, the Georgia Data Analytic Center (GDAC) was established to build a centralized data hub for Georgia that will enable and empower its policy makers, legislators, and operational leaders to make data driven decisions. GDAC's objective is to support programs and policies that improve operational efficiencies in Georgia; and provides data transparency and accountability within the state.

Fiscal Year 2022 was a pivotal year for GDAC to demonstrate through its measurable progress and achievements its commitment to fulfilling its vision and objective. GDAC attained and accomplished many major milestones: GDAC's government cloud organization was formed and operationalized; HIPAA (Health Insurance Portability and Accountability Act) compliance security control guardrails were enforced and alarms and alerts are monitored; GDAC established and convened a data governance committee and focus groups; GDAC formalized several state agency data partnerships and established data sharing agreements with them; the GDAC website (https://gdac.georgia.gov/) was launched; the GDAC internal secure data governance website was launched; and the digital transformation began in Georgia with GDAC's modern data analytics platform.

GDAC's executive leadership played a significant role throughout the year by defining clear objectives and goals, by offering timely support with making decisions and removing barriers. State agencies have empowered GDAC by sharing their data inventories, by ingesting and reviewing data, by partnering with the GDAC team to improve overall data literacy and analytics within the State. The GDAC team was highly driven and committed throughout the year.

GDAC won a national award "**State IT Innovation of the Year 2022**" from STATESCOOP for its commendable work. STATESCOOP is a leading media brand for the state and local government sector which annually honors the most influential people and the most innovative projects that advance services and solutions for its residents. The GDAC team is thrilled to accept this award for Georgia and its partnering state agencies.

Throughout the fiscal year, new data sets were continuously added to GDAC's data inventory based on the use cases submitted.

GDAC has active data sharing agreements with the following agencies: University System of Georgia Board of Regents (USG|BOR), Department of Community Health (DCH), Department of Human Services (DHS), Department of Administration Services (DOAS), Department of Revenue (DOR), Employee Retirement System (ERS), Georgia Department of Corrections (GDC), State Accounting Office (SAO), and Teachers Retirement System (TRS).

GDAC looks forward to continually improving its cloud infrastructure, streamlining data engineering processes, and onboarding additional agencies and data sets. A strong initial foundation has paved the pathway to endless data possibilities in Georgia.
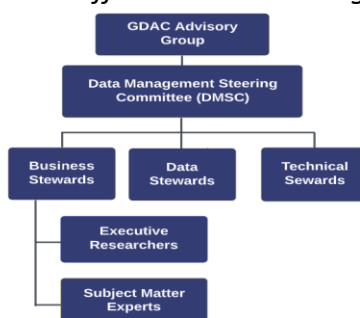
GDAC Data Governance

GDAC's Executive Leadership continues to recognize the importance of an effective data governance and data management structure.

GDAC has partnered with several agencies to form the GDAC Data Governance Committee. The committee meets quarterly with a common mission focused on methods to ensure the short-term effectiveness and long-term sustainability of GDAC. The committee's focus includes but is not limited to creating clear data security and distribution policies, standardizing common data elements across agencies, creating a statewide GDAC data dictionary and glossary, and the varying approaches and workflows to submitted use cases.

Additional agencies are onboarded as specific agency use cases are received. Three main data governance focus tracks were identified to keep momentum going: **Data Submissions, Data Literacy, and Data Access.** A dedicated GDAC Data Governance SharePoint site is used for ease of collaboration and communication. Meeting minutes and recordings are published to the site.

GDAC Data Governance Committee

Mission: *To ensure the short-term effectiveness and long-term sustainability of GDAC*

State Agency partners nominated Data Governance Committee members from their respective agencies. Primary governance responsibilities and participants for these focus groups are described below.

- **GDAC Advisory Group**- This group is comprised of OPB Executive Leadership and select members of the Data Management Steering Committee (DMSC). The group's function is to define clear objectives for the Data Management Steering Committee to ensure continued progress.
- **Data Management Steering Committee (DMSC)**- This committee includes agency business and technical stakeholders such as CIOs, CFOs, and Executive Directors. The Data Management Steering Committee ensures data quality and security by establishing policies and procedures for data access, usage, and management. Stephanie Beck, OPB Deputy Director currently serves as the Data Governance Committee Chair. This position will rotate annually.
- **Business Stewards**- The business stewards' role is to review data requirements, provide inventory of data systems, data definitions, identify data elements, identify data gaps and

timing of data completeness, data catalogs, data dictionaries, reports, usage, and redaction requirements.

- **Data Stewards**- Data stewards review data requirements, prepare, and push data to the secure GDAC cloud.
- **Technical Stewards**- Technical stewards help troubleshoot connectivity and technical issues, perform security audits, and assist with client software installation for data and business stewards.

GDAC Fiscal Year 2022 Highlights

The GDAC cloud foundation was laid in fiscal year 2022, which enabled several cloud services, features, controls, products, processes, and security guardrails that can be scaled up and down to meet future demands. GDAC built a state-of-the-art cloud architecture by running and operating creatively in several parallel tracks with its nimble team and vendor partners.

- ✓ Built a HIPAA compliant and secure client to be leveraged by the State.
- ✓ Formed new state agency partners and established data sharing agreements.
- ✓ Ingested new datasets and published new analytics; significant growth in data inventory.
- ✓ Awarded and recognized by STATESCOOP for State IT Innovation project of the year.
- ✓ Created Internal Intranet dashboards for OPB Divisional Directors to automate their manual processes to effectively facilitate and manage agency budget and operations.

The visual below highlights GDAC focus tracks in FY2022 - infrastructure, continual website monthly updates, data governance, data submissions/ingestions, data analytics.
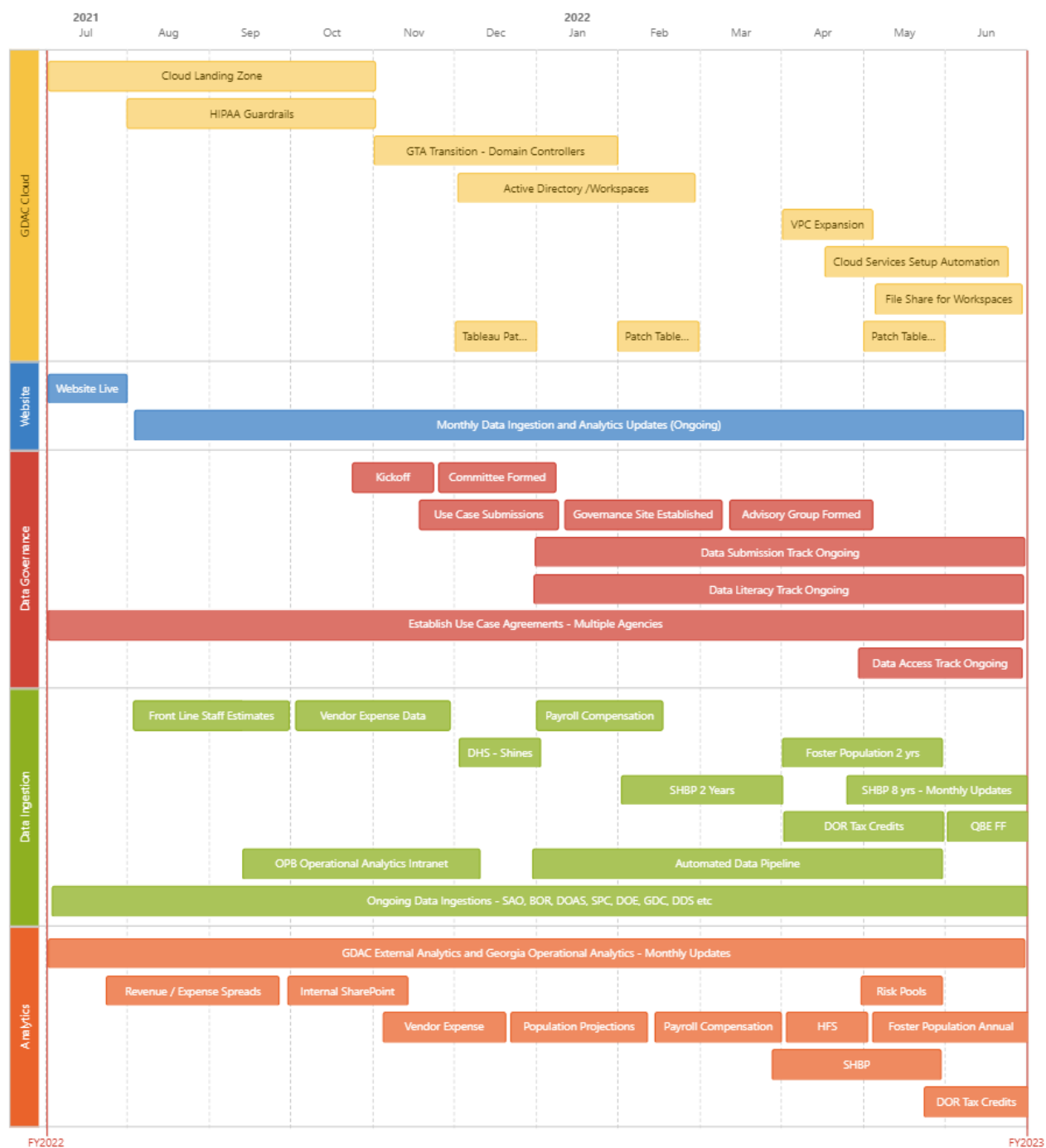
GDAC Technology Infrastructure

GDAC hired a cloud infrastructure vendor to build a GDAC cloud organization and a landing zone that allows running secure and scalable workloads in a multi-account architecture. This infrastructure includes identity and access management, governance, data security, network design, cloud monitors, alerts and alarms for auditing and logging. In parallel with this infrastructure development, another team defined, enforced and reviewed HIPAA compliance. In addition, aa third-party HIPAA vendor was engaged to independently review and verify this compliance.
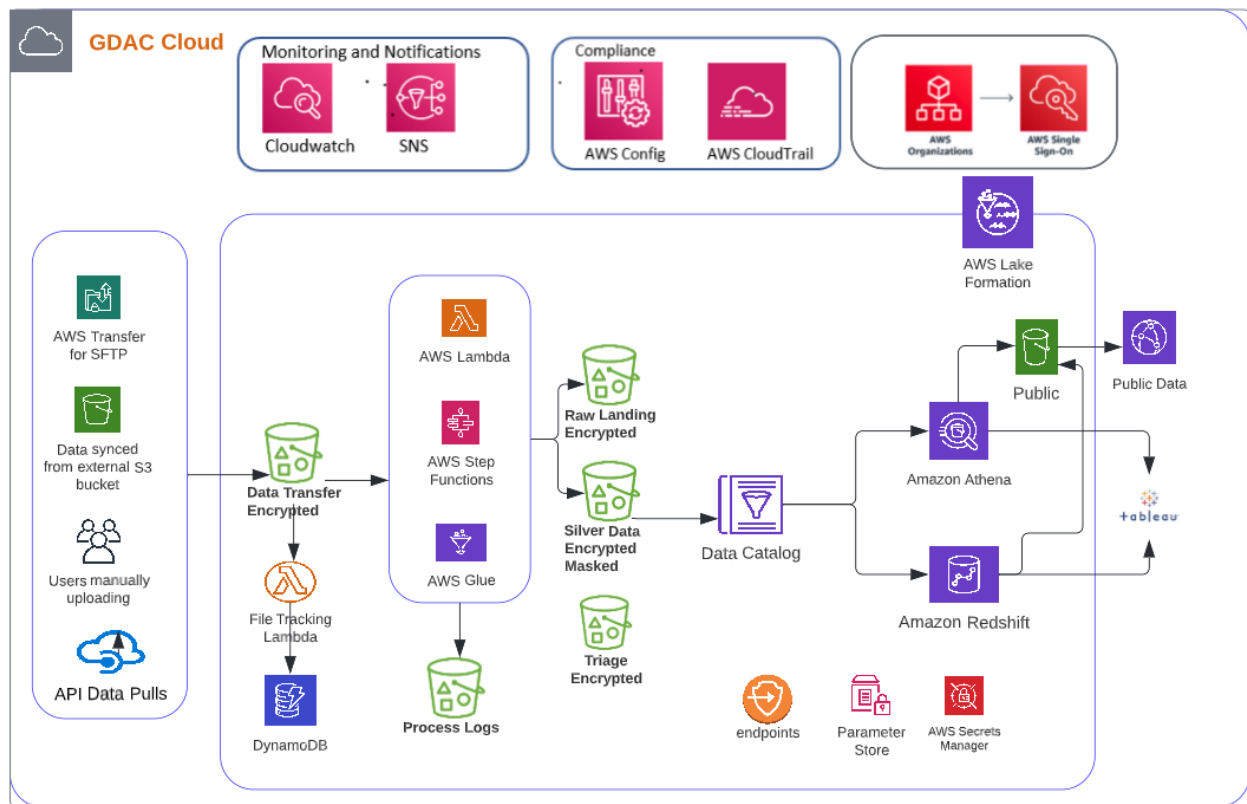
The GDAC cloud infrastructure management was transferred to Georgia Technology Authority (GTA) for the purpose of providing governed, organized, and managed cloud services. GTA integrated this cloud into a federated multi-factor authenticated security model with domain controllers and directory services. The GTA Chief Cloud Officer and Chief Cloud Security officer and their teams assist GDAC with cloud operations and management on an ongoing basis.

GDAC Data Lakehouse

The GDAC modern data architecture has a multi-tiered data lake/ data lake house. The first tier of its data lake is a data transfer (landing) tier where agencies push their data; GDAC raw tier standardizes various data formats received (compressed, encrypted, delimited, excel, json, text files etc.) for processing. The silver data lake tier houses highly compressed and curated data formats that provide exponential speeds for data processing. Silver lake stores obfuscated data for transformation, aggregation, and load into the data warehouse and/or gold data lake for easier consumption into the data analytics tools or for insights generation by machine learning and artificial intelligence tools. In addition, we also have a triage zone to conduct exploratory analysis and design for new data sets.

In quarter four of fiscal year 2022, the GDAC cloud network and virtual private cloud were further expanded and enhanced with multiple security groups and a larger IP range to provide unlimited capacity and compute. GDAC also began developing a continuous development and continuous deployment framework for its data and infrastructure pipelines.

GDAC's automated data pipeline is sort of an "**assembly line**" for data management and organization. Easy, repeatable data patterns and ingest models have been built for GDAC. Data pushed into the data transfer lake is ingested in the raw landing lake and curated into a silver staging lake, where data are compressed and partitioned in Parquet format. The team has learned and grown over the past year and has become highly effective in building efficient data processes. In May 2022, GDAC added additional team members to support our ever-growing data analytics center.

GDAC matured foundational components of our infrastructure and built several repeatable data jobs for initial and historic loads and append vs. overwrite strategies. These strategies were picked based on the nature of the data in various tables. In addition, the file processing and data transformation glue jobs are currently being automated. Lambda functions were built for handling a variety of file compression types, lambda jobs for data ingestion through application program interface (API) calls and other purposes. Data orchestration is being done using step functions. Jobs are being scheduled using event bridges.

GDAC's data analytics are currently being developed using Tableau and Power BI. We partnered with agency data owners in requirements gathering, development, testing and review, and documentation for these data analytics. Several new dashboards were added this fiscal year. We will detail them later in this report.

GDAC Strategic Goals

FY2023 GDAC Strategic Goals	
Data Governance	✓ Ensure effective data management by streamlining data submissions, data requests and data access policies and procedures ✓ Facilitate data inventory and use case submissions to GDAC ✓ Document and publish data governance policies and procedures ✓ Build data dictionaries and data catalogs ✓ Standardize data definitions and glossaries.
Policy	✓ Work with legislatures and policy makers to facilitate smoother data sharing with GDAC. ✓ Facilitate agency data inventory and use case submissions to GDAC ✓ Ensure long-term sustainability for GDAC
Agency Partners	✓ Grow data inventory and agency use cases ✓ Continue recruiting Data Governance committee members ✓ Participate in GDAC Data Governance ✓ Review and provide data and analytics feedback
GDAC	✓ Track new data and use case requests ✓ Continually ingest new data and build data analytics ✓ Maintain and enhance GDAC data architecture ✓ Build modern automated models and insights ✓ Public data publications and monthly analytics updates
Technology	✓ Work with Georgia Technology Authority to manage cloud operations ✓ Manage security control policies and guardrails ✓ User and account permission management ✓ Cloud service reviews

FY2023 Data Initiatives - Preview

Department of Family and Children Services Foster Care

This use case will facilitate tracking the foster care population as they move through the system. Emphasis will be placed to monitor foster children's entries, exits as well as allow monitoring allegations, diagnosis, placements, services and associated costs etc.

Department of Revenue Tax Credits

This use case will look at trends across individual and business income tax and include analysis to understand which tax credits are most utilized and generated, and which areas benefit the most from tax credits.

Department of Families and Children Services P-EBT

The Pandemic Electronic Benefit Transfer (P-EBT) program authorized by the Families First Coronavirus Act (FFCRA), assists families with children who were unable to receive free or reduced-price school meals due to school closures and for SNAP eligible children in childcare due to the COVID-19 pandemic. This use case will determine those eligible families based on various factors.

Quality Basic Education (QBE)

The Quality Basic Education funding formula has been a tedious manual process since its enactment in 1985. The formula is currently calculated using embedded formulas in multiple workbooks and worksheets. This use case automates parts of the QBE process to reduce the turnaround before budget recommendations are available, to eliminate human error in the various workbook formulas, and to increase overall efficiency in the K-12 formula funding process.

Department of Behavioral Health and Development (DBHDD) APEX

DBHDD funds mental health services in high schools through the Georgia Apex Program (Apex). This use case will assess the effectiveness of APEX involvement in high school's vs high schools where APEX is not present.

Department of Community Health Hospital Survey

This dashboard will provide data on hospital financials in Georgia by facility type. It will include charitable contributions, bad debt and varying expenses on inpatient and outpatient admissions.

Health Care Workforce

The Georgia Board of Health Care Workforce (GBHCW) examines the supply and distribution of Georgia's actively practicing physicians using data from license renewals. This information helps determine trends in workforce patterns (i.e., demographics, specialty, and geographical location) and to better assess the healthcare needs of Georgia's citizens.

State Charter Schools Commission

State Charter Schools are expected to meet academic, financial, and operational standards during every year of the charter term. This dashboard provides a "report card" for these schools.

Data Inventory

GDAC receives data from several agencies and departments and maintains over 170 aggregated data tables.

GDAC utilizes personally identifiable information (PII) to match individual data across data sets. The PII data are restricted to this data integration only, these data sets will not be part of the data warehouse.

See *Appendix A: Aggregated Data Tables*

Organization	Data Type
Board of Regents|University System of Georgia	Human Capital Management Data
Department of Administrative Services (DOAS)	State Agency Worker's Compensation Data, State Owned Motor Vehicle Data, Payroll Compensation, Risk Pools
Department of Behavioral Health and Development (DBHDD)	APEX Program Schools*
Department of Community Health (DCH)	State Health Benefit Plan (SHBP), Hospital Financial Survey, Medicaid*
Department of Driver Services (DDS)	Driver's License Data
Department of Education (DOE)	Quality Basic Education (QBE) Funding, School Expenditure Data, FTE Data, K12 Student Data*
Department of Family and Children Services (DFCS/DHS)	Foster Care Data
Department of Public Health (DPH)	Mortality and Birth Rates
Department of Revenue (DOR)	Sales and Use Tax Data, Tax Returns, Vehicle Registration, Tax Credits
Employees Retirement System (ERS)	Employee Tenure Data
Georgia Peace Officers' Standards and Training Council (GAPOST)	Emergency Medical Technicians (EMT) Data
Georgia Technology Authority (GTA)	Call Center Data
Governor's Office of Student Achievement (GOSA)	Criminal Justice Majors
House Budget and Research Office / Office of Planning and Budget	Budget and Appropriations (BATS) Data
Office of Planning and Budget | Grant Care	Covid Relief Funds Data (CRF), Nursing Home Obligations
State Accounting Office (SAO)	TeamWorks Financials & Human Capital Management (HCM) Data
State Property Commission (SPC)	Building, Land and Lease Inventory of Property (BLLIP) Data
Teachers Retirement System (TRS)	Employee Tenure Data
Travel Incorporated	Car, Air, and Hotel Travel
US Department of Transportation (USDOT)	Vin Information

*These data are pending as of report date.

GDAC Dashboard Overview

FY 2022 Analytics Inventory Added

Population Projections

The Governor's Office of Planning and Budget is charged with the responsibility of preparing, maintaining, and furnishing official demographic data for the state (O.C.G.A. § 45-12-171). These projections are residential based, which provides a foundation for assessing future infrastructure and service needs, such as transportation planning, certificate of need, water planning, and other publicly funded projects. These projections include state and county level projections by age, sex, and race.

The U.S. Census Bureau lists Georgia as the eighth most populous state in the country with a 2022 estimated population of approximately 10.9 million.

From 2022-2032, the state is projected to grow at an average of less than 1% per year resulting in an average yearly increase of 101,866 in residents, and 1.1 million total residents by 2032. Taliaferro, Georgia's least populous county has approximately 1,500 residents and is expected to experience negative growth of 6% over the same period, losing an average of 9 residents per year. Fulton county, Georgia's most populous county, is projected to grow at an average of 1.1% per year, increasing in approximately 144,145 total residents by 2032.

Both counties are projected to experience negative growth in ages 0-4 (Fulton (-7%) Taliaferro (-5.1%)). While Fulton will gain approximately 10,000 residents aged 20-24, Taliaferro will experience a 17% total decline in residents aged 20-24 over the same 10-year period. Similar observations were made for ages 40 and up (Fulton (15%) Taliaferro (-3.4%)) and ages 40 and below (Fulton (9%) Taliaferro (-10.2%)).
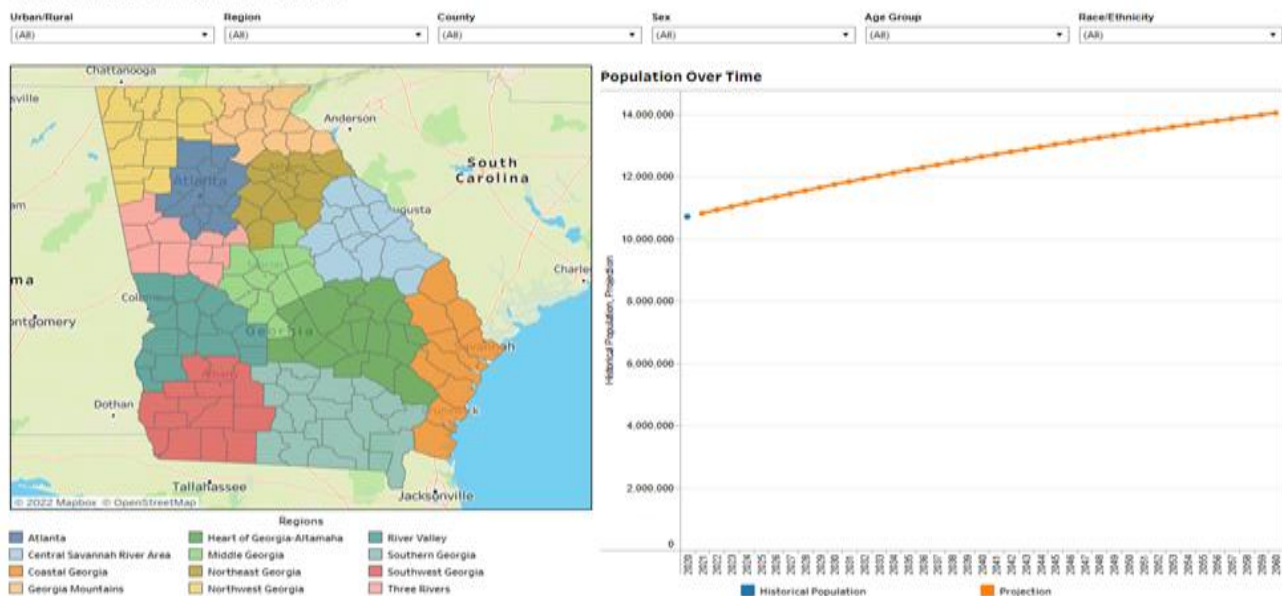
Vendor Expense

GDAC obtains State Agency Vendor Expense data from the State Accounting Office (SAO) enterprise financial system. These data include information about statewide contractors and expense that exists between two or more agencies.

Total vendor expenses for the Department of Agriculture more than doubled between FY 2020 and FY 2021. The largest contributors were expenditures in both years related to the damage caused by Hurricane Michael in October 2018. According to the National Weather Service, Michael was recorded as the first major hurricane (Category 3+) to directly impact Georgia since the 1890's.

The agency spent approximately $12.3 million in federal disaster relief grants in FY 2020 and approximately $156.9 million in FY 2021. Most of the expenditures were paid to farmers based on claims made. A small portion are administrative costs incurred during both years by the Department of Agriculture.

Vendor Expense Report

Invoice Detail   Reference   Home

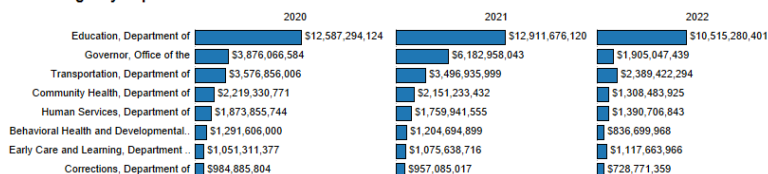| Fiscal Year	Agency Name	Vendor Name	Statewide Contractors	Interunit Vendor
(Multiple values)	(All)	(All)	(All)	(All)

Overall Agency Expense

	2020	2021	2022
Education, Department of	$12,587,294,124	$12,911,676,120	$10,515,280,401
Governor, Office of the	$3,876,066,584	$6,182,958,043	$1,905,047,439
Transportation, Department of	$3,576,856,006	$3,496,935,999	$2,389,422,294
Community Health, Department of	$2,219,330,771	$2,151,233,432	$1,308,483,925
Human Services, Department of	$1,873,855,744	$1,759,941,555	$1,390,706,843
Behavioral Health and Developmental..	$1,291,606,000	$1,204,694,899	$836,699,968
Early Care and Learning, Department ..	$1,051,311,377	$1,075,638,716	$1,117,663,966
Corrections, Department of	$984,885,804	$957,085,017	$728,771,359

Amounts are unaudited and may not reflect post-closing or prior period adjustments that occur in subsequent fiscal years. These data are from the State Accounting Office enterprise financial system. Only agencies utilizing the state's enterprise Teamworks financial system are included in this report.

Please note current fiscal year expenditures are partial as of refresh date.

Data should be used for informational purposes only and should not be used in place of audited state financial reports.

			Fiscal Year		
Agency Name	Vendor ID	Vendor Name	2020	2021	2022
Grand Total			**$33,447,359,289**	**$35,983,309,625**	**$25,269,088,682**
Accounting Office, State	0000000000	Inactive Vendor		$0	
	0000000061	Ga Dept Of Administrative Svcs	$261,531	$276,301	$268,319
	0000000126	Georgia Correctional Industries	$5,640		
	0000000201	Fulton County			$5,011
	0000000607	Ga Dept Of Labor	$4,109		
	0000000614	Georgia Building Authority	$28,640	$28,790	$21,040
	0000000684	Employees Retirement System	$2,597,810	$2,647,018	$1,856,339
	0000000685	Flexible Benefits Program	$321,383	$320,590	$239,483
	0000000688	Ga Dept Of Revenue-withholdings	$17,784,358	$22,390,444	$16,039,842
	0000000689	Ga Defined Contribution Plan	$476	$558	$8,554
	0000000690	Internal Revenue Service-withholdings	$108,286,209	$119,898,913	$86,130,817
	0000000695	Teacher's Retirement System	$12,426		
	0000001300	Georgia Dept Of Education		$889	
	0000004053	Georgia Dept Of Economic Developme..		$3,804	
	0000004460	Informa Tech Holding Llc	$2,786		
	0000004596	Canon Usa Inc	$7,950	$15,379	$9,889
	0000004975	Shi International Corp	$88,440	$39,819	$39,574
	0000005144	Financial Accounting Foundation	$706	$741	
	0000008166	Ernst & Young Llp	$789,139	$531,772	$377,619

Payroll Compensation

The State of Georgia payroll compensation data are collected from the State Accounting Office (SAO). These salary reports are updated monthly and present full-time employee salary rates by fiscal year, agency, employee detail, and pay type.

The retention of Juvenile Correction Officers (JCOs) has been an ongoing challenge for the Department of Juvenile Justice (DJJ). According to the agency's FY 2021 annual report, the turnover rate was 90% for FY 2021, down 7 % from the previous fiscal year.

Overtime payout for the agency averaged $2.8 million from FY 2018 - FY 2020, dropping significantly in FY 2021 to approximately $12,000. Below is a FY 2018 – FY 2020 snapshot of base and overtime earnings for Juvenile Correction Officers 1 and 2. Some employees received more in overtime pay than base earnings which contributed to their total earnings doubling. Assuming 2,080 work hours in a typical year, these employees worked approximately 1,380 additional hours. DJJ's Office of Human Resources has implemented an aggressive recruitment strategy for correctional officers and other areas where retention is a challenge. At the time of reporting, GDAC had not determined what contributed to the significant drop in FY 2021.
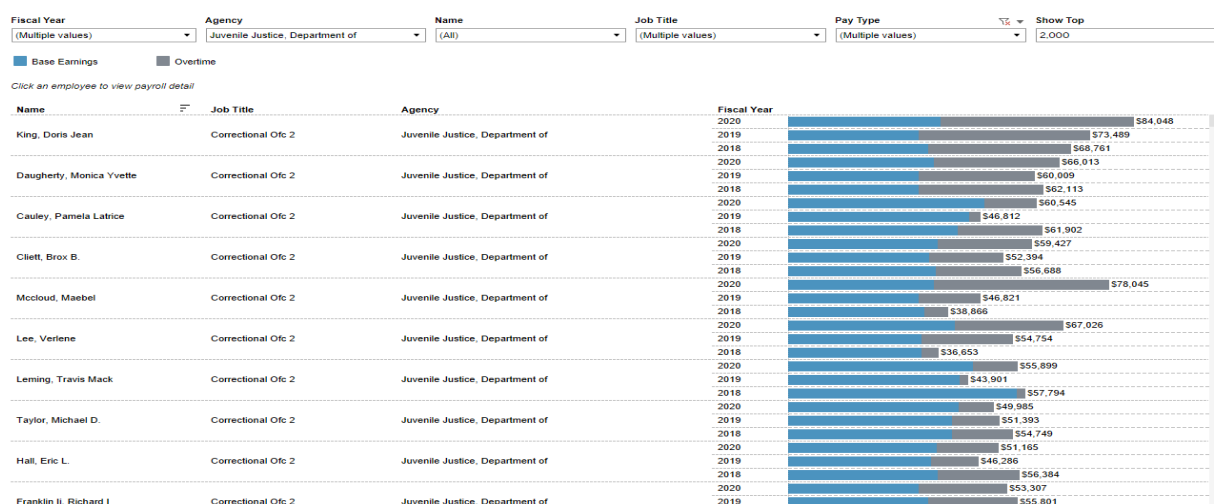
DJJ Correctional Officer I and II Change in Position Count
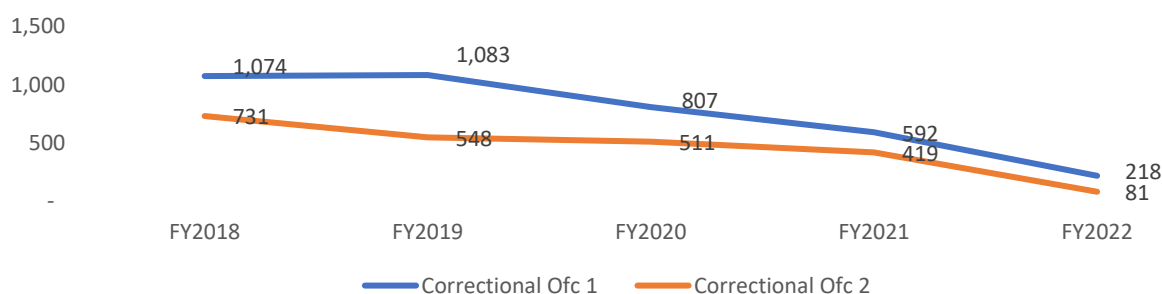
*FY 2022 was not complete at the time of reporting.

https://djj.georgia.gov/about-us/djj-publications

State Health Benefit Plan (SHBP) - Enrollment

The Georgia Department of Community Health (DCH) administers the State Health Benefit Plan (SHBP). The plan consists of three plans established by Georgia law: a plan for State employees (O.C.G.A. § 45-18-2), a plan for public school teachers (O.C.G.A. § 20-2-881), and a plan for public school employees other than teachers (O.C.G.A. § 20-2-911). Enrollment can be viewed by county, employee type, and plan group.

Teachers' salaries are a combination of state and local funding. The Quality Basic Education (QBE) formula calculates the state portion using Certified Personnel Information (CPI) reported to the Georgia Department of Education (GaDOE) from the school districts. QBE funding allotments are posted to the GaDOE website. Recognizing the current teacher shortage across the state and nation, and the struggle for some school districts to recruit and retain teachers, SHBP enrollment for active "teachers" employee type group and the number of teachers funded in QBE were observed independently.

Overall SHBP enrollment declined by 11% between 2018 and 2022 while enrollment for active teachers declined by 6%. Approximately 14.3% of counties experienced an increase in SHBP enrollment for active teachers while 85.7% experienced declines. It is important to note that enrollment also includes eligible family members. Gwinnett, Cobb, DeKalb, and Fulton County, Georgia's four largest school districts declined in SHPB enrollment for active teachers at an average of 10% during this period.

The number of teachers funded through QBE increased slightly by 1.1% from 2018-2022. Although Gwinnett County, the state's largest district, increased by 5% in the number of teachers funded, the average decline was 2.3% for the remaining three larger school systems. DeKalb, which is the third largest school district experienced the greatest change among the top four districts. According to a Dekalb news blog, DeKalb has the highest number of open teacher positions of any metro Atlanta school district. While the number of teachers funded declined by 7.6% for DeKalb from 2018-2022, SHBP enrollment declined by 13%.
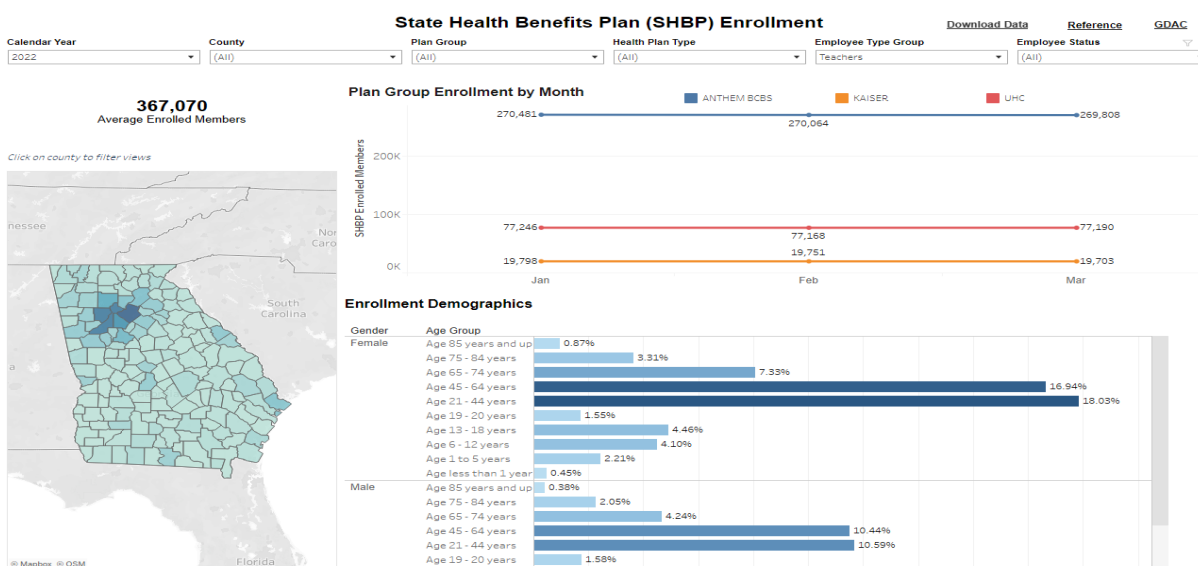
State Health Benefit Plan (SHBP) - Pharmacy

The State Health Benefit Plan (SHBP) Pharmacy dashboard allows users to view prescription claims, counts, and costs for State of Georgia employees enrolled in the SHBP.

According to the Georgia Department of Public Health, cardiovascular disease (including heart disease and stroke), cancer, and diabetes are the leading causes of death in Georgia. Combined they contributed to half of all deaths in 2020. Infectious disease, including COVID-19 was the third leading cause.

While most members were prescribed medications described to treat bacterial infections such as azithromycin and amoxicillin, the majority of claims submitted were for medications described to address high blood pressure and diabetes. Forms of Levothyroxine, Atorvastatin, Amlodipine, Lisinopril, and Metformin were the most prescribed in all years (2017-2021). In 2021 approximately 189,000 claims were paid for the PFIZER Covid 19 vaccine at a cost of $6.5 million.

Humira, an immunosuppressive drug has been the most expensive prescription in cost year over year. In 2021, the state spent approximately $109 million in claims, an increase of 82% from 2017.

In 2021 total claims were approximately 12 million, an increase of 1% from 2017. Whereas prescription counts were down by 5% (11,192,735) from 2017, there was a 44% ($1.5 million) increase in prescription costs.
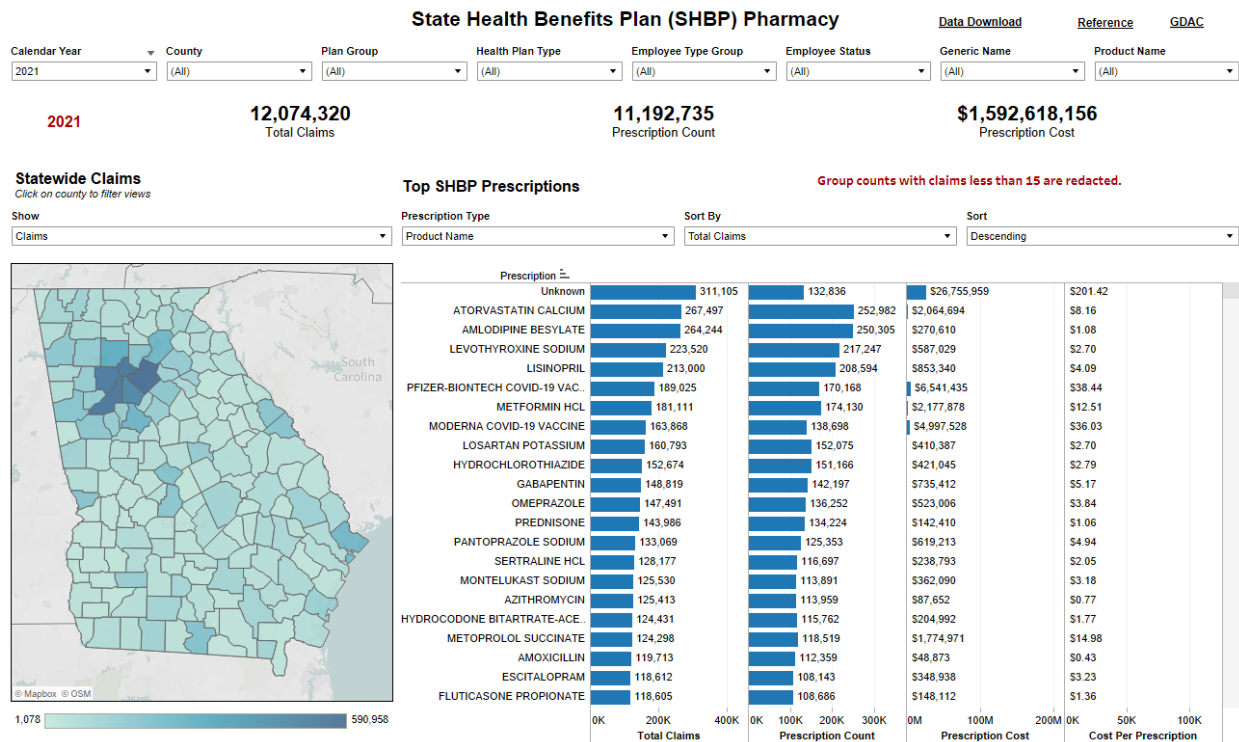
State Health Benefit Plan (SHBP) - Facilities

The State Health Benefit Plan (SHBP) Facilities dashboard allows users to view facility inpatient days, diagnosis, provider information, and costs for State of Georgia employees enrolled in the SHBP. This dashboard can be used to analyze the leading causes of inpatient admissions and associated costs.

Sepsis is the body's extreme response to an infection. Per the Centers for Disease Control and Prevention (CDC), at least 1.7 million adults in America develop sepsis and nearly 270,000 dies as a result.

From 2016-2019 a diagnosis of sepsis has led the cause of inpatient facility stays for SHBP members. In 2020, COVID-19 was the leading cause of facility stays with approximately 18,600 inpatient days, pushing sepsis to number two at 13,897 inpatient days. There was an average of 27,000 SHBP patients in 2021.

End stage renal disease, sepsis, and encounters for antineoplastic chemotherapy were the top 3 diagnoses contributing to total cost. These costs increased by 35% from 2016-2019. In 2020 COVID-19 rounded out the top 3 for total cost at approximately $68.3 million, increasing to approximately $209 million in 2021. Inpatient days for COVID-19 increased from 18,600 to 41,968 during the same period.

While inpatient days decreased by 3% from 2016-2021 total cost for stays more than doubled at 59% from $1.67 billion in 2016 to approximately $2.66 billion in 2021.
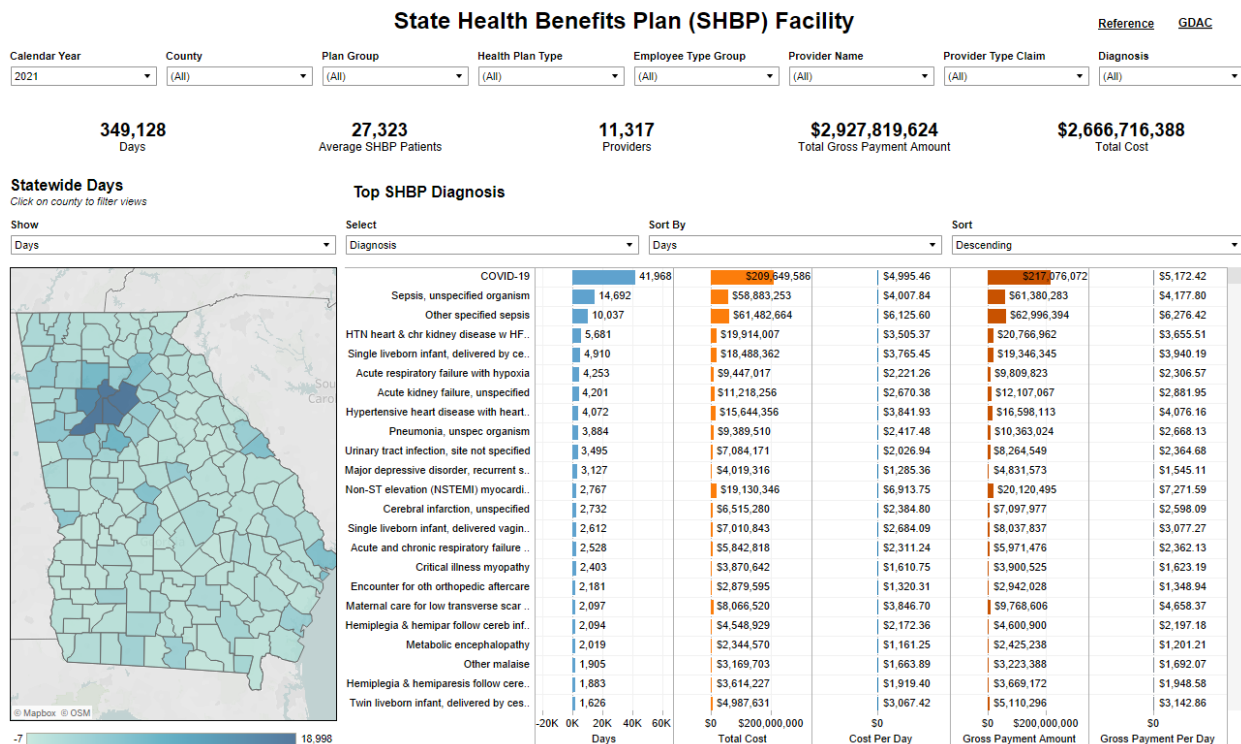
State Health Benefit Plan (SHBP) – Facility Detail

The State Health Benefit Plan (SHBP) Facility Detail dashboard provides the average allowed amounts per patient for medical services. Detail can be viewed by calendar year, plan group, plan type, type of service and provider.

The goal of this dashboard is to be used as a sort of comparison tool between procedures and providers. At the time of reporting this tool was in user acceptance testing (UAT) for quality and performance.

State Health Benefits Plan (SHBP)
Average Allowed Amounts for Procedures by Facility

Reference

Calendar Year	Plan Group	Health Plan Type	Provider Name	Facility Service	Procedure	Top Costs
2022	(All)	(All)	(All)	(All)	(All)	100

Fiscal Year	Provider Name	Facility Service	Procedure	Allowed Amount Per Patient
2022	PIEDMONT ATHENS RE	Drugs Requiring Detailed Coding	Inject, nusinersen, 0.1 mg	$138,338
	PIEDMONT NEWNAN HO	Drugs Requiring Detailed Coding	Inject, nusinersen, 0.1 mg	$138,338
			Inject, ocrelizumab, 1 mg	$38,350
	SGMC OUTPATIENT PL	Drugs Requiring Detailed Coding	Inject, ravulizumab-cwvz, 10 mg	$141,004
	ERLANGER MEDICAL C	Drugs Requiring Detailed Coding	Inject, ravulizumab-cwvz, 10 mg	$68,676
	CHILDRENS AT EGLE	Supply/Implants	Cochlear device incl all int & ext components	$137,202
		Drugs Requiring Detailed Coding	Inject, ravulizumab-cwvz, 10 mg	$137,032
			Injection eculizumab, 10 mg	$38,534
			Injection pegaspargase, per single dose vial	$0
		Cardiac Cath Lab	R&L HRT CATH CHD IMG CATH TRGT ZON ABNL NT CONNJ	$14,823
		Operating Room Services	COCHLEAR DEVICE IMPLANTATION W/WO MASTOIDECTOMY	$1,361
	TALLAHASSEE MEMORI	Cardiac Cath Lab	INSJ/RPLCMT PERM DFB W/TRNSVNS LDS 1/DUAL CHMBR	$52,490
	HAMILTON MEDICAL C	Drugs Requiring Detailed Coding	Ustekinumab, for subcutaneous injection, 1 mg	$96,637
		Operating Room Services	INSJ/RPLCMT PERM DFB W/TRNSVNS LDS 1/DUAL CHMBR	$14,424
	COLQUITT REGIONAL	Drugs Requiring Detailed Coding	Inject, ocrelizumab, 1 mg	$45,531
	NORTHEAST GEORGIA MEDICAL CTR	Operating Room Services	REVJ TOT HIP ARTHRP BTH W/WO AGRFT/ALGRFT	$42,894
	WELLSTAR PAULDING	Drugs Requiring Detailed Coding	Inject, ocrelizumab, 1 mg	$39,539
	MEMORIAL HEALTH UN	Operating Room Services	REVJ TOT HIP ARTHRP BTH W/WO AGRFT/ALGRFT	$49,370
		OR/Minor Surgery	INSJ/RPLCMT PERM DFB W/TRNSVNS LDS 1/DUAL CHMBR	$29,237
	CHILDREN S HEALTHC	Supply/Implants	Cochlear device incl all int & ext components	$69,618
		Drugs Requiring Detailed Coding	Inject, asparaginase, recomb, (rylaze), 0.1 mg	$42,911
			Inject, crizanlizumab-tmca, 5 mg	$19,810
			Injection pegaspargase, per single dose vial	$0
		Operating Room Services	COCHLEAR DEVICE IMPLANTATION W/WO MASTOIDECTOMY	$27,553
	LAUREL HEIGHTS HOS	Total Charge	Psychiatric health facility service per diem	$34,398
	PIEDMONT HOSPITAL	Supply/Implants	Gen, neurostim, nonrechg CAR sinus baroreceptor	$44,408

$0 $50,000 $100,000 $150,000
Allowed Amount Per Patient

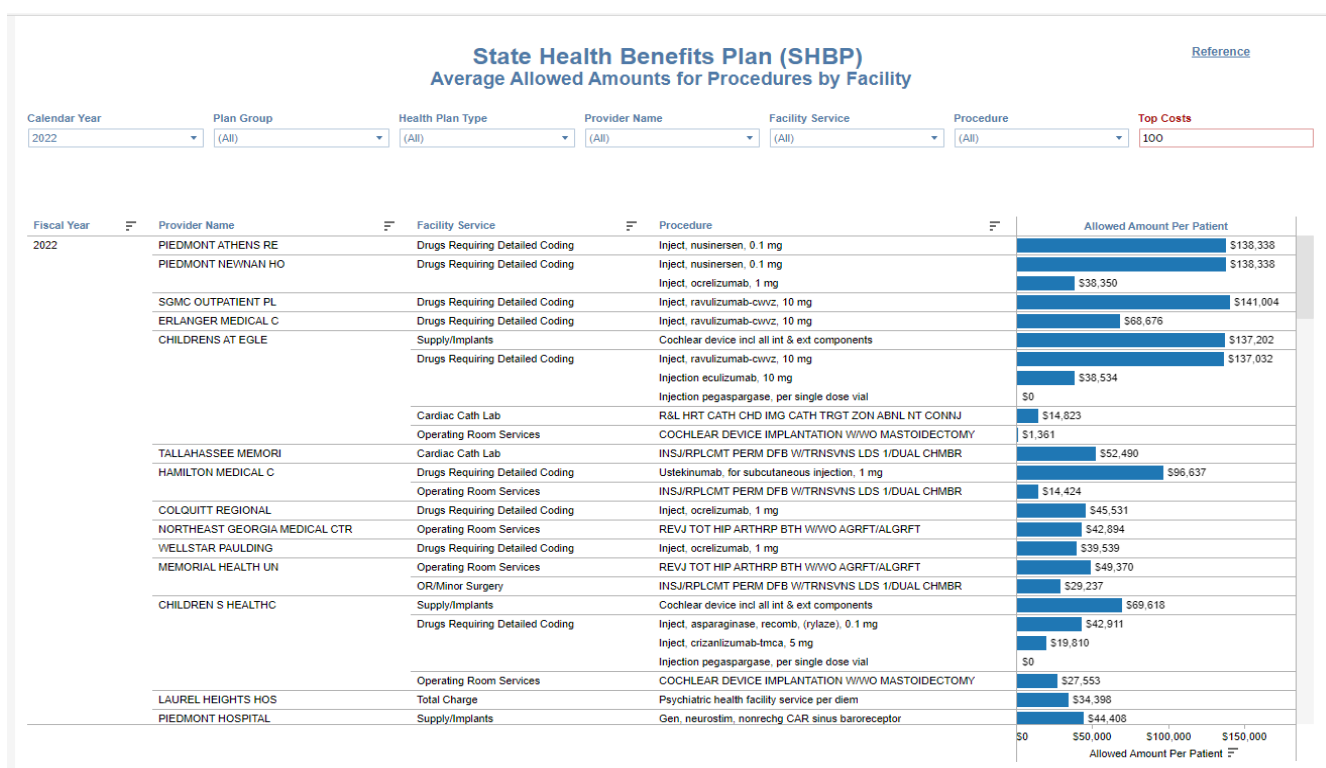## State Health Benefit Plan (SHBP) - Professional Services

The State Health Benefit Plan (SHBP) Professional Services dashboard allows users to view professional medical services claims, counts, and costs for State of Georgia employees enrolled in the SHBP.

From 2017-2021 total claims increased by 19% resulting in an increase in costs by 69%, or approximately $474 million. Seventeen thousand additional providers were added over the 5-year time frame, up from an average of 127,700 in 2017. Average SHBP patients increased by 31,000 in this four-year period, up by 11% from 2017.

The statewide map below indicates that Gwinnett, Cobb, and Fulton County account for a large percentage of claims compared to other counties in the state.
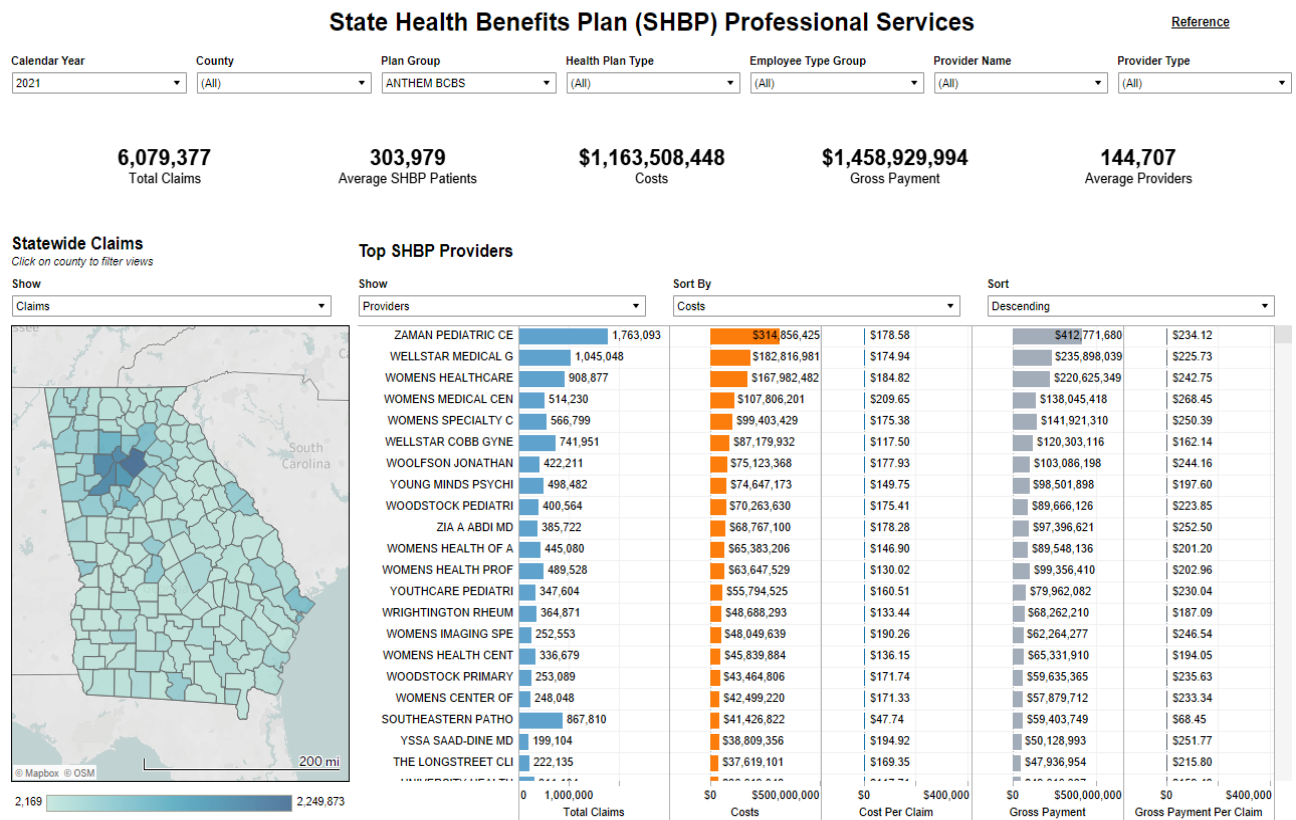
FY 2021 Existing Analytics Inventory

These dashboards were included in the FY 2021 GDAC Annual Report.

Building and Lease Inventory of Property

The State Properties Commission (SPC) collects the building and lease inventory data for all State of Georgia agencies based on data as reported by state agencies and authorities. These data are submitted to GDAC monthly.

State Agency Expenditures

State Agency Expenditures are collected from the State Accounting Office (SAO) enterprise financial system monthly. The dashboards allow users to review the current year's spending activity as well as historical spending patterns.

State of Georgia Average Employee Salary Rates

The State of Georgia employee salary data are collected from the State Accounting Office (SAO) and the Board of Regents (BOR). These salary reports are updated monthly and present full-time employee salary rates by fiscal year and by agency.

Georgia Technology Authority Service Desk

The Georgia Technology Authority (GTA) oversees a consolidated service desk call center to handle issues involving IT infrastructure and network services for the Georgia Enterprise Technology Services (GETS) agencies. GDAC collects these service desk call data from GTA monthly.

Coronavirus Relief Fund (CRF) Analytics

The COVID relief funding dashboard tracks the Coronavirus Relief Funds the state has received through the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Public Law No: 116-136) federal funds.

Medicaid Health Care Quality Measures

Medicaid population data are obtained from Centers for Medicare and Medicaid Services (CMS) website and are refreshed annually.

Medicaid Drug Utilization

State Drug Utilization data are obtained from Centers for Medicare and Medicaid Services (CMS) and are processed and updated quarterly.

Appropriations Tracking

The House Budget and Research Office (HBRO) and Office of Planning and Budget (OPB) provide budget appropriations data from the Budget and Appropriations Tracking System (BATS).

Quality Basic Education (QBE) Funding

Quality Basic Education (QBE) funding data are provided by the Georgia Department of Education (GaDOE). QBE supports K-12 education funding for every student in Georgia. These funding data are updated after each term.

Appendix A: Aggregated Data Sources

Organization	Table Name
Georgia General Assembly/Office of Planning of Budget	BATS_ProgramData
Georgia General Assembly/Office of Planning of Budget	BATS_ProgramFunding
Georgia General Assembly/Office of Planning of Budget	BATS_agency
Georgia General Assembly/Office of Planning of Budget	BATS_Budgetchange
Georgia General Assembly/Office of Planning of Budget	BATS_BudgetchangeData
Georgia General Assembly/Office of Planning of Budget	BATS_BudgetchangeFunding
Georgia General Assembly/Office of Planning of Budget	BATS_CommonChange
Georgia General Assembly/Office of Planning of Budget	BATS_FundSource
Georgia General Assembly/Office of Planning of Budget	BATS_lookup
Georgia General Assembly/Office of Planning of Budget	AppropriationSubChairs
University System of Georgia Board of Regents (USG BOR)	BOR_employee
University System of Georgia Board of Regents (USG BOR)	BOR_ Position
University System of Georgia Board of Regents (USG BOR)	BOR_Class_Indicator
University System of Georgia Board of Regents (USG BOR)	BOR_Employee_Status
University System of Georgia Board of Regents (USG BOR)	BOR_FLSA
University System of Georgia Board of Regents (USG BOR)	BOR_Full_Partime
University System of Georgia Board of Regents (USG BOR)	BOR_Institution_Addresses
University System of Georgia Board of Regents (USG BOR)	BOR_Pay_Frequency
University System of Georgia Board of Regents (USG BOR)	BOR_JobCode_JobTitle
University System of Georgia Board of Regents (USG BOR)	BOR_Regular_Temporary
University System of Georgia Board of Regents (USG BOR)	BOR_WorkerComp_Agency
Department of Administrative Service (DOAS)	dlossrun
Department of Administrative Service (DOAS)	dpaymenttransactions
Department of Administrative Service (DOAS)	dmedicalbilldetail
Department of Administrative Service (DOAS)	worker_comp_agency
Department of Administrative Service (DOAS)	motor_vehicle
Department of Community Affairs (DCA)	Low_medium_income
Department of Community Health (DCH)	GA_DCH_DataProbe_Lookups
Department of Community Health (DCH)	GA_DCH_DataProbe_Lookups_2
Department of Community Health (DCH)	Pharmacy from SFY 2016 to current
Department of Community Health (DCH)	Prof from SFY 2016 to current
Department of Community Health (DCH)	Facility Header from SFY 2016 to current
Department of Community Health (DCH)	Facility Details from SFY 2016 to current
Department of Community Health (DCH)	Eligibility from SFY 2016 to current
Department of Driver Services (DDS)	active_registrations_citizens
Department of Human Services (DHS)	Fs_ma_tf
Georgia Department of Education (GaDOE)	EARNINGS
Georgia Department of Education (GaDOE)	INSTRUCTION
Georgia Department of Education (GaDOE)	SCH_DIST_ADDRESSES
Georgia Department of Education (GaDOE)	QBE_program
Georgia Department of Education (GaDOE)	QBE_School_district
Georgia Department of Education (GaDOE)	QBE_School_term
Georgia Department of Education (GaDOE)	QBE_Earnings
Department of Revenue (DOR)	tax_report_file

Appendix A: Aggregated Data Sources

Organization	Table Name
Teachers Retirement System (TRS)	trs_tenure
Employee Retirement System (ERS)	ers_tenure
State Property Commission (SPC)	Building
State Property Commission (SPC)	BuildingFacadeType
State Property Commission (SPC)	BuildingImprovementType
State Property Commission (SPC)	BuildingMechanicalSystemType
State Property Commission (SPC)	BuildingRoofType
State Property Commission (SPC)	BuildingSecondaryUseType
State Property Commission (SPC)	BuildingStructureType
State Properties Commission (SPC)	Entity
State Properties Commission (SPC)	Landlord
State Properties Commission (SPC)	LeasedBuilding
State Properties Commission (SPC)	LeasedBuildingExpense
State Properties Commission (SPC)	OtherAsset
State Properties Commission (SPC)	Property
State Properties Commission (SPC)	PropertyDeed
Office of Planning and Budget (OPB)	PBCS_Account
Office of Planning and Budget (OPB)	PBCS_Agency_Prog_SubProg_FSTYPEState
Office of Planning and Budget (OPB)	PBCS_Agency
Office of Planning and Budget (OPB)	PBCS_Agency_Prog_SubProg_OBJClass
Office of Planning and Budget (OPB)	PBCS_Agency_Prog_SubProg_PositionCtn
Office of Planning and Budget (OPB)	PBCS_Agency_Prog_Sub_FSTYPE_FedOther
Office of Planning and Budget (OPB)	PBCS_Program
Office of Planning and Budget (OPB)	PBCS_SubProgram
Office of Planning and Budget (OPB)	Nursing Home Obligation
Office of Planning and Budget (OPB)	Nursing Home Expense
Office of Planning and Budget (OPB)	Grant Management (ARPA)
Office of Planning and Budget (OPB)	Airport_Codes
Travel Inc.	CAR_itinerary
Travel Inc.	HOTEL_itinerary
Travel Inc.	CarType
Georgia Technology Authority (GTA)	Service Desk
State Accounting Office (SAO)	concurTravelExpenses
State Accounting Office (SAO)	ps_divers_ethnic
State Accounting Office (SAO)	ps_personal_data
State Accounting Office (SAO)	ps_action_tbl
State Accounting Office (SAO)	ps_actn_reason_tbl
State Accounting Office (SAO)	ps_addresses
State Accounting Office (SAO)	Ps_bus_unit_tbl_fs
State Accounting Office (SAO)	ps_chartfield1_tbl
State Accounting Office (SAO)	ps_class_cf_tbl
State Accounting Office (SAO)	ps_company_tbl
State Accounting Office (SAO)	ps_dept_tbl
State Accounting Office (SAO)	ps_dx_com_fund_src
State Accounting Office (SAO)	ps_dx_emp_cls_mail
State Accounting Office (SAO)	ps_dx_empl_nosec_v
State Accounting Office (SAO)	ps_dx_employee_vw2

Appendix A: Aggregated Data Sources

Organization	Table Name
State Accounting Office (SAO)	ps_dx_emply_nt_vw2
State Accounting Office (SAO)	ps_dx_emplys_nt_vw
State Accounting Office (SAO)	ps_dx_enc_tbl
State Accounting Office (SAO)	ps_dx_fast_scrty_3
State Accounting Office (SAO)	ps_dx_flsa_dollar
State Accounting Office (SAO)	ps_dx_flsa_jobcode
State Accounting Office (SAO)	ps_dx_gls4092x_tbl
State Accounting Office (SAO)	ps_dx_job_pers_vw2
State Accounting Office (SAO)	ps_dx_ld_history
State Accounting Office (SAO)	ps_dx_posdata5_tbl
State Accounting Office (SAO)	ps_dx_prsn_dta_vw2
State Accounting Office (SAO)	ps_dx_reprts_to_vw
State Accounting Office (SAO)	ps_dx_vacant_posn
State Accounting Office (SAO)	ps_earnings_tbl
State Accounting Office (SAO)	ps_employees
State Accounting Office (SAO)	ps_eoaw_stepinst
State Accounting Office (SAO)	ps_eoaw_userinst
State Accounting Office (SAO)	ps_ep_appr
State Accounting Office (SAO)	ps_ep_appr_xref
State Accounting Office (SAO)	ps_ethnic_grp_tbl
State Accounting Office (SAO)	ps_fund_tbl
State Accounting Office (SAO)	ps_gl_account_tbl
State Accounting Office (SAO)	ps_itm_cat_tbl
State Accounting Office (SAO)	ps_job
State Accounting Office (SAO)	ps_job_family_tbl
State Accounting Office (SAO)	ps_jobcode_tbl
State Accounting Office (SAO)	ps_jrnl_header
State Accounting Office (SAO)	ps_jrnl_ln
State Accounting Office (SAO)	ps_kk_activity_log
State Accounting Office (SAO)	ps_kk_budget_hdr
State Accounting Office (SAO)	ps_kk_budget_ln
State Accounting Office (SAO)	ps_kk_cf_value
State Accounting Office (SAO)	ps_kk_liquidation
State Accounting Office (SAO)	ps_kk_source_hdr
State Accounting Office (SAO)	ps_kk_source_ln
State Accounting Office (SAO)	ps_ledger
State Accounting Office (SAO)	ps_ledger_kk
State Accounting Office (SAO)	ps_location_tbl
State Accounting Office (SAO)	ps_names
State Accounting Office (SAO)	ps_pay_trms_tbl
State Accounting Office (SAO)	ps_per_org_asgn
State Accounting Office (SAO)	ps_po_hdr
State Accounting Office (SAO)	ps_po_line
State Accounting Office (SAO)	ps_po_line_distrib
State Accounting Office (SAO)	ps_position_data
State Accounting Office (SAO)	ps_posn_history2
State Accounting Office (SAO)	ps_posn_incumbent
State Accounting Office (SAO)	ps_program_tbl
State Accounting Office (SAO)	ps_project_fs

Organization	Table Name
State Accounting Office (SAO)	ps_sal_grade_tbl
State Accounting Office (SAO)	ps_sal_plan_tbl
State Accounting Office (SAO)	ps_sal_step_tbl
State Accounting Office (SAO)	ps_set_cntrl_rec
State Accounting Office (SAO)	ps_sjt_class_all
State Accounting Office (SAO)	ps_sjt_dept
State Accounting Office (SAO)	ps_sjt_opr_cls
State Accounting Office (SAO)	ps_tl_empl_data
State Accounting Office (SAO)	ps_tl_trc_tbl
State Accounting Office (SAO)	ps_tl_rptd_time
State Accounting Office (SAO)	ps_vchr_acctg_line
State Accounting Office (SAO)	ps_vendor
State Accounting Office (SAO)	ps_vendor_addr
State Accounting Office (SAO)	ps_vendor_addr_phn
State Accounting Office (SAO)	ps_vndr_hdr_ind_cl
State Accounting Office (SAO)	ps_voucher
State Accounting Office (SAO)	psoprdefn
State Accounting Office (SAO)	pstreenode
State Accounting Office (SAO)	psxlatitem
State Accounting Office (SAO)	xlattable_vw
State Accounting Office (SAO)	LedgerGROUP_LKP
State Accounting Office (SAO)	Ledger_LKP
State Accounting Office (SAO)	TRANSACTN_SOURCE_LKP
State Accounting Office (SAO)	Vendor_Classes
State Accounting Office (SAO)	5_DIGIT_NIGP_CODES
State Accounting Office (SAO)	use_procard
State Accounting Office (SAO)	PO_Line_Status
State Accounting Office (SAO)	PO_STATUS
State Accounting Office (SAO)	PO_TYPE
State Accounting Office (SAO)	JCCP_Job_Code_Crosswalk
State Accounting Office (SAO)	NIGP_CODES
State Accounting Office (SAO)	Distrib_LN_Status
State Accounting Office (SAO)	ps_dx_paychk_opb_v
State Accounting Office (SAO)	FLSA_Lookup
State Accounting Office (SAO)	DOC_Facility_Lookup
State Accounting Office (SAO)	Agency_Lkp
State Accounting Office (SAO)	ps_dx_paychk_opb_v
State Accounting Office (SAO)	ps_pay_earnings
State Accounting Office (SAO)	ps_paygroup_tbl
State Accounting Office (SAO)	ps_pay_oth_earns
State Accounting Office (SAO)	ps_dx_pay_tax_er_v
State Accounting Office (SAO)	ps_py_tax_class
State Accounting Office (SAO)	ps_dx_pay_ded_er_v
State Accounting Office (SAO)	ps_pay_check_earns
State Accounting Office (SAO)	ps_pay_calendar
State Accounting Office (SAO)	Ps_voucher_line
Department of Family and Children Services (DFCS/DHS)	Hotel_Stays
Department of Family and Children Services (DFCS/DHS)	Foster Care Services
Department of Family and Children Services (DFCS/DHS)	Foster Care Population

Appendix A: Aggregated Data Sources

Organization	Table Name
Department of Family and Children Services (DFCS/DHS)	PlacementTypes
Department of Family and Children Services (DFCS/DHS)	PlacementCloseReasons
Department of Family and Children Services (DFCS/DHS)	DataTeamUpload1
Department of Family and Children Services (DFCS/DHS)	Data_Lake_ListofServices
Department of Family and Children Services (DFCS/DHS)	Datalake_FosterCare_Costs_a
Department of Family and Children Services (DFCS/DHS)	diagnosed_characteristics
Department of Family and Children Services (DFCS/DHS)	rmvl_reasons
Department of Family and Children Services (DFCS/DHS)	placement_list
Department of Family and Children Services (DFCS/DHS)	Services
Department of Revenue (DOR)	SAS_LEDGER_TRANSACTIONS
Department of Revenue (DOR)	SAS_ADDRESSES
Department of Revenue (DOR)	SAS_CERTIFICATE
Department of Revenue (DOR)	SAS_COR_RETURN_INFO
Department of Revenue (DOR)	SAS_FIT_RETURN_INFO
Department of Revenue (DOR)	SAS_FUND
Department of Revenue (DOR)	SAS_IIT_RETURN_INFO
Department of Revenue (DOR)	SAS_CMP_RETURN_INFO
Department of Revenue (DOR)	SAS_WTH_RETURN_INFO
Department of Revenue (DOR)	SAS_NAICS
Department of Revenue (DOR)	SAS_ARTIFICIAL_CLAIMS
Department of Revenue (DOR)	SAS_PAR_RETURN_INFO
Department of Revenue (DOR)	DOR_tax_credit_Look_up
Georgia Department of Education (GaDOE)	weightedformula_2020_2023i
Georgia Department of Education (GaDOE)	FTE Enrollment by Grade Fiscal Year2022-3 Data
Georgia Department of Education (GaDOE)	FTE Enrollment by Grade Fiscal Year2022-1 Data
Department of Correction (DOC)	OPB - GDC Offender Roster
Secretary of State (SOS)	Georgia_Daily_VoterBase_012022
Population Projections	ctys_regions
Population Projections	Regional Commissions
Population Projections	projections_data2060
Technical College System of Georgia	Tcsg_pell_zip