DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
ANNUAL REPORT ON GOALS, OBJECTIVES AND POLICIES

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Program ID/Title: AGS-131 / Enterprise Technology Services – Operations and
                         Infrastructure Maintenance

Contact Person/Phone: Douglas Murdock, Chief Information Officer
                             (808) 586-6000

I.   Goals

        Identify, prioritize and advance programs and projects with the greatest potential
        to increase efficiency, reduce waste, and improve transparency and accountability
        in State of Hawaiʻi government.

        Provide efficient, effective, and available information technology (IT) enterprise
        services and support in the areas of data center, cybersecurity, computing
        (mainframe and open systems), telecommunications, application development,
        and web-based services for the purpose of assisting State government agencies in
        fulfilling their current and future business mission and objectives.

II.   Objectives and Policies

        *Program objectives are arranged by branch under proposed organizational
        structure:*

        Production Services Branch — Schedule, execute and monitor production jobs for
        State departments and agencies, as well as monitor the State networks and
        maintain the operation of the State data center.

        Systems Services Branch — Provide systems programming and administration,
        database management and operational support for the enterprise shared services
        computing platforms such as the mainframe system, power system, backup and
        restore system and managed file transfer system as well as maintaining
        compliance to audit standards for these platforms set by the IRS, SSA and State
        Auditor.

        Technology Support Services Branch — Provide support, maintenance and
        development of hardware, software, and infrastructure for on-premises and Cloud
        applications.

Client Services Branch — Provide applications development, enhancement, maintenance, technical support, and consultant services for State departments and agencies to meet their business objectives.

Enterprise Systems Branch — Provide ongoing operational maintenance, business process management support, technical support, and enhancement and applications development for the following enterprise systems – HIP Enterprise Payroll, Human Resources, and Time and Leave applications.

Network Branch — Provide statewide telecommunication services (e.g., data network, radio network, and telephone systems) for daily business operations of the State of Hawai'i's executive, legislative, and judicial branches, including telecommunications interfaces to county and federal governments; provide land mobile radio communications for public safety entities and radio microwave network connection interfaces to county and federal agencies for first responder and emergency communications; provide technical support on voice and telephone systems to State government entities.

Security Branch — Manage the statewide cybersecurity program to secure and protect electronic assets and data stored on State computer systems or transported through the State's networks.

Enterprise Architect Branch — Develop and implement statewide technology policies, guidance, and standards; provide Departmental guidance for Business and IT decisions that support the State's strategic plan and investments and improve the ability to deliver responsive, cost-effective government functions and services.

Program Management Branch — Provide project management, project consulting services, and training to agencies to effectively develop and maintain new technology applications and improve service delivery through effective integration of technology solutions; provide program management development support for enterprise technology programs and projects.

III.   Action Plan with Timetable

Past Year Accomplishments

Production Services Branch — Effectively managed production jobs for State departments and agencies, monitored the State networks, and maintained the operation of the State data center.

Systems Services Branch — Provided regular operational support for systems programming, database administration and access management. Initiated projects that will enhance the operational capability, security, and compliance posture of the Mainframe System such as workload management, performance monitoring, software upgrade, disaster recovery, encryption in transit, encryption at rest and mainframe process documentation. Administered Third Party Software maintenance. Provided regular updates to Corrective Action Plan for IRS Audit requirements. Provided regular updates to Plan of Action and Milestones (POA&M) for SSA Audit requirements. Completed reportorial requirements for the Annual SSAE-18 Audit. Improved the disaster recovery capability of the Power Systems by implementing data replication tool for systems and database recovery.

Technology Support Services Branch — Established the Citizen Identity infrastructure to support a statewide identity and access management (IAM) service that will provide constituents a single identity to access State services online. Partnered with Tyler Hawaii to develop a working proof of concept for Citizen Single Sign-on with a single portal application. Established the Enterprise Identity Section and 3 new positions within TSSB to support the State IAM infrastructure and related projects. Acquired and provided Frontline worker Office 365 licenses for non-information workers across the state, allowing these employees the ability to access enterprise systems such as the Enterprise Time and Leave System and Statewide Training Platform via a single Hawaii.gov account. Piloted new records and data life cycle management features of Office 365. Enhanced policy tips in Outlook. Deployed a SharePoint migration tool to assist agencies to move their file servers to Office 365 and the public cloud. Migrated file servers of DAGS-OIP, DAGS-SPO, DOT-HWY, and LTGOV to SharePoint/Teams. Expanded delegated admin tasks in CoreView to provide departmental admins the ability to create mail contact objects. Implemented additional functionality for mobile device management of Apple devices. Performed server migrations for end-of-life Windows 2012 servers, developed and deployed templates for new RHEL9 and Windows 2022 servers, and enhanced the load balancing functionality within the Government Private Cloud (GPC). Partnered with Tyler Hawaii to develop an updated statewide website theme offering. Migrated website analytics to the new Google GA4 platform. Extended web application firewall and content delivery network services for the Capitol website. Provided IT support for the administrative transition of the Office of the Governor. Implemented enhancements to the Governor's constituent relationship management platform. Provided IT support and consultation for the Department of Law Enforcement. Performed a migration of the Adobe Sign management platform for the Judiciary to Adobe's new licensing management platform. Onboarded 4 additional groups to the Enterprise Notification System. Provided trainings for Teams, Teams Calling,

SharePoint/OneDrive, AlertMedia and Adobe Sign to departments across the State.

Client Services Branch — The branch continued to support the Department of Labor and Industrial Relations (DLIR), Unemployment Insurance (UI) Division, with the following pandemic-related programs: 1) Federal Pandemic Unemployment Compensation (FPUC), 2) Pandemic Emergency Unemployment Compensation (PEUC), 3) Multi Earner Unemployment Compensation (MEUC), 4) Extended Benefits (EB20) and 5) American Rescue Plan Act (ARPA). In addition, for DLIR UI, the branch provided support for the newly implemented Treasury Offset Program (TOP) that intercepts federal and state payments to collect delinquent debts owed by individuals and businesses to federal and state agencies. For the Department of Commerce and Consumer Affairs (DCCA), Professional and Vocational Licensing Division (PVL), the branch provided "Salesforce Support Case Analysis" and assistance with the preparation for 4 license renewal cycles: June 2022, September 2022, December 2022, and June 2023. The branch also provided support to the Department of Accounting and General Services (DAGS), Campaign Spending Commission (CSC), by assisting with campaign report filings for Candidate Committees; 576 active committees, 7 report filing deadlines and 2,022 disclosure reports filed and Non-Candidate Committees; 329 active committees, 6 report filing deadlines and 1,547 disclosure reports filed.

Enterprise Systems Branch — Ongoing maintenance and support of the Enterprise Human Resources Management System (HRMS) and Payroll systems, also known as Hawai'i Information Portal (HIP). Built, maintained, and supported interfaces to all agency HR, Payroll, and financial data sources. Successfully upgraded both PeopleTools and HIP to the latest released version in May 2023. Created custom Temporary Hazard Pay application to track different pay types incurred during the Emergency Proclamation timeframe. Enabled Single Sign On for Libraries and Office of Hawaiian Affairs.

Network Branch — Established initial State Next Generation Network (NGN) presence at the ServPac MTP Data Center in Miliani to provide more business continuity and disaster recovery options for state agencies. Upgraded end-of-life State NGN equipment providing wide-area-network connectivity across State Office Buildings on Oahu. Increased on island network peering to content providers to improve performance and reduce reliance on commercial internet connections. Made initial investment in Starlink satellite terminals and FirstNet Compact Rapid Deployable (CRD) units to provide deployable cellular and wireless connectivity. Increased the reliability of the State's radio systems by

performing network topology changes. Added Hawaiʻi Wireless Interoperability Network (HIWIN) Land Mobile Radio (LMR) coverage/connectivity.

Security Branch — Conducted tabletop exercise focused on a ransomware incident that impacted our state-managed infrastructure with information technology staff across our executive branch departments. Expanded "Patch-as-a-Service" to more department workstations, further relieving their staff of monthly system patch cycles. Partnered with the Judiciary and University of Hawaii in deploying advanced endpoint protection into their environments. Continued to disseminate standards, guidance, and security awareness training to increase department capabilities to be more resilient against cybersecurity attacks.

Enterprise Architect Branch — As part of the statewide IT Consolidation Planning, ETS coordinated and participated in all the working committees for the benefit of the IT Consolidation Working Group. Regarding IT Governance, significant changes were proposed to the statewide IT governance by the committees in their recommendations to the Working Group. Worked with both DHS and DCCA to define their respective departmental IT plans, in accordance with the planning structure defined the year before. Continued refinement of the statewide IT portfolio data model by enhancing the data model for budget programs, business capabilities, data objects, and IT projects. Continued data collection for the statewide IT portfolio in the monthly IT roadmap meetings. Revised the guidance matrix for the state's executive branch enterprise IT projects, structured by readiness reviews by each phase in this process. Established specific guidance for large IT procurement solicitations in the form an IT RFP checklist. Continued providing solution architecture and technical architecture guidance for multiple departments in their large-scale IT procurements. Continued refining the state's IT portfolio strategy refinement by coordinating the activities of the IT Portfolio Working Group. Continued refining the state's IT portfolio strategy refinement by coordinating the activities of the Data Governance Working Group.

Program Management Branch
Hawaii Modernization Section: The Enterprise Financial System (EFS) project is sponsored by the Department of Accounting and General Services (DAGS) and the Department of Budget and Finance (B&F). The State has invested in acquisition support services as well as accounting and business process modernization services to maximize the opportunity with the new solicitation and to minimize the risks for the next evolution of the project execution for this replanning and procurement effort. The project team in partnership with DAGS has been working with their vendor/partner in understanding the new Uniform Chart of Accounts (UCOA) which is set to replace the Uniform Accounting Code (UAC) used in the current FAMIS financial management system.

Program Transformation Section has been fully staffed since its formation. Program Transformation (PT) provides leadership to the executive branch project teams with the goal to establish consistent practices for IT project management and project expertise throughout the Executive Branch. In 2023, PT also participated in the CIO chaired Act 179, IT Consolidation project. The Sr. Project Manager managed the planning phase activities and deliverables. Other PT staff were assigned as either Working Committee facilitators or served on multiple Working Committees as recorders.

Time and Leave Unit: Over the past year over 1,500 tickets related to the Hawaii Information Portal (HIP) Time and Leave system were addressed through a collaborative effort involving DAGS Accounting, ETS, and consultants from CherryRoad Technologies (CRT). Efforts to resolve the tickets consisted of researching issues, ranging from simple to complex in nature, as well as identifying and developing enhancements to improve user experience and user reports to accommodate new/updated policies, procedures, HRS and user requirements. Additionally, a major HIP System Upgrade was released this year resulting in new features. Key features include a new ability to see absence balance detail broken down by pay period and a new way to request leave.

One Year

Production Services Branch — Maintain effective and efficient day-to-day operations of production job execution and monitoring of the State network and data center.

Systems Services Branch — Continue to implement previously initiated projects that will enhance the operational capability, security, and compliance posture of the Mainframe System such as workload management, performance monitoring, software upgrade, disaster recovery, encryption in transit, encryption at rest and mainframe process documentation. Provide technical assistance for IRS Audit. Provide system reports and documentation for the Annual SSAE-18 Audit. Implement managed services for the Power Systems & Spectrum Protect Infrastructure.

Technology Support Services Branch — Increase adoption amongst departments of O365 (particularly Teams, license management, Unified Security Risk and Quality Assessments). Continue hardening and enhancing the State's Active Directory infrastructure. Assist other departments and offices with their requests to implement Teams Calling and build additional resilience into the calling infrastructure. Build out the mobile device management platform across several departments. Perform a required migration of the Classic Microsoft Stream video platform. Research hybrid solutions and managed service options for the

Government Private Cloud (GPC). Facilitate migration off the end-of-life RHEL7 operating system within the GPC. Continue migrating file servers hosted within the GPC to Office 365 or other cloud storage solutions. Implement new SMTP mail servers. Begin development of state portals managed by Tyler Hawaii to integrate with the State Citizen Identity platform. Continue working with the departments to expand the Citizen Identity solution and evaluate fraud protection and identity-proofing services. Publish statewide accessibility standards for electronic information technology. Continue enhancements for the Adobe licensing platforms and increasing adoption of digital eSignature workflows. Improve IT service management processes and tooling for the ETS service desk. Implement a new cloud-based constituent relationship management system for the Office of the Governor and Office of the Lieutenant Governor. Provide IT support related to the county wildfire incidents. Assist the Department of Law with the development of their public website. Modernize the Missing Child Center-Hawaii database application for the Department of the Attorney General and Department of Human Services. Provide support for the 2024 elections.

Client Services Branch — Implement the re-write of the Non-candidate Filing System application (NCFS), for DAGS Campaign Spending Commission (CSC), which will use an updated platform providing better support and security. Due to end of support for COBOL version 4 on the IBM Mainframe, assist the various departments with migration of their programs to COBOL version 6. For the replacement of DLIR UI application systems residing on the IBM Mainframe, the branch will continue to provide assistance with business and data analysis, as well as data conversion for the new Hawaiʻi Unemployment Modernization (HUIMod) System. For the DAGS Financial Accounting Management Information System (FAMIS) residing on the IBM Mainframe, the branch will continue to assist with its replacement toward a new modernized application system. Also, create or participate in more pilot projects and proof of concepts to gain experience in new technology and determine potential applicability within the State.

Enterprise Systems Branch — Maintain and support the Enterprise HR, Payroll, and Time and Leave systems including interfaces, reporting, security, and transaction processing. Improve on current processes to improve transaction efficiency and data use. Assist with integrations to/from HIP with the new Enterprise Financial System. Enable Single Sign On for the Department of Education.

Network Branch — Increase the number of sites with broadband connectivity, provide network redundancy between agencies and the State's network, assist with the deployment of enterprise Wi-Fi, and expand the use of network peering at the on-island internet exchange. Complete upgrades of end-of-life State NGN equipment providing wide-area-network connectivity across State office buildings on all islands. Complete data center network upgrades to replace end-of-life

equipment and improve performance. Expand radio microwave and LMR networks by adding new sites at no additional site development costs through the use of MOAs.   Maintain radio facilities and infrastructure.

Security Branch — Prioritize asset visibility and vulnerability detection of State assets. Expand solutions to effectively recommend and validate secure configurations and operations. Provide broad and effective security software to protect information systems against compromise and misuse.

Enterprise Architect Branch — Define statewide IT enterprise architecture framework. Maintain and manage statewide IT enterprise applications portfolio and roadmaps; demonstrate effectiveness of IT planning, review, approval, procurement, and implementation processes. Provide enterprise architecture assistance to Departmental initiatives such as the DHS technology modernization, DLIR UI Modernization, DCD eCMS Modernization, and AGS KEIKI modernization. Continue planning and strategy refinement for procurement of new contract for the Statewide Internet Portal provider.

Program Management Branch

Hawaii Modernization Section — With the Procurement of Acquisition Support Services, utilize this opportunity to prepare for the upcoming release of the RFP for the Enterprise Financial System (EFS). Continue efforts to derisk the project through departmental outreach, establish change management strategies, and document the as-built configurations of existing processes and systems across the executive branch.

Through its team of five specialized consultants, Program Transformation will continue to work with departments to help them achieve their desired and expected business outcomes and increase the likelihood of project success for the State of Hawai`i.

Transition the Time and Leave Unit to join the Enterprise Services Branch through a reorg to align efforts to the payroll team who currently support HIP. 5 positions were granted to staff the HIP Service Center.

Two Years

Production Services Branch — Maintain effective and efficient day-to-day operations of production job execution and monitoring of the State network.

Systems Services Branch — Continue to provide technical assistance to the departments in executing plans to modernize applications hosted on the Mainframe Systems. Complete mainframe policies and procedures per POA&M submitted to SSA. Provide system reports and documentation for the SSA Audit. Provide system reports and documentation for the Annual SSAE-18 Audit.

Technology Support Services Branch — Implement the next phase including the standing up of a hybrid cloud environment and begin planning for potential datacenter relocation of the Hawai‘i Government Private Cloud. Maintain and further enhance the State's Active Directory infrastructure and Citizen Identity platform. Assist executive branch departments in maximizing and securing O365 and other Microsoft products used across the state. Continue digitalization efforts, and further implement the new web platform for the State.

Client Services Branch — Continue to provide support and assistance for modernized application systems replacing systems currently residing on the IBM Mainframe, such as the DLIR UI applications and the DAGS FAMIS. Expedite the development of quality application systems by utilizing new/improved application development platforms and tools.

Enterprise Systems Branch — Ongoing maintenance and operations including system and application upgrades for HIP Enterprise Payroll, Human Resources, and Time and Leave applications for all departments and agencies. Build team to for the new Service Center that will support the Enterprise HIP and future EFS systems.

Network Branch — Continue to increase the number of sites with broadband connectivity, increase network redundancy between agencies and the State network, and continue assisting with the deployment of enterprise Wi-Fi. Continue with the critical hardware upgrades of the network and security equipment on the State network. For the radio microwave and LMR networks, revise existing partnership agreements or develop new partnerships for mutual benefit with entities such as the County of Hawai‘i, County of Maui, University of Hawai‘i, and the U.S. Marine Corps. Transition DOT Highways onto HIWIN to provide their first responders with improved response times during natural disasters utilizing HIWIN's ubiquitous coverage on Oahu and interoperable communications between various first responder agencies. Establish microwave radio data connectivity to State Office Buildings to utilize during emergency situations when terrestrial connections or other communication links may become inoperable.

Security Branch — Prioritize cybersecurity initiatives based on risk and impact. Increase collaboration with federal, local, and state infrastructure partners to provide whole of community approach to cybersecurity. Develop pipeline to onboard workforce earlier in their career and expand expertise of in-house cybersecurity team.

Enterprise Architect Branch — Refine statewide IT enterprise architecture framework. Refine statewide IT enterprise applications portfolio and roadmaps; continue to demonstrate effectiveness of IT planning, review, approval, procurement, and implementation processes. Continue to provide enterprise architecture assistance to Departmental initiatives. Release of Request for Proposal and award new contract for the Statewide Internet Portal provider.

Program Management Branch — Award a contract to a system integrator to help implement the Enterprise Financial System to replace FAMIS.

Grow the portfolio of statewide projects that receive professional consulting and training. Demonstrate a decrease in risk and increase in successful outcomes.

Five Years

Production Services Branch — Maintain effective and efficient day-to-day operations of production job execution and monitoring of the State network.

Systems Services Branch — Continue to sustain the operation of the Mainframe Systems and gradually decrease the costs of operation proportionate to the computing capacity and demand until all the applications are migrated to new computing platforms. The Mainframe Managed Hosting Services agreement with Kyndryl will be terminated. The data center space previously occupied by the decommissioned on-premised mainframe and other hardware systems will be converted into office space. Develop a plan to repurpose or decommission the Power Systems platform and infrastructure in anticipation of the completion of current lease agreement and the transition to new application platforms.

Technology Support Services Branch — Assist executive branch departments in maximizing Office 365, electronic signatures, and the new State web platform, and maintain and further enhance the State's Active Directory and Citizen Identity infrastructure. Continue implementing enhancements to the Hawaiʻi Government Private Cloud.

Client Services Branch — As reliance on the IBM Mainframe platform gradually decreases, assist departments, as requested, with the migration of their various application systems to a new computing platform. Continue to evaluate and refine technologies, processes, and services.

Enterprise Systems Branch — Ongoing maintenance and operations for HIP Enterprise Payroll, Human Resources, and Time and Leave applications for all departments and agencies. Implement successful system integrations in support of DAGS Accounting Division's Hawaii Pay (HIP) project and the Enterprise Financial System (EFS) project. Service Center support of Tier 1 and Tier 2 response for both HIP and EFS.

Network Branch — Improve the State's telecommunications networks through the addition of high-speed connectivity and network redundancy. For radio microwave and LMR networks, enact projects to affordably provide the entire State with interoperable radio coverage.

Security Branch — Reduce risk to the State's infrastructure and data through modernization efforts to enable safe and secure digital services and managing the decline of legacy systems.

Enterprise Architect Branch — Refine statewide IT enterprise architecture framework. Maintain statewide IT roadmaps and demonstrate effectiveness of IT review and approval process. Provide enterprise architecture assistance to Departmental initiatives. Provide oversight and management over the new contract for the Statewide Internet Portal provider.

Program Management Branch — Successfully decommission FAMIS through the launch of the Enterprise Financial System (platform TBD). Explore the state's needs for additional ERP systems, assess the maturity of existing ERP systems, and stabilize the costs for support and on-going operations and maintenance. Fully integrate project and program management methodologies with the State's IT roadmaps and strategic plans. Assess the need for on-going professional consulting services contracts with the goal of in-sourcing consulting using staff expertise.

IV.   Performance Measures

Customer Satisfaction measure (if applicable)

Production jobs executing as scheduled.

Number of new and/or improved application services implemented, adopted, and used.

Number of requests completed within timeframe.

Time to respond to help desk and assistance center inquiries.

Average incident response time for system and network outages.

Average time to review and approve IT spending request.

Program Standard measure

Timely reporting of network outages to the appropriate staff, ensuring the State data center is operational.

Ease of use and delivery of modern flexibility.

Number of connections completed, and number of sites supported by enterprise Wi-Fi.

Collection of IT roadmaps from all applicable departments and continuous refinement.

Cost Effectiveness measure

Return on value and total cost of ownership.

Alignment to IT roadmap and Operational Expenditure Plan.

Cost-efficiencies achieved through IT governance and road mapping processes.