

# Strategic Plan for Texas A&M University – Galveston Campus Information Services Department

2016 - 2020



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## Introduction

The Information Services (IS) department is responsible for supporting all the information technology (IT) infrastructure and services that are utilized by the faculty, staff and students at Texas A&M Galveston. IT permeates the entire Texas A&M University at Galveston (TAMUG) campus so a strategic plan that ranges five years must support the academic and administrative mission while being adaptive to the rapidly changing IT world.

The plan must also strive to meet the aspirations and goals of the Texas A&M University Vision 2020 and the TAMUG Strategic Plan 2016-2020. While many of the Vision 2020 imperatives are supported by information technology, IT directly addresses Imperative 7: Increase Access to Knowledge Resources.

In the TAMUG 2016-2020 Strategic Plan Goal 2 Strategy 5: Invest in Strategic Areas of Excellence: IS can support the growth in research by providing increased storage for "Big Data" projects and additional Virtual Server capacity. Under Goal 2, Strategy 7: World-class Research and Learning Infrastructure: IS will upgrade video conferencing rooms and design collaborative learning spaces. Information Services with the support of the TAMUG Executive Team, recently renovated its offices and tech-shop to provide a modern, more spacious, environment for supporting the campus. IS also utilizes an industry standard IT management software suite (ServiceNow) for incident tracking, change management, project portfolio management, and knowledge management. With these tools and a more efficient IT operation, IS can better support student and faculty success measures as part of this strategy. These core initiatives for retention and success to graduation and beyond are a great measure of an effective IT department. Annual IT satisfaction surveys will provide a measure for evaluating Information Services effectiveness at meeting these core objectives of the campus strategic plan.

In the TAMUG 2016-2020 Strategic Plan Goal 3 Stewardship of the Public Trust, Strategy 10: Inclusiveness: Information Services strives to be a department that fosters an environment that is supportive of all people regardless of their identity. Through our student worker program and community outreach to the Galveston Independent School District (GISD) for student interns, IS has been able to provide technical training to a large and diverse group of individuals. The IS staff take great pride in seeing TAMUG and GISD students grow in technical skills over the course of their employment at TAMUG Information Services. TAMUG IS is also a place for new and existing staff to grow and be a part of a campus that values multiculturalism. With a wide array of opportunities for professional development and personal wellness, IS will also work toward incorporating TAMUG Strategy 11: Work Life Excellence into its strategic vision. Our continued support and promotion of the health and wellbeing of the University workforce fosters individual and organizational effectiveness, efficiency and excellence.1 TAMUG faculty and staff will rate the perceived organizational support and quality of work-life as the measure for achieving this goal and strategy.

The TAMUG Information Services 2016-2020 Strategic plan identifies the top nine technology priorities that will affect the technology decisions for TAMUG over the next five years. They include Security and privacy, business continuity, utilizing technology to facilitate learning, IT workforce, mobility, data networks, cloud services, virtualization, and data management. We will address these technology priorities so the University can make informed decisions about investments in technology.

<sup>&</sup>lt;sup>1</sup> TAMUG Strategic Plan 2016-2020 Goal 3 Strategy 11 – Work Life Excellence.



## About Texas A&M at Galveston Information Services Department

The Information Services (IS) department at Texas A&M University Galveston Campus (TAMUG) has the mission to provides high quality, responsive computing and information services for students, faculty and staff. The IS vision is to provide a computing environment that exceeds our customers' requirements.

The IS department runs a central helpdesk that is the first line of technology support for the campus community. There are distinct teams that are responsible for the core services, network, application servers, voice, instructional technology, faculty support, distance education support, data reporting and database support, desktop support, and service desk coordination.

TAMUG is in a period of student population growth. This increase in students will require an increase in the number of faculty and administrative support staff at the University. To support this growth, new classroom and office construction is already underway and will continue for the next several years. This growth in students, faculty, staff, and facilities will require more Information Services Staff in order to keep the same level of high quality IT support.

To help prepare for the higher demand this growth will have on the IS department, we have recently renovated the office space in building 3007 to double the size of the Helpdesk and Technical Services area. The IS Administration, Faculty support, Web, and Data teams recently move to offices in building 3025 which provide more flexibility, collaboration, and growth space.

We also leverage the staff and resource of TAMU on a regular basis. Being a branch campus we collaborate with TAMU on many IT projects like Identity Management, WebEx, ServiceNow, and ProofPoint.

The services that the IS department provides are managed using the best practices described by the Information Technology Infrastructure Library (ITIL) foundation. ITIL best practices are at the core of meeting the strategic goals for the department.

### Strategic Goals:

Utilize technology to improve the effectiveness of the essential process of facilitating learning.

Provide high quality and responsive services, training and support which is available on request.

Utilize technology to improve our ability to increase the visibility of TAMUG and communicate with the public.

Improve our ability to communicate internally and utilize technology to improve our internal processes.

The strategy to achieve these goals include a plan to provide appropriate computer hardware to support the use of technology in the classrooms. We also must provide access to course and reference material through the campus network and from off campus securely via Virtual Private Networks (VPN). IS must also acquire and operate software and technology to facilitate interactive learning strategies and provide local support for the eCampus (Blackboard Learn) system.



"In order to operate and grow successfully in the long term, service providers must have the ability to think and act in a strategic manner. The purpose of service strategy is to define the perspective, position, plans and patterns that a service provider needs to be able to execute to meet an organization's business outcomes." 2

### A few words on how to read the project numbers that are in this strategic plan.

Project numbers have the goal and strategy as part of their name. The first project that is part of Goal 1 and Strategy 1 will be notated by G1S1-1 and project 2 will be G1S1-2. As the goals and strategies change, so will the prefix of the project designations.

You will also notice another number in the form of PRJOOXXXXX at the end of the project description. This is a ServiceNow Project Portfolio tracking number, which signifies an actual project in our departmental project tracking application, ServiceNow. Authorized personnel can use this ServiceNow tracking number to look up information on the project such as, percent complete, planned start date, planned end date, and project notes.

<sup>&</sup>lt;sup>2</sup> Brady Orand, <u>Foundation of IT Service Management</u> (ITILyaBrady) 67.



# Texas A&M University at Galveston Information Services Strategic Goals and Initiatives 2016 - 2020

GOAL 1 – Utilize technology to improve the effectiveness of the essential process of facilitating learning.

Imperative 1: Elevate our Faculty and Their Teaching, Research, and Scholarship

Imperative 3: Enhance the Undergraduate Academic Experience

Imperative 7: Increase Access to Knowledge Resources

*Strategy* 1 – Provide appropriate furnishing and computer hardware to support use of technology in the classrooms

Project G1S1-1: Install Wi-Fi connectivity to projectors for tablets and iPads in all classrooms.

Project G1S1-2: Maintain updated multimedia/computing capabilities in every general classroom on a 4year replacement schedule. This is an ongoing project where ¼ of the classrooms will be done each year. (PRJ0012654, PRJ0012655)

Project G1S1-3: Provide support for audiovisual multimedia needs. Design and oversee the implementation of advanced audiovisual technology in the collaborative learning spaces of the new Academic Complex Phase I and Phase 2 buildings. (PRJ0012735, PRJ0012816)

Project G1S1-4: Support the Learning Commons initiative by providing multimedia expertise and partnering with the Library on technology related projects.

Project G1S1-5: Provide training, documentation and IS staff support for utilization of technology hardware.

Project G1S1-6: Coordinate upgrades to classroom furnishings; work with academic department heads and faculty to prioritize upgrades. Goal is to renovate at least one classroom per year with funding provided by central university funding. Renovate CLB 103 to support group study with advanced audiovisual technology to support the ENGR 111/112 classes. (PRJ0012653) - Complete

Strategy 2 – Provide access to course and reference material

Project G1S2-1: Support providing electronic access to reference material.

Project G1S2-2: Support the BYOD (Bring Your Own Device) initiative by keeping laptops available for check out when student computers are worked on in the tech shop. Ensure good security and adequate Wi-Fi density and coverage to support all student owned devices.

*Strategy 3* - Acquire and operate software and technology to facilitate interactive learning strategies.



Project G1S3-1: Coordinate eCampus support and management with College Station.

Strategy 4- Maintain and improve video quality to main campus.

Project G1S4-1: Upgrade all TTVN video conferencing systems as needed but not to exceed a 6-year replacement cycle.

Project G1S4-2: Upgrade PMEC 144 to support Ocean Engineering distance education classes. (PRJ0012656) –Complete

*Strategy* 5 – Improve support for the research providing new infrastructure and IT knowledge. Provide a research friendly environment with a focus on graduate students.

Project G1S5-1: Identify infrastructure enhancements that will better support research. Upgrade campus backbone to 10Gig to support file transfer for researchers. Provide support for "Big Data" storage and processing. Increase available capacity and processing power of virtual server cluster. Work with researchers to ensure they can access the new High Performance Research Computing resources at TAMU.

Project G1S5-2: Support Texas Beaches and Shores project by upgrading and managing servers while providing technical support. Upgrade Dr. Sam Brody's ArcGis Coastal Atlas infrastructure. (PRJ0012667)

*Strategy 6* – Provide one on one support and training for faculty in the utilization of technology for instruction and research

Project G1S6-1: Provide one on one support to faculty as needed. Dedicate two full time IS staff to the support of faculty for research and distance education needs. One IS staff member is dedicated as the campus TTVN coordinator, they assist with distance education class scheduling and ad-hoc video conference scheduling.

Measures:

Number of courses supported by web pages.

Number of classrooms renovated.

Number of classroom instructor workstations replaced vs. number with equipment over 4 years old.

Number of faculty researches supported each year with their projects.

Customer surveys.

Success of Phase I and II of the Academic Complex.

Number of faculty trained by IS Technology Consultants each year. Tracked using the ServiceNow ticketing system.



## GOAL 2 - Information Services provide high quality and responsive services, training and support, which is available on request.

Imperative 1: Elevate our Faculty and Their Teaching, Research, and Scholarship

Imperative 7: Increase Access to Knowledge Resources

Strategy 7 – Establish, monitor and meet service level standards

Project G2S7-1: Publish and continually monitor service level performance.

Project G2S7-2: Use ServiceNow incident and change management service desk solution with College Station and other A&M System members. Implemented December 2014.

Project G2S7-3: Maintain IS staff training program modeled on Information Technology Infrastructure Library ITILv3 foundation. Maintain expertise on constantly evolving hardware and software.

Strategy 8 – Provide software-training opportunities

Project G2S8-1: Use Lynda.com for all of our on-line training, available to all faculty, staff and students. This will support Human Resources in their Professional Development Training Program, which includes classes in Microsoft Word, Access, Outlook, and Excel.

#### Strategy 9 – Provide resources to support computing

Project G2S9-1: Provide internal consulting support for hardware and software acquisition and implementation of common systems. Offer the highest level of support for the products used by the majority of the clients on campus. List products supported by the Information Service's Help Desk. For the products not included in our support list, we do attempt to help, but our knowledge will be limited and there may be a charge for our service. We have published our policies and standards concerning support.

*Strategy* 10 – Identify common campus wide software and provide a high level of support for its use. Support other software at a lower, time and skill available level.

Project G2S10-1: Maintain list of common software and support levels on public web site.

*Strategy* 11 – Ensure continuity of operations

Project G2S11-1: Maintain up-to-date disaster and business continuity plans.

Project G2S11-2: Determine critical functions and replicate those systems to disaster recovery (DR) site in College Station. Maintain list of critical servers that will be replicate to DR site and activated in the



Event of an evacuation. Ensure list of equipment that needs to be relocated to College Station is current; this includes notebook computers and network backup drives.

Project G2S11-3: Upgrade campus IT infrastructure as part of the Phase 2 Academic Complex project. The upgrade includes completing the campus data conduit "Loop" that connects all buildings on campus. The Phase 2 Infrastructure project will complete the northeast part of the data loop that is between OCSB and Atlantic Hall with a connection to the Physical Education facility and Seibel Building. (PRJ0012816)

Strategy 12 – Measure and assess impact of technology

Project G2S12-1: Send out survey twice a year requesting feedback on technology services provided by Information Services. Add survey link "How was our service" to all email signature lines of Information Services staff.

Measures:

Replication and demonstrate the ability to successfully restore data from the disaster recovery facility.

Successful delivery of critical email communications from infrastructure housed in the disaster recovery facility.

ServiceNow reports on helpdesk incidence and service requests.

Staff certifications including ITILv3.

Survey results.

GOAL 3- Utilize technology to improve our ability to market TAMUG and communicate with the public.

Imperative 7: Increase Access to Knowledge Resources

*Strategy* 13 – Provide accurate, timely, clear, and easily accessible information on the public web site.

Project G3S13-1: Use programs SiteImprove and the Cascade Content Management System to monitor and update site content including monitoring broken links for repair.

Project G3S13-2: We have a new responsive web design for the public web site, which is easily viewable on phones, tablets and desktops. Work with the Marketing and Communications department to move all of the University departments to the latest design. Work with all departments to maintain accurate, informative, and engaging departmental website content.

Project G3S13-3: Utilize the Enrollment Management (EM) recruiting system in coordination with Enrollment Services to promote the TAMUG campus to recruit students.

Project G3S13-4: Collaborate with Galveston Independent School District in support of the GISD Career Connect Grant. As a partner in the Career Connect Grant, Information Technology Track, we hire high



school interns as student workers to work and train in the TAMUG Information Services department. Having such a diverse group of GISD student workers training in the IS department, helps promote an atmosphere of inclusiveness.

Measures:

Reports from the SiteImprove program and Google Analytics on website stats.

Publish list of sites moved and rank the priority of the sites that still need to be migrated.

GOAL 4 – Improve our ability to communicate internally and utilize technology to improve our internal processes.

Imperative 7: Increase Access to Knowledge Resources

Imperative 10: Demand Enlightened Governance & Leadership

Strategy 14 – Development and Implementation of a Governance structure for TAMUG IS.

Project G4S14-1: TAMU System has been developing a Governance Structure for the TAMU System Universities and Agencies. This Governance Structure is in its early stages of development and implementation, but once a few Universities have piloted it, it will be ready for the rest of the A&M System. Currently TAMUG has an informal IT Governance Structure where the IS Director attends the Executive Team meetings and the Academic Department heads meetings. The IS Director is also a member of the A&M System CIO Council and the TAMU IT Directors ITAC Council. TAMUG IS will work with leadership to implement the TAMUS IT Governance structure once finalized. This will allow IT to build a stronger relationship with the senior academic and administrative staff of TAMUG and the A&M System. TAMUG IS also needs to engage the students to ensure we are meeting their technology needs. One way to do this is to meet with the Student Government Association and relay what IT projects are underway and planned for in the future. This will also be a way for IS to hear what the students think about IS at TAMUG.

*Strategy* 15 – Collaborate with TAMU on maintaining the Howdy portal.

Project G4S15-1: Maintain content on Howdy Portal.

*Strategy 16* – Support implementation and operation of the new TAMUS HR and payroll software system for the Galveston Campus, Project Helios (Workday).

Project G4S16-1: IS Director and IS staff member regularly meet with TAMUG HR representative.

*Strategy* 17 – Provide convenient access to student electronic data for faculty and staff with requirements to use the data electronically.

Project G4S17-1: Maintain and modify local databases as appropriate to better support access to data. Increase access to data by providing reports to departments.

*Strategy 18* - Monitor, manage and upgrade campus LAN to ensure it meets all the bandwidth, data and security requirements of the campus.

Project G4S18-1: Upgrade network equipment on a 4-year life cycle. (PRJ0012971)

Project G4S18-2: Mitigate the effect of virus attacks and malware on the network by controlling access to the network and improving performance by blocking virus traffic. Use a security appliance for URL filtering and threat protection to block potential malware access thorough a web browser. – Installed

Project G4S18-3: Install new identity management system for Wi-Fi authentication. - Complete

Project G4S18-4: Integrate security into all aspects of IT at TAMUG by developing policies and standards that align with Texas Administrative Code (TAC) 202 and the Texas Cybersecurity Framework. The 2016-2020 State Strategic Plan for Information Resources Management will also guide the development of these standards.

Project G4S18-5: Use NetID for authentication into TAMUG Active Directory domain.

Project G4S18-6: Complete the installation of single mode fiber to all buildings to support higher bandwidth requirements.

*Strategy 19* – Provide improved tools to support collaboration.

Project G4S19-1: Support transition to Google Apps for students, faculty and staff.

Project G4S19-: Information Security collaboration with other A&M System Universities and Agencies to ensure implementation of best practices at TAMUG.

Project G4S19-3: Support emergency communications system (SeaAggie Alert/RAVE).

Project G4S19-4: Support the server requirements for outsourced departments, SSC (Facilities Services) and Chartwells (Food Services). Server and data feed support for several TAMUG departments, which include Academic Enhancement, Physical Education facility, General Rudder, Student Housing, and the Texas A&M Maritime Academy.

Project G4S19-5: Cisco WebEx collaboration tool rollout to campus. - Complete

Project G4S19-6: Continued implementation of ServiceNow. Currently implementing Project Management, Change Management, and Knowledge Base.

Project G4S19-7: Developing on-line processes that are similar to the Grade Review program for automated PARS, workflows, web forms, and Honor's Program project. Project Helios may provide a solution once we go live.

*Strategy 20* – Provide Improved tools to support the administration of the University.



Project G4S20-1: Call accounting software to help department monitor long distance charges and general phone use by faculty, staff and student workers. This will make it easier for departments to comply with SAP 33.04.02.M0.01 Non-Business Use of Telephones and Fax Machines. – Complete

Measures:

Reports from security appliance on botnet and malware mitigation.

Replication reports from MARAD on ship software updates.

Monthly SeaAggie Alert tests.

Monitor the number of WebEx installations.

Survey Department heads about Call Accounting Software "ease of use".

ProofPoint Email Digest monitoring.

Security Operations Center reports.



## Appendix:

### A - Resources

TAC 202 http://dir.texas.gov/View-About-DIR/Information-Security/Pages/Content.aspx?id=2

### Cybersecurity Framework

http://dir.texas.gov/View-About-DIR/Information-Security/Pages/Content.aspx?id=4

2016-2020 State Strategic Plan for Information Resources Management http://publishingext.dir.texas.gov/portal/internal/resources/DocumentLibrary/2016-2020%20State%20Strategic%20Plan%20for%20Information%20Resources.pdf

B – TAMUG Strategic Plan 2016-2020 http://www.tamug.edu/AcademicAffairs/pdf/TAMUG\_Strategic\_Plan-FINAL\_Dec\_2015.pdf

C – TAMU Vision 2020 Imperatives Texas A&M University Vision 2020 Imperatives <u>http://vision2020.tamu.edu/the-twelve-imperatives</u>

- 1 Elevate Our Faculty and Their Teaching, Research & Scholarship
- 2 Strengthen Our Graduate Programs
- 3 Enhance the Undergraduate Academic Experience
- 4 Build the Letters, Arts and Sciences Core
- 5 Build on the Tradition of Professional Education
- 6 Diversify & Globalize the Texas A&M Community
- 7 Increase Access to Knowledge Resources
- 8 Enrich Our Campus
- 9 Build Community & Metropolitan Connections
- 10 Demand Enlightened Governance & Leadership
- 11 Attain Resource Parity with the Best Public Universities
- 12 Meet Our Commitment to Texas