CALIFORNIA STATE UNIVERSITY, LOS ANGELES
RESOURCE ALLOCATION PLAN
FISCAL YEAR 2019 – 2020

RAP-6

ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300050**
Department: **Infrastructure Services**	Fund Code: **SF013**
Prepared By: **Jason Solis**	Program Code: **R0004**
Budget: **$ 40,000** Expenditure: **$ 40,000**	Project ID:
	MyTools Support

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

MyTools leverages service from Parallels and Microsoft to allow Information Technology Services (ITS) to minimize downtime through access to technical information, advice and recommendations on technical best practices, and education on troubleshooting methodologies and tools, all of which ensure reliable access for our students. The service is available 24/7 to address immediate questions, problems, and issues.

This service is beneficial to all undergraduate and graduate students and aligns with the Student Success initiative of the University Strategic Plan.

This service supports vital technologies and continued support for student learning by providing access to campus Information Technology application resources from anywhere and anytime through MyTools. Students can access these frequently used software applications without having to purchase their own.

2. **Provide key performance metrics to measure and sustain success.**

ITS technical staff use this service to resolve several issues reported by students and also receive assistance with upgrades. This service ensures that the University receives proactive professional advice, including hotfixes; known issues and upcoming releases pertaining to the campus environment, and access to a variety of troubleshooting tools, scripts, and techniques to reduce incident resolution time. This service also allows ITS staff to expand their technical knowledge in troubleshooting difficult incidents.

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was originally intended to achieve. This program allowed the University to avoid challenges normally faced with the management and high maintenance of an application delivery tool of MyTools' scope. For instance, ITS received customized technical information, advice, and recommendations on technical best practices and education on troubleshooting methodologies and tools. This benefit enabled students to securely access necessary applications 24/7 to complete their assignments, collaborate with other students, or engage with faculty. This benefit is increasingly essential in the midst of remote learning during the pandemic. Continued Student Success Fee funding is needed to maintain this program.

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RESOURCE ALLOCATION PLAN
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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services** Dept ID: **300050**

Department: **Infrastructure Services** Fund Code: **SF013**

Prepared By: **Jason Solis** Program Code: **R0005**

Budget: **$ 87,392** Expenditure: **$ 87,392** Project ID:

Supp Srvcs for Microsoft Tech

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The Microsoft Premier Support program continues to provide a broad range of proactive and responsive services that increase system uptime and productivity, and decrease the need for incident-based support after problems occur. The increased remote student use of Microsoft programs and technology offerings require Information Technology Services (ITS) to have access to Microsoft subject matter experts, who can help without delay when assistance is needed to resolve critical production issues immediately. The Microsoft Office 365 Outlook (OWA) email system provides email accounts to students; SharePoint enables students to communicate and collaborate with classmates and faculty on class projects and assignments; OneDrive allows students to store, share, and sync 5TB of files across multiple devices; Microsoft Teams, a unified communication platform, combines persistent workspace chat, video meetings, file storage, and application integration. The Microsoft Office 365 suite of products and integration of these products - online, on the cloud, and on local devices - facilitate student success by providing students with the latest available computing tools. Students expect these programs and services to be available to them 24/7; in support of such student needs, ITS must be prepared to address questions, problems, and issues on a 24/7 basis. This program aligns with the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

ITS has monthly meetings with the Microsoft Technical Account Manager (TAM) and receives monthly reports, providing usage information of the Premier Support services that include support assistance and problem resolution. ITS also uses the Customer & Partner Experience (CPE) Pulse Submission form to provide our satisfaction regarding the supported areas from Microsoft. ITS utilized 100% of the support hours and received support for assistance with Microsoft products, including MS Office, Outlook, OneDrive, SharePoint, Teams, SMS Server, SCCM, SQL Server, Azure, Microsoft Identify Management, and licensing.

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was originally intended to achieve. It enabled ITS to have access to key subject matter experts and support 24/7, which ensure services provided to students have minimal downtime. This service is critical and necessary to ensure that Microsoft technologies and support are always available to students. The major benefits attained with this service include:

- Rapid escalation within Microsoft to product teams, senior manager, and technical account manager.
- Ability to submit support requests via telephone or electronically through the Premier online website.
- Receive first response calls within four hours.
- Receive monthly security patches and updates to critical problem alerts, notification of potential high-impact issues to resolve, and ensure that the University is secure.
- Access to Microsoft Knowledgebase, which provides the latest technical articles and best practices for troubleshooting tools and guides.

ITS will be adding more Microsoft services to support student success in the coming year. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID:	**300050**
Department: **Infrastructure Services**	Fund Code:	**SF013**
Prepared By: **Jason Solis**	Program Code:	**R0021**
Budget: **$ 88,511** Expenditure: **$ 88,511**	Project ID:	
	Anywhere, On Demand Appl	

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The Anywhere, On-demand Application Delivery, called MyTools, provides all undergraduate and graduate students access to campus-licensed software via the MyTools website. It includes the current Microsoft Office suite of products, such as Microsoft Visio, Microsoft Project, SPSS, SAS, Mathematica, MATLAB, ChemDraw, and Adobe products, such as Adobe Photoshop, Acrobat, Illustrator, InDesign, Dreamweaver, and Premier Pro. This program also promotes student success by building upon students' computer skills, improving completion of educational assignments in a timely manner, and increasing students' study time by allowing them to work remotely using their PCs, MACs, iPads, Android tablets, iPhones and other devices. Students can work on assignments from any location of their choice 24/7 with an Internet connection.

This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The table below shows the number of successful applications launched for fiscal year 2018-2019 and 2019-2020. Due to Adobe's free software downloads for personal use for a limited timeframe, the number of launches for the Adobe software from the MyTools website decreased significantly. All users were allowed to download all Adobe software for free from April 2020 through the end of June 2020. Many users took advantage of the free offering from Adobe.

Application Name Usage	2018 - 2019	2019 - 2020
Adobe Acrobat	4,378	4,333
Adobe Photoshop CC	114,174	18,539
Adobe Illustrator	41,783	13,941
Adobe InDesign	13,261	11,626
Adobe Animated CC	12,122	255
Adobe Dreamweaver CC	2,014	68
Adobe Muse CC	88	20
Adobe Premier Pro CC	11,749	4,541
SPSS	26,983	33,139
Mathematica	505	215
ArcGIS	370	382
MATLAB	3,309	975
Access	59	302
Excel	636	558
PowerPoint	209	322
Project	705	883
Publisher	28	39
Visio	808	600
Word	579	1638
Adobe Creative Cloud	693	460
Final Draft 11 (New)		44
TOTAL	**234,453**	**92,880**

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was originally intended to achieve. MyTools eliminates the additional expense for students to purchase software needed for their computing devices. This program increases student study time that would otherwise have been spent driving to and from campus, waiting for available computers in the Open Access Labs (OALs), or not having access to the curriculum or discipline-specific software when OALs are closed. This program is more important now during the pandemic as students are able to use it during remote learning. Students have access to the applications 24/7. This program meets the highest computing security standards and allows students to access these programs securely while keeping the University secure.

Information Technology Services (ITS) will continue to develop marketing campaigns to promote MyTools to more students, especially incoming first-year students and new transfers admitted to the University. Such campaigns include the use of social media, the ITS welcome booth, and working with the Center for Effective Teaching and Learning to bring faculty on board to help encourage students to use this service. Training is available to students via LinkedIn Learning and in-person trainings, which enable students to hone their skills with free applications. ITS will continue to work with software vendors to publish additional applications for students when requested and when license permits. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**

Department: **Infrastructure Services**

Prepared By: **Jason Solis**

Budget: **$ 21,976**   Expenditure: **$ 21,976**

Dept ID: **300050**

Fund Code: **SF013**

Program Code: **R0022**

Project ID:

Anywhere, Anytime Access

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

Virtual Private Network (VPN) systems provide a secure and dependable method for remotely accessing campus network resources. Students with a desktop, laptop, or mobile device can access VPN services through a web browser anytime and anywhere with internet access. Continued support and maintenance of the VPN provides students with secure access to site-licensed software, library resources via cloud computing, and specialized department software and databases.

This program proved to be critical for maintaining University operations during the COVID-19 pandemic. Providing secure, remote connectivity allows students the flexibility to complete their assignments, collaborate with classmates, and engage with faculty anytime and anywhere with internet connectivity. This service is available to all undergraduate and graduate students who wish to access computing resources and applications off-campus or on-campus without having to utilize an Open Access Lab (OAL) or the University Library. This program aligns with the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

During fiscal year 2019-2020, the VPN system supported over 64,000 connections (266% increase from 2018-2019) with 2,048 unique users (232% increase from 2018-2019). This significant increase was due to COVID-19 related campus closures, which began in March 2020. The following statistics compare February 2020 (last full month before campus closures) and April 2020 (first full month of campus closures). The daily average VPN connections increased from 128 in February to 637 in April, a 498% increase. The total number of VPN connections increased from 3,219 in February to 15,320 in April, resulting in a 476% increase. VPN has provided students with free and secure access not only to valuable data resources, but also to an entire suite of applications previously only available in the OALs and for purchase.

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was originally intended to meet. The achieved benefits include:

- Students can remotely access curriculum or discipline-specific software previously only available in Open Access Labs (OALs).
- Students no longer need to purchase software for personal computing devices.
- Students have free access to the applications 24/7.
- Students are able to work on assignments from any location of their choice with an internet connection.
- Students are able to use the computing devices most familiar to them, including PCs, MACs, iPads, Android tablets, iPhones, Android phones, and a host of other devices.
- Students are able to access software to work collaboratively on group projects from home, dorm rooms, study halls, etc.
- Students can securely access applications that have the highest computing security standards.

Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300070**
Department: **Client Support Services**	Fund Code: **SF013**
Prepared By: **Alex Harwood**	Program Code: **R0023**
Budget: **$ 60,147** Expenditure: **$ 60,147**	Project ID:
	On-Demand Learning

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

On-Demand Learning provides students with LinkedIn Learning (formerly Lynda.com) online training materials. LinkedIn Learning (LiL) delivers timely training topics, offers 24-hour access to training materials, and enhances the traditional classroom experience. With an internet connection, students can access training at their convenience from a location of their choice. The experience and education made available through these trainings can increase students' skills and allow students to apply these skills in the classroom immediately. Trainings can also be assigned by faculty to students as part of their coursework. Certificates earned by completing trainings can be posted to LinkedIn for potential employers to see. On-Demand Learning provides resources to both undergraduate and graduate students. This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The table below provides data from both fall 2019 and spring 2020, indicating increased usage of this application.

	FALL 2019	SPRING 2020
New Active Accounts	2,762	3,246
Total Unique User Logins	4,728	6,081
Total All Logins	20,048	59,518
Total Viewing Hours	3,990	10,631
Total Courses Viewed	10,254	25,902
Total Videos Viewed	78,577	260,650

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was intended to achieve. The On-Demand Learning program has continued to be a popular offering for students. The success of this program is demonstrated in the number of new active accounts, courses viewed, videos viewed, and hours spent viewing courses and videos.

A total of 2,762 new user accounts were activated in fall 2019 and 3,246 during spring 2020. An 18% increase in new active accounts was observed between the two terms. During the 2019-2020 academic year, over 35,000 courses and nearly 340,000 videos were viewed, and over 14,000 viewing hours were recorded. This increase in utilization can be attributed to ongoing campaigns through promotional booths held at the beginning of each term on the University's main walkway, campus promotional videos displayed at the Information Technology Services (ITS) Help Desk, social media campaigns, the ITS website, and word-of-mouth from students and faculty. Furthermore, statewide stay-at-home orders in March 2020, due to COVID-19, may have positively impacted LinkedIn Learning usage.

This program assists students in acquiring new skills, further contributing to their overall success. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**

Department: **Infrastructure Services**

Prepared By: **Jason Solis**

Budget: **$ 71,500**   Expenditure: **$ 71,500**

Dept ID: **300050**

Fund Code: **SF013**

Program Code: **R0024**

Project ID:

Wi-Fi Maintenance

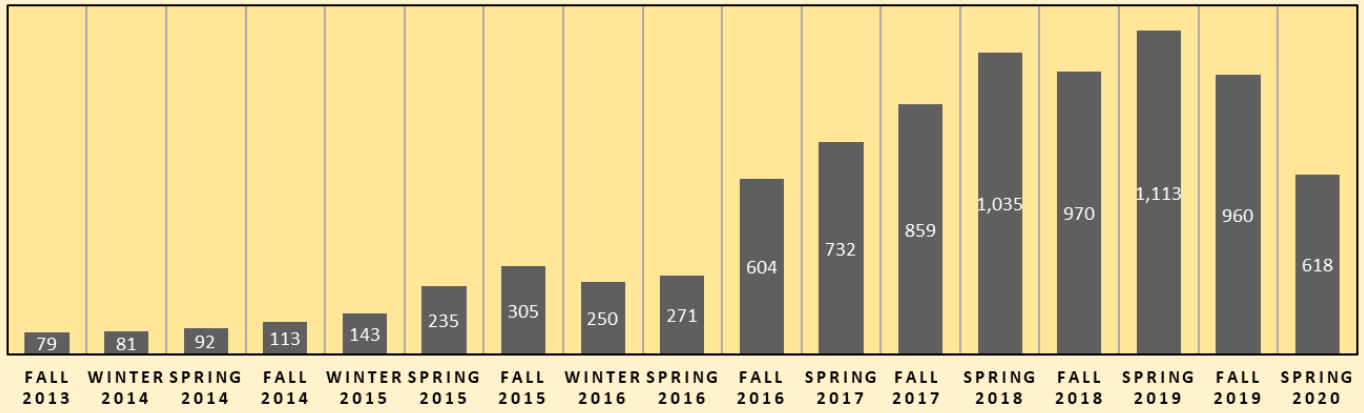**Please use evidence-based data, including year-end financial reports and historical data for comparison.**

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

Expanding the wireless coverage of outdoor areas has provided students with a broader range of locations to access University network resources, allowing for greater collaboration and increased student success. This program extends Wi-Fi services to areas of the University where these services are currently unavailable, insufficient, or unreliable. This program ensures the wireless infrastructure continues to meet or exceed the increased student usage of multiple personal computing devices. The installation of additional outdoor wireless coverage provides secure access to campus network resources to our students. This program aligns with the Student Success, Engagement, Service, and the Public Good, and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

There has been a significant decrease in the number of students using the outdoor Wi-Fi coverage due to campus closures related to the COVID-19 pandemic. Maintenance of the campus wireless system is critical to students who will inevitably return to campus with more advanced technology.

TOTAL CAMPUS WIFI DATA (TB)

Term	Value
FALL 2013	79
WINTER 2014	81
SPRING 2014	92
FALL 2014	113
WINTER 2015	143
SPRING 2015	235
FALL 2015	305
WINTER 2016	250
SPRING 2016	271
FALL 2016	604
SPRING 2017	732
FALL 2017	859
SPRING 2018	1,035
FALL 2018	970
SPRING 2019	1,113
FALL 2019	960
SPRING 2020	618

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was originally intended to achieve. While Wi-Fi was initially provided for convenience or to supplement wired connectivity, wireless network access has become the primary connection method to network resources. By providing more comprehensive outdoor wireless access, students have more options with when and where to study and collaborate. As a result, demand for Wi-Fi in the indoor spaces, such as computer labs and lecture halls, has decreased and an overall increase in the Wi-Fi distribution over the entire University has been observed up until the pandemic. Increased distribution improves the overall quality of Wi-Fi services everywhere and provides better overall quality of service to students. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300050**
Department: **Infrastructure Services**	Fund Code: **SF013**
Prepared By: **Jason Solis**	Program Code: **R0025**
Budget: **$ 252,694** Expenditure: **$ 252,694**	Project ID:
	Adobe Creative Suite/Cloud

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The Adobe Creative Cloud software suite provides students with access to the latest Adobe software on campus. Some Adobe software is virtualized, and the applications are available remotely via the "MyTools.calstatela.edu" website. The Adobe Creative Cloud software is installed on all student computers in the Open Access Labs (OALs), library, electronic classrooms, housing lab, and department labs across the University. The new and updated applications continue to provide students a means to explore and develop creative ways to prepare individual and group assignments. The program allows enrolled students to subscribe to the Adobe Creative Cloud software for use at home at a very discounted $14.99 annual subscription fee and includes 100GB of online storage. These available resources support the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The tables below demonstrate student engagement and increased utilization of Adobe products over the past four academic years. Adobe provided free downloads of the Adobe Suite for a limited time in 2020 that our users took advantage of. Thus, they were able to access Adobe Suite without needing to log in remotely to the University. This aligns with the reduction of Adobe launches for 2019-2020.

Adobe Lab Usage	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020
Adobe Acrobat	148,323	144,143	135,299	27,973
Adobe Audition CC	214	296	258	43
Adobe Dreamweaver	1,124	1,716	1,162	2,682
Adobe Fireworks	280	258	2	6
Adobe Flash	127	100	1,144	3,911
Adobe Illustrator	5,115	9,349	7,977	6,720
Adobe InDesign	2,506	4,202	3,248	2,500
Adobe Media Encoder	55	80	1069	712
Adobe Photoshop CC	8,869	13,784	12,726	9,033
Adobe Premiere Pro	6,037	5,159	5,893	3,846
TOTAL	172,650	179,087	168,778	57,426

Adobe Creative Cloud Subscription	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020
Total Subscription	1,110	1,345	2,842	3,250

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was initially intended to achieve. The Adobe Creative Cloud programs are the industry standard for graphics design, video editing, fonts, mobile app design, and web development photography. By making the latest versions available to students, this program enhances students' knowledge and experience in preparation for future employment opportunities. More students are using the Adobe programs, and more faculty are incorporating media into classroom assignments and presentations. The broader availability of the program provides students access to the applications required for timely completion of class assignments requiring digital media creation. The lab usage for this year dropped due to the COVID-19 pandemic. All the campus labs were closed, and Adobe made the Adobe software available for free to all users from April 2020 through the end of June 2020.

As new and upgraded Adobe tools are made available, the software must be kept current to provide students with access to the latest Adobe tools. Additional new Adobe applications will be virtualized to make them accessible via the "MyTools.calstatela.edu" website when Adobe releases applications that support virtualization. The Adobe software must be kept affordable for home use so students can renew their annual subscription and use the applications on their personal computer or laptop. Continued Student Success Fee funding is needed to maintain this program.

RAP-6

ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID:	**300080**
Department: **Security and Compliance**	Fund Code:	**SF013**
Prepared By: **Sheryl Okuno**	Program Code:	**R0027**
Budget: **$ 39,000** Expenditure: **$ 39,000**	Project ID:	
	2-Step Verification	

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The 2–Step Verification system provides a secured password alternative that students can utilize to protect their accounts and ensure their data is protected from unauthorized users. It was implemented to alleviate the risks associated with compromised student accounts. This feature is strictly optional. For students who opted to enroll in the 2-Step Verification system, it ensures that if a student's account is compromised, hackers cannot access the student's personal and financial information through the MyCalStateLA portal. Additionally, funds have been allocated from this program to provide students with a hardware token device so they can participate in this program even if they do not possess a mobile device. The goal is to ensure that all students have the same opportunity to participate in this program. By securing student information from unauthorized access, this program directly supports the success of students, thus aligning with the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The 2-Step Verification system was deployed to all students on July 24, 2017. During this fiscal year, there was a drastic increase of 1552% in the number of students using 2-Step Verification. This increase was due to the requirement for secured access to student direct deposit information, where the number of student users went from 647 in the previous year to 10,043 student users in 2019-2020. Of those users, 15 reported that the sign-in activity was marked as fraud. Those students were immediately contacted and instructed to change their passwords.

Operating Systems by Platform

macOS (7278)   Create macOS Policy

- End-of-Life   **943** (12%)
- Out-of-Date   **2,732** (37.5%)
- Up-to-Date   **3,603** (49.5%)

Windows (7901)   Create Windows Policy

- End-of-Life   **381** (4.8%)
- Supported by Microsoft   **7,520** (95.2%)

Includes major Windows versions, not patch levels.

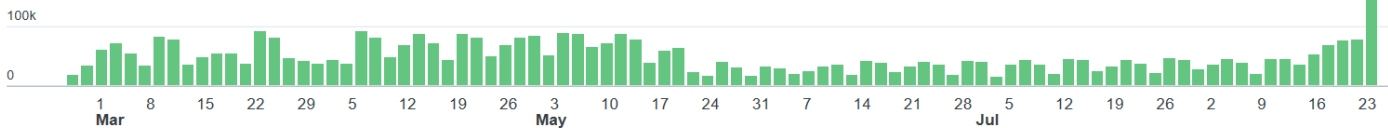**Android, iOS** (12815)   Create Android, iOS Policy

- End-of-Life   **356** (2.8%)
- Out-of-Date   **6,287** (49.1%)
- Up-to-Date   **6,172** (48.2%)

Access devices + 2FA devices using Duo Mobile

A sampling over the last 180 days, beginning in March 2020, shows there were over 4.6M authentications made, a 31% decrease from last year. The reason for the decrease in authentications is most likely due to the pandemic and campus closure, with the summer sessions continuing to show a drop in usage as expected. However, at the beginning of the fall 2020 semester, there has been a spike in authentications, with the number returning to higher levels at over 179k authentications, as seen in the following chart.

4.6M Authentications

Shown at **every 2 days**.

Duo Push was again the most common authentication method used. This method allows the user to quickly approve the login request via their smartphone. It is the easiest, most recommended method when authenticating with 2-Step Verification.

Authentication Methods

Top authentication methods being used to access applications.

Method	Count
Duo Push	80,327 (71%)
Phone Call	11,195 (9.9%)
SMS Passcode	10,599 (9.4%)
Duo Mobile Passcode	8,343 (7.4%)
Bypass Status	1,509 (1.3%)
Invalid Passcode	621 (<1%)
Hardware Token	536 (<1%)

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was initially intended to achieve. All student account information currently enrolled in 2-Step Verification continues to be secure and uncompromised.

However, the majority of University accounts that are compromised continue to be student accounts not enrolled in the 2-Step Verification program through increased and changing threat vectors. It is also noted, based on the Operating System by Platform chart in section 2, that many of the students' devices are running outdated or no longer supported operating systems. Students are often stressed with their course requirements and daily demands that they do not maintain and update their devices. Many students get caught off guard and unknowingly log in to fake websites with their campus accounts and passwords, causing a compromise of their login credentials. Students who rely on financial aid and direct deposit often do not realize that securing their accounts is the best way to ensure that they do not succumb to financial loss due to compromised access.

As planned, Information Technology Services (ITS) implemented mandatory use of 2-Step Verification for all students who use direct deposit through the GET system. This ensures that student financial information stays secure. Marketing and communicating regarding the benefits of the 2-Step Verification program will continue to occur in order to encourage students to enroll in the program. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**

Department: **Client Support Services**

Prepared By: **Alex Harwood**

Budget: **$ 330,959**   Expenditure: **$ 344,323**

Dept ID: **300070**

Fund Code: **SF013**

Program Code: **R0030**

Project ID:

24-Hour Open Access Lab

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The Annex Link "after-hours" Open Access Lab (OAL) normally closes only during the semester breaks and University holidays. When available, the Annex Link provides students with the only early morning access to on-campus printing and computing facilities before 7:00 a.m., which is when the Library normally opens. Additionally, the Annex Link is usually the only computer lab that is open when the Library is closed. The Annex staff also provides ITS Help Desk support outside of the regular ITS Help Desk office hours via phone, walk-up, online, and social media.

The Annex Link was closed in mid-March 2020, along with all of the other OALs due to COVID-19. Annex Link remote computer resources were made available in April 2020, and the 24-hour helpdesk support continued uninterrupted.

The Student Success Fee (SSF) funding for 2019-2020 was approved to continue to provide students with 24/7 access to the Annex Link. The "after-hours" supported by SSF included in this report are:
- Monday, Tuesday, Wednesday, Thursday: 11:00 p.m. to 7:30 a.m.
- Friday 4 p.m. through Saturday 11 a.m.
- Saturday 5 p.m. through Sunday 12 p.m.
- Sunday 6 p.m. through Monday 7:30 a.m.

The "after-hours" are funded by Student Success Fees (SSF) and provides students with access to computers, printers, a group study room, and a technology-equipped smart room. This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

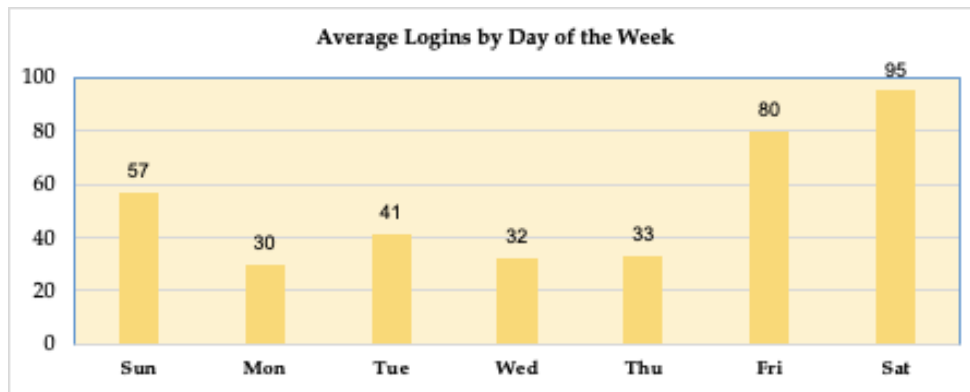2. **Provide key performance metrics to measure and sustain success.**

After-hours Workstation Capacity

The overall OAL capacity for after-hours described below are calculated by multiplying the number of computer workstations by the number of after-hour operations. This chart demonstrates the total capacity of the after-hours Annex Lab prior to closing in mid-March 2020.

	FY 2019 - 2020
Computer Workstations	71
Total Hours of Operation	2,975
Workstation Capacity in Hours	211,225

Average Logins by Day of the Week

The chart below compares the average after-hours OAL computer logins by day of the week. The data demonstrates that the demand for after-hour access is greater on Fridays, Saturdays, and Sundays.

Average Logins by Day of the Week

After-hours Usage

The table below summarizes general usage of the Annex Link after-hours. In fall 2015, ITS installed Count-Recorder software to record foot traffic to and from the lab. Count-Recorder uses infrared technology to detect individuals coming in and out through the lab's entrance.

Keeping in mind that in mid-March 2020 the Annex closed and then in April 2020 the computers were made available remotely, the data for spring 2020 is very different from fall 2019, as well as previous years. It is important to note that Count-Recorder captures all traffic entering and exiting the OAL, but not every student who enters the lab uses a workstation, which would create a login session. Students could be picking up a remotely generated print job, or multiple students may share a login session to work jointly on collaborative projects. ITS gathers all other statistical data using LabStats software, such as login sessions, hours of use, and application usage. Station utilization is calculated using the total session hours divided by the lab's computer capacity.

	FALL 2019	SPRING 2020
Count-Recorder Total	33,233	57,840
Total Login Sessions	12,634	11,845
Total Hours Used	26,322	20,366
Average Login Session (minutes)	125	103
Station Utilization	27%	22%

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was initially intended to achieve. This year we were forced to close the Annex Link along with the other OALs due to COVID-19. We closed the OALs in mid-March 2020 and then shortly after made the computers available remotely. The after-hours data demonstrates the continuing demand for the 24/7 Annex Open Access Lab. The lab was available for 2,975 hours in 2019/2020 with 71 computers available to use; this is equivalent to 211,225 available workstation hours. The after-hours Annex averaged a 27% workstation utilization in fall 2019 and 22% in spring 2020. There were 46,688 workstation hours used and 24,479 logins were recorded. Since not everyone accessing the lab logged into a workstation, ITS also recorded foot traffic with nearly 91,073 entries.

The after-hours lab is staffed with a combination of four full-time staff and student assistants. Normally, during the two weeks prior to finals and during the week of finals, the 24/7 Annex Link is usually at capacity. Continued Student Success Fee funding is needed to maintain this program. This year we closed the Annex in mid-March due to COVID-19, but we continued the 24/7 remote ITS Help Desk support uninterrupted, with OAL computer resources available remotely shortly after.

CALIFORNIA STATE UNIVERSITY, LOS ANGELES
RESOURCE ALLOCATION PLAN
FISCAL YEAR 2019-2020

RAP-6

ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300050**
Department: **Infrastructure Services**	Fund Code: **SF013**
Prepared By: **Jason Solis**	Program Code: **R0037**
Budget: **$ 200,000** Expenditure: **$ 160,426**	Project ID:
	Identity Management Systems

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

Providing students with an identity that makes them unique and recognizable on campus is the foundation for student access to all services on campus. With this unique identity, they can access services the University provides, such as email, Office 365, campus network, myCalstateLA Portal, GET, OALs, myCalStateLA Tools, library resources, and much more. In addition, students can access these services and resources quickly and securely with increasingly divergent mobile devices.

A new Identity Management system was implemented two years ago. The new system provides students with the capabilities mentioned above while making it easy to access services through single sign-on access and eliminating the need to log on to each system individually. The Identity Management system is supporting the automatic creation of accounts as students apply to the University, as well as updating their access as they progress through their academic career. The system created over 70,000 accounts last academic year. It also supports mobile password management so students can use any device they choose to conduct password resets or changes via self-service functionality. This new system provides reporting and auditing capabilities. In addition, it serves as the centralized role-based administrative system for online student productivity tools, which allows students to participate in online groups and collaborate with other students and faculty, thereby increasing their productivity and classroom success. This program is beneficial to all undergraduate and graduate students and aligns with the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. Provide key performance metrics to measure and sustain success.

Microsoft Identity Management (MIM) was selected as the new Identity Management System. MIM was deployed and has been in production for two years. The measurement of success will be providing students the appropriate level of access to the University's applications and the ability for students to manage their password through self-service functionality. Licensing for all enterprise-wide University applications is completed automatically based upon student roles.

3. Describe program outcomes and results. Identify challenges encountered.

This program is active and manages all the student, faculty, and staff identities used for all computing resources across the University. Additional features and services will continue to be streamlined and rolled out to students, faculty, and staff during future phases of this project. Ongoing maintenance and annual costs will increase as the University continues to grow. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300050**
Department: **Infrastructure Services**	Fund Code: **SF013**
Prepared By: **Jason Solis**	Program Code: **T0040**
Budget: **$ 65,000** Expenditure: **$ 45,412**	Project ID:
	Wi-Fi Improvements

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

This initiative previously funded wireless device upgrades and a more robust wireless network monitoring server. The program continues to address any gaps in wireless coverage, repairs malfunctioning access points, and improves the existing Wi-Fi infrastructure. A new generation of wireless access points were installed in three pilot buildings.
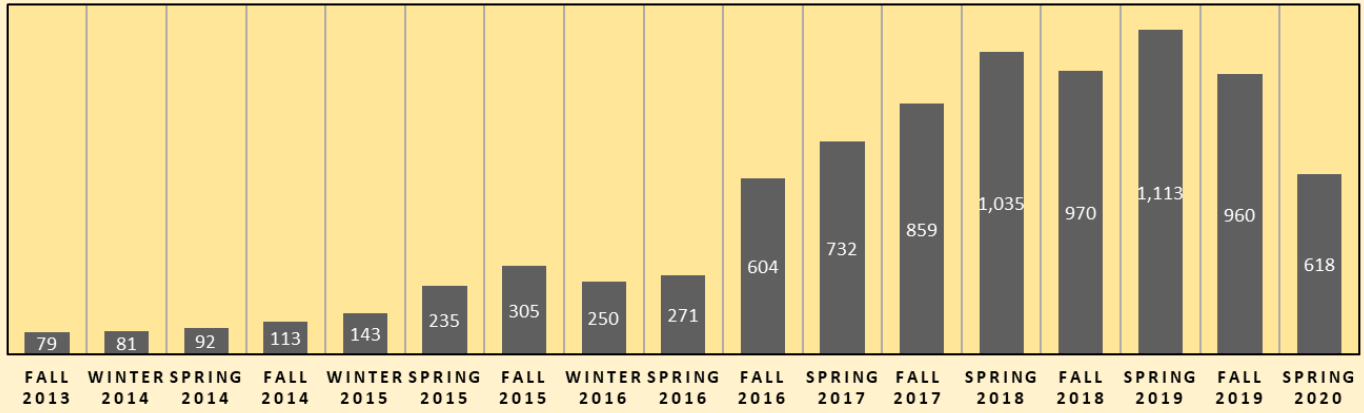
Due to campus closures related to the COVID-19 pandemic, usage of the campus wireless system showed a decrease at the end of the fiscal year. We expect usage to return to normal once students return to campus. This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

Since the upgrade of Wi-Fi access points and expansion of coverage to areas previously not covered, operations have been more stable and the user community has experienced fewer outages. The user experience has improved when accessing wireless connectivity, and more users are connecting and transmitting more data than before.

Due to campus closures related to the COVID-19 pandemic, usage of the campus wireless system showed a decrease at the end of the fiscal year.

TOTAL CAMPUS WIFI DATA (TB)

Bar chart of Total Campus WiFi Data (TB) by term:

Term	Data (TB)
FALL 2013	79
WINTER 2014	81
SPRING 2014	92
FALL 2014	113
WINTER 2015	143
SPRING 2015	235
FALL 2015	305
WINTER 2016	250
SPRING 2016	271
FALL 2016	604
SPRING 2017	732
FALL 2017	859
SPRING 2018	1,035
FALL 2018	970
SPRING 2019	1,113
FALL 2019	960
SPRING 2020	618

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3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was initially intended to achieve. The objective and challenge of this initiative is to assess and facilitate the continual improvement of wireless infrastructure and exceed the needs of our students. Students will continue to use a growing number of new devices and applications that consume a greater amount of data. An increasingly diverse set of devices used by students is significantly increasing data usage. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID:	**300040**
Department: **Enterprise Systems**	Fund Code:	**SF013**
Prepared By: **Kee Chang**	Program Code:	**T0041**
Budget: **$ 250,000**　Expenditure: **$ 250,000**	Project ID:	
	Mobile Appl Enhancements	

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

GETmobile is an interactive mobile application built to provide students with easy access to University information and services using devices they are comfortable using. The GETmobile application underwent a complete redesign this year to improve the user experience and enhance our ability to engage students. Additionally, the AskCalStateLA chatbot was deployed this year to assist students with easy access to information about Cal State LA.

GETmobile continues to engage students by providing easy access to select critical functions from their mobile devices within the GET system. The application provides students with the ability to enroll in courses, view their class schedules, map out the distance between classes, access the final exam schedule, check their financial aid status, view tuition and fees owed, check for any holds or to-dos, calculate their expected tuition and fees for the upcoming semester, and also access CashNet to pay their tuition and fees. Students are also able to participate in the ASI and U-SU elections from the application and submit their student course evaluations near the end of each term directly from GETmobile.

The enhanced GETmobile functions help promote a welcoming and inclusive campus. Under the Campus Life section, the Events page displays upcoming events from the University event calendar. Other key features on the application include a comprehensive campus map, Cal State LA Athletics RSS feed, Campus Food options and map, Housing and Residence Life information, and a complete parking and transportation section promoting many opportunities for students to take advantage of.

All resources allocated to this program are aligned with the University Strategic Plan initiatives and used for GETmobile production support and enhancements.

2. Provide key performance metrics to measure and sustain success.

During the 2019-2020 fiscal year, GETmobile continued to show significant usage and growth. There were over 2.5 million transactions on the mobile application with 9,745 new downloads and a total of 29,587 unique user registrations. Below are statistics for the top 20 used functions within the GETmobile application.

FUNCTION	VIEWS
My Class Schedule	892,592
Home	511,664
Info	16,139
Enrollment	65,150
Financial Aid Info	86,270
Exam Schedule	25,954
Student Course Evaluations	20,054
Student Account Summary	24,866
Cal State LA Shuttle	10,094
Starbucks Live Stream	31,003
Holds/Notices	18,227
Student Financial Services	18,555
Course Catalog	16,523
NextBus	11,707
To Do	20,821
Campus Map	19,638
Tuition and Fees Calculator	13,450
Campus Food Options	13,333
Notifications	8,781
Buy Parking Permits	2,168

3. Describe program outcomes and results. Identify challenges encountered.

This program met the objectives and goals it was intended to achieve. With over 63,000 downloads since its inception and 9,645 new downloads during the 2019-2020 fiscal period, it is evident that students use their mobile devices significantly. By providing services via their mobile devices, the University is engaging students with the tools that they are most comfortable with and use daily. The mobile app currently has a cumulative 4.6/5.0 star rating on the Google Play store and a 4.5/5.0 star rating on the Apple App Store. Continued Student Success Fee funding is needed to maintain this program.

Below are some comments and feedback from users who have publicly posted on the Google Play Store and Apple App Store.

This new update of GET mobile makes it better than before. It's now easier to find my classes and check them out. However, the only thing I don't like is that I can't see my units for my classes (4 stars)
on August 10, 2020.

Very useful, a lot of help. Hope to see the app get a better user interface and contain more information (4 stars)
on August 20, 2019, Android

Really useful and easy to use, almost everything in one place. The campus map could be improved (4 stars)
on August 14, 2019, Android

Easy to use, many options, overall great app (5 stars)
on August 9, 2019, Android

Very convenient and easy to navigate (5 stars)
on July 31, 2019, Android

It's user friendly, can't go wrong with that (5 stars)
on July 26, 2019, Android

Decent app - Very neat and well organized! Love this app :) (5 stars)
on June 12, 2019, iOS v4.3.46

Useful - I can quickly access my class schedule! (4 stars)
on June 2, 2019, iOS v4.3.46

Sicccckk – Graduating soon and this app helped a lot finding where classes were 10/10 would recommend (5 stars)
on May 12, 2019, iOS v4.3.45

Love the app – I registered classes on the app which makes life so much easier. Truly appreciate this app as a student (5 stars)
on April 7, 2019, iOS v4.3.44

The app is pretty good to look your class schedule in general (5 stars)
on January 19, 2019, Android

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**   Dept ID: **300070**

Department: **Client Support Services**   Fund Code: **SF013**

Prepared By: **Alex Harwood**   Program Code: **T0056**

Budget: **$ 9,978**   Expenditure: **$ 0**   Project ID:

24-Hour Open Access Lab - Augment

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The Annex Link "after-hours" Open Access Lab (OAL) normally closes only during the semester breaks and University holidays. When available, the Annex Link provides students with the only early morning access to on-campus printing and computing facilities before 7:00 a.m., which is when the Library normally opens. Additionally, the Annex Link is usually the only computer lab that is open when the Library is closed. The Annex staff also provides ITS Help Desk support outside of the regular ITS Help Desk office hours via phone, walk-up, online, and social media.

The Annex Link was closed in mid-March 2020, along with all of the other OALs due to COVID-19. Annex Link remote computer resources were made available in April 2020, and the 24-hour helpdesk support continued uninterrupted.

The Student Success Fee (SSF) funding for 2019-2020 was approved to continue to provide students with 24/7 access to the Annex Link. The "after-hours" supported by SSF included in this report are:
- Monday, Tuesday, Wednesday, Thursday: 11:00 p.m. to 7:30 a.m.
- Friday 4 p.m. through Saturday 11 a.m.
- Saturday 5 p.m. through Sunday 12 p.m.
- Sunday 6 p.m. through Monday 7:30 a.m.

The "after-hours" are funded by Student Success Fees (SSF) and provides students with access to computers, printers, a group study room, and a technology-equipped smart room. This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**
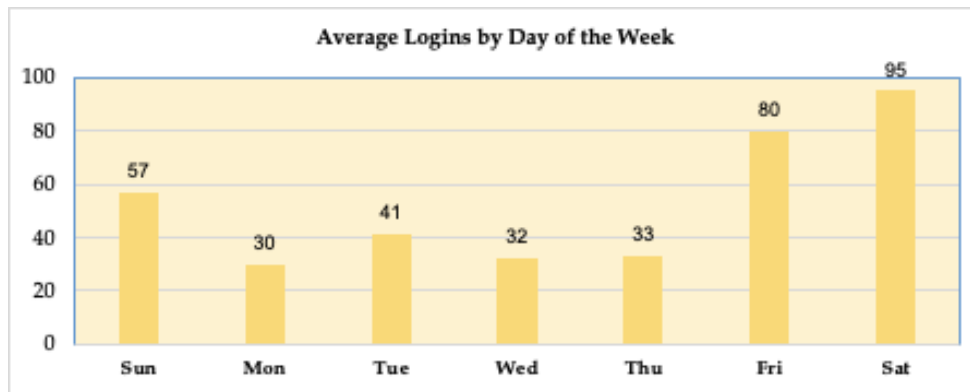
After-hours Workstation Capacity

The overall OAL capacity for after-hours described below are calculated by multiplying the number of computer workstations by the number of after-hour operations. This chart demonstrates the total capacity of the after-hours Annex Lab prior to closing in mid-March 2020.

	FY 2019 - 2020
Computer Workstations	71
Total Hours of Operation	2,975
Workstation Capacity in Hours	211,225

Average Logins by Day of the Week

The chart below compares the average after-hours OAL computer logins by day of the week. The data demonstrates that the demand for after-hour access is greater on Fridays, Saturdays, and Sundays.

After-hours Usage

The table below summarizes general usage of the Annex Link after-hours. In fall 2015, ITS installed Count-Recorder software to record foot traffic to and from the lab. Count-Recorder uses infrared technology to detect individuals coming in and out through the lab's entrance.

Keeping in mind that in mid-March 2020 the Annex closed and then in April 2020 the computers were made available remotely, the data for spring 2020 is very different from fall 2019, as well as previous years. It is important to note that Count-Recorder captures all traffic entering and exiting the OAL, but not every student who enters the lab uses a workstation, which would create a login session. Students could be picking up a remotely generated print job, or multiple students may share a login session to work jointly on collaborative projects. ITS gathers all other statistical data using LabStats software, such as login sessions, hours of use, and application usage. Station utilization is calculated using the total session hours divided by the lab's computer capacity.

	FALL 2019	SPRING 2020
Count-Recorder Total	26,511	12,082
Total Login Sessions	11,720	4,069
Total Hours Used	16,805	5,106
Average Login Session (minutes)	99	66
Station Utilization	18%	9%

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was initially intended to achieve. This year we were forced to close the Annex Link along with the other OALs due to COVID-19. We closed the OALs in mid-March 2020 and then shortly after made the computers available remotely. The after-hours data demonstrates the continuing demand for the 24/7 Annex Open Access Lab. The lab was available for 2,975 hours in 2019/2020 with 71 computers available to use; this is equivalent to 211,225 available workstation hours. The after-hours Annex averaged a 18% workstation utilization in fall 2019 and 9% in spring 2020. There were 21,911workstation hours used and 15,789 logins were recorded. Since not everyone accessing the lab logged into a workstation, ITS also recorded foot traffic with nearly 38,593 entries.

The after-hours lab is staffed with a combination of four full-time staff and student assistants. Normally, during the two weeks prior to finals and during the week of finals, the 24/7 Annex Link is usually at capacity. Continued Student Success Fee funding is needed to maintain this program. This year we closed the Annex in mid-March due to COVID-19, but we continued the 24/7 remote ITS Help Desk support uninterrupted, with OAL computer resources available remotely shortly after.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID:	**300070**
Department: **Client Support Services**	Fund Code:	**SF013**
Prepared By: **Alex Harwood**	Program Code:	**T0057**
Budget: **$ 41,853** Expenditure: **$ 33,693**	Project ID:	

On-Demand Learning-Augment

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

On-Demand Learning provides students with LinkedIn Learning (formerly Lynda.com) online training materials. LinkedIn Learning (LiL) delivers timely training topics, offers 24-hour access to training materials, and enhances the traditional classroom experience. With an internet connection, students can access training at their convenience from a location of their choice. The experience and education made available through these trainings can increase students' skills and allow students to apply these skills in the classroom immediately. Trainings can also be assigned by faculty to students as part of their coursework. Certificates earned by completing trainings can be posted to LinkedIn for potential employers to see. On-Demand Learning provides resources to both undergraduate and graduate students. This project contributes to the Student Success and Welcoming and Inclusive Campus initiatives of the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The table below provides data from both fall 2019 and spring 2020, indicating increased usage of this application.

	FALL 2019	SPRING 2020
New Active Accounts	2,762	3,246
Total Unique User Logins	4,728	6,081
Total All Logins	20,048	59,518
Total Viewing Hours	3,990	10,631
Total Courses Viewed	10,254	25,902
Total Videos Viewed	78,577	260,650

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was intended to achieve. The On-Demand Learning program has continued to be a popular offering for students. The success of this program is demonstrated in the number of new active accounts, courses viewed, videos viewed, and hours spent viewing courses and videos.

A total of 2,762 new user accounts were activated in fall 2019 and 3,246 during spring 2020. An 18% increase in new active accounts was observed between the two terms. During the 2019-2020 academic year, over 35,000 courses and nearly 340,000 videos were viewed, and over 14,000 viewing hours were recorded. This increase in utilization can be attributed to ongoing campaigns through promotional booths held at the beginning of each term on the University's main walkway, campus promotional videos displayed at the Information Technology Services (ITS) Help Desk, social media campaigns, the ITS website, and word-of-mouth from students and faculty. Furthermore, statewide stay-at-home orders in March 2020, due to COVID-19, may have positively impacted LinkedIn Learning usage.

This program assists students in acquiring new skills, further contributing to their overall success. Continued Student Success Fee funding is needed to maintain this program.

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ACCOUNTABILITY REPORT
(Applicable To All Funds)

Division: **Information Technology Services**	Dept ID: **300080**
Department: **Security and Compliance**	Fund Code: **SF013**
Prepared By: **Sheryl Okuno**	Program Code: **T0058**
Budget: **$ 1,000** Expenditure: **$ 1,000**	Project ID:
	2-Step Verification - Augment

Please use evidence-based data, including year-end financial reports and historical data for comparison.

1. **Describe how resources are aligned with the campus strategic plan, which includes Engagement, Service, and the Public Good; Welcoming and Inclusive Campus; Student Success; and Academic Distinction.**

The 2–Step Verification system provides a secured password alternative that students can utilize to protect their accounts and ensure their data is protected from unauthorized users. It was implemented to alleviate the risks associated with compromised student accounts. This feature is strictly optional. For students who opted to enroll in the 2-Step Verification system, it ensures that if a student's account is compromised, hackers cannot access the student's personal and financial information through the MyCalStateLA portal. Additionally, funds have been allocated from this program to provide students with a hardware token device so they can participate in this program even if they do not possess a mobile device. The goal is to ensure that all students have the same opportunity to participate in this program. By securing student information from unauthorized access, this program directly supports the success of students, thus aligning with the University Strategic Plan.

2. **Provide key performance metrics to measure and sustain success.**

The 2-Step Verification system was deployed to all students on July 24, 2017. During this fiscal year, there was a drastic increase of 1552% in the number of students using 2-Step Verification. This increase was due to the requirement for secured access to student direct deposit information, where the number of student users went from 647 in the previous year to 10,043 student users in 2019-2020. Of those users, 15 reported that the sign-in activity was marked as fraud. Those students were immediately contacted and instructed to change their passwords.

Operating Systems by Platform

macOS (7278)   Create macOS Policy   **Windows** (7901)   Create Windows Policy   **Android, iOS** (12815)   Create Android, iOS Policy

- End-of-Life   **943** (12%)
- Out-of-Date   **2,732** (37.5%)
- Up-to-Date   **3,603** (49.5%)

- End-of-Life   **381** (4.8%)
- Supported by Microsoft   **7,520** (95.2%)

Includes major Windows versions, not patch levels.

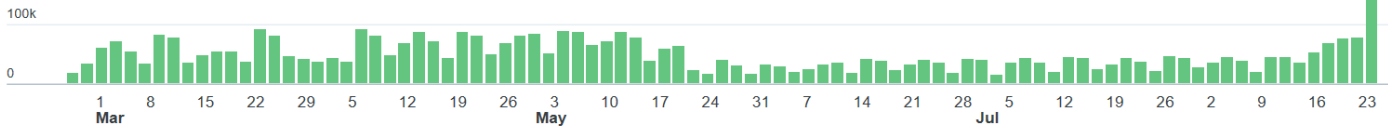- End-of-Life   **356** (2.8%)
- Out-of-Date   **6,287** (49.1%)
- Up-to-Date   **6,172** (48.2%)

Access devices + 2FA devices using Duo Mobile

A sampling over the last 180 days, beginning in March 2020, shows there were over 4.6M authentications made, a 31% decrease from last year. The reason for the decrease in authentications is most likely due to the pandemic and campus closure, with the summer sessions continuing to show a drop in usage as expected. However, at the beginning of the fall 2020 semester, there has been a spike in authentications, with the number returning to higher levels at over 179k authentications, as seen in the following chart.

4.6M Authentications

Shown at **every 2 days**.

Duo Push was again the most common authentication method used. This method allows the user to quickly approve the login request via their smartphone. It is the easiest, most recommended method when authenticating with 2-Step Verification.

Authentication Methods
Top authentication methods being used to access applications.

Duo Push	**80,327** (71%)
Phone Call	**11,195** (9.9%)
SMS Passcode	**10,599** (9.4%)
Duo Mobile Passcode	**8,343** (7.4%)
Bypass Status	**1,509** (1.3%)
Invalid Passcode	**621** (<1%)
Hardware Token	**536** (<1%)

3. **Describe program outcomes and results. Identify challenges encountered.**

This program met the objectives and goals it was initially intended to achieve. All student account information currently enrolled in 2-Step Verification continues to be secure and uncompromised.

However, the majority of University accounts that are compromised continue to be student accounts not enrolled in the 2-Step Verification program through increased and changing threat vectors. It is also noted, based on the Operating System by Platform chart in section 2, that many of the students' devices are running outdated or no longer supported operating systems. Students are often stressed with their course requirements and daily demands that they do not maintain and update their devices. Many students get caught off guard and unknowingly log in to fake websites with their campus accounts and passwords, causing a compromise of their login credentials. Students who rely on financial aid and direct deposit often do not realize that securing their accounts is the best way to ensure that they do not succumb to financial loss due to compromised access.

As planned, Information Technology Services (ITS) implemented mandatory use of 2-Step Verification for all students who use direct deposit through the GET system. This ensures that student financial information stays secure. Marketing and communicating regarding the benefits of the 2-Step Verification program will continue to occur in order to encourage students to enroll in the program. Continued Student Success Fee funding is needed to maintain this program.