



ANNUAL REPORT TO THE GOVERNOR'S OFFICE

AZSITE Consortium

Report on AZSITE Consortium activities for the period July 1, 2024, through June 30, 2025.

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Contents

Introduction and Background	3
AZSITE Goals	3
Executive Management Board Membership.....	3
Summary of Activities, Fiscal Year 2025.....	4
July 2024.....	4
August 2024.....	4
September 2024	4
October 2024.....	4
December 2024	5
January 2025	5
March 2025	5
April 2025	6
May 2025	6
June 2025	6
AZSITE Finances.....	7
Funding Sources.....	7
Table 1: Evolution of AZSITE Fee Structure, 2021-2025.....	7
Hosting and Maintenance Costs.....	8
Table 2: AZSITE Hosting and Maintenance Costs.....	9
AZSITE Account Balance	9
Table 3: AZSITE Account Balance, FY 2020-2025.....	10
Table 4: FY 2025 Income and Expense, Projected vs Actual.....	12
Table 5: FY 2026 Projected Income and Expense.....	13
AZSITE Improvements.....	14
New GIS Layers.....	14
USFWS Document Library.....	14
Data Clip Request Workflow	15
AZSITE Public Website Enhancements	15
Data Sensitivity Training	15
AZSITE by the Numbers	17
AZSITE User Participation, 2024-2025	17
Backlog ASM Data.....	17
Newer ASM Data.....	17

Table 6: New ASM Fee Structure Data Upload Progress.....	18
SHPO Data.....	19
ASU Data.....	19
USFWS Data.....	19
Table 7: USFWS Data Upload Progress.....	20
Summary of Data Uploads.....	20
Figure 1: Total Uploads, 2020-2025 – Projects, Sites, and Site Updates.....	20
Table 8: Summary of AZSITE Data Uploads.....	21
Data Clip Requests.....	21
Table 9: Summary of Data Clip Requests.....	22
Data Fix Requests.....	22
Table 10: Summary of Data Fix Requests.....	22
AZSITE Next Steps.....	23
Advisory Framework.....	23
Data and Development Work.....	23
AZSITE User Management and Invoicing Application.....	24
ArcGIS Enterprise Migration.....	24
San Miguel High School Intern.....	26
Conclusions.....	26

Introduction and Background

In 1995, the State Historic Preservation Office (SHPO), a division of Arizona State Parks, the Arizona State Museum (ASM), the Arizona State University (ASU), and the Museum of Northern Arizona (MNA) signed a Memorandum of Agreement that created the AZSITE Consortium (Consortium), with the goal to computerize and electronically share archaeological and historical site and project files for the State of Arizona. This information is extremely important to private companies and municipal, state, and federal agencies to comply with historic preservation laws.

In 2006, Governor's Executive Order 2006-03 identified the Consortium and the original four founding agencies as the official decision-making and planning body within Arizona's Executive Branch for the AZSITE database and Geographic Information System (GIS) inventory of Arizona's historical and archaeological properties. The integration permits AZSITE users to have up-to-date information on a property's eligibility status to the Arizona and National Registers of Historic Places (A/NRHP), project sponsors, and other related information that was heretofore scattered among many separate locations. This report summarizes AZSITE's activities during the 2024-2025 fiscal year.

AZSITE Goals

- To serve as Arizona's electronic inventory of known historical and archaeological cultural resources.
- To provide information about previously documented historic and archaeological sites and previously conducted surveys.
- To assist state and local agencies in meeting federal and state mandates.
- To serve as a tool for the preservation of resources through planning, for the review of projects for compliance with federal and state preservation legislation, and as a research tool for qualified researchers.
- To provide data for improved review of state agency planning processes.
- To provide security for data related to archaeological site locations.

Executive Management Board Membership

The Executive Order establishes the Executive Management Board (the Board) members as consisting of the Director of the MNA, the Chair of the School of Human Evolution and Social Change at ASU (SHESC), the State Historic Preservation Officer, and the Director of the ASM, or their designees, on indefinite appointment. Traditionally, delegates have served as Board members. Current Board representatives are listed below.

Christopher Caseldine, Ph.D., Curator of Collections and an Assistant Research Professor, SHESC

James Watson, Ph.D., Associate Director, ASM (Chair 2025)

Mary-Ellen Walsh, M.A., Cultural Resources Compliance Program Manager, SHPO (Chair 2024)

Kelley Hays-Gilpin, Ph.D., Curator of Anthropology, MNA (MNA representative 2024)

Jeff Burns, M.A., Project Director and Supervisory Archaeologist, MNA (MNA representative 2025)

Summary of Activities, Fiscal Year 2025

July 2024

The Board held an open virtual meeting on July 18th, during which the Board heard a report on AZSITE finances and approved an increase in the weekly hours of the AZSITE GIS Technician, Ellie Maria Renteria, from 0.5 full-time equivalent (FTE) to 1.0 FTE. The Board also discussed a potential future project integrating the SHPO's Government-to-Government Toolkit with AZSITE, and heard updates on AZSITE data and development.

This was Dr. Hays-Gilpin's final Board meeting as the MNA representative. For this meeting, Dr. Suzanne Eckert served as the ASM delegate in place of Dr. Watson.

The AZSITE Manager, GIS Technician, and Dr. Watson traveled to the July 2024 meeting of the Four Southern Tribes Cultural Resources Working Group to provide a general update on AZSITE, discuss the draft AZSITE Data Sensitivity Training, and request input or materials from the Four Southern Tribes for inclusion in the AZSITE Data Sensitivity Training.

AZSITE published three new GIS layers, including metadata and documentation. These were the *Consolidated ASM Sites* layer, the *Inactive ASM Sites* layer, and the *Lower Salt River Valley Hohokam Canals* layer.

August 2024

AZSITE distributed consultation letters regarding development of an AZSITE Data Sensitivity training for non-archaeologists approved for AZSITE access by the SHPO. These letters requested input and/or multimedia materials from tribes for inclusion in the training, regarding their perspectives on the sensitivity of AZSITE data. This round of letters represented the third and final solicitation for additional input and materials from tribes for the AZSITE Data Sensitivity Training.

September 2024

AZSITE implemented a new tracking and processing system for data clip requests, including new scripts and custom GIS tools.

The AZSITE Manager, Gabe McGowan, began parental leave on September 16th. The 12 weeks of parental leave provided by University of Arizona policy will be used throughout the following 12 months, including three weeks of initial full-time leave.

October 2024

The AZSITE Executive Board held an open virtual meeting on October 24th, during which the Board heard a report on AZSITE finances, approved the *AZSITE Policy on Site and Project Information from Tribal Lands*, and approved a data sharing agreement with the National Park Service Tuzigoot National Monument and Montezuma Castle National Monument units. The Board also heard updates on AZSITE data and development.

At this meeting, Mr. Burns began serving as the MNA representative on the Board, and Erin Davis served as the SHPO delegate in place of Ms. Walsh. In Ms. Walsh's absence, Dr. Caseldine served as the acting Board Chair.

The AZSITE GIS Technician began working full-time for AZSITE in mid-October.

December 2024

AZSITE published updates to the AZSITE web applications that included deployment of the Partner Agency Document Library, a reusable framework developed by AZSITE personnel providing the structures to make documents submitted by partner agencies, such as project reports and site forms, available and integrate them with related GIS features. The application updates also included a new data clip delivery mechanism, developed by AZSITE personnel, allowing users to download their data clip deliverables directly from the AZSITE web application.

Development of the Partner Agency Document Library was funded by the US Fish and Wildlife Service (USFWS) Region 2, and USFWS project reports and site forms were the first documents made available via this framework. In addition, legacy MNA project reports were made available using the new framework.

January 2025

The AZSITE Executive Board held an open virtual meeting on January 23rd, during which the Board heard a report on AZSITE finances and reviewed a draft budget for fiscal year 2026, approved a data clip request for a large volume of data pursuant to the *AZSITE Data Clip Policy*, and approved the draft AZSITE Data Sensitivity Training following tribal consultation efforts. The Board also heard updates on AZSITE data and development, including a detailed analysis of data clip requests by the AZSITE GIS Technician.

At this meeting, Erin Davis served as the SHPO delegate in place of Ms. Walsh. Dr. Watson began his term as Board Chair for 2025.

March 2025

The University of Arizona submitted AZSITE's application for grant funding from the National Park Services Preservation Technology and Training grants program, with Dr. Watson as PI. The proposed scope of work includes migration of the AZSITE data services and web applications to the ArcGIS Enterprise platform.

April 2025

The National Park Service Tuzigoot National Monument and Montezuma National Monument units remitted payment for data layer development and integration under the terms of the data sharing agreement approved late in 2024.

The AZSITE Executive Board held an open virtual meeting on April 14th, during which the Board heard a finance report and approved the draft FY 2026 budget. As part of this, the Board approved the use of AZSITE funds to migrate GIS data services and applications to the ArcGIS Enterprise platform if grant funds are not received, approved the use of AZSITE funds for ArcGIS Enterprise training, and approved the hiring of an AZSITE intern from the San Miguel High School work experience program.

At this meeting, the Board also approved a minor update to the *AZSITE Access Policy* requiring the Salt River Pima Maricopa Indian Community Cultural Sensitivity Training, in addition to the AZSITE Data Sensitivity Training, for AZSITE users from government agencies that are approved for AZSITE access without having a qualified archaeologist on staff. The Board also heard updates on AZSITE data and development.

At this meeting, Erin Davis served as the SHPO delegate in place of Ms. Walsh.

AZSITE distributed a user feedback survey to current and former AZSITE users and user organizations. The survey was intended to assist AZSITE in prioritizing effort and identifying future projects. The results of the survey will be compiled and analyzed and a summary delivered to the Board in July 2025.

May 2025

The AZSITE Manager and GIS Technician attended the Arizona Preservation Foundation's 2025 Preserve AZ Conference in Phoenix, Arizona.

June 2025

The University of Arizona School of Geography and Development (UA SGD) donated a map scanner to AZSITE. This scanner will be used to facilitate accurate and efficient digitization of paper map data.

The AZSITE Data Sensitivity Training was recorded by AZSITE personnel and distributed to users required to complete it pursuant to the terms of the *AZSITE Access Policy*.

AZSITE Finances

Funding Sources

AZSITE users are required to pay user fees for access to the database; access periods are based on the calendar year, and fees are charged for each individual user account. Table 1 below summarizes the fee structures used between 2021 and 2025.

Table 1: Evolution of AZSITE Fee Structure, 2021-2025

Account Type	2021-2023 \$/User	2024 \$/User	2025 \$/User
Standard I	\$550	\$750	\$825
Standard II	\$450	\$650	\$725
Government Standard I	\$450	\$650	\$725
Educational	\$100	\$120	\$120
30 Day	\$250	\$400	\$450

AZSITE’s general financial strategy is to cover operating and personnel costs with user fees, with grant funding targeted for major development costs. Due to increases in operational and personnel costs between 2020 and 2023, at the April 2023 Board meeting a three-year phased fee increase was proposed for 2024-2026.

In July 2023, AZSITE surveyed user organizations regarding the proposed fee increase. The responses showed that the proposed increases were relatively well-received by AZSITE user organizations, who were pleased with recent improvements to AZSITE. The responses suggested there would not be a long-term, significant decrease in participation in AZSITE due to the proposed fee increases.

An unexpected server migration required in the summer of 2023 led this fee increase to be accelerated, with the original year two fees implemented in year one. At the August 2023 Board meeting, the Board approved the updated, two-year fee increase proposal.

In the final year of the phased user fee increase, the calendar year 2025 fee structure charges \$825 per user for one year of access with direct GIS access (Standard I account), \$725 per government agency user for one year of access with direct GIS access (Government Standard I account), \$725 per non-government agency user for one year of access with web-only access (Standard II account), \$450 for one user account with 30 days of web-only access within the calendar year (30 day account), and \$120 per educational institution user for one year of access with direct GIS access (Educational account).

In April 2025, AZSITE received \$1,500 from the National Park Service (NPS) to develop new GIS layers for NPS site and survey data from Tuzigoot and Montezuma Castle National Monuments and make them available in AZSITE with unique sharing limitations. As part of the associated data sharing agreement, the NPS will receive two complimentary AZSITE user accounts each year for the two-year term of the agreement. As of this writing, NPS has not yet provided data in support of this project.

In February 2024, AZSITE partnered with the Arizona Association of Conservation Districts (AACD) to apply for South 32 Hermosa, Inc. Social Investment grant funds to subsidize AZSITE user fees for tribal government cultural resources personnel. South 32 awarded \$5,000 to AACD, who provided a \$5,000 match. AZSITE will invoice AACD for one account per interested tribal government per year until these funds are exhausted. To date, \$8,125 (13 accounts) has been invoiced under this program, including \$4,375 in FY 2025.

Hosting and Maintenance Costs

ASU Geospatial Research Solutions (ASU GRS) provides server maintenance and support for all of AZSITE's servers. ASU GRS also provides general technical support and advisement, and historically has provided application development and database management services. The evolution in maintenance and development services billed to AZSITE by ASU GRS since FY 2023 is shown in Table 2, below.

Notably, ASU GRS provided significant development support in FY 2023 and FY 2024 for AZSITE's web application redevelopment effort. In FY 2024, AZSITE's production servers were migrated from another ASU data center, requiring significant support effort from ASU GRS, as well as initial software costs. These items are reflected in Table 2, below.

Over time, more development and maintenance responsibilities have shifted from ASU GRS personnel to AZSITE personnel (Table 2), in particular following personnel changes at ASU GRS in FY 2024 and FY 2025. This has decreased the cost to AZSITE of ASU GRS maintenance work, though a larger proportion of AZSITE personnel effort is dedicated to application development and server maintenance. AZSITE's purchase order to ASU GRS for FY 2025 hosting and maintenance was in the amount of \$24,175. As of this writing, ASU GRS has invoiced AZSITE for only \$5,325 in maintenance and \$5,850 in hosting.

During the reporting period, AZSITE maintained three production servers (application server, database server, and GIS server) and one working server at the ASU RC on-premises data center at ASU. The working server is quarantined from external internet traffic and hosts the definitive version of the AZSITE dataset. These data are edited by AZSITE personnel each week and synced to the production servers via automation processes each weekend.

In addition to the four servers at ASU RC, ASU GRS maintains a development server for AZSITE. The development server is a lightweight Amazon Web Services (AWS) cloud server used solely for application development and testing. The evolution in AZSITE's server costs since FY 2023 is shown in Table 2, below. Overall, server costs have increased but are cheaper than was predicted prior to the FY 2024 server migration.

Table 2: AZSITE Hosting and Maintenance Costs

FY	Server Costs	Maintenance/Development Costs	Comment
2023	\$ 1,575.00	\$ 48,250.00	M/D costs include significant work on application redevelopment
2024	\$ 9,928.14	\$ 28,875.00	M/D costs include significant work on application redevelopment and server migration; server costs include initial software costs
2025	\$ 5,850.00	\$ 5,325.00	AZSITE personnel dedicating more time to maintenance and development

AZSITE Account Balance

Table 3 below summarizes the AZSITE account balance over fiscal years 2020 through 2025. Two notable transactions and one change in University of Arizona policy affect the account balance summary for fiscal year 2025.

First, as part of the University of Arizona’s Financial Action Plan in response to the financial crisis that began in FY 2024, AZSITE’s carryforward balance from FY 2024 (\$133,718.55) was swept by the University of Arizona.

Second, under the Financial Action Plan, AZSITE personnel, along with other ASM personnel with information technology job classes, were centralized into the University Information Technology Services (UITS) division for a period spanning the end of FY 2024 and the beginning of FY 2025. A subsequent transfer of \$165,158.00 from UITS reimbursing for personnel costs paid by ASM’s division during the centralization was directed into AZSITE’s account to compensate for the balance swept by the University.

Table 3 provides a row summarizing AZSITE’s account balance independent of these transactions (denoted by *), and a row summarizing AZSITE’s account balance incorporating both of these transactions (denoted by **). Table 4 provides a comparison of AZSITE’s projected versus actual FY 2025 budget, including the UITS transfer.

As of this writing, no definitive guidance has been issued by the University of Arizona regarding the AZSITE account’s carryforward balance for FY 2025. AZSITE will be able to adapt whether the carryforward is available or not; Table 3 shows that AZSITE’s account balance is net positive (\$59,257) over FY 2025 without a carryforward or external transfer. Table 3 also shows that the fee increases implemented since 2023 have eliminated the negative annual balances that occurred from 2021 to 2023.

Finally, the University of Arizona has historically collected fees on incomings (11%) and outgoing (2%) from the AZSITE account. However, also as part of the Financial Action Plan, in FY 2025 these fees have not been collected. This has contributed to AZSITE’s positive account balance over the course of the fiscal year. However, as of this writing, no definitive guidance has been issued by the University of Arizona regarding whether these fees will be reinstated for FY 2026. For planning purposes, AZSITE assumes that the fees will be reinstated.

Table 3: AZSITE Account Balance, FY 2020-2025

FY	Beginning Balance	Income	Expense/Encumbrance	Annual Balance	End Balance
2020	\$207,875.55	\$184,290.00	\$113,470.38	\$70,819.62	\$278,695.17
2021	\$278,695.17	\$142,965.00	\$165,093.70	\$(22,128.70)	\$256,566.47
2022	\$256,566.47	\$137,825.00	\$197,963.92	\$(60,138.92)	\$196,427.55
2023	\$196,427.55	\$141,151.00	\$225,718.73	\$(84,567.73)	\$111,859.82
2024	\$111,859.82	\$218,730.00	\$197,786.56	\$20,943.44	\$132,803.26
2025*	\$133,718.55	\$260,895.00	\$201,638.38	\$59,256.62	\$192,975.17
2025**	\$0.00	\$426,053.00	\$201,638.38	\$224,414.62	\$224,414.62

***In this row, AZSITE’s FY 2024 carryforward balance and a \$165,158 transfer from UITs are included in income and end balance calculations.**

****In this row, no FY 2024 carryforward is included, and a \$165,158 transfer from UITs is included in income and end balance calculations.**

Table 4 below shows the AZSITE FY 2025 budget estimated at the end of FY 2024, compared with actual FY 2025 income and expenditures/encumbrances. The comparison reflects the lack of University of Arizona transaction fees over the reporting period.

AZSITE’s personnel expenses were slightly higher in FY 2025 than predicted (Table 4). This was primarily due to the increase in the AZSITE GIS Technician FTE from 0.5 to 1.0 in October 2024. It had been anticipated that under the FTE increase the GIS Technician would work 0.75 FTE for AZSITE and 0.25 FTE for other divisions at ASM. However, all of the GIS Technician’s effort was dedicated to AZSITE. AZSITE also spent more than anticipated on supplies this year, as the GIS Technician’s workstation required replacement mid-year. Higher-than-predicted personnel costs and the cost of a new workstation were offset by lower-than-predicted hosting and maintenance costs, and overall operational costs were lower than predicted.

Additionally, AZSITE’s FY 2025 income (absent the UITs transfer) was higher than anticipated, primarily due to the lack of University of Arizona fees on transactions, and AZSITE participation remaining strong despite the fee increase. Increased tribal government participation resulting from the AACD/South 32 grant effort also played a role in supporting participation.

Overall, AZSITE’s FY 2025 income (approximately \$261,000) exceeded projections by about \$29,000 (excluding the UITs transfer), while spending (approximately \$202,000) was roughly \$8,000 lower than projected. All told, excluding the UITs transfer, AZSITE’s account balance increased by roughly \$59,000 over the course of FY 2025.

Table 5 shows AZSITE's projected income and expense for FY 2026. For planning purposes, University of Arizona transaction fees are included in these projections.

Overall, personnel costs are expected to increase by approximately \$25,000 from around \$155,000 to around \$180,000. This is due to a combination of 1) the AZSITE GIS Technician working at 1.0 FTE for the entire FY; 2) the University of Arizona mandating raises at approximately 3% starting in October 2025; 3) ASM rehiring the Database Manager position early in FY 2026, as this position has historically devoted 0.05 FTE to supporting AZSITE; and 4) AZSITE hiring a San Miguel High School intern to assist with data entry and digitization efforts.

Operational costs are expected to increase from around \$22,000 to around \$48,000. This includes the cost of an additional workstation in case the AZSITE Manager's workstation, purchased in 2020, requires replacement in FY 2026. Also included are \$20,000 in ASU GRS hosting and maintenance costs; these are conservatively estimated based on prior years and are likely to be significantly lower, though the planned migration to ArcGIS Enterprise may require more support than was required by normal operations in FY 2025.

The projected operational costs also include \$11,725 for a migration of AZSITE's data and applications to ArcGIS Enterprise. This migration is required due to several key components of AZSITE aging out of support by Esri as discussed in detail in *AZSITE Next Steps* below. AZSITE has applied for grant funds from the National Park Services Preservation Technology and Training grants to support this migration; the awardees will be announced early in FY 2026. If grant funds are not received, this project will be pursued with AZSITE funds as it is critical to AZSITE's operation and will open up new avenues for enhancement and modernization of AZSITE. The conferences and training line item under operating expenses in Table 5 includes \$4,040 for AZSITE personnel to complete online, instructor-led training on the ArcGIS Enterprise platform in support of this effort.

Overall, FY 2026 expenditures are estimated at approximately \$260,000, including University of Arizona transaction fees, and FY 2026 income is estimated at roughly the same amount based on the FY 2025 income excluding the UITS transfer (approximately \$261,000). This suggests that AZSITE will be able to support its FY 2026 personnel and operating costs, as well as significant development costs, solely with income from FY 2026, should carryforward balances again be swept by the University of Arizona.

Table 4: FY 2025 Income and Expense, Projected vs Actual

Section	Description	Projected Amount	Actual Amount
Personnel			
Salaries	AZSITE Manager & GIS Tech, ASM Database Manager Support	\$112,853	\$116,770
ERE	AZSITE Manager & GIS Tech, ASM Database Manager Support	\$36,113	\$37,367
Projected / Actual Personnel Total		\$148,966	\$154,137
Operations			
General	Software/Subscriptions	\$480	\$515.10
	Supplies	\$500	\$3,766.42
	GRS Hosting & Maintenance	\$24,175	\$11,175
	CC Fees	\$5,000	\$5,467.59
Travel/PD	Conferences, training	\$2,000	\$928.34
Projected / Actual Operations Total		\$32,155	\$21,852.45
Projected / Actual Total, Personnel + Operations		\$181,121	\$175,989.45
	<i>Projected / Actual UA IDC 2% on expenditures</i>	\$3,622	\$0.00
Projected / Actual Income		\$231,078	\$426,053
	<i>Projected / Actual UA 11% on income</i>	\$25,419	\$0.00
Projected / Actual Total Expense/Encumbrance*		\$210,162	\$201,638.38

*Actual Total Expense/Encumbrance includes remaining FY 2025 operations encumbrances which may not be spent.

Table 5: FY 2026 Projected Income and Expense

Section	Description	Projected Amount
Personnel		
Salaries	AZSITE Manager, GIS Tech, 5% ASM Database Manager Support	\$130,360
ERE	AZSITE Manager, GIS Tech, 5% ASM Database Manager Support	\$42,115
Interns	San Miguel High School Intern	\$7,500
Projected Personnel Total		\$179,976
Operations		
General	Software/Subscriptions	\$520
	Supplies	\$4,000
	GRS Hosting & Maintenance	\$20,000
	ArcGIS Enterprise Migration	\$11,725
	CC Fees	\$6,000
Travel/PD	Conferences, training	\$5,540
Projected Operations Total		\$47,775
Projected Total, Personnel + Operations		\$227,751
	<i>Projected UA IDC 2% on expenditures</i>	\$4,555
Projected Income		\$261,000
	<i>Projected UA 11% on income</i>	\$28,710
Projected Total Expenditure, Including Fees		\$261,016

AZSITE Improvements

New GIS Layers

In July 2024, AZSITE published three new GIS layers, which had been in development over the course of FY 2024. These layers were made available in the AZSITE Mapping Application and the standalone GIS data services; they were also integrated with the AZSITE Attribute Search Application and documented in the *AZSITE User Guide*. The new layers are:

Consolidated ASM Sites: This layer serves to keep a record of pre-consolidation ASM site boundaries to assist in research and review where ASM site consolidations are involved.

Inactive ASM Sites: This layer serves to keep a record of boundaries and minimal attributes for ASM sites and segments of ASM sites that do not meet the ASM site definition. These may include in-use segments of historic linear sites (e.g., roads, pipelines, and railways), in-use historic structures, historic isolated occurrences (e.g., waste piles with no features), or site boundaries identified only from archival research. An *active segments* field is included to indicate if a site in this layer has segments that are abandoned and thus meet the ASM site definition. Segments may move out of this layer as they are abandoned.

Lower Salt River Valley Hohokam Canals: This layer provides polylines of Hohokam canals in the Lower Salt River Valley, organized into sublayers by period, as described in *Hohokam Irrigation Longevity and Agricultural Success in the Lower Salt River Valley, Arizona* by the ASU delegate to the Board, Dr. Caseldine. Features in this layer include attributes such as canal system name and time period. These data were based largely on historic aerial photographs from 1930 to 1959, coupled with the maps of Jerry B. Howard and information from cultural resource management reports in the area. Data are symbolized with dashed lines where they have been projected. This layer is intended to be used to identify the potential for subsurface canal features in a project area. This layer can be used for this purpose in conjunction with AZSITE's existing *Howard Canals* layer and typically improves upon this layer where the two overlap.

USFWS Document Library

In late January 2024, the USFWS Region 2 paid AZSITE \$2,995 for the development and implementation of a USFWS site and survey document library in AZSITE and began providing GIS data along with documents. AZSITE also assisted the USFWS Region 2 in developing site form templates for use by their field personnel.

In December 2024, AZSITE published the USFWS document library in the production version of the attribute search web application. The implementation is designed to be a reusable framework for other partner agencies that wish to make cultural resources documents available in AZSITE. Documents exposed via this framework are integrated throughout the AZSITE Map and Attribute Search applications. As part of this project, AZSITE provided the USFWS Region 2 with a secure web form for submitting their data.

Data Clip Request Workflow

AZSITE allows users to request extracts or “data clips” of AZSITE data for particular areas of interest. In the early part of FY 2025, AZSITE redeveloped the workflows used to process these data clip requests. This involved migrating the tracking system from Microsoft Access to Microsoft Lists, updating existing and creating new automation processes in the Make and Power Automate frameworks, developing new custom geoprocessing tools to process the data clip requests, and developing a new mechanism in the AZSITE Attribute Search Application that allows users to search for and “claim” or download their data clip deliverables using a unique code that is automatically emailed to them when processing is complete.

These changes were necessary to reduce AZSITE’s effort in managing, processing, and delivering data clip requests. The volume of these requests has increased significantly in recent years; reducing AZSITE’s effort per request frees up time to work on other tasks.

AZSITE Public Website Enhancements

AZSITE added a database table to track uploads and updates to key datasets; database triggers were added to automatically populate the tracking table when insert or update operations are performed on key tables. Automation processes were developed to publish a weekly summary of data added or modified on the AZSITE Blog each Monday morning.

Data Sensitivity Training

AZSITE Annual Database Use Agreements are issued at the organizational level. In general, AZSITE user organizations are required to have a responsible representative meeting the Secretary of the Interior’s Professional Qualifications for Archaeology and Historic Preservation (SOI’s Qualifications). The SHPO delegate to the AZSITE Consortium Executive Board reviews applications for access to AZSITE and approves them based on these qualifications.

Changes to AZSITE’s *Access Policy* implemented for calendar year 2023 give SHPO discretion to grant AZSITE access to government or public utility organizations not meeting the SOI’s Qualifications, but demonstrating cultural resources management responsibilities, on a case-by-case basis. In calendar year 2025, five user organizations of this category, with six total individual users, have been approved by the SHPO.

As stated in the *Access Policy*, approved users from these organizations are required to complete an AZSITE Data Sensitivity training. This training is intended to provide specific context and perspective on the sensitivity of cultural resources data that these users may not otherwise have from their professional background (Note: all AZSITE users must review and sign the *Annual Database Use Agreement*, which stipulates basic access management, data management, and data distribution limitations). To this end, a draft AZSITE Data Sensitivity Training was developed in late 2022 and 2023.

Between October 2023 and January 2025, AZSITE conducted a tribal consultation process to receive input on the draft training and perspectives on the sensitivity of data in AZSITE.

Discussion of the training occurred with the White Mountain Apache Tribe, the Pascua Yaqui Tribe, and the Four Southern Tribes Cultural Resources Working Group. In January 2025, the Board voted to approve the training for distribution. The training was recorded by AZSITE personnel and distributed to the relevant users in June 2025.

AZSITE by the Numbers

AZSITE User Participation, 2024-2025

In calendar year 2024, AZSITE had approximately 435 individual users, representing the four Consortium agencies, 79 private companies, 17 state and local agencies, 15 federal agencies, eight Tribal agencies, one public utility, and 10 educational or non-profit organizations. About 65% of the users had direct GIS access.

In calendar year 2025, AZSITE has approximately 417 individual users. These users represent the four Consortium agencies (59 individual users), 77 private companies (usually archaeological consulting firms or engineering firms with archaeologists on staff; 267 individual users), 12 state and local agencies (excluding consortium agencies; 30 individual users), 15 federal agencies (30 individual users), nine tribal agencies (13 individual users), one public utility (two individual users), and nine educational or non-profit organizations (17 individual users). About 65% of the users have direct GIS access.

Overall, 127 organizational user agreements have been issued for calendar year 2025. Roughly 61% of user agreements were issued to private companies; 29% were issued to local, state, tribal, or federal agencies, or public utilities; and 7% were issued to educational or nonprofit institutions. Despite the increase in fees for calendar year 2025, participation in AZSITE from the archaeological research and compliance community has not significantly decreased; the lower user count so far in 2025 will likely increase to be close to the 2024 total by the end of the calendar year.

Backlog ASM Data

Early in fiscal year 2025, AZSITE continued to apply and refine previously developed backlog processing methods on the remaining ASM backlog data. The ASM data backlog consists of 7,631 original site recordings and 2,545 projects not on tribal lands submitted to the ASM Archaeological Records Office (ARO) between approximately 2003 and 2017. In late 2020, AZSITE was granted permission to upload these materials into the AZSITE system prior to completion of curation activities by ASM.

At the beginning of 2020, 121 projects and 528 original site recordings from the backlog had been uploaded to AZSITE. At the end of June 2025, 2,471 backlog projects (97%) and 7,554 original site recordings (99%) have been uploaded. The remaining submissions generally lack digital data or some component of the submission to ASM, requiring detailed review by the ASM ARO before AZSITE dedicates effort to preparing them for upload.

Newer ASM Data

While the ASM data backlog has been largely under control since 2022, by 2024 AZSITE had become increasingly out-of-date with respect to site and survey data submitted to the ASM ARO since 2017 under the new ASM fee structure. This is because, unlike the backlog submissions,

these materials were not made available for addition to the AZSITE system until all ASM review and curation activities were complete.

Over the course of fiscal year 2025, the ASM ARO has increased staffing and changed workflows such that new ASM fee structure data are made available to AZSITE more quickly after submission. As part of these changes, large quantities of new fee structure data in the ARO review and curation queues have been pushed through to AZSITE. These data have been prioritized over the small amount of remaining ASM backlog data.

Over the past several years, AZSITE has developed a suite of scripts and geoprocessing tools to streamline the process of preparing submissions for upload. This allows AZSITE to rapidly add these newly available materials to the AZSITE database. Table 6 lists the various categories of data and documents provided by ASM to AZSITE, including counts of each record type that have been made available as well as counts of each record type that have been uploaded to AZSITE. For most categories, upload progress exceeds 70%, indicating that AZSITE has made good progress on these items since they were released to AZSITE in large batches. Notably, since the large batches of data were made available to AZSITE, AZSITE’s rate of upload has exceeded the rate at which additional records have been added to the AZSITE queue. This suggests that AZSITE will be able to achieve data contemporaneity once the initial batches of data are processed.

Table 6: New ASM Fee Structure Data Upload Progress

Category	Available to AZSITE	Uploaded to AZSITE
PRFs	1,635	1,635 (100%)
Reports	1,634	1,261 (77%)
Negative Surveys	903	809 (90%)
Projects w/ Site Recordings (Project)	481	346 (72%)
New Site Recordings	910	713 (78%)
Site Update Recordings	937	394 (42%)
Site Cards	551	551 (100%)

Note: These numbers represent only ASM data items from the new fee structure.

Figure 1, below, summarizes total additions of site and project data to AZSITE from 2020-2025, including both backlog and new fee structure data from ASM as well as other agency sources. The uptick in ASM data availability over the reporting period is apparent on Figure 1 by the increased slope of each line in FY 2025.

SHPO Data

AZSITE receives quarterly updates to undertakings information, site information, and NRHP eligibility determinations from the SHPO. The raw text files exported from the SHPO database are transformed and uploaded into the AZSITE database. In the AZSITE web application, these data are queryable and interrelated to the other AZSITE datasets. For example, NRHP eligibility determinations for a given site (made by a federal agency or SHPO) are shown separately but alongside NRHP eligibility recommendations made by the recorders of the site.

SHPO data were updated in AZSITE in September and December 2024, and in March and June 2025. A total of 1,420 SHPO undertakings information entries, 393 SHPO site information entries, and 442 NRHP eligibility determination entries were added to AZSITE over the reporting period.

ASU Data

In 2023, ASU site survey forms were made available in AZSITE's .pdf library. This was in conjunction with the ASU SHESC repository conducting a digitization effort for their paper records. In 2024, 810 ASU site survey forms were added to AZSITE; thus far in 2025, 402 ASU site survey forms have been added. The total number of ASU site survey forms available in AZSITE is 1,385.

The AZSITE database contains many ASU sites. As the ASU site survey form scans are obtained from the ASU SHESC repository, they are added to the AZSITE database and linked to the corresponding, existing site entry where applicable. The addition of ASU site survey forms to AZSITE provides an opportunity to review existing ASU site entries in AZSITE to see where these can be improved based on the information on the forms, or where new site entries can be added. This review and digitization is a task that has been identified for the San Miguel intern in FY 2026.

USFWS Data

As part of the USFWS Document Library project, the USFWS Region 2 has been providing AZSITE with survey and site data from its lands in Arizona, including both GIS data and documents. As of this writing, 21 surveys and 223 sites have been added to the AZSITE database, and 19 .pdf reports and 200 .pdf site forms have been made available in AZSITE.

Table 7 below summarizes the quantity of USFWS data and documents available to AZSITE, and the quantity of each that has been uploaded. Newer USFWS data that are submitted to AZSITE are reviewed and uploaded as they are received. Several older survey projects, with large numbers of site recordings, require significant digitization effort. These account for most of the materials in Table 7 that have not been uploaded; in addition, some USFWS project reports have not yet been uploaded as they involve state lands and require ASM review.

Table 7: USFWS Data Upload Progress

Data Type	Available to AZSITE	Data Uploaded	Document Uploaded
USFWS Sites	421	223 (54%)	200 (48%)
USFWS Projects	25	21 (84%)	19 (76%)

Summary of Data Uploads

Figure 1, below, summarizes total additions of site and project data to AZSITE from 2020-2025, including both backlog and new fee structure data from ASM as well as other agency sources. The uptick in ASM data availability over the reporting period is apparent on Figure 1 by the increased slope of each line in FY 2025.

Table 8 below summarizes total items added to the AZSITE database in calendar years 2024 and 2025, as well as past years.

Figure 1: Total Uploads, 2020-2025 – Projects, Sites, and Site Updates

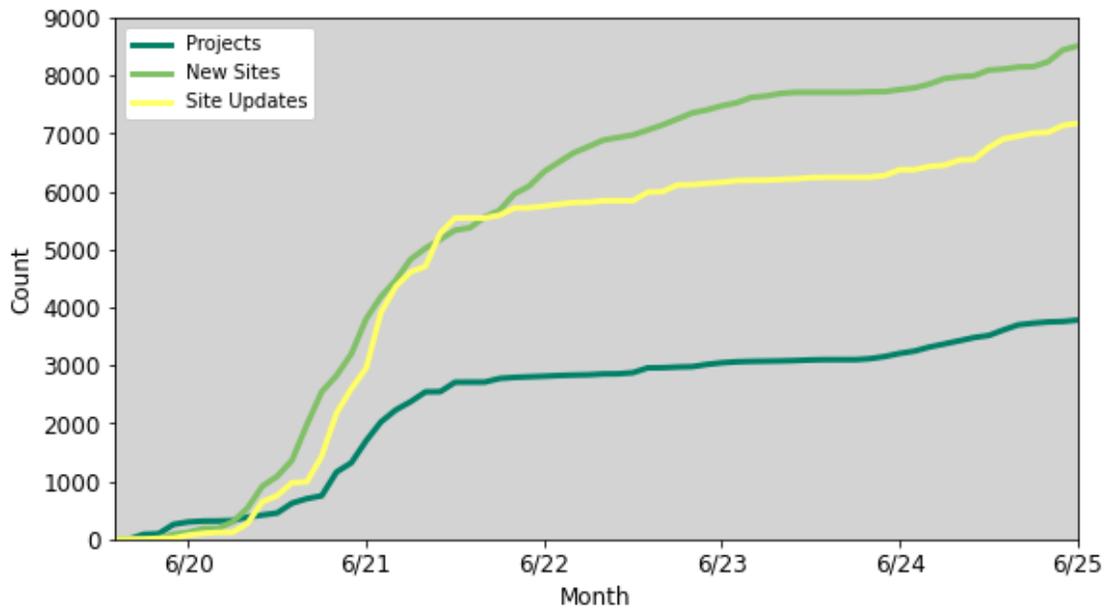


Table 8: Summary of AZSITE Data Uploads

Mean Annual (past) Total Annual (current)	2004- 2014	2015- 2019	2020	2021	2022	2023	2024	2025
Projects	951	109	452	2,225	172	220	421	266
New Sites	1,497	194	1,084	4,087	1,663	696	387	404
Site Updates	ND	ND	752	5,033	299	360	578	429
ASM PRFs	ND	ND	335	231	257	361	400	122
New/Updated ASM Site Cards	ND	ND	322	511	405	743	169	822
ASM Reports	ND	ND	ND	ND	4	3,975	2,401	327
ASU Site Forms	ND	ND	ND	ND	117	56	810	402
MNA Reports	ND	ND	ND	ND	ND	ND	53	1
USFWS Site Forms	ND	ND	ND	ND	ND	ND	171	29
USFWS Survey Reports	ND	ND	ND	ND	ND	ND	10	9
SHPO Site Info Entries	ND	ND	ND	ND	ND	872	982	142
SHPO Project Info Entries	ND	ND	ND	ND	ND	1,266	1,456	782
SHPO NRHP Eligibility Dets.	ND	ND	ND	ND	ND	806	812	150

ND = No Data; NA = not applicable; data type did not exist.

Uploads of core data types (sites and project GIS features) in 2024 and 2025 are increasing as more ASM data, as well as data from new sources such as the USFWS Region 2, have been made available for addition to AZSITE. This is illustrated on Figure 1, as well.

Data Clip Requests

AZSITE provides a “data clip” service to fee-paying users. Users of this service provide a GIS boundary for a research area, specify the data of interest to them and the format in which they want to receive it, and AZSITE provides an extract of the requested AZSITE data for the area of interest. Table 9 below summarizes the number of data clips processed in recent years.

While the volume of data clip requests has increased, AZSITE personnel have improved workflows, scripts, geoprocessing tools, and automation to reduce time spent processing these requests.

Table 9: Summary of Data Clip Requests

Data Clips	2019	2020	2021	2022	2023	2024	2025
Requests	48	46	51	200	102	176	117

Data Fix Requests

Every record displayed in AZSITE includes a hyperlink to a web form that can be used to request a correction, or “data fix” to the specific record. The web form allows the user to provide details regarding the correction request, including the ability to submit materials to support their request. Data fix requests are assigned a ticket number; if found to be actionable, the requester is notified automatically when the ticket is closed out with an email describing the action taken. Data fix requests are tracked and managed using Microsoft Lists and Power Automate.

Table 10 provides a summary of the number of data fixes processed since this workflow was implemented in late 2023.

Table 10: Summary of Data Fix Requests

Data Fixes	2023	2024	2025
Requests	3	62	32
Closed	3	61	32

AZSITE Next Steps

This section describes priorities for AZSITE in the next reporting period.

Advisory Framework

The AZSITE Ad Hoc Advisory Committee (AHAC) was established in 2020 to serve in place of the AZSITE Advisory Committee, which had not been active in some years. The AHAC was comprised of representatives from utilities, tribal governments, federal agencies, state agencies, county governments, local governments, producers, academia, small businesses, and large businesses. The intended purpose was to provide guidance and assistance to the AZSITE manager from a diverse set of perspectives and skillsets.

The AHAC provided input to AZSITE on application redevelopment efforts, policy development, and a draft AZSITE Data Sensitivity Training between 2020 and 2024. Due in part to the improvements at AZSITE over this time reducing the acute need for assistance, participation and leadership for the AHAC waned and the AHAC was suspended by the AZSITE Board in April 2024.

Since then, AZSITE personnel have been in communication with the Governor's Office of Boards and Commissions (B&C) about reactivating the AZSITE Advisory Committee. Per Governor's Executive Order 2006-03, the AZSITE Advisory Committee is intended to include representatives from the Governor's Office, an Arizona tribal preservation office, a federal agency with an Arizona presence, an Arizona state agency, and a cultural resources management consulting firm. Applications for the federal agency and state agency representative positions are in review at B&C, and AZSITE will be soliciting applications for the consulting firm and tribal preservation office representatives.

In addition to reactivating the AZSITE Advisory Committee, AZSITE developed a detailed user feedback survey that was distributed in April 2025. This survey is intended to collect feedback and suggestions to assist AZSITE personnel in identifying priorities for improving AZSITE and planning for the allocation of AZSITE financial resources. The results of this survey will be presented to the Board at their July 2025 meeting.

Data and Development Work

Early in FY 2026, AZSITE anticipates publishing a new set of GIS data services. These have been in development in the latter months of FY 2025 and are intended to serve as a bridge to the ArcGIS Enterprise migration described below. These GIS data services will evolve the existing AZSITE GIS data services, which are used in the AZSITE Map Application and made available as standalone GIS services to AZSITE users with GIS access. Key updates include updated reference layers (e.g., Public Land Survey System data), and modifications to core layers such as site and project boundaries to include additional attributes and hyperlinks to relevant documents.

As previously described, AZSITE has entered into a data sharing agreement with the NPS Tuzigoot and Montezuma Castle National Monuments units. AZSITE's responsibilities under

this agreement include developing new AZSITE data layers displaying NPS data from these units and making them available with unique use restrictions. AZSITE has received payment from NPS but as of this writing no data has been received. When data are received, work on this project will be prioritized. Successful completion of this pilot project will bring AZSITE closer to its stated purpose to provide a statewide, consolidated cultural resources GIS inventory.

Preliminary results from the AZSITE User Feedback Survey distributed in April 2025 indicate that a primary concern for AZSITE users remains the contemporaneity of ASM data in AZSITE. Over the course of FY 2025, following on from changes to ASM ARO workflows that made more ASM new fee structure data items available to AZSITE (and increased the rate at which data items from new submissions matriculate to AZSITE), AZSITE made significant headway on incorporating ASM data from 2017 to the present. This included adapting batch scripts originally developed for backlog processing as well as developing new workflows.

In FY 2026, AZSITE personnel will continue to emphasize catching up on the ASM new fee structure data items that have been made available. Since large batches of these data were made available to AZSITE, rates of processing by AZSITE have exceeded the rates at which additional items are added to the queue. This indicates that AZSITE should be able to catch up and achieve a “steady state” with new submissions to the ASM ARO, at least in terms of those items that are available to AZSITE.

ASM data represent by far the largest single source of data to AZSITE and will continue to be the highest priority for upload. In recent years, AZSITE has broadened its portfolio of data sources to include legacy data from ASU and MNA, as well as new data from USFWS and NPS. AZSITE will use additional labor from an intern (described in detail below) to assist with processing of data from ASU and MNA and continue to refine effort-reducing scripts and automation to prevent the accrual of significant data backlogs.

AZSITE User Management and Invoicing Application

For the past several years, AZSITE has leveraged a combination of custom scripts, low-code automation platforms, the ArcGIS Survey123 web form framework, Box file sharing and e-signatures, Microsoft Access, SharePoint, and SQL Server to manage annual applications for AZSITE access, track individual users, issue invoices, enforce Database Use Agreement signature requirements, and facilitate SHPO review of AZSITE access applications.

As AZSITE has grown, it has become apparent that an integrated platform that will consolidate these functions in a single, user-friendly place is required. AZSITE is currently seeking grant support for a project to develop such an application. This project would significantly benefit AZSITE users by reducing AZSITE personnel effort on these tasks, freeing up more time for AZSITE data and application development work.

ArcGIS Enterprise Migration

In 2022 and 2023, AZSITE redeveloped the AZSITE Map Application in the Esri WebAppBuilder Developer Edition (WAB DE) framework. This application was integrated with

new data and document types and a reimagined Attribute Search Application. At the time, Esri's newer Experience Builder developer edition (XB DE) framework was available but not fully mature. The maturity of the WAB DE framework and wide-ranging library of user-developed WAB DE widgets led AZSITE to select WAB DE over XB DE.

Since then, Esri's retirement schedule for WAB DE was accelerated, and WAB DE went out of support on July 1, 2024. While existing WAB DE applications, such as the AZSITE Map Application, continue to function, Esri no longer provides bug fixes, enhancements, or technical support. AZSITE's GIS data services are hosted in standalone instances of Esri ArcGIS Server (AGS), and mostly published using Esri's older GIS client, ArcGIS Desktop. ArcGIS Desktop will go fully out of service on March 1, 2026.

Given these developments, ASU GRS has recommended that the AZSITE data services and web mapping applications be migrated to Esri's ArcGIS Enterprise (AGE) platform. This platform includes AGS for publishing data services as well as the XB DE application development framework in an enterprise GIS portal environment. While open-source alternatives exist, remaining within the industry-standard Esri ecosystem reduces development effort and makes it easier to maintain institutional knowledge.

ASU GRS prepared a scope of work and cost estimate for the migration to ArcGIS Enterprise, with a total cost (excluding AZSITE personnel effort on app development and database restructuring) of \$11,725. As previously described, AZSITE submitted a proposal for grant funding from the NPS Preservation Training and Technology Grants program in March 2025. Award notifications under this program will be issued in July 2025.

Maintaining a functional and well-supported Map Application and standalone GIS services is mission-critical for AZSITE. As such, the migration to ArcGIS Enterprise will be pursued even if grant funds are not secured. As shown in Table 5, the associated expense would still be expected to be covered by AZSITE's FY 2026 income.

In the first months of FY 2026, after notification regarding the grant award is received, work on the AGE migration will begin. The first steps for this migration will include completion of online, instructor-led AGE training by AZSITE personnel; ASU GRS licensing and configuring the AGE instance; and AZSITE personnel designing and publishing new GIS data services, built and improving upon existing data structures, on the AGE instance. These steps are anticipated to be completed within the first two quarters of FY 2026. As these initial steps near completion, AZSITE personnel will work on developing an updated AZSITE Application in the XB DE framework.

There are several functional advantages to the XB DE framework over the WAB DE framework. Two that will be leveraged to greatly improve the AZSITE user experience are 1) the ability to execute spatial queries using data added at runtime, i.e., the ability for the end-user to upload spatial data to the application and then use their added data to query AZSITE's data; and 2) improved support for one-to-many data relationships, allowing users to query primary datasets using attributes from related tables within the mapping application.

San Miguel High School Intern

San Miguel High School, located in the Tucson area, has a unique, nationally recognized work-study model that provides students with real-world job experiences. In this program, student associates work one day per week as an intern in a professional environment. Various ASM offices have maintained productive participation with this program. To reduce the time spent by the AZSITE Manager and AZSITE GIS Technician on basic data entry and digitization tasks, AZSITE has requested a San Miguel intern for FY 2026.

Some potential tasks for AZSITE's high school intern in FY 2026 include 1) preparation of ASM data such as negative surveys for upload to AZSITE; 2) preparing AZSITE entries for ASU sites where site forms have been received but no corresponding AZSITE entry exists; and 3) reviewing MNA project reports available for addition to AZSITE for intersection with tribal lands, and digitizing related project geometries where applicable.

Conclusions

Addition of new data to AZSITE slowed between 2022 and 2023 with the ASM backlog effort winding down. However, AZSITE's pre-curation access to newer ASM materials has increased in 2024 and 2025, and significant volumes of new ASM survey and site data are once again being added to AZSITE. Additional data sources from ASU, MNA, the USFWS, and soon, the NPS have also increased the volume of data being added to AZSITE. Workflows and tools developed by AZSITE to support the timely upload of these materials continue to be refined and allow AZSITE to keep up with the increased volume of incoming data. To further support these efforts, a part-time intern will be hired for FY 2026 to assist with digitization and data entry.

The AZSITE redevelopment effort completed early in FY 2024 represented a significant improvement to the AZSITE user experience and allowed users to extract more information from AZSITE than ever before. Due to the continued evolution of the Esri software ecosystem, another application redevelopment effort will be required in FY 2026, involving the deployment of an AZSITE AGE instance. Migration to AGE is necessary to support the continued stability and usability of AZSITE and will be pursued whether NPS Preservation Technology and Training grant funds are received or not.

While necessary to maintain basic AZSITE functionality, the AGE migration also presents an opportunity to modernize the AZSITE Map Application with advanced features such as the ability to run spatial queries using runtime data, and the ability to leverage one-to-many relationships within the AZSITE dataset in spatial queries. The AGE migration also gives AZSITE an opportunity to restructure key GIS datasets to support improved usability and integration. Making this advanced functionality available to AZSITE users within the Map Application will demonstrate that AZSITE user fees are being used directly to improve our product for all users.

AZSITE significantly increased user fees in 2024 and 2025. Despite significant changes to the financial landscape stemming from the University of Arizona Financial Action Plan, the revenue generated by user fees is expected to continue to cover base operating and personnel costs.

Grants will continue to be pursued for specific projects. AZSITE successfully partnered with AACD in 2024 to obtain South 32 Social Investment funds, with an AACD match, to sponsor AZSITE access for tribal government cultural resources personnel. As these funds wind down at the end of calendar year 2025, AZSITE is seeking sponsors to continue to support tribal government access to AZSITE.

AZSITE has recently obtained funding from USFWS and NPS for application development work in exchange for data. AZSITE will continue to seek partnership opportunities with other agencies that will bring AZSITE closer to its stated purpose to provide a statewide, consolidated cultural resources GIS inventory.