INTRODUCTION

In 1995, three state agencies and one private museum signed a memorandum of agreement that created the AZSITE Consortium, with the multi-year goal to computerize and share electronically archaeological and historical site files for the State of Arizona. The AZSITE Consortium goals are detailed in Table 1. In 2006, Governor’s Executive Order 2006-03 named the Consortium, and the original four founding agencies (see Table 2) as the official decision making and planning body within Arizona’s Executive Branch for the AZSITE database and GIS inventory of Arizona’s historical and archaeological properties.

Table 1. AZSITE Goals

| • To serve as Arizona’s inventory of known historic and archaeological cultural resources. |
| • To provide information about cultural resource surveys and projects for historic and archaeological sites and surveys. |
| • To assist state and local agencies to meet federal and state mandates. |
| • To serve as a tool for 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 location of archaeological sites. |

Table 2. Signatory agencies to the 1995 Memorandum of Agreement, predecessor to Executive Order 2006-03

| • Arizona State Museum (University of Arizona) |
| • Department of Anthropology (now the School of Human Evolution and Social Change, Arizona State University) |
| • Museum of Northern Arizona |
| • State Historic Preservation Office (Arizona State Parks) |

A Brief History of AZSITE – Arizona’s Cultural Resource Inventory

Following it’s creation in 1995, the Consortium spent several years in planning and meeting with private, state, federal, tribal, and municipal land use planners, archaeologists, and cultural resource managers to consider what type of information the database needed to include and who should have access to it. It was quickly clear that archaeological and historical site data were maintained in over two dozen municipal, state, federal, and private agencies across the state and that a centralized database would need to be electronic and internet accessible, that it needed to be very secure to protect sensitive archaeological information and that it would have to be based on a fee for service and no single agency had the necessary funding. The planning phase itself was funded by grants from federal and state agencies (see Table 3). The database went on-line in 1998, as a test product. Private contract agencies quickly began to apply to use it, even though data were not complete, and were willing to pay for the services electronic data could offer. Initially the database held records from the Arizona
State Museum, Arizona State University, and the Museum of Northern Arizona. Data from the U.S. Bureau of Land Management (BLM) and from the State Historic Preservation Office were soon added. In 2000, AZSITE began charging for access to the database. Over the past several years, AZSITE has developed a funding base that includes annual user fees and grants from federal and state agencies that covers on-going development of the system and annual operating expenses for staff, equipment, software licenses, and travel (see Table 4).

Table 3. Planning Phase Grants

- National Center for Preservation Training and Technology (NPS)
- Federal Geographic Data Committee
- Transportation Enhancement Funds (ADOT)

Table 4. On-going Sources of Funding for AZSITE

- Arizona Heritage Funds (Arizona State Parks Board)
- Federal Historic Preservation Fund (ASP/SHPO)
- U.S. Bureau of Land Management
- AZSITE user fees
- Arizona State Museum records repository fees

Consortium Structure Under Executive Order 2006-03

The Executive Order created an Executive Management Board (Board), comprised of the director (or designee) of the four agencies that manage AZSITE (see Table 2). The Chair is to be selected from these four agencies on an annual rotating basis. It also created a Standing Advisory Committee (Advisory Committee), which may be composed of representatives from the Governor’s Office, a state agency, a federal agency with an Arizona presence, a tribal preservation office, and a private cultural resources consulting firm.

Consortium Activities Under Executive Order 2006-03

February - June 2006

- Board met four times to select a chair (see Table 5), draft operating procedures, and consider issues related to database development and management.
- Board members took Open Meetings Law training as provided by the state and the Assistant Attorney General.
- Board worked with SHPO staff to develop the Advisory Committee.
- Board distributed user fees to agencies to support AZSITE functions (staff, equipment, software licenses, travel).

July 2006 – June 2007

- Advisory Committee met for the first time in October and elected a chair (see Table 4), drafted operating procedures, and developed a list of topics that they would like the Board to address.
- Consortium Board prepared and mailed letters to state agencies and tribal chairs announcing the Executive Order.
• Board and Advisory Committee both addressed issues of determining and recording archaeological site boundaries
• Board distributed user fees to agencies to support AZSITE functions (staff, equipment, software licenses, travel).
• Board finalized interagency service agreement amongst the three state agencies specifying distribution of duties related to database management.
• On direction of Board database manager developed plans for data sensitivity maps, per request from Governor’s Growth Initiative.
• Advisory Committee requested Board to consider closer collaboration with Governor’s Archaeological Advisory Committee.

July 2007 – June 2008
• Board and Advisory Committee reviewed plans for Growth Initiative sensitivity maps that went on-line in fall, 2007.
• Advisory Committee discussed potential for and difficulties with collaboration with U.S. Forest Service to incorporate their data into AZSITE.
• Board distributed user fees to agencies to support AZSITE functions (staff, equipment, software licenses, travel).
• At request of Advisory Committee, Board issued data sharing protocols to guide archaeological contractors in working with their clients in a way that will not compromise data security.

July 2008 – June 2009
• On the recommendation of the Advisory Board, the Board discussed and planned to initiate new consultation meetings with Tribes on AZSITE activities and upgrades.
• Advisory Committee Bylaws were reviewed and updated.
• Advisory Committee and Board reviewed and set priorities for AZSITE system improvements.
• The advisory Committee and the Board reviewed and commented on a draft data sharing guidance document.
• Advisory Committee and Board reviewed plans for the uploading of Phoenix Basin Canal Maps.
### Table 5. Membership of the Board and Advisory Committee

<table>
<thead>
<tr>
<th>CY Year</th>
<th>Executive Management Board</th>
<th>Standing Advisory Committee</th>
</tr>
</thead>
</table>
| 2006    | • Beth Grindell, Arizona State Museum, Chair  
          • Robert Breunig, Museum of Northern Arizona  
          • C. Michael Barton, Arizona State University  
          • James Garrison, State Historic Preservation Office | • Scott Kwiatkowski, Yavapai Prescott Indian Tribe, Chair  
                                                                 • James Cogswell,  
                                                                 • Katherine Neustadt, ADOT  
                                                                 • Lori Faeth, Governor’s Office |
| 2007    | • Carol Griffith, State Historic Preservation Office, Chair  
          • Beth Grindell, Arizona State Museum  
          • Robert Breunig, Museum of Northern Arizona  
          • C. Michael Barton, Arizona State University | • Scott Kwiatkowski, Yavapai Prescott Indian Tribe, Chair  
                                                                 • James Cogswell,  
                                                                 • Katherine Neustadt, ADOT  
                                                                 • Lori Faeth, Governor’s Office |
| 2008    | • C. Michael Barton, Arizona State University, Chair  
          • Robert Breunig, Museum of Northern Arizona  
          • Carol Griffith, State Historic Preservation Office  
          • Beth Grindell, Arizona State Museum | • James Cogswell, Chair  
                                                                 • Scott Kwiatkowski, Yavapai Prescott Indian Tribe  
                                                                 • Jeremy Haines, U.S.F.S.  
                                                                 • Katherine Neustadt, ADOT  
                                                                 • Lori Faeth, Governor’s Office  
                                                                 • Barnaby Lewis, Gila River Indian Community |
| 2009    | • C. Michael Barton, Arizona State University, Chair  
          • Robert Breunig, Museum of Northern Arizona  
          • Carol Griffith, State Historic Preservation Office  
          • Barnet Pavao-Zuckerman, Arizona State Museum | • Scott Kwiatkowski, Yavapai Prescott Indian Tribe, Chair  
                                                                 • Jeremy Haines, U.S.F.S., Vice Chair  
                                                                 • Barnaby Lewis, Gila River Indian Community |

**Recent Database Usage**

At the end of fiscal year 2009, the AZSITE database contained 83,127 records. The majority are archaeological sites but a substantial minority are historic properties (buildings, railroads, telegraph, etc.). The website receives on the average 87 “hits” per day from users who are checking data on-line. In addition to reviewing data on-line, users may request downloaded data sets that they may then incorporate into their planning documents. The number of user agreements issued to private archaeological firms and state and federal agencies has increased every year as has the number of users (employees with passwords to access the data). Table 6 details the number of user agreements, individual
users, and electronic data requests over the past three years. Table 7 provides information on the breakdown of user agreements by agency type. By far the largest number of user agreements is provided to private companies that are usually archaeological consulting firms or engineering firms with archaeologists on staff. State and federal agencies are also finding the database useful.

Table 6. Database Users and Data Requests

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th># User Agreements Issued</th>
<th>Total # Users</th>
<th># Requests for Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 (6 mo.)</td>
<td>73</td>
<td>242</td>
<td>278</td>
</tr>
<tr>
<td>2007</td>
<td>77</td>
<td>257</td>
<td>334</td>
</tr>
<tr>
<td>2008</td>
<td>83</td>
<td>278</td>
<td>263</td>
</tr>
<tr>
<td>2009</td>
<td>74</td>
<td>260</td>
<td>242</td>
</tr>
</tbody>
</table>

Table 7. Details on User Agreements by Institution Type

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th># Private Companies</th>
<th># State &amp; Local Agencies</th>
<th># Federal Agencies</th>
<th># Tribal Agencies</th>
<th># Educational Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 (6 mo.)</td>
<td>50</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2007</td>
<td>49</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>2008</td>
<td>54</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>2009</td>
<td>47</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

AZSITE Funding

AZSITE users are required to pay user fees for access to the database. The fees are graduated; depending on the number of users an institution wishes to have access to the database. They range from $750 per annum for one to three users, $1,500 per annum for four to nine users, and $3,000 per annum for ten or more users. The income from these fees is detailed in Figure 1. It does not cover the full expenses of running AZSITE and each of the four managing institutions contributes staff and operations funds annually, as well as occasional grant funds. Table 8 provides operating expenses, by agency, for FY 2008. User fees cover close to 30% of the costs. Member agencies and annual funding from the U.S. Bureau of Land Management provide the remaining expenses.
Table 8. AZSITE Operations Budget, FY 2008-2009

<table>
<thead>
<tr>
<th>Agency</th>
<th>Personnel</th>
<th>Travel</th>
<th>Operations</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona State Museum</td>
<td>$162,967</td>
<td>$4,579</td>
<td>$1,098</td>
<td>$184,644</td>
</tr>
<tr>
<td>Arizona State University, ISSR</td>
<td>$19,950</td>
<td></td>
<td></td>
<td>$19,950</td>
</tr>
<tr>
<td>Arizona State University, School of Human Evolution and Social Change</td>
<td>$4,000</td>
<td></td>
<td></td>
<td>$4,000</td>
</tr>
<tr>
<td>State Historic Preservation Office³</td>
<td>$42,080</td>
<td>$1,707</td>
<td></td>
<td>$43,787</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$228,997</td>
<td>$4,579</td>
<td>$18,805</td>
<td>$252,381</td>
</tr>
</tbody>
</table>

³ $30,000 of expenses funded by the BLM under national programmatic agreement with SHPO

**Conclusions and Priorities for the Next Year**

The AZSITE consortium is an outstanding example of successful collaboration to provide important public services the citizens of the state of Arizona. The voluntary cooperation among the consortium members has produced one of the most sophisticated, accessible, and secure digital archives of archaeological and historic information in the country. The AZSITE digital archive is used by hundreds of professionals, in private, local, state, and federal institutions to help preserve Arizona’s cultural heritage. Over the life of the consortium, and continuing after Executive Order 2006-03, AZSITE has consistently improved the quality of the cultural resource data it makes available as well as the ease of accessing this data to qualified users.

The system is highly efficient, but still incurs a number of inherent costs. There are personnel, hardware, and software costs of maintaining the data and web server needed to store and deliver cultural resource information. There are continuing personnel cost needed for verifying and uploading new archaeological and historic sites information submitted to the archive by
professionals carrying out cultural resource management activities in compliance with state and federal laws. Finally, there are personnel costs needed to convert into digital format the paper records from nearly a century of archaeological and historic research in the state.

Clearly, maintaining and improving the data and web servers that store AZSITE’s data and make is accessible to others is a top priority. However, to make the system more effective and useful for managing Arizona’s cultural resources, it is imperative that archaeological and historic resources discovered and documented in ongoing projects be rapidly uploaded to the archive to avoid duplication of effort by different agencies and private companies. It is equally important to enter and upload pre-existing paper records to the new digital archive. Entering all known archaeological and historic properties into the archive will better help to preserve Arizona’s cultural resources, and avoid the costly delays and remedial work that is required when such properties are encountered during public or private construction activities.

An important priority for the board in the coming year will be to review funding sources for the AZSITE archive. User fees have been kept modest since the founding of the archive in order to make this information as widely accessible to qualified users as possible. However, current user fees are not even sufficient to support maintenance of the database and servers that now exist, and the consortium members contribute considerable staff resources to keep the system running. It is important that the AZSITE archive continue to grow to include all known archaeological and historic properties in the state. This will require a considerably larger funding base than is now available for the system.

Ideally, there should be direct public funding to augment user fees and help the consortium members continue to deliver this important information service to qualified users in Arizona. Additionally, the federal and state land managing agencies—whose missions benefit by the maintenance of a statewide archive of archaeological and historic properties—should share in the financial support of this system. The Bureau of Land Management contributes $25,000 annually to support AZSITE, but other state and federal agencies only pay a few hundred dollars per year for user access. We will seek ways to increase public support and system improvements that benefit the public. Additionally, we plan to review the cost structure of user fees—both in terms of the base costs and the kinds of user agreements made available.

An important reason for seeking to improve the funding base of the AZSITE archive is to enter the large backlog of archaeological and historic properties that are known but not in the archive. The reason for this backlog is primarily the lack of funds to hire needed personnel. As the technical components of the system have reached maturity, improving the quality and quantity of data in the archive will take on an increasingly higher priority.
Finally, we seek to address an important management issue in the coming year. The AZSITE board functions well. But an important component of Executive Order 2006-03 was the establishment of an Advisory Committee to provide a formal way for the larger community of cultural resource professionals and the general public to offer advice to the board. The Advisory Committee has been very active and helpful. But its activities have been limited by the difficulty in achieving full membership on the committee according to Executive Order 2006-03. We plan to work with the Governor’s office (who appoints the Advisory Committee) to find ways to expedite the appointment of members to this committee so that it can better fulfill its role in advising the board.