The Power To Preserve

Public Archeology and Local Government
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Cover: Pima County’s redevelopment of an entire city block in downtown Tucson required both historical research and archeological investigations to document its developmental history. Beneath the asphalt of a parking lot installed in the 1950s, archeological features and materials were found that dated from the prehistoric, Spanish colonial, Mexican, and early Statehood periods. Photo courtesy Linda Mayo.

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Foreword

There is widespread interest in archeology among the American public—and I am not talking about New Age or Fantastic treatments of the subject. Witness the popularity of magazines, television shows, newspaper reports, museum exhibits, site tours, and adult education programs that present real archeological materials and interpretations in a credible way. Archeologists and citizen activists have tapped this widespread interest to promote laws and regulations requiring federal and state agencies to include archeological resources among the historic properties to be considered in project planning and execution. At the local level, however, public interest in archeology has seldom been translated into effective preservation of sites. Decisions by local governments and actions by private developers that result in destruction of archeological resources have more often been met by mere laments from the archeological community than by effective action to address the problems. Yet the widespread occurrence of local ordinances providing some type of protection for historic buildings demonstrates citizens' willingness to support reasonable restrictions on development in order to preserve historic values.

The important set of papers in this issue of CRM show what archeological preservationists must do to gain similar consideration for archeological resources at the local level. There is no single magic approach that will work everywhere. Each success must be built from the grassroots up on the basis of hard and patient work that takes the specific character of each community into account. Because archeological sites, unlike historic buildings, are seldom highly visible, proponents of archeological preservation must work doubly hard to show what can be learned from sites if they are protected. These papers provide tools and models that archeological preservationists can adapt to their own communities. They will also stimulate communication among local groups working for archeological preservation throughout the nation.

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Public Archeology and Local Land Use Law

This issue of CRM presents 10 papers that were originally prepared for a session entitled "Public Archeology and the Power of Local Preservation Law" that I organized for the 63rd meeting of the Society for American Archaeology held in Seattle, Washington, in March 1998. The session participants, all archeologists by training, were invited to speak about their experiences working with local governments (counties and municipalities) that are using their legal authority to regulate land use and development to protect archeological sites.

Protecting the archeological record has always been a land use and planning problem. Federal laws such as the National Historic Preservation Act, and similar state laws, specifically require consideration of cultural resources during the planning and design phases of government undertakings. Most development in this country, however, is private, and not subject to state or federal preservation requirements because no public lands or financing are involved, and no permits or other authorizations are required—except for those issued by local governments.

The explosive growth of sprawl occurring throughout the country is a direct threat to the archeological record. Last year alone there were over a million new housing starts involving disturbance to thousands of acres of land and the cultural resources they contain. Sadly, because most local governments have no requirements to consider archeological sites in planning for either public works projects or private development, much of the record of the past is in danger of being lost without even knowing what we are losing in the process. Ironically, many communities do have some form of preservation advisory board or commission, but protecting archeological sites is not a part of their mandates. A recent survey of 2,000 local historic preservation commissions in the country conducted by the National Alliance of Preservation Commissions found that 91% of the respondents do not in any way consider the effects of development on archeological sites.1

The purpose of this issue of CRM is to highlight this growing preservation problem and to present examples of some of the few local governments that are doing something about it. In each case, preservation is achieved by means of local laws controlling land use and development. The legal basis for these laws derives from the powers given the states under the U.S. Constitution to regulate the activities of private individuals for the purpose of protecting the public health, safety, and welfare.2 This authority may be conveyed to local governments through enabling state legislation that establishes the requirements for planning, zoning, and other land use controls. Thus, the local governments that have met these requirements and have chosen to protect archeological sites have accepted the argument that it is in the public interest to do so.

The threat to the archeological record is real, the problems are identifiable, and solutions do exist, as demonstrated by the papers in this issue. The papers are organized roughly by region and illustrate a wide range of approaches to archeological site preservation on the local level. The emphasis is on the practical and information is presented to demonstrate what works, and in some cases, what doesn’t. Many of the authors are state agency employees who work every day with local governments (Simon, Bellantoni, McGrath, Cushman, O’Shea). Others are local government planners or program staff who have to make preservation work for their communities (Mayro, Mouriquand, Carr). One author is a member of a local preservation commission that just recently succeeded in establishing protection for a large archeological district (Wheaton). And another is a professional planner with a background in archeology who provides valuable insights on where site protection can be inserted in the planning and development review process (Lawrence). Each author emphasizes something different about their experiences; however, the message that we want to convey to you is the same—local land use law can be a powerful tool for protecting archeological sites. Use it.

Notes
1 Pratt Cassity, personal communication with author.

David W. Cushman is Cultural Resources Program Coordinator, Pima County, Arizona. He is guest editor of this issue of CRM.
Local governments in the Commonwealth of Massachusetts have great flexibility in establishing archeological programs tailored to their particular needs and desires by drawing on local interests, resources, and talent; and by seeking advice from professional and responsible avocational archeologists. Because the majority of construction projects that jeopardize historic and archeological resources in Massachusetts are only reviewed by local agencies, communities must take the initiative in historic preservation planning. Not all communities choose to exercise local historic preservation review authority over specific projects. In fact, the most successful local archeology programs also embrace pro-active preservation planning activities that emphasize broad and long-term identification and preservation goals and public educational initiatives to foster a local preservation constituency.

Each town in Massachusetts is authorized under state enabling legislation (Mass. General Laws Chapter 40C) to establish a local historical commission (LHC). LHCs maintain inventories of historic and archeological properties and advise local governing boards and agencies about historic preservation. The LHCs are, in majority, staffed by volunteer citizens who are appointed by the town’s board of selectmen, mayor, or city council (depending on the organization of the local government). A few large cities, such as Boston, Cambridge, Somerville, and Lowell, have a paid professional historic preservation staff. Only Boston has a City Archeologist on staff.

The Massachusetts Historical Commission’s (MHC) assistance to LHCs includes giving advice on integrating preservation planning within local governments through the development of local historic preservation review by-laws; providing grants-in-aid for the preparation of model guidance documents, preservation plans, and archeological sensitivity maps; encouraging civic volunteerism through local archeology projects; developing a bibliography on archeology and historic preservation planning; and fostering public outreach and educational efforts through workshops and conferences, and coordinating events and publicity for Massachusetts Archaeology Week.

Results

Twelve towns and cities in Massachusetts have decided to include archeology in their local governments in various ways, resulting in a diversity of regulatory review and planning programs [see list p. 6]. Some towns allow LHC review of subdivision approvals, wetlands permits, gravel pit permits, or local historic district reviews. In addition, many of these towns have published archeological preservation plans, or have incorporated archeology into their historic preservation plans.

As a result of local regulatory review for archeology, many archeological surveys and a few data recovery excavations have been conducted. Site preservation has also occurred in open space areas of numerous subdivisions. Many acres of land with archeological sites have been acquired for conservation, preservation, and passive recreation by towns and land trusts through private donations, and by using local, state, and federal land conservation funds. The statewide inventory of archeological sites and collections has also been supplemented through local research efforts. Public education efforts and publicity have reached thousands of residents.

The chiefly volunteer structure of LHCs and public misperceptions about archeology and development projects can pose problems. Like other volunteer organizations, problems occur when key members depart or when enthusiasm wanes. Often, while LHCs are enthusiastic about archeology, there is little or no professional expertise.
Consequently, LHCs rely heavily on the State Archeologist for technical expertise to initially review and comment on proposed projects, and then to review, consult, and comment on archeological investigation proposals, results, reports, and recommendations.

Local governments also have to respond to public constituencies who are wary of too much government interference; or the relatively high cost of archeology for private land owners with modest construction budgets; project delays and 11th-hour crises caused by poor planning or late notification; and fears that archeological discoveries will prohibit construction altogether. One member of a local historical commission recently told us, “We don’t want to be regulators, we want to do archeology!” Although easily discouraged by negative experiences with local regulatory review, interested volunteers seemingly thrive on discovering new details about the archeology of their towns, and learning new skills.

More active local groups engage in a variety of tasks, such as examining private artifact collections, reporting site information, visiting and

<table>
<thead>
<tr>
<th>Local Archeology Programs and Preservation Plans in Massachusetts</th>
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<tbody>
<tr>
<td><strong>Barnstable</strong>—Local Historical Commission (LHC) comments on subdivisions and wetlands permits throughout the town and assists Sandy Neck governing board in management of archeological resources (Sandy Neck is a large archeological district owned by town, listed in National Register [NR]). Town-wide archeological sensitivity map and preservation plan prepared.</td>
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<tr>
<td><strong>Boston</strong>—City Archeologist on staff of Environment Department (Boston Landmarks Commission) runs educational programs, operates laboratory and curation facility; Local Landmark designation can be made on archeological sites (e.g., City Square, Charlestown). City archeological plan identifies priority areas for survey and protection.</td>
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<td><strong>Brewster</strong>—Brewster Conservation Commission wetlands permit by-law includes archeological sites in legal definition of protected resources. Archeological sensitivity map of town prepared. Wetlands permit applications for projects in sensitive areas submitted to Massachusetts Historical Commission (MHC) for review and comment.</td>
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<tr>
<td><strong>Chilmark</strong>—A town-wide sensitivity map and preservation plan are in preparation.</td>
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<tr>
<td><strong>Falmouth</strong>—A town-wide sensitivity map and preservation plan have been prepared, identifying priority areas for survey and protection.</td>
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<tr>
<td><strong>Marion</strong>—A town-wide sensitivity map and preservation plan are in preparation.</td>
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<tr>
<td><strong>Medfield</strong>—Medfield Archaeology Advisory Committee (MAAC) is a component of LHC. Recent town-wide archeological sensitivity map and plan completed; recommends adoption of local ordinance (by-law) directing all local boards to seek comments of MAAC on projects in archeologically sensitive zones. Previous “demolition delay” ordinance for archeological sites was not effective measure—resulted in 11th hour, difficult negotiations with land owners—no longer being implemented. MAAC continues extensive volunteer training and activities including survey, excavation, collections inventory, curation, and public education.</td>
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<tr>
<td><strong>Middleborough</strong>—Gravel borrow permit and subdivision applications are submitted to LHC for comment, using town-wide archeological sensitivity maps.</td>
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<td><strong>Northborough</strong>—Subdivision applications require submission of information to MHC for archeological review and comment.</td>
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<tr>
<td><strong>Salem</strong>—A city-wide archeological sensitivity map and plan identifies priority areas for survey and protection. Winter Island Historic and Archeological District listed in NR.</td>
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<tr>
<td><strong>Wayland</strong>—First town in Massachusetts to establish archeological component (Wayland Archaeology Group [WARG]) within the LHC. Town-wide reconnaissance surveys and archeological sensitivity maps prepared. WARG comments to local boards on impacts to archeological sites. WARG volunteers conducting data recovery program at town sand pit site.</td>
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<tr>
<td><strong>Westborough</strong>—LHC very interested in archeological resources, comments on project impacts, advocates for archeological surveys. LHC nominated Cedar Swamp Archeological District to NR.</td>
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inspecting sites, and nominating sites to the National Register; these activities are more typical of preservation planning than environmental review. Support and patient guidance on our part will go far to foster the growth and well-being of an interested cadre of local citizens, who typically also have other jobs and responsibilities.

**Is More Control Better? Not Necessarily!**

Instead of more "control," consider better ways of "doing business" by blending pro-active planning and public education into the regulatory mix. Each community should develop an archeological preservation plan, as it does for historic resources. Local archeological preservation plans can be funded through Survey and Planning (S&P) grants from the State Historic Preservation Office (SHPO). MHC has awarded S&P grants to eight towns (Barnstable, Boston, Chilmark, Falmouth, Marion, Medfield, Salem, and Wayland—see listing p.6) to produce archeological preservation planning reports with recommendations for each town's local archeology program, catered to the unique characteristics of each particular locality. With an S&P grant, in accordance with National Park Service guidelines, professional archeologists prepare a plan that typically includes the results of a town-wide reconnaissance survey identifying known prehistoric and historic site locations and archeologically sensitive areas on town maps using professionally accepted predictive models. The LHC's copy of archeological site and sensitivity maps are not a public record under state law (Mass. General Laws Chapter 40C), and are excluded from Freedom of Information demands by looters. But, LHCs can share this critical archeological information with the owners of significant sites and with local review authorities. Archeological sensitivity maps are a critical component of a local review program, defining which areas are subject to local regulatory attention. The maps must be accurate, preferably based on local zoning maps as well as USGS quadrangle maps. Meaningful and accurate archeological sensitivity maps help landowners, developers, engineers, and town permitting authorities better anticipate which project areas may involve archeological impact review. Local regulatory controls must be clear-cut, time-sensitive, predictable, defensible from legal challenge, and respectful of private property and due process rights.

Preservation planning for archeological sites is most successful when done pro-actively, rather than through regulatory review of proposed construction projects. Important archeological sites identified by a town reconnaissance survey can be targeted for preservation. LHCs can assist town conservation commissions by including archeological sites in open space plans and on a list of acquisition priorities by the town or a conservation organization such as land trust or The Archeological Conservancy. LHCs can advocate for town planning boards to adopt cluster zoning options for subdivision developments to protect sites within open space areas. Public educational initiatives are a critical component of any local archeology program. To increase the number of active members of LHCs involved in local archeology programs, basic archeological skills and knowledge can be acquired through reading, coursework, and field and laboratory training. The close involvement of professional and responsible avocational archeologists in basic archeological training and technical assistance to
LHCs are crucial. Adept media relations, publicity efforts, and programs geared to the general public broaden the constituency of support for local preservation efforts—always an important consideration in local politics.

In summary, local archeological review programs offer opportunities and challenges in developing and fostering a local review process that will be managed properly and embraced by local citizens. As unique as each community is, no single set of regulatory controls will be universally practical. Rather, each town should be encouraged to establish a local archeology program by choosing from a variety of regulatory, planning, and educational tools that meet their particular circumstances and interests.

Notes
2 Edward L. Bell, A Bibliography on Archaeology and Historic Preservation for Local Historical Commissions (Boston: Massachusetts Historical Commission, 1997).

References

Brona G. Simon is State Archeologist and Deputy State Historic Preservation Officer, and Edward L. Bell is Senior Archeologist at the Massachusetts Historical Commission, Boston, MA.
Planning and Zoning Strategies
Protecting Connecticut's Archeological Resources

Archeological resource protection mechanisms in the state of Connecticut are guided by a twofold strategy. The State Historic Preservation Office (SHPO) was established in the 1970s to administer federal and state historic preservation programs. The Office of State Archaeology (OSA) was created in the 1980s to provide technical assistance in the preservation of cultural resources to municipalities in the review of privately funded development projects that do not require compliance with federal or state preservation legislation, but are subject to local regulations.

By abandoning the county government system, the state gave municipalities virtual autonomy in land use decision-making. As a result, 169 separate local governments regulate, through planning and zoning and/or conservation commissions, the review of proposed development projects. To assist the town governments, state enabling statutes guide municipalities as to what they can regulate; and zoning commissions have been given the ability to develop regulations for the "protection of historic factors."*

"Historic factors" has been broadly interpreted to include archeological resources. Hence, the OSA provides technical assistance to town officials, landowners, developers, and others for evaluating private or town-sponsored development projects for impacts to cultural resources. OSA encourages Connecticut towns to develop a local review process that is structured similar to the federal preservation approach. While projects are usually of a smaller scale than their federally permitted or funded counterparts, compliance is more difficult to monitor due to a lack of legislative mandate or professional staff at the local level.

The OSA has worked with every municipality in the state on preservation issues, often when written planning and zoning regulations are lacking. Without these regulatory mandates, cogent arguments must be made to members of the local land use commission. The success of our arguments is often determined by the commitment of town officials and commission members to effectively balance the dual pressures of preservation and economic development. "Grassroots" advocacy from the local community plays an extremely important role in convincing town officials to support cultural resource protection. State officials can testify about the resource and the need, but it takes local residents and voters campaigning for archeological preservation to make it happen.

The general statutes of nearly 20 states contain enabling language either requiring, or encouraging, written comprehensive land use and development plans by local government. These local area plans serve as a guide not only for planning and zoning boards when adopting land use regulations, but they can also assist the judicial system in determining the constitutionality of a local regulation should it be challenged in court.

For example, the Connecticut Supreme Court has established that planning and zoning boards may consider historic preservation issues in their local land use regulations and decisions, provided that preservation has first been adequately addressed in the town's comprehensive plan. In Smith vs. Town of Greenwich Zoning Board of Appeals (227 Conn. 71, 1993), the courts ruled in favor of a municipality that was challenged by a developer who was obligated to comply with cultural resource protection measures. The clear message of the Connecticut Supreme Court, however, is that communities must be pro-active and possess an adopted comprehensive master plan that specifically addresses local historic preservation concerns.

Both SHPO and OSA routinely promote the Town of Ledyard's archeological review process (see regulations, p. 10) to other communities as a workable and successful approach. Ledyard's
preservation plan contains maps and a list depicting all properties on the National Register of Historic Places. It has four basic objectives:

- Identify and avoid historic and archaeological sites prior to construction. This is accomplished either proactively through broad, town-wide cultural resource surveys, or by detailed archaeological investigations of individual properties that are proposed for private development or municipal capital projects.

- Preserve archaeological sites in situ rather than excavate or salvage identified remains. Developers are encouraged to realign or relocate proposed roads, buried utilities and buildings, or to dedicate identified archeological sites to parks and open space. In this regard, the OSA has coordinated with landscape architects and engineers to incorporate cultural resource protection into their initial subdivision designs.

- List additional properties on the National Register. Although most listed properties in Ledyard are 18th- and 19th-century homes and farmsteads; this serves to create greater public awareness and broader respect for local preservation initiatives.

- Obtain Certified Local Government (CLG) designation from the SHPO and National Park Service, thus becoming eligible for matching federal grants for local preparation of National Register nominations.

Town of Ledyard Subdivision Regulations

SEC 2.0 General Definitions

CULTURAL RESOURCES: Consists of historic and prehistoric archaeological sites and structures; cemetery, human burials, human skeletal remains, and associated funerary objects; and distributions of cultural remains and artifacts.

SEC 4.7 CULTURAL RESOURCE PRESERVATION.

Subdivisions and resubdivisions shall be laid out to preserve significant cultural resources and unique natural features. Suitable public access to any cemetery may be required by the Commission.

SEC 4.7.1 CEMETERIES AND HUMAN BURIALS. All cemeteries within a proposed subdivision shall be deeded either to the Town of Ledyard, an existing cemetery association, a homeowners association, or other responsible party, as deemed appropriate by the Commission, along with a twenty (20) foot protective buffer, as measured from stone walls surrounding a cemetery, or from any identified human burial in the absence of wall or other demarcated boundary.

SEC 4.7.2 ARCHAEOLOGICAL ASSESSMENT. An on-site archaeological assessment shall be required, if in the opinion of the Commission, there is likelihood that significant cultural resources or undetected human burials will be adversely impacted by construction activities associated with the proposed development. The assessment shall be conducted in accordance with standards outlined in the Environmental Review Primer for Connecticut’s Archaeological Resources. Permanent reference copies are on file at the SHPO and Ledyard Planning offices.

SEC 4.7.3 DETERMINATION OF NEED. The Commission’s determination of need for an archaeological assessment shall be based on:

- a) proximity to identified cemeteries, human burials, archaeological sites, historic sites; and/or
- b) natural terrain features such as proximity to wetlands or watercourses, soils, slope, aspect or rock shelters,

where these factors reflect scientifically documented settlement patterns preferred by Native Americans or European Colonists.

In making this determination, the Commission shall seek advice and comment from the Office of State Archaeology and/or State Historic Preservation Officer. A letter seeking such advice shall be mailed within two (2) working days after the Commission’s subdivision preliminary review, as defined in Section 3.1.2 of those regulations.

SEC 4.7.4 MANAGEMENT PLANS. Cultural resource management plans submitted to the Commission by the applicant shall consist of:

a) a written investigative report prepared by a professional archaeologist, containing appropriate historic documentation, a description of research design methods and techniques, and a description of sites, features, and artifacts discovered as a result of the archaeological investigation. A list of accredited professional archaeologists is maintained by SHPO and OSA;

b) an evaluation of impact of the proposed subdivision on identified cemeteries, human burials, archaeological sites and historic sites;

c) a description of measures to be undertaken by the applicant to mitigate adverse impacts of construction activities on identified cultural resources. This may include an estimate of mitigation costs and time required for more extensive investigations. Measures may include open space dedication; conservation easements; redesign or relocation of roads, drainage features, or buildings so as to minimize adverse impacts; or excavations and removal of cultural remains supervised by a professional archaeologist;

d) copies of all investigative reports and management plans shall be submitted to the Office of State Archaeology and State Historic Preservation Officer for review and comment prior to any Planning Commission public hearing. Comments received from state officials shall be incorporated into the public hearing record.
Based on our experiences in developing archeological preservation strategies at the municipal level, we present a number of recommendations:

- **Generate local public support.** Local officials respond well to the concerns of town residents and their neighbors. Special interest groups, like archeologists, alone are usually not enough to persuade a town to go through the labor of amending, enacting and enforcing additional regulatory mechanisms. The preservation community, local historic and archeological societies, and environmental groups may be willing to offer guidance and support.

- **Search out and work with a municipal planning and zoning official that is especially supportive.** No matter how well archeological preservation regulations are written, you'll need an enlightened municipal official that will be willing to oversee compliance and day-to-day implementation and serve as the local point of contact with the SHPO and OSA. Archeological protection measures may get written into the regulations, but in time, they may not be adequately implemented unless someone in a position of authority oversees enforcement (see McGrath, p. 15).

- **Encourage town officials to incorporate the archeological process as early as possible within the land use decision-making process.** Attempt to coordinate site sensitivity information with design professionals prior to initial layout of the subdivision, with the goal of site avoidance and still permit the developer to place the same number of house lots without undergoing redesign of the project later. This is a cost-efficient and effective strategy, but works only at the early design stage. Town planners' hands become tied as engineering studies and design projects near completion.

- **Be as creative as possible in finding solutions for archeological site protection.** Create partnerships in preservation, not confrontations. Work with developers and municipal land use decision-makers to resolve preservation issues. If local officials perceive CRM as an administrative headache or economic burden, they will not effectively enforce what you have worked so hard to implement. Demonstrate that the system can work as the project proceeds through the design and regulatory review process. Success with a first "test case" of local regulatory procedures is critical for establishing respect in the treatment of historic properties on subsequent projects.

- **Encourage town officials to seek outside professional opinion in the site plan or subdivision review process.** Local officials should be comfortable seeking technical assistance from the SHPO, OSA, or other members of the archeological community. However, be careful to avoid any appearance of a conflict of interest. It is okay to provide testimony and professional guidance to local decision-makers, but if so, do not conduct CRM studies in your town of residence.

- **Clearly define such terms as "cultural resources."** This will prevent a court challenge based on vagueness, and can be used as a guidepost by local land use commissions and developers alike. It is the archeological community, both amateur and professional, that must take the lead and carry the banner of archeological protection to the public, to city hall, and planning and zoning commissions who, hopefully, in turn will adopt comprehensive community plans, pertinent regulations, and positively interact with the state's archeologists toward saving cultural resources. The archeologist who lives in the community is a taxpayer and a voter who carries a lot of weight with their neighbors and town officials. We encourage archeologists to get a seat on a planning or zoning commission, and to become one of the so-called "insiders."

**Note**
- Connecticut General Statutes, Sec 8-2.

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William R. Haase, AICP, is Director of Planning for the Town of Ledyard, Connecticut. He was an archeologist for the Bureau of Land Management in Utah and Colorado.
Ann Arbor is a town of slightly more than 100,000 people, located in the southeast corner of Michigan. Since 1983, the Ann Arbor Planning Department and the Museum of Anthropology, University of Michigan have collaborated in a program of archeological review, recording, and mitigation. This review process encompasses all development within the corporate limits of the city that requires Planning Department permitting, regardless of funding source.

The Review Process

Under the impetus of massive growth at the fringes of the city, The Great Lakes Range of the Museum of Anthropology received funding from the Michigan Council for the Humanities to pursue a program titled Archaeology in an Urban Setting. The goals of this initiative were to provide a baseline of archeological information for Ann Arbor and to develop a process for incorporating archeological review into the Natural Features portion of the city's Municipal Land Development Regulations.

Archaeological review is initiated when a site plan is submitted to the City Planning Department. As part of the normal site plan approval process, the city planner evaluates the parcel in terms of three archeological 'trip wires':

- Is there a known site in the vicinity?
- Is the parcel in a high probability zone?
- Is the parcel greater than five acres in size?

Criteria one and two are based on predictive maps prepared for the city by the Museum of Anthropology. These maps are overlain on a city base map of sufficient scale to allow easy evaluation by planners, but not so detailed as to compromise the safety of known sites.

If one or more of these criteria are met, the site plan is forwarded to the Museum of Anthropology for a file review. Given the nature of the 'trip wires', any parcel sent for file review should have a high probability of containing archeological sites. The primary function of the file review, therefore, is to ascertain whether there are reasons not to require a field reconnaissance, such as previous archeological investigation or prior site disturbance. In the event that a field reconnaissance is recommended, the Museum also provides guidance as to the appropriate survey requirements for the particular parcel.

Armed with these recommendations, the city can then require the developer to conduct the recommended archeological field reconnaissance as a precondition for site plan approval. The written report of this reconnaissance is forwarded to the Museum for evaluation. In the event that archeological resources are identified, the Museum staff provides advice to the city regarding the potential significance of the finds and, in the event of significant site finds, make recommendations for avoidance or appropriate mitigation.

An important feature of the review process is the clear delineation of the roles and responsibilities of the Planning Department and the Museum. It should also be noted that there are no additional costs to the city for the archeological review, which is performed by the Museum as a community service. The costs associated with field survey and potential mitigation are borne by the developer.

Since the review program has been in place for more than a decade, it is possible to get a good sense of its operation by considering the number of times each of these steps has been invoked. These figures represent the review activity between 1983 and 1996. During this 14-year period, 52 new sites were recorded within the city, of which 43 (83%) were the result of city mandated archeological survey. These 43 new sites constitute 13% of all recorded sites within the county. It is also interesting to note that sites arising from these surveys tend to be in locations and of types infrequently represented among the previously known sites.

Of the more than 2,000 plans reviewed by the Ann Arbor Planning Department during the period 1983-1996, 324 involved new ground projects of which 56 (17%) met one or more of the trip wire criteria. Of the 56 plans reviewed by the Museum of Anthropology, field reconnaissance was recommended in 46 instances (82%).

Of the 46 recommendations for field reconnaissance, 34 surveys were conducted. The difference in these values reflects projects that have been abandoned or postponed. These 34 field surveys resulted in the reporting of 43 new prehistoric sites, of which 5 required specific mitigation. This represents an average site recovery of 1.3 sites per survey, and the identification of significant sites that require mitigation in 15% of the surveys conducted.
Flow chart of the archaeological review process as implemented in Ann Arbor, Michigan (after Kotila, et al., 1998).

Figure 1

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These figures can be compared with figures reflecting rates for federal projects on a national basis.\(^4\) Nationally, 5%-7% of all projects required fieldwork and 10%-15% of the surveys conducted result in the identification of significant sites requiring mitigation. The Ann Arbor review process required fieldwork in 10%-14% and identified significant sites requiring mitigation in 15% of the surveys conducted. In other words, while the Ann Arbor review process is more inclusive than the Federal mandate (since it includes all development and not solely projects receiving federal funding) and entails fewer steps, it produces very similar results in terms of the identification of significant prehistoric sites.

In looking back over our experiences with archeological review in Ann Arbor, the acceptance and continued success of the program can be related directly to the long-term stability of the participants and to its predictability. City-based programs tend to promote stability among the players in the review process. Developers, planners, and archeologists all find themselves in something akin to a prisoner’s dilemma, in that everyone knows they will make repeated passes through the process. As such, everyone has a long-term interest in being reasonable and in making the process work. This was brought home to me early in the program when I asked a planner if he was worried that a contractor might not comply with the requirements. I was told that the contractor would keep his agreement because he knows he will be back in the Planning Office next year with another project.

For the city, the review process enables the Planning Department to fulfill its mandate under the Municipal Land Development Regulations at a minimum cost in time and dollars. The straightforward evaluation process and the clear delineation of responsibilities have enabled the review to become a routine step in the site plan process.

For the Museum, the archeological review process ensures that important archeological information is salvaged in advance of development. It also reflects the University’s recognition that it has a responsibility to the community in which we live.

For developers, the predictability of the process has been crucial. After strong initial opposition, most developers now view archeological review as just another regular step in the site plan process. The cost and time parameters have become predictable as developers have passed repeatedly through the process. We even have begun to see the phenomenon of advanced clearance, where developers seek assessment and even mitigation, prior to the submission of a site plan.

A key element in maintaining the predictability of the system has been the Museum’s willingness to act as a surveyor of last resort. This is not a role we envisioned for the Museum, nor did we anticipate its importance in maintaining the confidence of local developers in the process. When the city notifies a developer that a field reconnaissance is required, the developer is supplied with the list of State approved archeological contractors. Yet, the small size and short timelines for many of these surveys sometimes makes it difficult to find a contractor willing to do the work. This has been a serious concern voiced by the developers from the beginning. We have only been able to allay this fear by agreeing to do work in-house as a last resort. When the Museum does undertake field reconnaissance, it is done on a cost basis by MA level graduate students from the archeology program so as to put as much separation as possible between the survey and the evaluation roles of the Museum.

The program of archeological review developed for Ann Arbor does provide a model that can be adapted to other municipalities. Obviously, the existence of a large research museum in Ann Arbor is an important element, but many municipalities have access to a pool of trained archeologists attached to universities, museums, and, increasingly, to governmental agencies. It is, rather, the predictability of the review process and clear delineation of responsibilities that have been critical. These are the factors that have enabled the program to work and to gain broad community acceptance.

Notes
3. Ibid.

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William Parkinson is a graduate student in the Department of Anthropology, University of Michigan, Ann Arbor.
A local ordinance may be the foundation for preserving and protecting archeological sites. However, as the following two examples from Iowa illustrate, without commitment and a sense of responsibility, the local government will not build the necessary system for administering and enforcing the ordinance. In effect, the adage "pass it and sites will be protected" truly lies in the "Field of Dreams."

In the 1990s, problems arising from sprawl and uncontrolled development prompted Dallas County and Iowa City, Iowa, to pass ordinances that promised protection and preservation of archeological sites. The two local governments approached archeological site protection through comprehensive land use planning and zoning rather than local historic designation. They crafted ordinances that regulated development in environmentally sensitive areas by encouraging use of plans that minimized or avoided disturbance to natural and cultural resources. Archeological site protection was not the primary purpose of these laws. Rather, it was embedded within broader goals of natural and cultural resource preservation. In a state like Iowa with a laissez-faire tradition of land use regulation, it was easier to get the public and local officials to embrace laws that promised quality environments and green space for recreational use, than laws that focused exclusively on archeological site protection.

Located in eastern Iowa, home to the University of Iowa, with 80,000 residents, Iowa City is a growing metropolitan area. By the 1990s, the city had a nationally recognized historic preservation program, focused on the historic built environment. To preserve historic areas surrounding downtown and the University, the city adopted a model historic preservation plan, embarked on an ambitious, multi-year program of survey/evaluation of historic neighborhoods and an aggressive nomination schedule that would substantially increase the number of local historic districts and landmarks.

At the same time, Iowa City was contending with intensive sprawl and associated environmental mishaps. Initially, the city dealt piecemeal with each crisis, until it became apparent that the scale and complexity of the problems called for a more comprehensive approach. A citizen's committee was charged with drafting an ordinance that would deal with all aspects of the issue and produced the Sensitive Areas Ordinance (SAO) which was adopted in 1996. The SAO was supposed to alert developers and two state agencies (the State Historic Preservation Office and the Office of the State Archeologist) that a project might affect an archeological site and to provide an opportunity for intervention.

Since the passage of the SAO, the city planning staff has handled over 188 permit requests and requested more than 55 site record searches from the Office of the State Archeologist. Although there have been at least four previously recorded archeological sites within proposed development areas, there have been no archeological site investigations nor have plans been modified to allow for preservation of significant sites.

This situation developed because Iowa City had no sense of responsibility toward archeological sites, even though it has a historic preservation ordinance and participates in the Certified Local Government program (CLG). According to the ordinance and CLG agreement, the city is supposed to identify, evaluate, register, and preserve archeological sites. However, under the SAO, the state and the developer were expected to undertake and fund these activities. Their compliance was voluntary. If the state agencies and developer did not act, a project went ahead and sites were destroyed.

Since the mid-1980s, the Des Moines suburbs have spread westward and annexed portions of Dallas County for residential and commercial development. When this trend started, a farsighted Dallas County Conservation Department took action by compiling data and preparing a management plan for natural, cultural, and recreational resources in the county. The plan focused on the dominant topographic feature of the county, the 137,000-acre Raccoon River Greenbelt, formed by the North, Middle, and South branches of the river.

The plan contained two ways of preserving and protecting archeological sites. First, through planned land acquisition, the Conservation Department would purchase archeological sites. Second, by revising the county zoning ordinance to create a special zoning district for areas within the Raccoon River Greenbelt that contain significant...
natural or cultural resources and by establishing a review process for all development plans. In 1991, the county established a local preservation program, received CLG status, and initiated a survey-evaluation process within the Raccoon River Greenbelt. By 1994, the County Board of Supervisors had adopted the plan and a revised zoning ordinance that implemented the plan.

Dallas County issues permits for various development activities and uses a review process to determine if projects will involve archaeological sites. There is a two step approach. First, all developers are required to submit “concept plans” to the County Director of Planning and Community Development. The concept plans should indicate if significant archaeological sites lie within the proposed development as well as show how the site will be treated so as to minimize disturbance but still promote the site's recognition and enhancement. This review

### Steps in Sensitive Areas Ordinance Process

1. Developer applies for permit

2. City staff consults:
   a. Site Distribution Map  (outdated information, no process for updating)
   b. Office of State Archaeologist (by policy, OSA provides only locational information, does not maintain information on SHPO evaluations)

3. Based on consultation, possible actions:
   a. There is no site reported:
      1) OSA can pay for and undertake investigation to determine if site is present or
      2) Developer can pay for and undertake investigation to determine if site is present
   b. Unevaluated site is present:
      1) OSA can pay for and undertake investigation to determine site significance or
      2) Developer can pay for and undertake investigation to determine site significance
   c. Significant site is present:
      1) OSA can have additional time to study site and determine if in situ preservation is needed (OSA underwrites this effort)
      2) Iowa City Historic Preservation Commission can locally designate site

4. Significant site is present and should be protected:

   Developer asked to design around and place site in green space (What happens with a 200-acre development and a 150-acre significant site?)
applies to all concept plans regardless of where
the property is located.

Second, any request to rezone A-2 land, to
develop it in tracts of less than 10 acres, or any
other variation, prompts an additional review of
the developer's concept plan by the Director of
the Dallas County Conservation Department
with an opportunity to recommend approval or
denial of the plan. It should be noted that the A-
2 zoning district encourages large lot develop-
ment and assumes that improvements on lots of
10 acres or more will only be localized in effect
and create minimal disturbance to archeological
sites.

This promising start was not sustained.
The Director of Planning and Zoning and his
assistant are responsible for administration and
enforcement of the Dallas County zoning ordi-
nance. Since the passage of the revised zoning
ordinance, the county has handled approxi-
mately 100 requests for permits relating to develop-
ment. The records suggest that pro forma
approval was given to concept plans. Applicants
did not have to document their efforts to deter-
mine if a tract contained archeological sites by
submitting inventory reports, they could simply
assert there were none. When a project involved
lands classified as A-2, the Director of the
Conservation Department reviewed and com-
mmented on the plans. There was no follow up
mechanism to insure incorporation of his recom-
mandations in final plans. In summary, it
appears that the zoning ordinance provisions
applying to archeological sites are not being
implemented or enforced.

At present, neither ordinance has resulted
in archeological site protection. Analyzing the
reasons suggests what must be done to develop
an effective local archeological preservation pro-
gram. There should be an effective system in
place for administering and enforcing the ordi-
nance. Developers, staff, and historic preserva-
tion commissioners should know their role and
responsibilities in the process. There should be
formal means for communicating information
and tracking reviews.

Although Dallas County had all the ingre-
dients, e.g., staff and commission members with
experience and interest in archeology; a newly
initiated survey, evaluation, and registration
process that included archeological sites; a com-
puterized inventory; and utilization of the GIS
system, these were not organized for administra-
tion of the ordinance. Instead, the system rested
on the Director of Planning and Zoning and the
Director of Conservation, two staff members with
divergent views on how the system should oper-
ate. The differences were not resolved and the
fledgling historic preservation program has fal-
tered.

Many of the problems encountered
stemmed from the fact that neither local govern-
ment had completed its archeological site sur-
evys and evaluations. Consequently, they could
not furnish developers with information about
site location or significance. Moreover, staff did
not seem to understand site inventory data and
thus were unable to explain to developers how to
use the information for planning purposes. In
addition to helping a local government construct
its inventory of historic properties, survey and
evaluation projects can be powerful tools for
instructing staff, commission members, and the
public about the meaning and interpretation of
resources.

Finally, there should be a sense of local
commitment and responsibility toward archeo-
logical sites. This means that there is an effort to
educate all players—staff, commissioners, devel-
opers, officials—on their value and the need to
protect sites. It means that the local government
through CLG grants, fees, or other means
assumes responsibility for implementing those
activities that will accomplish preservation and
protection.

Passing the ordinance is simply the first
step in the process. To work, a local government
has to commit to the same array of activities it
undertakes when trying to preserve the built, his-
toric environment—maintain and update the
inventory, educate and train those who adminis-
ter the ordinance, and most importantly, commu-
nicate the results of its work with officials, devel-
opers, and the general public. Only by continu-
ously sharing the wealth of information gained
through archeological research will we be able to
insure protection of sites.

References
Dallas County, Iowa, Title V - Property and Land Use,
Chapter 45 - Zoning Code, November 8, 1994
Ordinance No. 95-3699, amended March 5, 1996,
September 10, 1996, October 22, 1996. An ordi-
nance amending the zoning chapter by incorporat-
ing a new section 14-6K-1, entitled "Sensitive
Areas Ordinance," to regulate development in
environmentally sensitive areas in Iowa City,
Iowa.

Kerry McGrath is Local Governments Coordinator,
State Historical Society of Iowa.
Archeological Site Protection in La Quinta, CA

Leslie J. Mouriquand

La Quinta, California, is a small community of 19,000 located approximately 30 miles southeast of Palm Springs, at the base of the Santa Rosa Mountains, in the Salton Basin of the Colorado Desert. The city was incorporated in 1982, but historic settlement began in the area over 100 years ago. Known for its golfing opportunities and as a hideaway for the stars, La Quinta is now approximately 32 square miles in size and is still growing.

Twenty-five years of archeological investigations have resulted in the discovery of over 200 prehistoric sites in the area spanning the last 3,000 years. The sites are significant to the local area and offer a clear picture of increasing interaction through time between prehistoric cultures of the Pacific Coast and Colorado River regions.

Since the city's incorporation, La Quinta has experienced continual urban development pressure as it has grown from a small village community to a progressive city. Numerous residential subdivisions have been reviewed, approved, and constructed in La Quinta, many of them on top of prehistoric residential areas. This continued development puts many of the archeological sites at risk.

To mitigate this risk of archeological site destruction, La Quinta has, over the past 10 years, developed an award-winning cultural resource management program. The program has elevated the level of legal compliance with state cultural resource laws and has become a model of local cultural resource stewardship. The success of the archeological resource management program in La Quinta directly relates to its passage of a historic preservation ordinance in 1992; this put the city on record as saying that the cultural heritage of the area is significant and worthy of proper consideration and protection efforts. Because of this commitment, La Quinta was awarded a Certificate of Recognition for an Outstanding Local Cultural Resources Management Program by the Association of Environmental Professionals in 1996, and the President's Award by the California Preservation Foundation in 1998.

Although the city regards its cultural resources with a somewhat holistic approach, considering historic, archeological, and paleontological resources alike, there is special emphasis on archeological sites. This emphasis is included as a primary component of the city's certification as a Certified Local Government (CLG), a national preservation program administered by the National Park Service and the State Historic Preservation Office (SHPO). Being a CLG entitles the city to benefit from special grants, technical advice, and the prestige associated with being certified.

The city's Historic Preservation Ordinance and Historic Preservation Commission are approved by the CLG Program, which means that the ordinance and the commission both meet federal and state standards for proper consideration and protection of cultural resources. The ordinance follows the California State model, and provides the tool for the city staff and Historic Preservation Commission to utilize in enforcing proper survey, recordation, and mitigation of the archeological resources in La Quinta. Prior to enactment of this ordinance, the city had to rely on implementation of the California Environmental Quality Act, Appendix K, as its only tool to require proper archeological investigations for private development projects. The ordinance provides the needed local legislation in support of the state law.

The ordinance requires that the city have a qualified Historic Preservation Commission composed of both professionals meeting the Secretary of the Interior's Standards and qualified lay members. As La Quinta is a relatively small city, it has at times been difficult to find professionally qualified candidates for the commission. An amendment to the ordinance allows for non-resident professionally qualified candidates to be appointed by the City Council to the commission. Lay-commissioners must be residents of La Quinta. With an active local historical society, there is never a shortage of lay-member candidates.

The next most important component of the archeological resource management program is the requirement that all archeological reports submitted to the city follow the Archeological Resource Management Report (ARMR) format as recommended by the California SHPO. This format ensures that there is a standard style of reporting that is detailed and comprehensive. The ARMR for-
A Historic Context Statement has been researched and written by staff that covers an extensive period of time ranging from 10,000 years before present to 1950. This document identifies and describes thematic and chronological periods in the history of La Quinta. It also sets forth criteria for determining significance for the city's cultural resources from these periods. La Quinta's Context Statement is a little different from most other California cities in that there is an equal amount of attention paid to the prehistoric heritage as there is to the historic built environment. The document is intended to be updated and expanded periodically as more pieces of the city's archeological puzzle are fitted together.

New to the city's cultural resource management program is the Cultural Resources Element that is being prepared for the city's General Plan. A General Plan is required by state law for every city in California to identify its goals, policies, and objectives for both development and open space preservation. The Cultural Resources Element will guide the city in planning and considering its cultural resources for the future. This particular element is not required by state law, thus its inclusion will provide yet another local preservation tool.

Throughout the development of La Quinta's cultural resource management program, it has been necessary to educate city staff and decision-makers on its implementation. The first task was educating staff, which includes planners and engineering department personnel. Cultural resources are one of the environmental issues on the California Environmental Quality Act (CEQA) Initial Study Checklist that must be addressed as to presence, significance, project impacts, and reasonable mitigation measures. Since the planners prepare these Initial Studies, they were the first target group for educating. In 1992, the planners did not know that they should require that archeological reports make significance determinations or to look for opportunities to redesign projects to preserve archeological sites located within a project boundary. The intent of CEQA was not being met. The planners were informed about CEQA and laws pertaining to archeological resources and were briefed about the standard professional archeological practices. This educational process was accomplished through casual discussions, formal presentations at workshops, and information memos and materials.

Staff of the engineering departments, who typically were not involved with archeological sites until the project implementation/permit issuance phase, are now brought in at the design review phase. Similar educational efforts and tools have been used for this group. Field engineering inspectors were briefed on the nature of archeological sites and artifacts, archeological laws, pot hunting, and the responsibilities and methods of project archeologists. The field staff have become the "eyes and ears" for the city in the field, interfacing with project archeologists.

Making archeological resource management palatable to city administrators and decision makers required more subtle and persuasive efforts accentuating the "carrot" of the various benefits of proper management by the city, rather than the "stick" of legal liability and compliance. Informal discussions and detailed staff reports have provided much of the education for this group. The "carrot" aspects that the staff has focused on have included pride in community prehistory and history, historic tourism, and the importance of scientific investigation of the city's archeological resources.

The implementation of the city's archeological resource management efforts has included networking with archeologists, historians, and paleontologists in both academia and the professional contract worlds. Networking has promoted effective working relationships, and reinforces the city's concern for its resources. One of the results of networking has been an improvement in the quality of archeological reports submitted to the city. There is a strong focus on research and interpretation in archeological resource investigation.

Close communication with the California SHPO and the local archeological information center is an important means of implementing the city's program. La Quinta communicates frequently with these agencies on a variety of topics ranging from organizing a training workshop to getting advice on technical issues and legal interpretations. Other agencies that are regularly contacted include the local and state archeological organizations, the local Native American tribal councils, and the various local conservancy groups. Communication is vital to effective implementation of a successful archeological resource management program.

The various components of La Quinta's archeological resource management program require continual monitoring to ensure proper implementation. As with any program, there are successes and setbacks. La Quinta has had repeated successes in implementing its program which has made the city a leader in local archeological resource management.

Note


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Santa Fe, New Mexico, population 70,000, encompasses an area of approximately 36 square miles centered on the old Plaza in the historic district. The city is also the seat of Santa Fe County, which has a burgeoning population of some 140,000 people concentrated primarily around the city limits. The combined city/county jurisdiction, covering 2,000 square miles of territory, is blessed with an abundance of world class cultural resources, from ancient Pueblo ruins to early Spanish colonial churches to the 19th- and early 20th-century buildings that make up the historic core of downtown Santa Fe itself.

Both the city and county governments passed preservation ordinances in the late 1980s that specifically link archeological site preservation with land use planning through their respective development review processes. In this paper I will briefly explore why the ordinances were adopted, how they work, and what the preservation payoff has been as a result.

Santa Fe has long been concerned with its image as a center of Anglo, Hispanic, and Puebloan culture, and efforts to preserve the city's historic properties began before the end of the last century. In 1957, responding to a building boom that threatened the historic character of the downtown area, Santa Fe passed the first preservation ordinance in New Mexico. While this law was directed toward preserving the city's architectural heritage, it set an important legal precedent by imposing local control over actions that may affect cultural resources. The area's rich archeological record was not specifically included in the city's preservation plans until the late 1980s. It was only after several large scale hotel and commercial development projects uncovered rich archeological deposits in the heart of downtown Santa Fe during the late-1970s and early-1980s that the full scale of the city's archeological potential was realized by local officials. The publicity that these projects generated, and the lack of legal mandates protecting the archeological record, galvanized local citizens into pushing for new preservation requirements. In 1987, the city passed its archeological ordinance, and a year later the county followed with its own law.

The City and County of Santa Fe are divided into zones called "districts" that are defined by modeling the probability of finding archeological sites in these areas using site data housed at the New Mexico Historic Preservation Division (State Historic Preservation Office). Stratifying the city and county in this manner is tied to different sets of requirements for development in each zone. This arrangement builds into it the concept of project size thresholds: if the size of the project is above the threshold for the district in which it is located, an archeological survey and any necessary follow-up investigations are required; if not, then the requirement is waived. Both jurisdictions require that if archeological deposits are discovered during construction, the work cease and the city or the county be notified. Tying survey requirements to areas defined by site location estimates is a classic resource sensitivity approach to preservation planning and is designed to balance the costs and benefits of preservation against those of development.

In the city's high potential Historic Downtown zone, a development of 2,500 square feet or more triggers the survey requirement; in the more moderate areas along the Santa Fe River and the Santa Fe Trail corridors, the limit is two acres or more; and, in the suburbs where the archeological potential is predicted to be much lower, only
This petroglyph, executed in the Rio Grande Classic style between AD 1325 and 1600, is typical of the rock art that is found throughout the Galisteo basin, in Santa Fe County, New Mexico.

Developments at 10 acres or more in size require survey.\textsuperscript{3} Survey reports and other studies are submitted to the city by the developer along with property plats and design plans for review. A five-member archeological review board composed of qualified volunteers determines if the developer has complied with the archeological requirements of the law and makes its recommendations to the City Planning Department for or against project approval.

The county ordinance is also based on the zone concept and works the same way only on a much bigger scale. Again, the State Historic Preservation Office (SHPO) assisted county government in developing a map of the county that predicts where sites will be found. The county is broken down into three zones: high, medium, and low. Development in the high potential zone requires archeological survey if the property is five acres or more in size, or two acres or more if it is within the limits of a traditional community. In the moderate zone, the threshold is 10 acres or more, and in the low potential areas it is 40 acres or more.\textsuperscript{4} Again, if the size of the property being developed is below these thresholds, the archeological requirements are waived.

Santa Fe County never established an internal review process. Instead, county staff relied upon the SHPO to advise the county on matters relating to archeology and historic preservation. From 1988 to 1996, the SHPO handled all reviews under the county code and in effect administered this program for county government. Changes to the county code in 1996 established a new process whereby the results of archeological investigations, along with preservation recommendations, are provided directly to the county planning staff by the archeologist who is hired by the developer. The SHPO continues to assist the county upon request, but administration of the law is now fully a county responsibility.

By law, the city and the county require that archeological surveys be conducted by qualified individuals; that sites be recorded according to defined standards; and, that an assessment be made of their significance based on the criteria for listing properties to the National Register of Historic Places. Once a survey has been conducted and significant sites have been located, the developer must choose one of two options in order to receive project approval: archeological data recovery, including but not limited to, excavation to recover the information content of the sites; or, avoidance through project redesign to preserve the sites in place. Additional protective measures such as easements, deed restrictions, and covenants are also used to ensure preservation once the project under review has been approved.

Since the laws went into effect just over 10 years ago, a tremendous amount of new information about human occupation of the Santa Fe area has been gained, largely because of the archeological requirements contained in the city and county ordinances. Table 1 compares the total number of surveys conducted, acres surveyed, and sites recorded before and after the city and county ordinances went into effect in 1987-88. From 1971-1986, state and federal preservation requirements account for most of the archeological investigation conducted in Santa Fe County; however, survey counts, acreage, and site numbers all increase markedly once the preservation mandates were added to the local development review process. While some of the sites recorded after 1987 were destroyed by development and required data recovery, most were saved through avoidance; thus

<table>
<thead>
<tr>
<th>Year</th>
<th>Surveys Conducted</th>
<th>Acres Surveyed</th>
<th>Sites Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-1986</td>
<td>209</td>
<td>62,731</td>
<td>1601</td>
</tr>
<tr>
<td>1987-1996</td>
<td>895</td>
<td>78,907</td>
<td>3185</td>
</tr>
</tbody>
</table>

Table I

Comparative figures for before and after the Santa Fe City and County ordinances went into effect starting in 1987. Note: state and federally mandated surveys conducted after 1987 have been removed to better illustrate the effectiveness of the local preservation laws.
Figure 1
Comparison of cultural components identified in the Santa Fe County area between 1971-1997 before and after city and county ordinances went into effect.

demonstrating the effectiveness of local land use control as a preservation tool.

Another effect of the ordinances is reflected in Figure 1, which compares the number of cultural components, identified before and after the city ordinance was adopted in 1987. Note the increase in those identified as Archaic, Hispanic, and Anglo/European after this time. Prehistoric components, especially those identified as Anasazi and Puebloan, were the primary focus of identification efforts before the survey mandates went into effect, reflecting a significant research bias prior to 1987. Because the city/county laws require that all sites be recorded during survey, not just some of them, the long-term effect of these ordinances has been to produce a more accurate understanding of the cultural resources that exist on the landscape.

The communities of Santa Fe City and County have achieved an impressive preservation record through the enforcement of their archeological ordinances. A tremendous number of archeological sites have been located, recorded, and saved for the future. But this accomplishment did not just happen by itself. Archeologists, working with many other interested parties in the community, got involved, learned about the political and regulatory process, and successfully argued that protecting cultural resources was a land use problem that should be addressed through development review under local zoning authority.

Notes
3 City of Santa Fe, *Archaeological review Districts*, Division 3, section 14-75.1 through 14-75-23 SFCC as amended. Santa Fe City Land Development Code, 1990.
4 County of Santa Fe, *Historical, Cultural, and Archaeological Districts*, Article VI, Section 3.1 through 3.8., as amended. Santa Fe County Land Development Code, 1996.

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Photos by the author.
Unlike many local government jurisdictions, Pima County, Arizona, is vast—and perhaps unique—in how it developed its support for preservation policy. Larger than some states, Pima County comprises an area the size of Connecticut, Delaware, and several Rhode Islands combined, or 9,240 square miles, with a total population of less than 800,000 people. More than half live in Tucson, its largest city, with the rural areas very sparsely populated. Pima County, with its long and complex prehistoric and historic past, has a diversity of historic properties located throughout a culturally diverse region. Furthermore, its Native American, Spanish Colonial, Mexican, and Territorial heritage remains very much a part of the community's vitality. The vast landscape, shaped by generations of its founding groups, and the region's cultural origins together have come to define the community's sense of place and identity. For Pima County, public policies that support historic preservation derive from this connection with the past, which has fostered the community's expectations for a commitment to historic preservation from their local government.

With the public's support, Pima County began to develop working policies to assess the potential impacts of development on archeological and historic sites as early as 1970. This process occurred in response to growing public concern about the need for historic preservation and was further stimulated by new federal laws like the National Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969. By 1983, these policies were formalized by the Pima County Board of Supervisors, and by 1985, they were extended to private sector development of subdivisions and commercial projects. Today, Pima County has a comprehensive cultural resource component in the development review process for both public works projects and private development.

Local government, however, has not always acted so responsibly. Like many cities in the 1960s that were offered large sums of federal redevelopment money, Tucson undertook the Pueblo Center Redevelopment Project, also called the Tucson Urban Renewal Project, which destroyed nearly half of what had been the heart of "old town" Tucson for 200 years, its Presidio area and adjacent barrios and Territorial districts. Unfortunately, it took the wholesale destruction of the historic cores of many American cities to serve as the catalyst nationally for some of the first local historic preservation policies. In Tucson, public outcry stopped the destruction, and the joint Tucson-Pima County Historical Commission was established in 1972, resulting in the adoption of the first Historic Zone Ordinances in Tucson and Pima County.

Some 10 years later, a second unfortunate incident focused attention on the protection of archaeological sites. In 1982, the Tucson began construction of a new road along the Santa Cruz River south of downtown and just north of the San Xavier Indian Reservation. Although a large prehistoric Hohokam village, the Valencia Site, was known to be present, road construction proceeded, and numerous archeological features were...
Archeologists excavate the remains of a prehistoric Hohokam pit house impacted by road construction at the Valencia Site south of Tucson. Although damage to this site was unintentional, community response prompted Tucson and Pima County to adopt cultural resource protection policies and procedures to avoid such damage in the future.

Impacted. The Native American community and the general public demanded the suspension of all construction activities until an appropriate data recovery program could be completed. As before, the community's response coalesced into support for the establishment of preservation policy. Looking to existing law for guidance, Pima County and Tucson broadly recognized the applicability of federal and state statutes including the National Historic Preservation Act of 1966, the Arizona State Antiquities Act, and the State Historic Preservation Act and adopted resolutions for the protection of archeological sites in 1983.

Public Works and Cultural Resources
By adopting these resolutions, the city and county accepted responsibility for the assessment of potential impacts to archeological sites and historic structures that may be affected by proposed public works projects, such as road construction and park development. This also provided the necessary justification for creating the Pima County Cultural Resources Program and bringing preservation expertise on staff. Today, all county undertakings are subject to the same standards and procedures used by federal and state agencies. Project engineering plans are reviewed at various planning and design phases. The steps involve site records checks, cultural resources inventory, recording, site assessment and determination of eligibility to the National Register of Historic Places, consultation with the State Historic Preservation Office, and mitigation as appropriate. If impacts to cultural resources cannot be avoided, the necessary survey, assessment, and mitigation programs are conducted by competitively selected cultural resource consultants under contract to Pima County. These procedures are followed whether there is federal or state agency funding involved or whether it is strictly a county sponsored and constructed project.

The Private Sector and Cultural Resources
What I have just described accounts for the responsibility of local government to mitigate impacts to cultural resources that are caused by their own actions. In Pima County, however, private development is held to the same standards and regulations as county public works projects. It is the responsibility of the private developer to fund the necessary surveys, assessments, and mitigation measures as part of the development approval process.

The process begins with the cultural resource policies expressed in the Pima County Comprehensive Plan, the primary planning document upon which county land-use regulations are based. These policies affirm the principle that historic preservation is an important element in documenting Pima County's cultural heritage and in maintaining and preserving our community's identity and sense of place.

With Pima County government setting historic preservation policy for itself in 1983, these policies were then extended to the private sector in 1985 through zoning and grading requirements defined in the Pima County Zoning Code. Specifically, the Rezoning Ordinance and the Site Analysis process requires the identification, recording, and evaluation of historic properties, as well as a mitigation plan if warranted. Parcels exceeding five acres for residential development and commercial developments greater than one acre are subject to site analysis requirements. Rezoned parcels become subject to the "Special and Standard Conditions" or "Specific Plan Regulations" for mitigation of impacts to cultural resources. If these conditions are violated, the developer can be subject to zoning violation fines, revocation of permits, retention of bond assurances, or non-acceptance of roads or other infrastructure.

The Grading Ordinance is applied to any subdivision or commercial development project, whether a new rezoning or a parcel zoned prior to 1985. Grading and construction cannot begin until the cultural resource mitigation requirements are met. Once the appropriate mitigation is completed by permitted consultants under contract to the developer, a Grading Permit is issued. Often the subdivision plat, development plan, and specific plan can be phased to accommodate development.

Mitigation can include typical archeological data recovery programs with analysis and report-
ing, in-place preservation in designated open space preserves, documentation and adaptive use of historic buildings, or donation of archeological sites to organizations like the Archeological Conservancy. Plat notes, covenants and deed restrictions, and homeowner association regulations further serve to ensure the protection of these sites. It should be noted that this process only applies to large projects that require filing of subdivision plats or development plans. The individual who purchases land with the intention of building one single family home is not affected by these regulations, except for compliance with the state burial protection laws.

I feel it is critical to understand there can be no double standard regarding how these policies are applied to the public and private sectors. Both must acknowledge there is an equal and common responsibility. That is, the private sector is much more likely to accept cultural resource regulations on development if the local government itself has already taken on the same responsibility in its own projects and demonstrated its commitment to preservation. Alternatively, local government that exempts itself from historic preservation policy and regulations while imposing the same preservation requirements on private sector development is likely to be challenged as being unfair and risks losing its ability to protect its cultural resources at all. Once preservation policies are rejected or viewed as an unfair hardship by the community, it becomes very difficult to recreate the necessary public and government support for this kind of land use regulation.

In summary, since 1983, Pima County has adopted an incremental set of preservation policies, regulations, and ordinances, which work together with state and federal regulations to address each step of public and private development. This takes significant cooperation among the various county departments, commissions, planners, outside engineering and consulting firms, and elected officials to ensure that we are collectively achieving our preservation objectives and serving the public interest. Regardless of the unique circumstances in any local government setting, procedures for the protection of archeological and historical properties do not develop without the establishment of public policies that are backed by popular support. In my opinion, the key to the future of historic preservation policy is how well these efforts benefit the public and meet perceived community expectations.

References
Pima County Cultural Resources Protection. Resolution 1983-104
Pima County Grading Ordinance. Pima County code. Chapter 18.81
Pima County Rezoning Procedures. Pima County code. Chapter 18.91

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Photos by the author.

Development Review Process for Pima County

Site Analysis. Records checks and site inventory are completed for rezoning petition and submitted to the Planning and Zoning Commission. The P & Z forwards its recommendation to the County Board of Supervisors who then vote to approve or disapprove the rezoning petition at public hearing.

Tentative Plat. If the rezoning is approved, a Testing/Mitigation Plan for the treatment of the affected National Register eligible cultural resources is required as a condition of rezoning. This plan is submitted for review by Pima County and SHPO and other agencies, as appropriate.

Final Plat. When land-use plan is complete, the mitigation program is implemented. Mitigation can include documentation, data recovery, in-place preservation, or adaptive use, together with appropriate analysis, curation, and report preparation.

Grading Permit. The fieldwork/documentation phase of mitigation must be completed before final approval of a development plan and grading permit are issued for the developer.

Development Proceeds. Analysis, report publication, and curation complete the mitigation program in accordance with the conditions for the rezoning or the Specific Plan regulations.
Miami Underground
Dade County's Archeological Success Story

Miami-Dade County has been portrayed by the broad brush of the media as an area that is riddled with crime and corruption and void of deep historic roots. Incorporated in 1896, the city of some 1.5 million souls has experienced dramatic demographic changes and has been passed like a baton from Anglo to Cuban-Hispanic political power in the last 20 years. There is little hint on the surface of this testy city of an archeological and prehistoric heritage that dates back 10,000 years, or of a commitment to the preservation of the community's heritage.

In fact, the area has a pre-history that began with the late Paleo-Indian Period as indicated by the Cutler Fossil Site. There are also hundreds of other Native American sites that range from the Archaic Period to the Formative Period of the Tequesta, as well as Seminole and Miccosukee sites of the 18th century. Historic occupations are reflected by 16th- and 18th-century Spanish missions and forts, English military and surveyor camps of the late-18th century, Bahamian settlers, and even villages of Black Seminoles who fled American troops during the early-19th century.

The county's current archeological program had no academic precedent since no state college existed in the region until the 1960s, and state and private colleges developed no local archeological curriculum. Investigations were largely conducted by avocational archeologists who were rarely concerned with preservation issues, and when there were concerns, they were generally powerless to affect development.

The county preserved its first archeological site in 1926, when a developer used a burial mound as a central green space of Sherwood Forest, an English style development of the boom period. Other sites were less fortunate and were destroyed or covered with fill during the past century.

The current preservation program grew out of a three-year survey grant by Florida's Division of Historic Resources in 1978-1980. That study was largely focused on the built environment, but during its last year the state insisted that an archeological survey be included. That single-year study resulted in the hiring of a consultant archeologist and the documentation of over 100 archeological sites in urban Dade County. The consultant archeologist also participated in the drafting of a historic preservation ordinance.

The Miami-Dade Historic Preservation Division (Division) was created in 1981 as a result of county historic preservation ordinance 81.13. This ordinance also created a Historic Preservation Board (Board) with 13 members, each appointed by a county commissioner. The current staff includes a director, secretary, historian, architectural historian, and archeologist (the current director is also an archeologist).

Miami-Dade County is Florida's first county to implement an archeological ordinance and to fully implement a countywide archeological program. Under the ordinance, the preservation requirements are triggered by the county's permitting process that covers regulated actions such as building, grading, and wetlands construction. A proposed project is evaluated against information on the location of both known archeological sites and areas with high archeological probability. The Board is charged with designating archeological sites as historic properties if they meet criteria of eligibility; this determination can be made without owner consent and affords archeological sites full consideration under the law.

Two types of archeological designations are possible: sites and zones. An archeological site designation is of a single discrete location. The ordinance allows the Board to approve or to deny a Certificate of Appropriateness required for any work that would adversely impact a designated site. An archeological zone is a much more liberal type of designation that allows for the designation of an open-ended area of property encompassing one or more recorded sites and/or an area that has a high potential for containing unrecorded sites. This type of designation allows zone boundaries to be determined based on a site predictive model. This means that if there is
a pending preservation emergency, an archeological site can be protected without having to determine its exact boundaries by systematic sub-surface testing.

Proposed development, excavations, or impacts within an archeological zone require another type of approval called a Certificate to Dig, which can be issued by either the Board or the Division. In an apparent concession to property owners, the ordinance requires that all Certificates to Dig must be approved. However, approval can be made with conditions set by the Historic Preservation Division and these conditions often include requirements for Phase I surveys, excavations, as well as other types of mitigation, and sometimes, preservation of all or parts of the site. The archeological zone designation offers by way of legal breathing room tremendous leverage to preserve archeological sites that would have been difficult to preserve under a single site designation. In some cases, the mere fact that a designation is pending is sufficient to bring developers to the bargaining table and often results in the preservation of a site or comprehensive mitigation.

Since the inception of the program in 1981, over 35 archeological sites have been designated and protected, and at least 30 sites have been subjected to archeological testing and monitoring because of ongoing development. Since the program began, no known significant site in the county has been destroyed without mitigation. Perhaps it is even more surprising considering Miami’s pro-development climate that no county actions regarding archeological designations or required archeological actions or preservation have resulted in a court action by the property owner. In fact, only one appeal has been filed by a property owner to the County Commission, which the Commission denied.

Interestingly, compliance with the archeological element of the county ordinance is generally easier with developers and private property owners, and more difficult with other governmental agencies, particularly other county departments, which often use techniques of avoidance or bureaucracy to circumvent historic preservation requirements. For instance, county and municipal agencies issue permits for tree removal from archeological sites or zones without notifying the Division. Other interagency issues that have arisen include the creation of wetland banks in what are generally considered natural preservation areas where archeological sites are inherently protected. The creation of wetland banks in South Florida includes the scraping away of natural soils to reach current water levels. These actions result in the destruction or intense damage to the sites. Other challenging issues include the clean up of polluted sites where obvious health concerns supersede historic preservation issues. In the case of a polluted boat yard on the Miami River, a significant prehistoric and historic site was destroyed without the benefit of prior testing with only some safe-distance monitoring affected.

Despite these problems, the Miami-Dade County archeological preservation program works because it is based on an ordinance that allows for flexibility and balance between preservation interests and private property rights. Linking preservation to permitting gives the county control over actions that may affect the archeological record while oversight by the Board and review by the Division provide the political, administrative, and technical tools necessary to make the program a success.

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CRM on the WWW

CRM has a re-designed presence on the World Wide Web located at <http://www.cr.nps.gov/crm>. The new site features extended archives of past issues available in PDF format, a database containing every CRM article from the past 21 years searchable by Title, Author, Subject, and Year, and an online comment and subscription form.

Submit your email address to be included on our new electronic mailing list. You will receive notification of new issues, corrections from the print edition, and links to articles and supplementary information only available online.
Thomas R. Wheaton

The Soapstone Local Historic Preservation District, Georgia

In Georgia, historic preservation commissions are set up at the local level. These locally appointed commissions generally receive and review nominations of individual sites and buildings or larger districts based on criteria similar to those of the National Register of Historic Places. The elected County Board of Commissioners must then give its final approval to the nomination. Each site, building, or district has a set of preservation guidelines specific to that resource, often based on the Secretary of the Interior's Standards and Guidelines. The preservation commissions, following the appropriate guidelines, then review projects that will impact buildings or disturb the ground within those designated districts or sites. Areas not included in specifically designated historic districts have no formal local protection.

In late summer 1996, an article appeared in the local paper about the destruction of an archaeological site at Soapstone Ridge. A developer had bulldozed extensive areas of an ancient soapstone quarry site, one of dozens of such sites located along the 25-square-mile ridge. The article mentioned that the site was one of only three such sites on the ridge listed on the National Register. This should have triggered a Corps review under Section 106 of the National Historic Preservation Act of 1966, but as it turned out, the appropriate Corps archeologist had not heard of the project because the developer had applied for a nationwide permit. Such a permit does not require the normal, in-depth environmental studies, including cultural resources studies.

At the behest of the DeKalb County Historic Preservation Commission (DCHPC), the county stopped the bulldozers, the Corps conducted a belated Section 106 review, and the Advisory Council on Historic Preservation had its say. But it was obvious to me, as a member of the DCHPC, that if the federal preservation mandates could not protect a site already on the National Register, it surely was not going to protect the rest of Soapstone Ridge in Fulton, Clayton, and DeKalb Counties, one of the last, large, undeveloped tracts near downtown Atlanta. Together with other members of the DCHPC and the local archeological society, we began the process of nominating Soapstone Ridge as a local historic district with its own set of archeologically oriented preservation guidelines. The DCHPC could then enforce these guidelines on future projects, whether or not a Corps or other federal permit was required. (This has recently proven critical to the protection of the single remaining NRHP site in private hands.)

The first step in nominating the district was to assess the condition of the ridge since it was last examined archeologically in the 1970s. To do this we needed to know what sites had been previously recorded so we could say which ones were destroyed, damaged, or still in good shape, and make a reasoned argument before the County Board of Commissioners, who would ultimately approve or deny our recommendations. After some difficulty, we were able to obtain nearly all of the site forms. These were essential to identify and protect individual sites and to convince the County Board of Commissioners of the significance of the ridge and the danger posed by development. The local archeological society checked the status of the recorded sites and of development on the ridge. Using this information and information provided by the county on property boundaries, land owners, and land use, we developed a map showing what had been destroyed and what was worth protecting. Of the 43 sites revisited, only 24 were still intact. Nearly half the sites had been destroyed in the past 15 to 20 years. At this rate, all of the sites at Soapstone Ridge would be destroyed in another 20-30 years.

The sites date almost exclusively to the Archaic Period and are related to the exploitation of soapstone nearly 3,000 years ago. This information made the newspapers and got everyone's attention. Armed with the ridge's history, we then began development of an ordinance that would win the necessary votes on the Board of Commissioners. Even though most people seemed to support protecting our heritage, the majority of people in DeKalb, and the South generally, are loath to tell their neighbors what to do with their land. Our ordinance would have to be reasonable and justifiable to a lot of competing interests, most of whom had not the slightest interest in the rarefied atmosphere of National Register significance or the niceties of settlement patterning and lithic technol-
In DeKalb County, once a nomination has been officially submitted to the DCHPC, a 60-day building moratorium goes into affect in the nominated area. This is to prevent "preemptive development" of the site. Before the moratorium is over, the DCHPC must make a recommendation to the County Board of Commissioners to accept or reject the nomination. The moratorium caused the greatest furor of the entire process, but it also got us a lot of coverage on television and in the newspapers, which we ultimately turned to our advantage.

Also during the moratorium, the DCHPC was required to hold a public hearing. This was held at a school in the district and was very well attended. The purpose of the hearing was to inform those affected, and to receive their input. Because we had excluded the small homeowners, support for the nomination was over 90% among the attendees, most of whom were small landholders. This carried a lot of weight with the Board of Commissioners, and in particular with the member representing Soapstone Ridge, one of the votes we needed to win. It was also a chance to educate people about the sites. Native American representatives gave their input and performed a ceremony at the end of the hearing. All of these activities had an air of controversy, were occasionally colorful, and attracted the local television and press. Through various political maneuvers and jawboning behind the scenes, the Board finally voted to approve the district.

The new preservation guidelines were designed to keep the costs (and therefore the public outcry) to a minimum. We did this, in part, by having a two-step approach to site identification. The first step requires a reconnaissance letter. This can be done quickly by a consultant, or it can be done for free by the county's preservation planner. The purpose of this letter is to determine whether an intensive survey is needed. If the project area or only part of the area has been greatly disturbed or has no potential for having significant sites, an approval can be granted on the basis of the letter. If there is a possibility of significant sites, an intensive survey of all or part of the area is required. Significant resources found during the discovery phase are treated on an individual basis in consultation with the landowner/developer and the DCHPC.

A major lesson of the Soapstone Ridge nomination process is that such an effort can only be done with grass-roots support of, and involvement by, many people inside and outside of the preservation community. In my view, the biggest lesson to be learned is that real protection of sites is greatly enhanced, and may only be possible, at the local level.

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There can be many reasons why it is not feasible for a community to enact an ordinance narrowly tailored to the needs of its archaeological resources. Its political culture may be anti-land use controls, in general, or anti-conservation, in particular. It may be zealously pro-growth/economic development and view such an ordinance as an obstacle to "progress." Its citizens may be concerned about the additional costs and bureaucracy created by the implementation of such a law. Or, the ordinance may become a casualty in a local political power struggle, e.g., when its supporters are voted out of office, or when it becomes attached, in the public's mind, to another, unpopular cause.

When contemplating solutions for your local cultural resource dilemmas, remember that an ordinance is a law, and that the concepts associated with that term tend to be negative, e.g., coercion, control, punishment. Moreover, the archaeological ordinance, as a legal entity, is a comparative newcomer to the arena of land use law. Unlike zoning and conventional historic preservation legislation, it has yet to be extensively tested in court and is therefore more risky to enact.

In 1993-94, I researched the cultural resource management (CRM) practices of 10 local southwestern governments. All but one (Colorado Springs, Colorado) were making or had made some attempt to protect their archaeological resources. Only two, however (Santa Fe and Santa Fe County, New Mexico), used archeological ordinances to do so. The other governments protected their archeology with varying degrees of success by incorporating survey and mitigation requirements into traditional land use law and development review processes. The rest of this paper briefly describes some of these.

Some local governments incorporated archeological requirements into their traditional, i.e., architectural, historic preservation (HP) ordinances. These requirements are enforced by the local historic preservation review board, which evaluates construction and demolition projects proposed for historic properties. El Paso and Austin, Texas, both used this approach. El Paso's HP ordinance required that at least one of the members of its review board be an archeologist. However, only archeological properties that have already been declared historic (significant) are protected. The scope of Austin's ordinance was enhanced by the interpretation given it by its enforcer, the city Preservation Liaison. She used the power of persuasion and precedent to negotiate archeological requirements in all developments that came to her attention, regardless of whether they were captured by the HP ordinance.

Informants from several local governments recommended rezoning and annexation applications as particularly amenable to the inclusion of CRM requirements. They said that applicants in these types of cases are "asking for something" — often a big and lucrative something, as in large subdivision housing projects — and expect to "give something" in return. A project planner in Durango, Colorado, routinely included survey and mitigation stipulations in her reviews of annexation cases. Tucson and Pima County, Arizona, both embedded archeological requirements in their review process for rezoning requests.

Plans can be effective vehicles for local archeological protection. In many states, they are only advisory documents, not laws, and therefore tend to be more palatable to city councils and landowners. Plans come in three "sizes," or ranks. Rank I plans are the broadest in scope, both geographically and in terms of number of issues addressed. Master and comprehensive plans are Rank I. They tend to be full of glittering generalities and warm fuzzies, e.g., "retain rural character" and "rich cultural heritage," and possess little detail or enforceability. They do, however, serve to legitimize the subjects they address, in terms of inclusion in subordinate plans and implementation in policy and law. It is therefore important to include mention of local cultural resources and the desirability of protecting them in a community's Rank I plan.

Rank II plans concentrate on a geographical or topical aspect of the material contained in their superordinate Rank I plans. The most common Rank II plan is the area plan, which is just what it sounds like, i.e., a plan for a physical piece of the Rank I pie, e.g., the West Mesa Area Plan, the Downtown Districts Area Plan, the South Valley area plan. Tucson uses area and neighborhood plans to accomplish its CRM goals. It began phas-
ing in archeological requirements in area plan revisions in the late 1970s. Today, all such plans contain them. They call for survey and mitigation recommendations in the environmental assessment reports required in rezoning application reviews.\(^7\)

Piper, Schmader, and Chapman\(^8\) mention another kind of Rank II plan as an appropriate vehicle for local cultural resource management. Facility plans implement Rank I plans by subject, rather than by area. Plans for storm drain maintenance, fire station construction, and city park development are examples of facility plans. Piper, et al., suggest that all archeological resources under the jurisdiction of a given Rank I plan be designated a "facility" and planned for accordingly. Preservation plans can function as this kind of plan.

Rank III plans are the smallest in geographic scope and tend to be the most detailed and grassroots-oriented. Neighborhood plans are Rank III, and, as their name implies, serve small areas bound together by such commonalities as class, economic bracket, types of commercial development, and cultural affinity. While this type of plan often becomes a battleground for NIMBY (Not In My Backyard) and LULU (Locally Unacceptable Land Use) wars, it also has potential for local CRM success. Pro-conservation neighborhoods, e.g., historic and aspiring historic districts, may be enthusiastic about adding archeology to their plans and can become role models for other parts of the community.

All plans are revised periodically: about every 10 years for Rank IIIIs and every 20 or 25 years for Rank Is and IIs. If attempts to add archeology fail once, remember the adage "try, try again."

To flesh out these examples, let us take a stroll through a typical local development review process and see where archeology can be interjected. The chart summarizes the current review process for a major (five acres or greater) subdivision in the unincorporated parts of Torrance County, New Mexico.\(^9\) Potential points of ingress for archeological requirements are shown in italics. As the diagram attests, these could be incorporated into every step of the process, except the final one, submission of the final plat to the Planning and Zoning Commission. However, the earlier in the process they are incorporated, the better. It is easier to affect protection during the pre-application conference than after the multi-agency review, when the project may have been in the works for several months or a year. And the public hearing, though available to anyone wishing to comment on the project, comes so late in the review process as to make it difficult to affect major changes, especially if they are advocated by only one or a few people.

The pre-application conference is mandated by law and is not unique to Torrance County. It is an informal meeting which regularly occurs in all governments, between the applicant and the official.

### Pre-Application Conference
Informal dialog between applicant and regulator. Either party may voice archeological concerns and possible resolutions.

### Submission of Preliminary Plat
Regulator inspects, approves, or returns plat with comments for revision, including archeological requirements.

### Multi-Agency Review
Preliminary plat sent to state and local agencies for comment, including SHPO.

### Planning and Zoning Review
County Planning and Zoning Commission reviews preliminary plat, taking agency comments into consideration. Approves or stipulates changes, including archeological requirements.

### Public Hearing
Public reviews and comments on preliminary plat and P&Z recommendations. Anyone can voice archeological concerns here.

### Back to Planning and Zoning
P & Z considers public input; approves preliminary plat or stipulates changes including archeological requirements. When preliminary plat approved, final plat drafted.

### Submission of Final Plat to County Commission
County Commission reviews final plat and votes to approve or reject. Last ditch efforts to protect archeological sites are heroic but largely ineffectual at this point.
cial responsible for the review of the preliminary plat, e.g., a current planner, project planner, or, in the case of projects involving historic properties, the historic preservation planner or officer. Virtually all developers of large projects, and many other applicants, take advantage of this opportunity to learn what the government in question expects of them. A savvy regulator will bring up cultural resource concerns here, either those mandated by law, or those which he addresses at his discretion. If he succeeds in establishing a good rapport with the prospective applicant, and if the applicant is willing to comply with his reasonable requests, the parties can reach agreement on the general extent and nature of survey and mitigation measures at this step, even if they are not required by law.

But a planner or zoning commissioner will not include archeology in the review if she does not know that it should be there. Make an appointment with her and tell her (nicely). Become familiar with your local development review processes and with pending projects.

Attend meetings; make your presence and your agenda known. If your schedule permits, serve on a review committee; the archeological mitigation that has taken place in Torrance County occurred because one Planning and Zoning Commissioner was an avocational archeologist.

There are many ways of protecting archeological resources in communities which lack archeological ordinances. This article has endeavored to give a far-from-exhaustive list of alternative methods and to provide an example of a typical review process, which can easily accommodate archeological considerations. This information does not resolve the problems inherent in advocating an archeological agenda in a local bureaucracy, but it will hopefully demystify the process so those who wish to do so can take action.

Notes
2 Lawrence, p. 22-25.
3 Ibid., p. 26-29.
4 Ibid., p. 29-32.
5 Ibid., p. 17.
6 Ibid., p. 35-36.
7 Ibid., p. 32-35.
9 Torrance County. Subdivision Regulations. Ordinance No. 96-7. County Managers Office, Torrance County Court House, Estancia, New Mexico, 1996.

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