Email posted to the NASA List SERVE BY Dr. Jonathan Leader, South Carolina State Archaeologist, 24 August 2012

Note: The technical proposal mentioned below can be viewed at: http://ux.opencontext.org/blog/wp-content/uploads/2012/09/DINAA-NASD-Technical-Proposal-2011.pdf.

Dear Jonathan:

Good talking with you a few minutes ago! Please feel free to share this letter and attached pdf file with the NASA list.

Thanks for letting me know about this discussion. I am sorry that we did not get a detailed statement out to folks prior to this, but we did not receive word until early August that funding was indeed approved. I was still in the field, and my co-PIs have been off for about ten days in Australia participating in a workshop directed to creating an integrated archaeological database for that country/continent. We had no idea the initial announcement would attract so much attention. We are now all back and recovered, and are gearing up for this project. Keeping participants and interested parties in the loop is a major first step and continuing part of the process. As discussed below, my colleagues and I are wholly committed to preserving site security and to working with individual SHPOs, state archaeologists, and site file managers to help coordinate and augment, and not at all to replace, existing data structures and organizations.

My colleagues and I will prepare a detailed statement for the NASA list, as well as for all the people we contacted when we were preparing the proposal. For now, a copy of our technical proposal is attached. The comments below from the NASA thread are exactly the type of dialogue we need to have as part of this project. If there is some way to add us to the NASA list, or this thread, we would all deeply appreciate it. Likewise, people are welcome to contact us directly.

Right up front, everyone should be aware that we are not interested in maintaining access to or distributing detailed site data per se, which is properly and legally under the control of individual states and federal agencies. Our project is directed to developing translation routines so portions of state site file databases can be integrated into larger regional and national research and management efforts. We are developing these routines for some 15 to 20 states in Eastern North America in the first phase of this project. All we need for that is information on how site file records are maintained in individual states. That kind of information is freely available from every state, and is what we will be using.

Once the integration routines are in place, individual state and agencies can chose to participate, or not, in our demonstration efforts. We have commitments from people in about a dozen states to provide data for our demonstration projects so far, and so will be able to meet our project objectives with data from a large, continuous portion of Eastern North America. If possible our translation routines will include as many eastern states as possible, but our first priority will be for those states where we can make use of data to generate demonstration maps on such things as 'all NRHP eligible sites' or 'all Paleoindian' sites, and so on.

We understand that the security of archaeological site information must be protected for ethical as well as legal reasons. In the United States, the locations of archaeological sites represent highly sensitive data and their release could have grave repercussions. It is very difficult to develop adequate information security measures for public-facing websites and prevent accidental data releases or data theft through hacking and other leaks. Even if we deployed appropriate security measures, our systems would need extensive auditing for compliance to Archaeological Resource Protection Act (ARPA) regulations and our project team would be legally liable for any release of sensitive data. For these reasons, managing (i.e.,

permitting access to) sensitive site location data lies beyond the scope of this project, and no such information will be posted nor released.

We see this effort as complementing and enhancing the significance and roles of SHPOs without endangering archaeological site security. These data will provide more exposure and better access to less sensitive data, enabling researchers, officials, the consulting community, and the public to better engage with SHPOs. Currently, few people understand the tremendous efforts SHPOs play in safeguarding the nation's heritage, and this little bit of extra public exposure can help the public better understand the richness of the heritage that lies all around them, again, without releasing sensitive information. We will also have the data under strict version control, so that it can accommodate future updates from participating SHPOs while still enabling citation and retrieval of earlier states of the record.

To eliminate the risk of accidental or malicious disclosure of sensitive data, this project will only manage and store site location data at a very reduced level of geographic precision. The exact spatial resolution we will use for public data will be negotiated with SHPO and agency personnel; this resolution is expected to be at the county scale or at ca. 20 km resolution, which have been previously accepted in earlier efforts (e.g., Anderson and Horak 1995; NADB Maps 1993). This will still permit important research programs that examine regional and large-scale geographic patterning in archaeological data. It will also still permit innovative Linked Open Data applications, which mainly require URI identification of specific data resources (archaeological site records). The project will associate appropriate SHPO contact information with each data record to enable qualified researchers to directly obtain higher resolution spatial data from state officials. PIDBA (Paleoindian Database of the Americas) has successfully implemented similar security strategies for 21 years and three project principals involved with data collection and selection are RPA (Register of Professional Archaeologists) certified, with strong backgrounds in compliance and site protection.

We will, of course, include NASA members in all general correspondence on our project as it proceeds. We welcome comment and assistance in this project, and look forward to hearing from and working with many of you in the months and tears to come. On behalf of my co-PIs Eric Kansa, Sarah Witcher Kansa, Josh Wells, and Stephen Yerka, I am

Sincerely,

David

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Anderson, David G., and Virginia Horak, editors

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