**APPENDIX 2**

**STATE DEPARTMENTS OF TRANSPORTATION SURVEY**

**STATE DOT STAFFING AND CRM CONTRACTOR CAPACITY AND GENERAL COMMENTS**

A survey questionnaire was sent to 28 state Departments of Transportation (DOTs) cultural resource managers in September and October 2021. States selected for receiving the survey represent large and small states, and states from different regions of the country. In addition, these states had regularly responded in the past to National Cooperative Highway Research Program[[1]](#footnote-1) (NCHRP) surveys on historic preservation issues in transportation. The junior author of this paper served as the Principal Investigator for many of these NCHRP surveys and associated studies.

Twenty (20) DOTs responded to the survey questionnaire, answering questions on state DOT staffing and CRM contractor capacity to address current CRM compliance needs, in addition to the anticipated workload resulting from the *Infrastructure Investment and Jobs Act* (infrastructure bill) passed in November 2021. The DOTs were also asked to provide any general comments on the current and future transportation-related CRM workforce.

Below is a summary of the survey responses, focusing on common themes and observations. Some of the responses were slightly edited for consistency of presentation. Following the protocols of NCHRP studies, state DOT responses were kept anonymous so no specific response may be linked to an individual state DOT.

**Survey Questions**

*Do you think the size of your current CRM staff is sufficient to handle the increase in work that might result with the passage of the infrastructure bill and reauthorization of the surface transportation bill? If not, how many additional staff do you think you will need and what types of staff will you need (i.e., discipline – archaeology, historic architecture, general historic preservation, etc.)?*

We do not believe that there will be more than an incremental increase in work based on the passage of the bills. There are recent state laws that restrict capacity-increasing projects, and the focus is on multi-modal transportation and maintenance and improvement of existing infrastructure.

We expect to remain fairly stable and would need to look at specific project needs as they begin development to determine if more staffing or contract work would be needed [with passage of the bills].

We are in need of additional staff as our workload stands today (staff of three down from a peak of 5 in the late 2000s). Currently our needs would be for a generalist archaeologist (who understands research design) and an architectural historian.

We anticipate that in order to accommodate the increase in projects, an additional 24 staff would be needed (12 archaeologists/12 historians). An additional consideration on staffing is that with the increase in overall project numbers, comes the increase in more complicated mitigation projects that require a high level of staff time, expertise, and coordination. This is an added challenge to staffing for an increased work program.

*Do you think your CRM contractors have the capacity to do the work to be conducted in this fiscal year? What about next fiscal year with the possible passage of an infrastructure bill and reauthorization of the surface transportation bill?*

We are not increasing the capacity of our consultant contracts. At this time, we believe our current staff are able to handle [the workload].

[Our] current pool of ten on-call archaeology firms and four on-call historic preservation firms have capacity to complete work needed in the next fiscal year.

We have seen challenges in our contractor workforce that mimic the challenges we have seen with hiring internal staff – there is not enough staff to meet the demands of the work increase.

An increase in projects [due to passage of infrastructure bill], especially in larger projects, will further increase pressure on our CRM contractors to hire additional staff, or failing that, increasing the number of contractors with which we have statewide contracts.

[For FY 2023] we expect to contract out more CRM work to consultants as our in-house staff are and will continue to be (even after implementation of [our] Section 106 Programmatic Agreement) at capacity right now and in the near future. There is a concern, however, that if all states are sending out more work to consultants, there will simply not be enough capacity.

Our local CRM contractors are already stretched, with many telling us they cannot find qualified staff to hire. They will be able to do the work we expect this fiscal year, but if the workload increases substantially, they will probably be stretched thinner. Especially if the infrastructure bill is passed, because then we will be competing with local agencies for the same contractors.

Contractors are having a difficult time finding the number of qualified staff that is required to meet the demands of the work program and the number of candidates for job postings has sharply decreased, along with the amount of experience the applicants have. With the competitive job market, we have also seen an increase in contractors changing firms, resulting in a lack of continuity and experience at firms that have impacted performance. We have seen a decline in quality as well resulting from contractors not having enough staff to conduct the work, and an overall lack of experienced workforce. These challenges are expected to increase in the next year with the passage of the infrastructure bill as more projects are programmed for transportation projects, as well as other industries that utilize the same contractor workforce.

*Do you want to make any additional comments related to the above questions?*

[Our] DOT’s program is largely focused on infrastructure preservation and maintenance. We do not have a lot of large-scale projects that require huge cultural resources surveys. Furthermore, our Project Development Process has streamlined our approach to cultural resources work so that larger survey areas are reduced to smaller footprints by the time they are subjected to Phase I surveys. We also have a large bank of shovel ready projects that money from any infrastructure/transportation bills will likely be allocated to.

While not an aspect in the survey, one way to quantify the future of the field is number of applications received for recent positions. We have seen a steady decline in the number of applicants over the last ten years, which is concerning.

We are just holding on here in [our state]. Our CRM consultants note they are finding it harder and harder to find crew, especially those at the MA level, and recent job announcements [in our state] support that (i.e., seeing more and more job announcements for firms looking to hire crew).

The increased workload will continue to pose a challenge to CRM practitioners as the work program increases more rapidly than the pool of available staff, especially [in terms of] the lack of trained and experienced professionals. Additionally, the increase in work also impacts external agencies, Tribes, and consulting parties as the number of consultation requests continues to outpace staffing levels at those entities as well.

**The 20 state DOTs responding to the survey questionnaire:** Alabama, Arizona, Arkansas, California, Georgia, Idaho, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Virginia, Washington State, Wisconsin,

1. <https://www.trb.org/NCHRP/NCHRP.aspx> [↑](#footnote-ref-1)