

Survey Science on Support for TMT

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ABSTRACT: The National Science Foundation (NSF) is soliciting community feedback regarding support for the thirty-meter telescope (TMT) in Hawai'i on Maunakea. Given NSF's obligation to solicit and engage community stakeholders, it is therefore imperative to understand Native Hawaiian preferences regarding TMT. I analyze public support for TMT in Hawai'i using a novel dataset I collected for the 2019 Native Hawaiian Survey. I find that 88% of Native Hawaiians surveyed did not support building TMT on Maunakea.

CURRENT MEASURES OF NATIVE HAWAIIAN PUBLIC OPINION

Existing public opinion research fails to adequately capture the policy preferences of Native Hawaiians. A key reason regards methodological practices. Current polls and surveys regarding TMT use random samples from registered voters in Hawai'i. These findings are therefore constrained to the population of registered voters. The implication is that these findings cannot adequately infer Native Hawaiian preferences regarding TMT support. There are two key features that distinguish the subset of registered voters from the population of Native Hawaiians. First, Native Hawaiians account for only 20% of the entire population in the state of Hawai'i. When using a dataset that samples from registered voters in Hawai'i, Native Hawaiians are severely under-represented. Second, as an interaction effect, Hawai'i suffers from low levels of voter registration and turnout. Therefore, surveys and polls conducted on registered voters under-sample Native Hawaiians living in Hawai'i. Surveys and polls conducted from registered voters in Hawai'i are subject to selection bias and sampling error.

Earlier this year, TMT publicized a new poll: "A statewide scientific public opinion poll was conducted in March 2020 by Ward Research...The demographics sample match the demographics of the community based on Census data." Because the Ward Research poll used Census data as a benchmark for their sample, it under-samples Native Hawaiians and, just like the other polls before it, cannot be used to infer Native Hawaiian preferences. Therefore, no previous or current dataset regarding TMT support can be used to infer Native Hawaiian preferences on the matter.

Due to the lack of specific and public data on Native Hawaiian public opinion and preferences, I designed and implemented a survey to focus exclusively on Native Hawaiian identity and public opinion.

ORIGINAL DATA

The 2019 Native Hawaiian Survey was created to understand Native Hawaiian identity and community concerns. I collaborated with Native Hawaiian scholar and activist Dr. Lynette Cruz (Cultural Anthropology, PhD.), along with undergraduate Native Hawaiian research assistants. Together, we designed a survey instrument, recruited interviewers, managed the implementation of the survey, organized the original data, and conducted data analysis.

We surveyed over 1,000 individuals of Hawaiian ancestry across Hawai'i. The survey was fielded between August 1, 2019, and December 31, 2019. The survey used a convenience and snowball sample to recruit individuals living

in Hawai‘i who were 18 years or older and of Hawaiian ancestry. By January 1, 2020, we successfully recruited over 1,000 Native Hawaiian respondents from O‘ahu, Maui, Kaua‘i, Lāna‘i, and Hawai‘i Island.

FINDINGS

Using original data from the 2019 Native Hawaiian Survey, we find that 87.79% of Native Hawaiian respondents do not support TMT on Maunakea. Respondents were asked, “Do you support the building of the thirty-meter telescope (TMT) on Maunakea?” Responses were: Yes=68, 8.30%; No=719, 87.79%; or Unsure=32, 3.91%; N=819, 100%. The full Community Report with more findings is available at <https://www.nhsurvey.org/results.html>.

Below, we compare our results to previous studies used to analyze Native Hawaiian TMT support. There are three main studies used by TMT:

- October, 2015 - TMT Statewide Poll (Ward Research)
- July, 2016 - TMT Hawaii Island Poll (Ward Research)
- August, 2019 - Civil Beat Statewide Poll

These three polls were chosen because they broke down respondents by Hawaiian identity so we can compare their results with the 2019 Native Hawaiian Survey. The two polls conducted by Ward Research used U.S. Census data, while the Civil Beat poll used registered voters. Both of these polls broke down responses by Hawaiian respondents (race/ethnicity identification). The table below shows the polls’ findings for opposing TMT by respondents who identify as Hawaiian.

Survey / Poll	% of Respondents who identify as Hawaiian who oppose TMT
2015 TMT Statewide	49
2016 TMT Hawaii Island	45
2019 Civil Beat Statewide	48
2019 Native Hawaiian Survey	88

From the above table, it is obvious that the 2019 Native Hawaiian Survey found a very different result from the previous polls regarding Native Hawaiians’ support for TMT.

IMPLICATIONS

These findings have significant implications for Native Hawaiians, residents of Hawai'i, and TMT partners. These findings also generate an important question. Why is there such a big gap between the findings from the first three polls and the Native Hawaiian Survey?

In order to reconcile these different results, the scholarship on Native Hawaiian public opinion needs to increase. Survey methodologists must apply sampling and recruitment techniques to draw generalizable inferences about Native Hawaiian public opinion. When the survey research process lacks transparency and draws inaccurate inferences, the results can be weaponized against the population it seeks to understand. When transparent and correct survey methodology is used, the results can be more trusted to inform the policymaking process.