

Date: 11/14/2024
TO: KPPCSD District Board
FROM: Rob Firmin, Ph.D.
RE: Survey Validity

Dear KPPCSD Directors,

Your upcoming community survey is important. For the responses to be representative of Kensington residents' views the data need to be processed to be representative. Opt-in survey return samples are notoriously biased statistically otherwise.

My graduate school training at the University of Chicago and much subsequent experience prepared me to do this. Representativeness of data is essential, regardless of respondents' answers.

I have no personal stake in the survey under discussion at this evening's meeting. (This offer is from me only, independent of the KPOA.)

Valid representativeness is only possible if the survey includes a few innocuous questions on each respondent's characteristics. Respondents' identities are not needed, and none of the methods involve modifying responses.

My Kensington database includes the publicly available data from the Census Bureau from 2020 (in more detail than from the bureau's Quick Facts), including some of the bureau's more recent estimates. I have requested special tabulations of its Kensington data to strengthen representativeness further. Other questions do not require matching Census data. All questions can be so simple as to render inference of identity impossible.

Useful characteristics may include (the more the better):

- Selection of their residential zone on a Kensington map. This may be as simple as: on The Arlington & west; east of The Arlington; and possibly a zone including several blocks along the Tilden ridgeline
- Income above or below the median Kensington income (recommended), or a small number of income ranges
- Employed or retired
- Age of respondent in a few categories, e.g., less than 20, 21-39, 40-65, over 65
- Children under age 20?, yes or no
- Maximum education: high school, college, graduate degree(s)
- Own or rent

I would, as a volunteer:

- Statistically test raw results for representativeness
- Use legitimate statistical methods to render the results more representative
- Compute statistics to test representativeness of the final data
- Report to the KPPCSD board

Requirements: I would need to review and make suggestions regarding characteristics questions and specify the data format. KPPCSD is responsible for data entry.