

444 Maple Avenue On-Line Petition: Validation Method and Results

The 444 Maple Avenue on-line petition ("Turn down the 444 Maple Avenue application ...") was hosted by Care2 Petitions (www.thepetitionsite.com). Care2 petitions requires all petition signers to provide name, full address, and email. They only release name, city/state, and comments to the petition owner. Full address and email are *not* released unless legally required, as in petitions to Members of Congress.

Care2 states that they use "fraud reduction technology", presumably to reduce instances of the same individual signing multiple times. Despite that claim, and despite the many obviously heartfelt comments on the petition, we felt that we should go through some standard validation exercise. That is, we should demonstrate that most of the signatures from self-reported Vienna residents in fact appear to be valid Vienna resident signatures.

We validated the petition list by matching the names of the signers to known Vienna residents. For petition signers who reported living in Vienna, we searched several data sources for an individual, with that name, known to live in Vienna. If we unambiguously found one such individual, we considered that a valid petition signature. If we found no such individual, or matched the individual to a current address not in the Vienna area (e.g., former residents), we excluded that signature from the validated signature total for Vienna. We did not attempt to validate the location of individuals who did not report living in Vienna.

We used three sources to match names to addresses, in this order: a commercial mailing list for ZIP code 22180 (from Leads Please, Inc.), a free internet-based search site (yellowpages.com), and a proprietary internet-based search site (whitepages.com). If we found an exact match to the mailing list, and had same-last-name opposite-sex pairs who signed the list at roughly the same time, we assumed those names represented a married couple, and assigned both individuals to the identified address. If there was no match to the mailing list, we first checked a free (but relatively incomplete) source, yellowpages.com. If that failed to produce a match, we tried for a "premium" (i.e. paid) match on whitepages.com. The Whitepages.com site was clearly a superior source of information, but was set up to prevent automated lookups, and so served as the reference of last resort. Only a handful of names were ambiguous (had multiple individuals with the same first and last name) within Vienna.

The results from this matching process are shown in the table below. Of the 992 signatures as of 8/12/2018, there were 703 with a self-reported Vienna address that were successfully matched within the 22180 ZIP code. (By inspection, a small fraction of the individuals included in that category were outside the Vienna town boundary but were not separated from the ZIP code 22180 total). Another 157 had Vienna addresses (ZIP codes 22181, 22182) but did not live in the Town of Vienna. A further 43 who claimed Vienna residence could not be verified (either because we found no match or because the name was incomplete). A further 84 either self-reported an address outside of Vienna or were assigned to a non-Vienna residence upon matching to the address databases. The most common locations were other nearby localities (e.g., Oakton, Fairfax). Only five were truly non-valid responses – apparent duplicate or obviously false name.

In general, it was evident that the petition signers took this quite seriously. The single false name ("Original Resident") was not even a joke name, but was apparently someone trying to make a point.

Table 1: Summary of petition validation process.

444 Maple petition signers as of 8/12/218

Validation status	Persons	Percent
1:Vienna 22180	703	70.87
2:Vienna other zip	157	15.83
3:Vienna not verified	19	1.92
4:Vienna last initial only	24	2.42
5:Non-Vienna Address	84	8.47
6:Duplicate name	4	0.4
7:Obvious false name	1	0.1
Total	992	100

As the picture on the next page clearly demonstrates, petition signers in the validated 22180 cohort were widely dispersed across town. The next table shows that those directly affected by 444 Maple West – what we have termed the "NIMBY" area – accounted for just over 8 percent of all validated respondents in 22180. Fully 92 percent of those signing the petition were outside of the "NIMBY" area. We defined that as residence on: Roland, Mendon, Millwood CT, Wade Hampton, Glen.

Table 2: Petition Signers in Areas Adjacent to 444 Maple Versus Others.

444 Maple petition signers as of 8/12/218

Validated signers in ZIP code 22180

	Count	Percent
"NIMBY" area*	59	8.39
Rest of 22180	644	91.61
Total	703	100

*"NIMBY" area defined as residence on these streets: Roland, Mendon, Millwood CT, Wade Hampton, Glen

The map on the next page displays the geographically widespread support for the petition. Although there is a modest concentration in the "NIMBY" area as defined above, all quadrants and areas of the Town of Vienna are well-represented. Support for the petition was sufficiently widespread that the map of respondents clearly reproduces the readily-recognizable shape of the Town of Vienna. (To orient yourself, the I-66 interchange is just off-center at the bottom edge of the picture.) There are no large "bare spots" within the populated areas of the Town of Vienna.

Figure 1: Location of Petition Signers in the Town of Vienna.

