In mid-2002, the Applied Population Laboratory was contacted by the Wisconsin Primary Health Care Association about compiling information from Census 2000 that would help provide some estimates of the Amish population in Wisconsin. An initial challenge in approaching this project was that there is no direct data on religious affiliation collected by the U.S. Census Bureau or other federal or state statistical agencies. Any information gleaned from Census 2000 would be indirect and would have to focus on responses or characteristics that might be indicators of the presence of Amish in Wisconsin counties and municipalities.

The long form questionnaire of the decennial census does collect information on ancestry, evaluations in several other states indicate that many (if not most) Amish identify themselves as Pennsylvania German. So, the Applied Population Laboratory proposed that this data could be used as a "proxy" for estimating Amish population in Wisconsin. At a minimum, the ancestry data would be compiled and presented in tables and maps and examined as estimates of the Amish population in Wisconsin. The APL also proposed that other data items, such as plumbing facilities, availability of telephone service, or access to vehicles, could be explored and might help to corroborate the population counts arrived at by using the ancestry data.

The data set generated by the answers to the long form questionnaire (Summary File 3) was not available for Wisconsin until late September 2002. Starting in October 2002, Applied Population Laboratory staff extracted and compiled data on the number of people who identified their first or second ancestry as Pennsylvania German for all counties, municipalities and census tracts in Wisconsin. Data on plumbing facilities, access to vehicles, and telephone service was also assembled for all counties, municipalities and census tracts.

The compiled data on ancestry was used to generate a series of tables and maps displaying all Wisconsin counties and municipalities. The results were evaluated by Applied Population Laboratory staff and the preliminary conclusion was that the "counts" indicated by the ancestry data were too low to be an accurate representation of Amish population in Wisconsin. The state total for Pennsylvania German in Census 2000 was 2,479 (an 8% decline from 1990) and largest count of Pennsylvania German at the county level was in Vernon County (214). Attempts to corroborate and/or enhance these counts with data on plumbing facilities, access to vehicles, and telephone service were not fruitful or were inconclusive. For example, the number of housing units without telephone service was as likely to be high in resort counties in northeastern Wisconsin as it was in counties with relatively large numbers of people who listed their ancestry as Pennsylvania German. And, the rate of households without access to private vehicles was highest in urbanized areas of southeastern Wisconsin. Applied Population Laboratory staff also tried to corroborate the counts by comparison with a publication called Churches and Church Membership in the United States 1990, a non-census source produced by the Glenmary Research Center in Atlanta, Georgia. While the publication listed numbers of churches and adherents for Old Order Amish denominations in Wisconsin counties, it quickly became clear that the figures were gross estimates based on numbers of churches and not actual membership and were not useful for comparison. These preliminary conclusions were confirmed and reinforced through conversations with Wisconsin Primary Healthcare Association staff and University of Wisconsin Extension county faculty. "On-the-ground" and anecdotal evidence suggests that there has been substantial growth in Amish communities in some parts of Wisconsin and that the expected "counts" would be at least 3-4 times higher than those arrived at by using Pennsylvania German ancestry as a proxy for Amish.

However, it was concluded that the maps and tables that resulted from this project could be useful for examining the geographic distribution and relative magnitude of the Amish population in Wisconsin. That is, there does seem to be strong correlation between the counties and municipalities with high numbers of people of Pennsylvania German ancestry and those counties and municipalities that have Amish communities. So, these results could help with planning and programming based on the location of Amish communities (e.g. site locations, regional efforts) even if they don't help understand the size of the communities.

Without further analysis and perhaps some direct contact with Amish communities, it is difficult to know exactly why the approach of using ancestry as an indicator for Amish population did not work as well in Wisconsin as it apparently has in other states. And certainly, making use of more local knowledge and more direct surveying of Amish communities would yield better results. However, there are several issues surrounding the way the decennial census is taken that may have influenced the quality of data collected from Amish communities. In general, the success of the decennial census, and the resulting accuracy and quality of the data, depends heavily on two factors, response rates and geographic coverage. The first is more intuitive – higher rates of response lead to more complete and accurate counts. The second is broader and has to do with accuracy of the mailing lists used to deliver census questionnaires to households and also for follow-up operations when a household does not respond to the census. While it is not possible to quantify a response rate for Amish, it seems plausible that, for social and cultural reasons and the desire to live in fairly isolated and separate communities, Amish might have had some resistance to filling out census forms or might be more likely to leave some questions unanswered. This pattern was seen in Census 2000 response rates for American Indians and recent Latino immigrants – both of whom have some distrust of federal government and federal

government forms. There is also some evidence from evaluation of geographic coverage in Census 2000 that there were some problems with the address lists used in rural areas – especially those that predominately use rural route addresses or E-911 addresses. As a result, there are many examples of households in rural areas not receiving questionnaires or not ever being contacted by a census field worker. Most Amish in Wisconsin live in just such rural areas and again, while there isn't any way to know the extent to which this happened, it is possible that it also could have affected the quality of the data collected from Amish.

In summary, the approach used in this project yielded less than satisfactory results. Using Pennsylvania German ancestry as a proxy for Amish in Wisconsin did provide some glimpses of the geographic location and distribution of Amish communities but did not produce good estimates of the size of the population. An alternative approach discussed with Wisconsin Primary Healthcare Association staff is to do intensive collection of local data and knowledge in several counties or areas of Wisconsin with large Amish communities to arrive at better estimates of Amish population. Information could be collected from sources such as local government officials, school districts, health care providers, Amish elders, and others who have contact with Amish communities, and ideally, would be used in conjunction with survey information collected directly from Amish communities to produce estimates. While this is an intensive process in terms of resources and time, it would not only yield superior results but might also serve as a way to build trust and collaboration between Amish communities and organizations such as the Wisconsin Primary Healthcare Association.