

# Survey of the Health of All the Population and the Environment



Metro SHAPE 2014 is the latest implementation in a nationally-recognized series of surveys collecting information on the health of residents living in the seven-county area around Minneapolis and Saint Paul, Minnesota and the factors that affect their health across a broad range of topics. Starting in mid-September 2014, Metro SHAPE 2014 contacted approximately 58,000 households in six of the seven Twin Cities metro counties (Anoka County did a version of the survey in 2013).

Metro SHAPE 2014 has several goals:

- To assess the health levels and trends among residents;
- To understand factors and conditions related to the health of county adults by geographic area, race and ethnicity, and household income; and
- To fill the data gaps at the county level to facilitate effective program planning and policy development to improve the health status of all residents in each of the areas.

A companion project, SHAPE Child 2015, is administered only in Hennepin County. SHAPE Child monitors the current health status and seeks to understand the factors and conditions related to the health of county children by selected developmental stages and by geographic area within Hennepin County.

## History

SHAPE, a public health surveillance project, was initiated by the Hennepin County Community Health Department in 1998 in partnership with the Minneapolis Department of Health and Family Support. A primary reason for conducting the SHAPE survey was to provide data on the health status and the factors that affect health for adults in Hennepin County, for use in planning, programming and policy development in a range of government, community and health organizations. A second goal was to provide baseline data for Hennepin County to help measure changes in health indicators and status over time. SHAPE 1998 interviewed a total of 10,745 adults age 18 and over. SHAPE 1998 was a phone-based survey and focused on geographic sub-regions within Hennepin County.

In 2002, the SHAPE survey was conducted again, this time in collaboration with the Minneapolis Department of Health and Family Support and the Bloomington Division of Public Health. An important objective of SHAPE 2002 was to broaden the scope of “community” to include reports on racial and ethnic communities in Hennepin County. By oversampling selected geographic areas in the county, sufficient numbers of respondents for reporting were collected for American Indians, Southeast Asians, Blacks/African Americans, and Hispanics/Latinos. SHAPE 2002 was primarily a phone-based survey supplemented with in-person interviews with some hard-to-reach populations.

In 2006, the third iteration of SHAPE was conducted as a partnership between Hennepin County and the University of Minnesota’s School of Public Health. The major new component for SHAPE 2006 was the addition of a survey on the health of children, age 0 to 17.

In 2010, the health departments in each of the other six counties in the Metro Area did a survey, titled the Metro Adult Health Survey, modeled after SHAPE. Hennepin County did a mail-only version of SHAPE for both adults and children and was processed solely by in-house staff.

Since 2010, managers and staff from all nine of the health departments (seven county-level departments plus the city-level departments for Minneapolis and Bloomington) in the seven-county area worked to synchronize and coordinate the projects into one project. So, in 2014, Metro SHAPE 2014 was a project that coordinated marketing and implementation efforts across the entire area. Anoka County implemented their part of the project in 2013. Hennepin County included the SHAPE Child 2015 module to their activities within that county. Information about SHAPE Child 2015 is available separately at [www.Hennepin.us/SHAPE](http://www.Hennepin.us/SHAPE).

## Content Areas

Since it is not possible to ask every question that would be liked to ask in the Metro SHAPE 2014 questionnaire, some guiding principles were agreed upon to help prioritize which questions would be included. The guiding principles are listed below:

- Does it serve the purpose of the survey’s objectives?
- Is the health concern of public health significance?
- Is it meaningful in capturing the health for county residents using the project’s definition of health?
- Is it feasible to measure via the survey methods at reasonable cost and effort?
- Is the measure reliable and valid?
- Is the measure culturally appropriate? Can it be conceptually translated across populations?
- Is the measure sensitive to change due to intervention efforts?
- Are these data not available at a population level locally?

The domains and some selected topic areas included in the Metro SHAPE 2014 survey are listed in Table 1.

**Table 1: Metro SHAPE 2014 Adult Questionnaire Question Domains and Topic Areas**

<b>Questionnaire Domain</b>	<b>Example topic areas</b>
<b>Health status and health related quality of life</b>	Overall health status Chronic disease and conditions Weight status Disability Mental health Serious psychological distress
<b>Healthcare access and utilization</b>	Insurance coverage Unmet health care need Use of prescription medications Difficulty in filling prescriptions Usual source and place of care Preventive screenings Discussion and advice on lifestyle from provider
<b>Lifestyle and risk behaviors</b>	Cigarette and other tobacco use Environmental tobacco smoke (second-hand smoke) Alcohol use Physical activity and screen time Dietary behavior and beverage use
<b>Social and environmental factors</b>	Social connectedness and community involvement Neighborhood safety and walkability Neighborhood cohesion Discrimination Food and housing security

<b>Demographic factors</b>	Age Gender Race and ethnicity Household income Education and employment status LGBT status Years living in the U.S.A.
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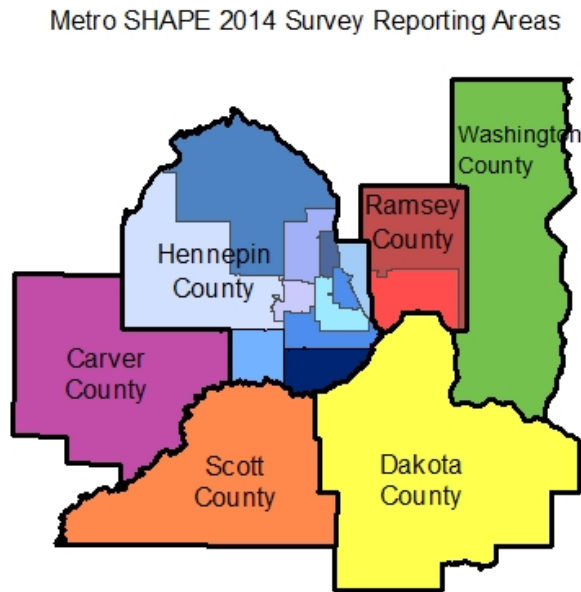
## Methodology

SHAPE 2014 collected information on adults by means of a mixed-mode on-line and mail survey sent to randomly selected households in six counties in the Twin Cities metro area. The on-line component was developed using Qualtrics.

The households included in the Metro SHAPE 2014 survey will come from a sample of addresses in the U.S. Postal Services' Delivery Sequence File (DSF). Each of the addresses was coded as to which one of the seventeen primary geographic sampling areas in which the address lies. Four of the sampling areas are in the city of Minneapolis, seven are in suburban Hennepin County – including the city of Bloomington, two are in Ramsey County, and one each for Carver, Dakota, Scott, and Washington Counties as shown in Figure 1.

Within each of the primary geographic sampling areas, some smaller areas were oversampled to increase the probability that residents of sub-populations of special interest (e.g., Hispanics/Latinos, Hmong, Somalis, U.S.-born Blacks, low-income households, etc.) will be included. Within a household, a random adult was selected to participate in the survey.

### Figure 1: Metro SHAPE 2014 Survey Reporting Areas



Using the Post Office's DSF, 58,400 households that were not in group homes were randomly selected to be in the sample. Each household got contacted up to seven times.

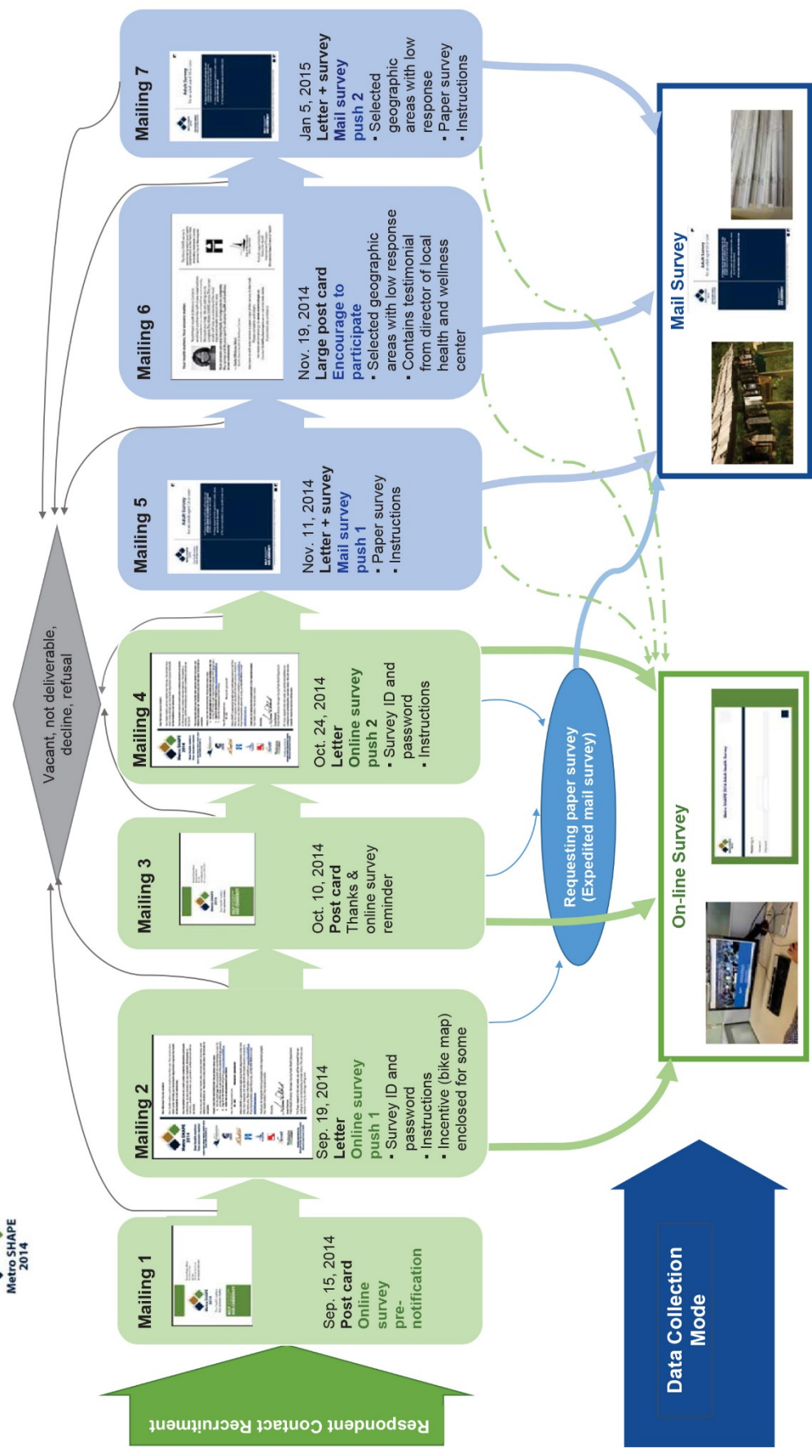
- 1) Mailing 1 – a postcard notifying the people in the household that they selected to participate.
- 2) Mailing 2 – a letter describing the project and instructing the adult living there with the next birthday to take the survey on-line using the included ID and password.
- 3) Mailing 3 – a postcard thanking the households who had already completed the survey and asking those who had not completed the survey to do so.
- 4) Mailing 4 – a letter describing the project and instructing the adult living there with the next birthday to take the survey on-line using the included ID and password.
- 5) Mailing 5 – a letter offering the persons at the household the option of taking the survey using the enclosed written version along with a postage-paid return envelope.

- 6) Mailing 6 – to households in selected geographic areas within Hennepin County, a postcard with a photo and testimonial of a manager of a community clinic in those areas urging people to complete and return the survey.
- 7) Mailing 7 – to households in selected geographic areas with low response rates, a letter offering the persons at the household the option of taking the survey using the enclosed written version along with a postage-paid return envelope.

See Figure 2 for a graphic illustration of the sequence of steps taken to recruit and encourage people to participate in the survey along with information on how the data from the completed surveys was captured.



**Figure 2. Adult Survey Data Collection Flow Chart**



Some overall results are:

A total of 58,486 randomly-selected non-group home households were included in the survey.

6,700 households completed the survey on-line.

6,100 households completed the survey by mail.

The response rate varied greatly by geography, but the overall rate is 22%.

The final dataset included results from 12,028 adults aged 25 and older.

Reports showing the results by geographic regions and by various demographic factors are available at [www.Hennepin.us/SHAPE](http://www.Hennepin.us/SHAPE)

### **Further Information**

For more information about Metro SHAPE 2014 see [www.MetroSHAPE.us](http://www.MetroSHAPE.us) or contact [SHAPE@Hennepin.us](mailto:SHAPE@Hennepin.us).

