



Real Possibilities

City of Flint Senior Needs Assessment

How does the Flint water crisis impact its older citizens?





Public Policy Associates, Incorporated is a public policy research, development, and evaluation firm headquartered in Lansing, Michigan. We serve clients in the public, private, and nonprofit sectors at the national, state, and local levels by conducting research, analysis, and evaluation that supports informed strategic decision-making.

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Executive Summary

Funded by AARP and the AARP Foundation, AARP Michigan commissioned a needs assessment to determine how the Flint water crisis is impacting older adults. The objectives of the assessment were to quantify the impact of the Flint water crisis on the senior population in the City of Flint and to identify community needs, assets, and gaps in services. AARP Michigan partnered with Public Policy Associates, Inc. and EPIC-MRA to conduct the assessment. The study's participants provided data via listening sessions and telephone surveys conducted during June 2016.

Listening Session Findings

The perspectives of approximately 82 older Flint residents at two listening sessions held on June 4–5 revealed strong patterns in their concerns. Most had experienced medical symptoms they attributed to the water crisis. Conversations revealed that Flint's seniors are not satisfied with the current provision of human services, perceive disparities in how older residents are treated when compared to youth, and think that almost nothing is working well with the current response system.

Attendees identified specific ways that current services could be improved, including having at-home water drop-off and recycling pickup, and funneling services/information through churches, community centers, or senior liaisons.

Survey Findings

A survey of 700 residents 60 years or older conducted on June 20–23 supported the listening session findings and provided additional insights concerning the impact of the Flint water crisis on older adults. Seventy-five percent of seniors have installed faucet filters in their home, but only a few use shower (14 percent) or whole-house filters (8 percent). Three out of four seniors have had their water tested for lead. Approximately 50 percent of seniors have not had their blood tested for lead poisoning; of this group, 43 percent don't know where to get tested.

The predominant illnesses and medical conditions that seniors attributed to the water crisis were skin sores and rashes, hair loss, teeth/gum pain, and stomach/digestive problems. Key barriers included challenges with getting bottled water home due to lack of transportation and limited ability to lift/carry the heavy water packages; and lack of access to the internet to obtain current information.

Identified Needs

Seniors identified strong preferences for where to focus efforts to help Flint's older residents with the water crisis:

- Medical assistance with blood testing
- Selection, purchase, and installation of (faucet, shower, and whole-house) filters
- Reimbursement for damaged plumbing equipment and appliances
- Helping replace pipes from the street into homes
- Water distribution/delivery
- Timely and reliable information via television, mail, and newspaper
- Improved medical care access/quality
- Assistance reviewing water bills
- Collaboration with community centers or churches
- Community mobilization and organization

Listening Sessions

“We matter . . . just like the kids. We want a good quality of life, too.”

The perspectives of older Flint residents at two listening sessions on June 4–5 revealed strong patterns in their concerns. Most had experienced medical symptoms they attributed to the water crisis, but no doctors had attributed their conditions (including rashes and other skin conditions) to the water. Flint’s seniors are not satisfied with the provision of human services, perceive disparities in how older residents are treated, and think that almost nothing is working well. Attendees identified some specific ways that current services could be improved, including having at-home water drop-off and recycling pickup, and funneling services/information through churches, community centers, or senior liaisons.

The attendees identified strong preferences for where to focus efforts to help Flint’s older residents: the selection, purchase, and installation of (faucet, shower, and whole-house) filters; reimbursement for damaged plumbing equipment and appliances; helping replace pipes from the street into homes; water distribution/delivery; and slightly lower priorities of reliable/accessible information, medical care quality/access, reviewing water

bills, community mobilization, and collaboration with community centers or churches.

“We all drink the water; we’re all at risk.”

Health Symptoms and Medical Care

“Don’t tell us that it’s only the young who need to worry about lead . . . stop saying these problems don’t exist.”

The majority of attendees at the listening sessions attributed medical symptoms that they, direct relatives, or close friends have experienced to the water crisis. Of the 82 attendees, 41 shared such medical problems; others did not share, and only a handful said that they had no such experience. The most common problem attributed to the water crisis was rashes. Particularly at the second session, there appeared to be a pattern of people without filters having rashes and people with shower filters not having rashes. Other common symptoms were hair loss; lesions; gum problems, including losing teeth; itching, flaking skin; and sores. A few attendees had blood tests show lead and/or various deficiencies (Vitamin D, Iron) that were not present before the crisis. Several people expressed

concerns about the long-term cognitive effects from lead, and particularly how neurological symptoms might be misidentified as cognitive decline in the elderly.

“They know what to look for in younger and pregnant individuals, but older people they aren’t sure exactly what to look for. There is a lack of knowledge in what to do with the older population.”

Attendees thought their medical conditions were being under-weighted. No attendees at the first session had a medical provider who successfully helped with the conditions they are experiencing. None of their medical providers said that any of the symptoms are from the water crisis. Several people at each session discussed paperwork and cost as barriers to receiving medical care, and expressed dissatisfaction with a perceived lackadaisical approach by medical care providers in Flint, who seem to be slower-moving and more willing to accept problematic symptoms than doctors elsewhere. In some cases, doctors and others are asserting that seniors’ health problems reflect conditions that they already had, not symptoms of new problems from the water.

“We’re just not dying fast enough.”

Human Services in Flint

“It’s a farce. It’s a runaround.”

Older residents expressed very strong dissatisfaction with the delivery of human services in Flint. Attendees shared stories including: Department of Health and Human Services (DHHS) staff conducting an information session but failing to provide participants with the required paperwork to apply for assistance; 211 being incorrect about which day lead testing was available at a particular location; filters being distributed on a first-come first-served basis (which disadvantages lower-mobility people such as the elderly and those with disabilities); difficulty navigating DHHS systems; poor communication and collaboration between service agencies; and failures in information about needed services reaching seniors in a timely fashion. Many attendees also felt that water billing was problematic in a variety of ways and warranted external review: water bills were too high, credits were not applied correctly, increases in rates were disproportionately harmful for seniors on fixed incomes, non-water items (e.g. sewage/services) were driving high bills, and the direction to flush water out of toilets and tubs for a

two-week period created costs. Residents were not clear on whether they were supposed to bear the costs of flushing the water, and in some cases felt that they were being lied to about billing schedules and water costs.

Differences in Human Services by Age

“I think that older people are not being engaged properly by the human services professionals, in the medical sense, in a financial and economic sense, as you hear about water heaters and fixed incomes.”

Attendees almost universally felt that older residents were not prioritized in services. One person said that they were “forgotten.” Another said “we were afraid to say anything, because of course the children matter.” The focus on children and de-emphasis of the impact of the water crisis on other groups limited the ability of older residents to self-advocate. Most attendees felt that older residents were explicitly de-prioritized.

“The water crisis is not just lead, it’s trihalomethanes and other bacteria . . . they seem to have forgot about the compromised immune systems, the elderly, high blood pressure, us folks. There’s been a neglect of the other issues drowned out by the lead.”

The focus in news coverage and services was on children under 6 and pregnant women. That reflects a focus on the lead in the water, but copper, bacteria, and other contaminants affect people of all ages. Additionally, attendees felt that even if lead is worse for children; that does not mean it’s not a problem for others. However, the policy focus seems to be on lead’s impact on children, not the overall water crisis’ impact on Flint residents.

“We need a system that’s going to work . . . not just the babies and the children, we all want to survive.”

Attendees also felt that even when serving older residents, providers did not adapt to the needs of the older population. In particular, several attendees expressed concerns for themselves or for other older residents without computer access or skills. Online information is often not helpful to seniors, and so other avenues of communication are important. Some people also felt that there was deliberate masking of information. Other attendees shared that they would see on nighttime news information about services that would have been helpful, but that they did not know about in time.

Almost Nothing Working Well

When asked if any part of service delivery is working well, the primary answer was no. Residents do not trust human service professionals at this point. Just 4 of the 82 attendees identified anything that worked well [media reporting of where water stations are, 211 (but other attendees had bad experiences with 211, with one-sixth indicating that they had called 211 but not gotten help), the outreach program of the church at which the second listening session was held, and an at-home water testing kit].

“They’re not taking care of us. They’re not even considering us as human beings.”

Attendees also identified specific ways to improve how some current services are delivered. These suggestions included: having water delivered (and recycling picked up) rather than asking residents to transport the water, having community liaisons for the older

“The experts that speak on Flint water have a forked tongue. We do not want any more experts, we want pipes.”

population and/or having information travel through churches or community centers, and sharing information on the

quality of various water filters and plumbers.

Focuses for Assistance

“It’s ruining my plumbing equipment. I had to replace my hot water heater, I’m wondering about my washing machine. How are we going to get reimbursed for these costs that I can’t afford?”

Overall the attendees provided clear guidance on their priorities for receiving assistance. Some priorities were emphasized in residents’ comments; we also ended each session by giving attendees 5–6 priority areas, and asking them to write down how they would allocate money among them.

- **Appliances.** Flint’s water has damaged plumbing appliances including water pumps, water heaters, washing machines, and boilers. Residents have already had to replace some, at costs of \$800–\$1,000 per appliance. **Reimbursement for the cost of appliances** was the third highest-rated priority for assistance receiving 20% of funding.
- **Filters.** Some residents do not know how to pick filters; some cannot install them; others cannot afford a filter, more than one filter, or the more-expensive but more-effective

whole-house filter. *Help with selection, installation, and reimbursement of faucet filters, shower filters, and whole-house filters* was the second highest-rated priority; receiving 21% of the funding recommendations.

“The governor is sending money to all these agencies, but we want him to send plumbers.”

- **Pipes into houses.** The government plans to replace water pipes in streets, but pipes from streets to houses is the responsibility of homeowners. The cost is estimated to be \$600 or more per house. *Replacing pipes into homes* was by far the highest-emphasized priority for assistance as it was discussed repeatedly and on average received 40% of the funding allocation.

“There are people who don’t have access to transportation, can’t do the lifting and that sort of thing.”

- **Water Delivery.** Almost a third of attendees agreed that older Flint residents have trouble getting to water distribution locations, and almost a third said they personally had trouble carrying water. The

fourth-highest priority was *in-home delivery of water to residents who cannot get it themselves along with recycling pick-up of water bottles*. This recommendation received about 10% of the overall funding allocation.

“Take your dot-com and put it where the sun don’t shine.”

- **Information.** *Better availability of reliable, trusted, timely, and accessible information (not delivered by computer)* on available services, medical information, and what to do was a real point of emphasis in the listening session discussions; this became the seventh priority and

“I feel that there should be information out daily to seniors: what’s available, what we should be looking for, how to access the system.”

received 7% of funding.

- **Water Bills.** Attendees **voiced** a plethora of concerns about water bills. *Improving, clarifying, and/or externally reviewing water bills* was weighted as about as important as water filters and it received about 5% of the funding recommendations.

*“We’re not going to just sit by.
We will speak out, we will
advocate for ourselves, we will
parade, we will not shut up.
That’s what they need to
understand. We are a powerful
force.”*

- **Community Mobilization.** At both sessions, residents were quite vocal about their interest in *political action to hold state officials accountable*. Based on the end-of-session activity, approximately 5% of funding was allocated to this area and it was rated as the fifth-most

*“Trust is going to be built through
the church, for us.”*

important.

- **Medical Care.** Almost a quarter of attendees said that they had trouble with medical costs or transportation to doctors. Others expressed dissatisfaction with the quality of care. *Improving the delivery of medical care and reimbursing costs for medical care* was the sixth-highest priority, and it received 5%–10% of funding allocation across days.

- **Collaboration with Community Centers or Churches.** Attendees very much liked the idea of having services coordinated through organizations that they already trusted. They proposed that—regardless of topic (medical, environmental, recycling, information, funding for reimbursement) and state agency—*funding, services, and information should flow through community centers or churches*. This issue received 5% of funding, was a point of strong consensus in conversations and ended up being the eighth priority area in the listening sessions.

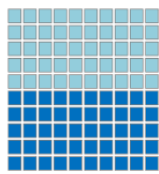
Key Survey Findings

A 20-minute telephone survey was conducted with 700 residents age 60 and older to learn how the Flint water crisis was impacting them; key findings are below.

1. Testing for Lead Poisoning

One out of two seniors living in Flint has not had their blood tested. Sixty percent of seniors that have not had their blood tested don't know where to go for testing.

50%



Fifty percent of seniors in Flint have not had their blood tested for lead poisoning.

Figure 1. Rate of Lead Testing Among Seniors

2. Use of Faucet, Shower or Whole-House Filters

One out of four seniors living in Flint has not installed a faucet, shower or whole-house filter in the home. Fifty-five percent of seniors that have not had installed filters don't know where to go for to seek help with the installation.

25%



Twenty five percent of seniors in Flint have not installed a faucet, shower or whole-house filter in the home.

Figure 2. Rate of Filter Use Among Seniors

3. Internet Access and Awareness

Forty-five percent of seniors indicated that they don't have access to the internet which limits their ability to learn about resources that may be available to them.

45%



Forty five percent of seniors in Flint don't have internet access.

Figure 3. Rate of Internet Access Among Seniors

4. Rate of Seniors with Illnesses Attributable to the Water Crisis

Survey results indicate that 3 out of 10 men, and 4 out of 10 women have a current illness that is attributable to the water crisis.



3 out of 10 men have an illness attributable to the water crisis.



4 out of 10 women have an illness attributable to the water crisis.

Figure 4. Rate of Illness Attributable to the Water Crisis by Gender

5. Illnesses Attributable to the Water Crisis

Flint seniors are dealing with a host of illnesses and medical conditions attributable to the water crisis.

Approximately 90 percent are dealing with skin rashes, flaking, or itching and about 50 percent have suffered hair loss.

6. Top Priorities

Older adults that live in Flint are very clear about where resources should be focused to help them deal with the water crisis. The priorities that were identified by survey respondents closely mirror the same priorities identified in the listening sessions.

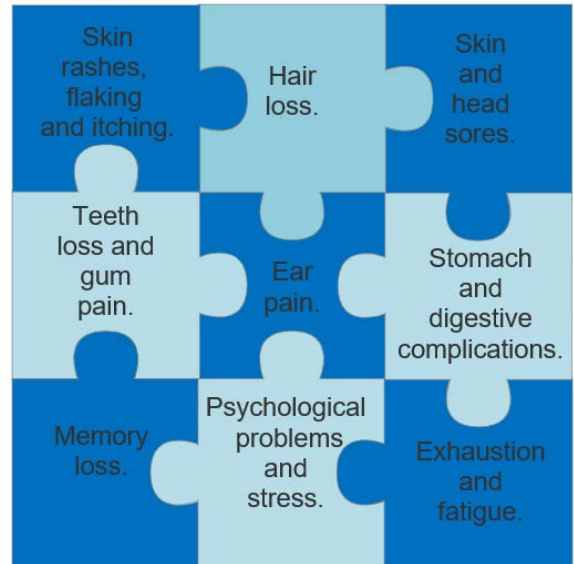


Figure 5. Illnesses/Medical Conditions Seniors Attribute to the Water Crisis

Top Priorities to Help Older Adults in Flint

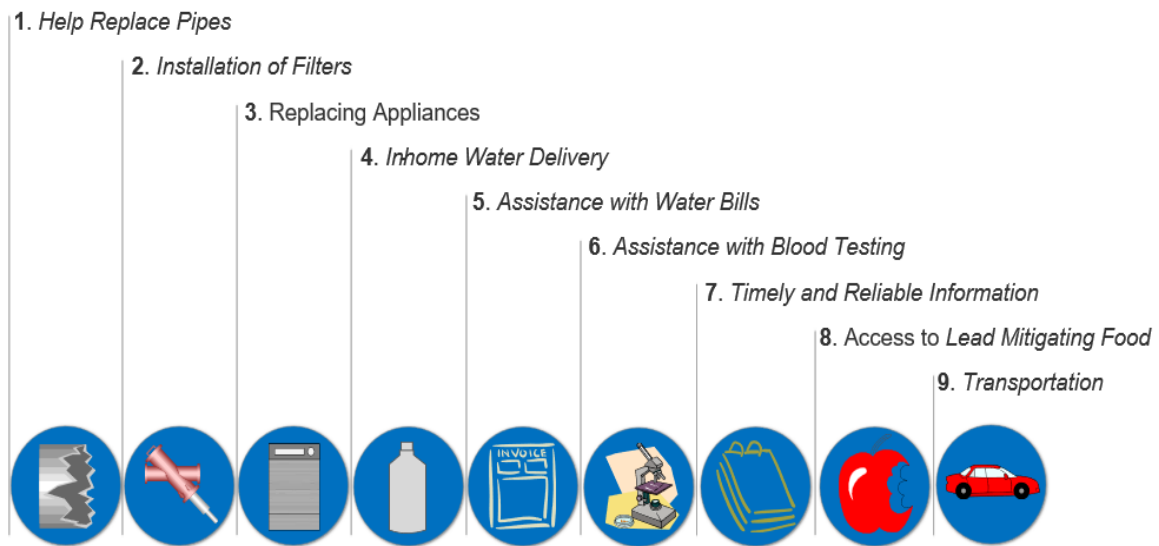


Figure 6. Top Priorities Identified by Seniors

Appendix A: Methodology

Listening Session Methods

Public Policy Associates, Inc. (PPA) partnered with AARP Michigan and the Valley Area Agency on Aging to conduct two 90-minute listening sessions to determine how the Flint Water Crisis has impacted older adults who live in Flint. Forty-two participants attended the listening session on Saturday, June 4, from 12 to 2 p.m. at Hasselbring Community Center, 1002 W. Home Avenue, Flint and 40 people attended the session on Sunday, June 5, from 2 to 4 p.m. at Grace Emmanuel Baptist Church, 3502 Lapeer Rd., Flint.

The purpose of the listening sessions was to identify the needs of older adults resulting from the Flint water crisis and gather insight and feedback to inform the development of a survey to 700 seniors later during the month. The session was moderated by PPA and several themes were captured and documented to help with the development of a plan of action to address specific issues related to the lead exposure crisis.

Telephone Survey Methods

PPA partnered with EPIC-MRA to conduct a 20-minute telephone survey with 700 residents age 60 and older to learn how the Flint water crisis was impacting them. Between June 20, 2016 and June 23, 2016 a total of 19,763 individual numbers were dialed in order to complete 700 live-operator interviews; 490 surveys were completed with

respondents that use landlines and 210 surveys with respondents that use cellphones. The margin of error for the survey is 3.5 percent. The response rate was 0.0441 and the cooperation rate was 0.5117.¹

For landline interviews, EPIC-MRA used their regularly updated database of the State of Michigan's Qualified Voter File and matched it against commercially available phone numbers. From that database, potential respondents were targeted using seven City of Flint Zip Codes (48502, 48503, 48504, 48505, 48506, 48507, and 48532). The database was then sorted by age to identify respondents aged 60 and older and calls were placed at random. For cell phone interviews, EPIC-MRA also obtained a list of cell phone numbers within those same Zip Codes and produced a similar database of potential participants aged 60 or older.

As a safeguard, screening questions were included at the outset of the survey to ensure that proper Zip Code stratification and interview qualifying criteria were met. Screening questions that were used include:

- "Do you currently live in the City of Flint?"
- "Are you currently 60 years old or older?"

¹ Calculated using AAPOR RR3 and COOP3. https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/Standard-Definitions2015_8thEd.pdf

- “Could you please tell me in what year you were born?”
- “What zip code do you live in?”

Appendix B: Priorities and Demographics

Priority #1: Help Replace Pipes

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	181	62%
Male	136	33%
Total	317	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	2	67%
Black	162	46%
Native American	1	11%
White	127	47%
Hispanic	9	41%
Total	301	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	77	46%
66-70	86	51%
71-79	95	49%
80 +	59	35%
Total	317	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	62	43%
\$20K - \$40K	105	47%
\$40K - \$80K	72	49%
\$80K +	25	54%
Total	264	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	7	29%
1-2 Days	44	36%
3-5 Days	105	53%
6+ Days	154	47%
Total	310	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	1	25%
48503	88	44%
48504	63	45%
48505	72	46%
48506	39	44%
48507	48	48%
48532	6	55%
Total	317	

Priority #2: Installation of Filters

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	32	11%
Male	23	6%
Total	55	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	25	7%
Native American	0	0%
White	26	10%
Hispanic	1	5%
Total	52	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	18	11%
66-70	17	10%
71-79	12	6%
80 +	8	5%
Total	55	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	9	6%
\$20K - \$40K	17	8%
\$40K - \$80K	13	9%
\$80K +	6	13%
Total	45	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	2	8%
1-2 Days	8	7%
3-5 Days	15	8%
6+ Days	29	9%
Total	54	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	21	11%
48504	10	7%
48505	7	4%
48506	2	2%
48507	13	13%
48532	2	18%
Total	55	

Priority #3: Replacing Appliances

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	29	10%
Male	20	5%
Total	49	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	1	33%
Black	25	7%
Native American	1	11%
White	14	5%
Hispanic	2	9%
Total	43	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	11	7%
66-70	12	7%
71-79	14	7%
80 +	12	7%
Total	49	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	13	9%
\$20K - \$40K	16	7%
\$40K - \$80K	11	8%
\$80K +	1	2%
Total	41	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	2	8%
1-2 Days	10	8%
3-5 Days	15	8%
6+ Days	20	6%
Total	47	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	10	5%
48504	12	9%
48505	10	6%
48506	9	10%
48507	8	8%
48532	0	0%
Total	49	

Priority #4: In-home Water Delivery

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	36	12%
Male	13	3%
Total	49	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	24	7%
Native American	1	11%
White	18	7%
Hispanic	4	18%
Total	47	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	12	7%
66-70	14	8%
71-79	14	7%
80 +	9	5%
Total	49	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	14	10%
\$20K - \$40K	15	7%
\$40K - \$80K	10	7%
\$80K +	2	4%
Total	41	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	1	4%
1-2 Days	8	7%
3-5 Days	17	9%
6+ Days	21	6%
Total	47	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	1	25%
48503	12	6%
48504	13	9%
48505	10	6%
48506	7	8%
48507	5	5%
48532	1	9%
Total	49	

Priority #5: Assistance with Water Bills

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	27	9%
Male	20	5%
Total	47	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	29	8%
Native American	2	22%
White	15	6%
Hispanic	1	5%
Total	47	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	9	5%
66-70	11	6%
71-79	10	5%
80 +	17	10%
Total	47	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	15	10%
\$20K - \$40K	17	8%
\$40K - \$80K	6	4%
\$80K +	0	0%
Total	38	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	0	0%
1-2 Days	16	13%
3-5 Days	11	6%
6+ Days	19	6%
Total	46	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	13	7%
48504	9	6%
48505	16	10%
48506	6	7%
48507	2	2%
48532	1	9%
Total	47	

Priority #6: Assistance with Blood Testing

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	13	4%
Male	19	5%
Total	32	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	21	6%
Native American	1	11%
White	8	3%
Hispanic	1	5%
Total	31	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	8	5%
66-70	7	4%
71-79	10	5%
80 +	7	4%
Total	32	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	4	3%
\$20K - \$40K	14	6%
\$40K - \$80K	7	5%
\$80K +	2	4%
Total	27	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	1	4%
1-2 Days	7	6%
3-5 Days	7	4%
6+ Days	15	5%
Total	30	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	11	6%
48504	7	5%
48505	7	4%
48506	4	5%
48507	3	3%
48532	0	0%
Total	32	

Priority #7: Timely and Reliable Information

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	16	5%
Male	12	3%
Total	28	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	13	4%
Native American	1	11%
White	13	5%
Hispanic	0	0%
Total	27	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	11	7%
66-70	5	3%
71-79	7	4%
80 +	5	3%
Total	28	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	0	0%
\$20K - \$40K	11	5%
\$40K - \$80K	5	3%
\$80K +	3	7%
Total	19	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	0	0%
1-2 Days	4	3%
3-5 Days	8	4%
6+ Days	15	5%
Total	27	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	7	4%
48504	9	6%
48505	3	2%
48506	4	5%
48507	4	4%
48532	1	9%
Total	28	

Priority #8: Access to Lead Mitigating Food

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	10	3%
Male	5	1%
Total	15	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	7	2%
Native American	1	11%
White	7	3%
Hispanic	0	0%
Total	15	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	2	1%
66-70	4	2%
71-79	3	2%
80 +	6	4%
Total	15	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	6	4%
\$20K - \$40K	2	1%
\$40K - \$80K	3	2%
\$80K +	2	4%
Total	13	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	2	8%
1-2 Days	2	2%
3-5 Days	2	1%
6+ Days	8	2%
Total	14	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	6	3%
48504	1	1%
48505	6	4%
48506	2	2%
48507	0	0%
48532	0	0%
Total	15	

Priority #9: Transportation

Gender	# Respondents Identified as Priority	% of Total Demographic
Female	4	1%
Male	5	1%
Total	9	
Race	# Respondents Identified as Priority	% of Total Demographic
Asian	0	0%
Black	4	1%
Native American	1	11%
White	3	1%
Hispanic	0	0%
Total	8	
Age	# Respondents Identified as Priority	% of Total Demographic
60-65	3	2%
66-70	3	2%
71-79	2	1%
80 +	1	1%
Total	9	
Income	# Respondents Identified as Priority	% of Total Demographic
Under \$20K	1	1%
\$20K - \$40K	3	1%
\$40K - \$80K	1	1%
\$80K +	0	0%
Total	5	
Days Leave Home	# Respondents Identified as Priority	% of Total Demographic
Zero	0	0%
1-2 Days	0	0%
3-5 Days	4	2%
6+ Days	5	2%
Total	9	
Zip Code	# Respondents Identified as Priority	% of Total Demographic
48502	0	0%
48503	0	0%
48504	2	1%
48505	2	1%
48506	2	2%
48507	3	3%
48532	0	0%
Total	9	

Appendix C: Listening Sessions Demographics

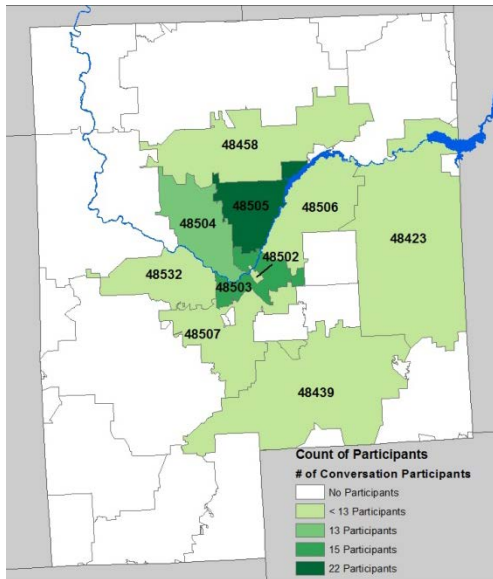


Figure C-1. Listening Session Participants by Zip Code

Table C-1: Race

Race	Frequency	Percentage
Asian/Pacific Islander	0	0.0
Native American	0	0.0
Black/African American	68	85.0
Hispanic/Latino	0	0.0
White/Caucasian	8	10.0
Other (please specify)	4	5.0

Table C-2: Marital Status

Marital Status	Frequency	Percentage
Separated	2	2.5
Married	28	35.0
Widowed	17	21.3
Divorced	24	30.0
Never Married	9	11.3

C-3: Income

Income	Frequency	Percentage
Under \$10,000	8	10.3
\$ 10,000-\$24,999	25	32.1
\$25,000-\$49,000	32	41.0
\$50,000-\$100,000	13	16.7
Over \$100,000	0	0.0

Table C-4: Gender

Gender	Frequency	Percentage
Female	61	74.4
Male	21	25.6

Table C-5: Employment Status

Employment Status	Frequency	Percentage
Employed, working 40 or more hours per week	4	5.0
Employed, working 1-39 hours per week	5	6.3
Not employed, looking for work	2	2.5
Not employed, NOT looking for work	3	3.8
Retired	62	77.5
Disabled, not able to work	11	13.8

Table C-6: Age

Age	Frequency	Percentage
Under 18	1	1.3
18 to 34	2	2.5
35 to 49	1	1.3
50 to 64	22	27.5
65+	54	67.5

Appendix D: Survey Demographics

Survey Participant Demographics

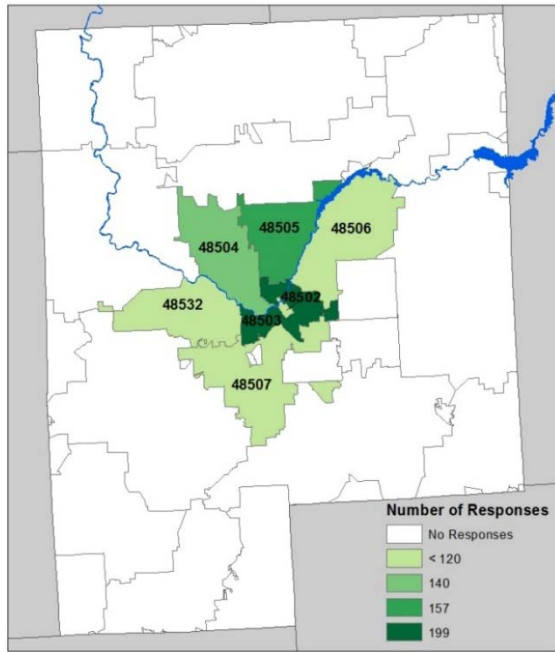


Figure D-1. Telephone Survey Responses by Zip Code; N=700

Gender	Frequency	Percentage
Male	294	42.0
Female	406	58.0
Total	700	100.0

Income	Frequency	Percentage
Under \$20K	143	20.4
\$20K-\$40K	223	31.9
\$40K-\$80K	146	20.9
Over \$80K	46	6.6
Undec	142	20.3
Total	700	100.0

Marital Status	Frequency	Percentage
Separated	14	2.0
Married	292	41.7
Widowed	165	23.6
Divorced	139	19.9
Never Married	62	8.9
Undec	28	4.0
Total	700	100.0

Race	Frequency	Percentage
Asian	3	.4
Black	354	50.6
Native American	9	1.3
White	272	38.9
Hispanic	22	3.1
Undec	40	5.7
Total	700	100.0

Table D-5: Ethnicity

Hispanic-Latino	Frequency	Percentage
Yes	21	3.0
No	663	94.7
Undec	16	2.3
Total	700	100.0

Table D-6: Education

Education Level	Frequency	Percentage
None-11th	53	7.6
High School	205	29.3
Technical	42	6.0
Some College	154	22.0
Associates	67	9.6
Bachelor	64	9.1
Post Grad	92	13.1
Undec	23	3.3
Total	700	100.0

Table D-7: Home Ownership

Home Ownership	Frequency	Percentage
Rent	55	7.9
Own	631	90.1
Live with Family	4	.6
Undec	10	1.4
Total	700	100.0

Appendix E: Data-Collection Instruments

Listening Session Questions

WHO ELSE NEEDS TO BE INVOLVED

1. In your opinion, are there other groups of older adults that should be represented as we seek to obtain feedback?

IMPACT OF THE WATER CRISIS

2. Have you or anyone that you know experienced any illnesses that you attribute to the water crisis? Please explain.

HUMAN SERVICE PROVIDER ENGAGEMENT

3. What do you think about the way older adults are currently being engaged by human service professionals since the water crisis?
4. Do you think there is difference based on age?
5. What is currently working well?
6. What needs to be improved?

HUMAN SERVICE PROVIDER REFORM

7. Are there any practices that need to be changed to improve access and/or quality?
8. What do you wish that human service professionals knew about you when they make decisions?

CRITICAL FOCUS AREAS

9. What about right now; what do you need help with to make sure your needs are being met?
10. we plan to survey 700 older adults in the City of Flint in the next month. What should we be asking them when we develop the survey?

BUILDING CONSENSUS

11. If you only had a dollar to spend, what should AARP and the Valley Area Agency on Aging focus their spending on if they really want to help older adults?

Survey Questions

700 SAMPLE – ERROR ±3.5%

SAMPLE DISPOSITIONS RR3=0.0441 COOP3=0.5117 REF3=0.0391

Polling Dates: June 20, 2016 through June 25, 2016

30% completed via cell phones

1. Could you please tell me in what year you were born?
2. What zip code do you live in?
3. Have you experienced any illnesses or medical conditions that you attribute to the water crisis?
 - INTRO TO Q.3A: Were any of the illnesses or medical conditions...?
 - 3A. Skin rashes, flaking or itching?
 - 3C. Hair loss?
 - 3B. Skin or head sores?
 - 3D. Teeth loss or gum pain?
 - 3E. Have you experienced other illnesses or medical conditions that we have not discussed related to the water crisis?
 - 3F. What is the illness or medical condition?
 - 3G. Do you feel that you are receiving proper medical attention for the illnesses or medical conditions you have attributed to the water crisis?
4. Have you had your blood tested for lead poisoning?
 - 4A. Did the test results reveal that you had high lead levels in your blood?
 - 4B. Would you like to have your blood tested for lead poisoning?
 - 4C. Do you know where you can have your blood tested for lead poisoning?
5. Have any of your blood test results since the water crisis revealed any vitamin or mineral deficiencies?
6. Have you had your water tested for lead?
7. Are you currently having bottled water brought to your residence?
8. Do you currently have help transporting bottled water to your residence?
 - 8A. Would you like help transporting bottled water to your residence?

- ▶ 8B. What is the primary barrier to getting bottled water to your home?
9. Have you encountered financial hardship in paying for medical care costs due to the water crisis?
- ▶ 9A. How hard was it for you to pay for these additional medical costs?
10. Have any of your water appliances needed to be replaced due to the water crisis? This includes your water heater, water pump, washing machine, etc.
- ▶ 10A. How hard is it/was it for you to pay for those new appliances?
 - ▶ 10B. Do you need financial help to cover these costs?
 - ▶ 10C. How much financial help do you need to cover these costs?
11. Have you installed any faucet, shower or whole-house filters in your home?
- ▶ 11A. Please tell me if you currently have ...
 - One faucet filter only
 - Multiple faucet filters, but no shower filters
 - Faucet filters and shower filters
 - A whole-house filter
 - ▶ 11B. Have you tried to get help selecting faucet, shower or whole-house filters?
 - ▶ 11C. Do you need help with the selecting faucet, shower or whole-house filters?
 - ▶ 11D. What is preventing you from trying to get help with the selection of faucet, shower or whole-house filters?
12. Have you tried to get help with the installation of faucet, shower or whole-house filters?
- ▶ 12A. Do you need help with the installation of faucet, shower or whole-house filters?
 - ▶ 12B. What is stopping you from trying to get help with the installation of faucet, shower, or whole-house filters?
13. Have you had to purchase a faucet, shower, or whole-house filter?
- ▶ 13A. How hard was it for you to pay for the filter(s)?
 - ▶ 13B. Do you need financial help to pay for the cost of purchasing a faucet, shower or whole-house filters?

- ▶ 13C. What is stopping you from asking for help to pay for the cost of purchasing a faucet, shower or whole-house filters?
14. Since the water crisis, have you experienced any of the following problems with your water bill?
- ▶ 14A. Water bill being more expensive than before the crisis
 - ▶ 14B. Charges on the bill that you don't understand
 - ▶ 14C. Public announcements about water charges that don't match what then appears on your bill
 - ▶ 14D. How hard has it been to pay for the higher bills? Would you say it is/was...?
 - ▶ 14E. Do you need help to pay for increased water bill costs due to the water crisis?
 - ▶ 14F. What is preventing you from seeking financial help to pay for increased water bill costs due to the water crisis? [RECORD RESPONSE AS STATED]
15. How would you rate the level of support and assistance that seniors are currently receiving to deal with the water crisis?
16. How would you rate the support and assistance that you are currently receiving from the City of Flint to deal with the water crisis?
17. How would you rate the support and assistance that you are currently receiving from State of Michigan to deal with the water crisis?
18. How would you rate the support and assistance that you are currently receiving from Federal Government to deal with the water crisis?
19. If you had one choice, which one of the following should be the Number 1 priority to help older adults in Flint at this time?
- ▶ 19A. Help paying for the cost of replacing pipes from the street into your home.
 - ▶ 19B. Help with selection, installation, and reimbursement of faucet filters, shower filters, and whole-house filters
 - ▶ 19C. Help paying for the cost of appliances
 - ▶ 19D. In-home delivery of water
 - ▶ 19E. Reviewing Water Bills
 - ▶ 19F. Medical Assistance, such as blood testing

- 19G. Reliable and Timely Information
 - 19H. Healthy Food
 - 19I. Meal Delivery
 - 19J. Transportation
20. Are there any other supports you need because of the water crisis that we have not discussed?
21. How would you prefer to obtain information concerning the water crisis?
22. Do you have access to the internet?
- 22A. How often do you typically go on the internet?
23. How many days per week do you typically leave the house?
- 23A. When you leave the house, how do you typically travel?
24. Do you currently rent or own a home?
25. During a typical week, do you spend time doing any of the following?
- 25A. Participating in religious or spiritual activities with others
 - 25B. Volunteering or helping out in the community
 - 25C. Participating in a club or civic group
 - 25D. Participating in senior center activities
26. Which of the following categories best describes your current employment status?
- 26A. Retired
 - 26B. Disabled, not able to work
 - 26C. Employed, working 1-39 hours per week
 - 26D. Employed, working 40 or more hours per week
 - 26E. Not employed, NOT looking for work
 - 26F. Not employed, looking for work
27. How many adults age 18 or older, including you, live in your household?
28. How many children, under age 18, live in your household?
29. Which of the following best describes your education level?
- 29A. 0-11 years, no diploma
 - 29B. High school graduate

- 29C. Non-college post high school (technical training)
 - 29D. Some college with no degree
 - 29E. Associate's degree
 - 29F. Bachelor's degree
 - 29G. Graduate or professional degree
30. Are you Hispanic or Latino?
31. What racial group or groups do you identify with?
- 31A. Black/African American
 - 31B. White/Caucasian
 - 31C. Native American
 - 31D. Hispanic
 - 31E. Asian/Pacific Islander
32. Are you currently married, widowed, divorced, separated, or never married?
33. We realize income is a private matter, and so rather than ask you anything specific about your income, could you please tell me whether your total household income in 2015, before taxes, was more, or less than, \$40,000?
- 33A. If less than \$40,000, "And was it less than \$20,000 or more than \$20,000?"
 - 33B. If more than \$40,000, "And was it less than \$80,000 or more than \$80,000?"
34. Do you identify as male or female?