Stormwater Knowledge, Attitude and Behaviors: A 2005 Survey of North Carolina Residents Chrystal Bartlett

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Stormwater Questionnaire

Q3	My name is	, and I'm calling from the East Carolina University Survey
		le. The State Department of Environment and Natural Resources
	has asked us to gat	her people's opinions about water quality in the state.
May	y I speak to a person	in the home that is 18 years of age or older
	No one lives in ho	usehold that is 18 years old or older
	No one at home ri	ght now that is 18 years old or older
	Yes I have someon	ne on the line that is 18 years old or older
Q3a	a After verifying tha	at you have dialed the correct number and have the
	appropriate person	on the phone, confirm age, restate mission, and continue.
	This interview is co	mpletely voluntary and confidential. The survey will only
	take a few minutes,	and if I come to any question that you would prefer not to
	answer, just let me	know, and I'll skip over it. OK.
Q4]	Interview Record Go	ender (Record gender of respondent. Do not ask .)
	Male	
	Female	

Q5	OK, my first question is about water quality in general. Based on your current			
	knowledge, do you think the overall water quality of the river, streams and lakes			
	in your area are.			
	poor			
	fair			
	good			
	excellent			
Q6	OK, next can you tell me what county you live in?			
Q7	What is your zip code?			
Q8	Now, the next few questions are about sources of water pollution. I am going to read you a list of possible sources of water pollution, and for each one, I want you to tell me how important you think that item is as a source of water pollution.			
	So, the first item is. Wastewater from manufacturing plants.			
	Do you think that item is, very important as a source of water pollution, important, or not important? Would you say			
	Very Important			
	Important			
	Not Important			
Q9	How about wastewater from sewer treatment plants? Would you say it is			
	Very Important			
	Important			
	Not Important			

Q10 How about pollutants that wash out of the air like acid rain?

Very Important

Important

Not Important

Q11 How about rainfall runoff from yards, parking lots, and streets?

Very Important

Important

Not Important

Q12 How about rainfall runoff from farms and agricultural operations?

Very Important

Important

Not Important

Q13 How about dirt eroding from construction sites?

Very Important

Important

Not Important

Q14 And how about trash that gets dumped into lakes and rivers by boaters and other recreational users?

Very Important

Important

Not Important

Q15 OK, now what I want to do is find out, of all the sources of water pollution that I just ask you about, which one of those you think is the most important source of pollution.

So, I am going to re-read the ones that you said were important or very important, and if you could, tell me which ONE you think is the most important as a source of water pollution(which ONE contributes the most)

Interviewer Note: The program will only list the ones for you to read that were answered important or very important. The respondent will choose just one that is most important.

Q16 OK, now I have a few questions about how you handle jobs around the house like yard work. Do you have a grass lawn or yard that you mow?

Yes

No

Q17 When you mow your grass, what do you do with the grass clippings? Do you...

leave them in the yard
collect them and throw them in the garbage
rake or blow them into a drain
mulch or compost them
something else

Q18 Do you ever use fertilizer on your lawn?

Yes

No

Q19 About how often would you say you use fertilizer on your lawn? Would you say

Monthly

two or three times a year

once a year or less

Q20	Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? Yes			
	No			
Q21	Now I would like to talk to you about taking care of your vehicle. First let me ask youDo you have a car/truck or other vehicle.			
	Yes No			
Q21a	OK, I have a question about washing your vehicle. Do you wash your vehicle at home or do you take it to a car wash,? At home			
	Other, someone else washes it, or some other scenario Take to a car wash			
Q22	When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?			
	into the grass, dirt or gravel			
	into the street or driveway			
	varies, sometimes one, sometimes another			
Q23	And now, a question about changing the oil in your vehicle, Do you change your own			
	oil at home?			
	Yes			
	No			

Q24 When you change your oil at home, how do you dispose of the used oil? Do you dispose of it....

In a designated lawn area with other garbage (dumpster, placed in trash bags with other trash, etc pour it down a storm drain take it somewhere it can be recycled (recycle center, Jiffy Lube, gas station) other

Q25 Now I have a few questions about your pet. Do you walk your pet

Yes

No

No Pets (Skip to Q26)

Q25a How often do you pick up their pet waste? Would you say...

Always

often

sometimes

rarely

never

Q26 Ok, the next thing I want to ask you about is storm water. Storm water Is all the water that collects on streets and parking lots after a rain storm and then runs into storm drains. Now, we've found that lots of folks don't really know that much about this--- and that's OK. But if you had to pick one of the following options for where storm water runoff goes once it enters a storm drain, would it be that it goes to....

the city's regular sewer treatment plant a separate special sewer treatment plant nearby fields and yards closest river, stream or lake drainage pond

Yes No	
Q28 Which of the following categories would you say best describes your education level?	
Less than high school	
Some high school	
High school graduate	
Some vocational or technical school	
Graduated from vocational or technical school	
Some college	
2-Year college graduate	
4-Year college graduate	
Post-graduate degree	
Q29 Which of these categories best describes your age? Are You	
18-24	
25-34	
35-44	
45-54	
55-64	
over 65	
Q30 Just to insure a proper representation by race, would you classify yourself as Black or African-American, Asian, White, Hispanic, or of some other race?	
Black of African-American Black or African-American	
Asian	
White	
Hispanic	

Other

Q31 Remember that none of this information can ever be associated with your name or household, can you tell me which of the following categories best describes your annual household income before taxes. Was it....

Less than \$12,000 \$12,000 to \$25,000 \$25,000 to \$35,000 \$35,000 to \$50,000 \$50,000 to \$75,000 \$75,000 to \$100,000 over \$100,000

Those are all the questions I have for you today.

Thank you for participating in this important survey.

Appendix B

Frequency Tables

Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	267	26.7	26.7	26.7
	Suburban	387	38.7	38.7	65.4
	Rural	346	34.6	34.6	100.0
	Total	1000	100.0	100.0	

May I speak to a person in the home that is 18 years of age or older?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes I have someone on the line that is 18 years old or older	1000	100.0	100.0	100.0

Record gender of respondent.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	600	60.0	60.0	60.0
	Male	400	40.0	40.0	100.0
	Total	1000	100.0	100.0	

Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are

		Frequency	Percent	Valid Percent	Cumulative Percent
	Poor	132	13.2	13.2	13.2
	Fair	394	39.4	39.4	52.6
	Good	424	42.4	42.4	95.0
Valid	Excellent	29	2.9	2.9	97.9
	Refuse to answer	21	2.1	2.1	100.0
	Total	1000	100.0	100.0	

Wastewater from manufacturing plants - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	633	63.3	63.3	63.3
	Important	284	28.4	28.4	91.7
Valid	Not important	61	6.1	6.1	97.8
	Refuse to answer	22	2.2	2.2	100.0
	Total	1000	100.0	100.0	

Wastewater from sewer treatment plants - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	633	63.3	63.3	63.3
	Important	277	27.7	27.7	91.0
Valid	Not important	76	7.6	7.6	98.6
	Refuse to answer	14	1.4	1.4	100.0
	Total	1000	100.0	100.0	

Pollutants that wash out of the air (acid rain) - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	299	29.9	29.9	29.9
	Important	523	52.3	52.3	82.2
Valid	Not important	143	14.3	14.3	96.5
valiu	Don't know	1	.1	.1	96.6
	Refuse to answer	34	3.4	3.4	100.0
	Total	1000	100.0	100.0	

Rainfall runoff from yards, parking lots, and streets - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	247	24.7	24.7	24.7
	Important	458	45.8	45.8	70.5
Valid	Not important	287	28.7	28.7	99.2
	Refuse to answer	8	.8	.8	100.0
	Total	1000	100.0	100.0	

Rainfall runoff from farms and agricultural operations - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	435	43.5	43.5	43.5
	Important	416	41.6	41.6	85.1
Valid	Not important	128	12.8	12.8	97.9
	Refuse to answer	21	2.1	2.1	100.0
	Total	1000	100.0	100.0	

Dirt eroding from construction sites - importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	258	25.8	25.8	25.8
	Important	497	49.7	49.7	75.5
Valid	Not important	234	23.4	23.4	98.9
	Refuse to answer	11	1.1	1.1	100.0
	Total	1000	100.0	100.0	

Trash dumped into lakes and rivers by boaters and other recreactional users – importance as a source of water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Very important	674	67.4	67.4	67.4
	Important	260	26.0	26.0	93.4
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Not important	59	5.9	5.9	99.3
Valid	Don't know	1	.1	.1	99.4
	Refuse to answer	6	.6	.6	100.0
	Total	1000	100.0	100.0	

Which of the sources that you indicated as important or very important do you think is the most important as a source of water pollution?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Manufacturing plants wastewater	309	30.9	30.9	30.9
	Sewer treatment plants wastewater	192	19.2	19.2	50.2
	Pollutants that wash out of the air (acid rain)	36	3.6	3.6	53.8
\	Rainfall runoff from yards, parking lots, and streets	45	4.5	4.5	58.3
Valid	Rainfall runoff from farms and agricultural operations	119	11.9	11.9	70.2
	Construction site dirt erosion	33	3.3	3.3	73.5
	Trash dumped into lakes and rivers	244	24.4	24.4	97.9
	Don't know	2	.2	.2	98.1
	Refuse to answer	19	1.9	1.9	100.0
	Total	999	99.9	100.0	
Missing	System	1	.1		
Total		1000	100.0		

Do you have a grass, lawn, or yard that you mow?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	961	96.1	96.1	96.1
Valid	No	38	3.8	3.8	99.9
valid	Refuse to answer	1	.1	.1	100.0
	Total	1000	100.0	100.0	

When you mow your grass, what do you do with the grass clippings?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Leave them in the yard	469	46.9	53.7	53.7
	Collect them and throw them in the garbage	228	22.8	26.1	79.7
\	Rake or blow them into a drain	13	1.3	1.5	81.2
Valid	Mulch or compost them	143	14.3	16.4	97.6
	Something else	14	1.4	1.6	99.2
	Refuse to answer	7	.7	.8	100.0
	Total	874	87.4	100.0	
Missing	System	126	12.6		
Total		1000	100.0		

Do you use fertilizer on your lawn?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	360	36.0	48.6	48.6
Valid	No	375	37.5	50.6	99.2
valiu	Refuse to answer	6	.6	.8	100.0
	Total	741	74.1	100.0	
Missing	System	259	25.9		
Total		1000	100.0		

About how often would you say you use fertilizer on your lawn?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Monthly	21	2.1	5.8	5.8
	Two or three times a year	167	16.7	46.1	51.9
Valid	Once a year or less	168	16.8	46.4	98.3
	Refuse to answer	6	.6	1.7	100.0
	Total	362	36.2	100.0	
Missing	System	638	63.8		
Total		1000	100.0		

Does anyone ever test the soil on your lawn to determine how much fertilizer is needed?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	161	16.1	44.1	44.1
\	No	198	19.8	54.2	98.4
Valid	Refuse to answer	6	.6	1.6	100.0
	Total	365	36.5	100.0	
Missing	System	635	63.5		
Total		1000	100.0		

Do you have a car/truck or other vehicle?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	742	74.2	89.8	89.8
Valid	No	84	8.4	10.2	100.0
	Total	826	82.6	100.0	
Missing	System	174	17.4		
Total		1000	100.0		

Do you wash your vehicle at home, or do you take it to a car wash?

		Frequency	Percent	Valid Percent	Cumulative Percent
	At home	297	29.7	40.1	40.1
	Other, someone else washes it, or some other scenario	85	8.5	11.5	51.6
Valid	Take to a car wash	356	35.6	48.0	99.6
	Don't know	1	.1	.1	99.7
	Refuse to answer	2	.2	.3	100.0
	Total	741	74.1	100.0	
Missing	System	259	25.9		
Total		1000	100.0		

When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Into the grass, dirt or gravel	188	18.8	56.8	56.8
	Into the street or driveway	128	12.8	38.7	95.5
Valid	Varies, sometimes one, sometimes another	14	1.4	4.2	99.7
	Don't know	1	.1	.3	100.0
	Total	331	33.1	100.0	
Missing	System	669	66.9		
Total		1000	100.0		

Do you change your own oil at home?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	176	17.6	22.8	22.8
Valid	No	592	59.2	76.8	99.6
Valid	Refuse to answer	3	.3	.4	100.0
	Total	771	77.1	100.0	
Missing	System	229	22.9		
Total		1000	100.0		

When you change your oil at home, how do you dispose of the used oil?

		Frequency	Percent	Valid Percent	Cumulative Percent
	In a designated lawn area	22	2.2	12.3	12.3
	With other garbage (dumpster, placed in trash bags, etc)	36	3.6	20.1	32.4
Valid	Pour it down a storm drain	16	1.6	8.9	41.3
	Take it somewhere it can be recycled	91	9.1	50.8	92.2
	Other	10	1.0	5.6	97.8
	Refuse to answer	4	.4	2.2	100.0
	Total	179	17.9	100.0	
Missing	System	821	82.1		
Total		1000	100.0		

Do you walk your pet?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	557	55.7	55.8	55.8
\/_!:-l	No	263	26.3	26.4	82.2
Valid	No Pets	178	17.8	17.8	100.0
	Total	998	99.8	100.0	
Missing	System	2	.2		
Total		1000	100.0		

How often do you pick up their pet waste?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Always	152	15.2	26.6	26.6
	Often	31	3.1	5.4	32.0
	Sometimes	68	6.8	11.9	44.0
Valid	Rarely	145	14.5	25.4	69.4
	Never	156	15.6	27.3	96.7
	Refuse to answer	19	1.9	3.3	100.0
	Total	571	57.1	100.0	
Missing	System	429	42.9		
Total		1000	100.0		

Where would you say storm water runoff goes once it enters a storm drain?

		Frequency	Percent	Valid Percent	Cumulative Percent
	The city's regular sewer treatment plant	152	15.2	21.3	21.3
	A separate special sewer treatment plant	53	5.3	7.4	28.8
	Nearby fields and yards	70	7.0	9.8	38.6
Valid	Closest river, stream, or lake	268	26.8	37.6	76.2
	Drainage pond	94	9.4	13.2	89.3
	Refuse to answer	76	7.6	10.7	100.0
	Total	713	71.3	100.0	
Missing	System	287	28.7		
Total		1000	100.0		

Are you retired?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	266	26.6	32.0	32.0
	No	471	47.1	56.6	88.6
Valid	Don't know	66	6.6	7.9	96.5
	Refuse to answer	29	2.9	3.5	100.0
	Total	832	83.2	100.0	
Missing	System	168	16.8		
Total		1000	100.0		

Which of the following categories would you say best describes your education level?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than high school	42	4.2	4.2	4.2
	Some high school	113	11.3	11.4	15.6
	High school graduate	233	23.3	23.5	39.2
	Some vocational or technical school	100	10.0	10.1	49.2
Valid	Graduated from vocational or technical school	64	6.4	6.5	55.7
	Some college	150	15.0	15.1	70.8
	2-Year college graduate	58	5.8	5.9	76.7
	4-Year college graduate	153	15.3	15.4	92.1
	Post-graduate degree	78	7.8	7.9	100.0
	Total	991	99.1	100.0	
Missing	System	9	.9		
Total	,	1000	100.0		

Which of these categories best describes your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	108	10.8	10.8	10.8
	25-34	81	8.1	8.1	18.9
	35-44	313	31.3	31.3	50.3
	45-54	177	17.7	17.7	68.0
	55-64	137	13.7	13.7	81.7
	Over 65	170	17.0	17.0	98.7
	Don't know	13	1.3	1.3	100.0
	Total	999	99.9	100.0	
Missing	System	1	.1		
Total		1000	100.0		

How would you classify yourself?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Black or African-American	166	16.6	17.1	17.1
	Asian	37	3.7	3.8	20.9
	White	537	53.7	55.4	76.4
\/_!:-l	Hispanic	87	8.7	9.0	85.3
Valid	Other	73	7.3	7.5	92.9
	Don't know	59	5.9	6.1	99.0
	Refuse to answer	10	1.0	1.0	100.0
	Total	969	96.9	100.0	
Missing	System	31	3.1		
Total		1000	100.0		

Which of the following categories best describes your annual household income before taxes?

		Frequency		
	Less than \$12,000		86	
	\$12,000 to \$25,000		99	
	\$25,000 to \$35,000		88	
	\$35,000 to \$50,000		99	
Valid	\$50,000 to \$75,000		104	
	\$75,000 to \$100,000		56	
	Over \$100,000		51	
	Don't know		107	
	Refuse to answer		23	
	Total		713	
Missing	System	287		
Total		1000	·	

Sources of Water Pollution

Of the sources of water pollution, 93.4% of respondents thought that recreational trash was important/very important. 91.7% indicated that manufacturing wastewater was important/very important and 91% indicated that wastewater from sewer treatment plants was important/very important. These were the same top three issues that surfaced as the MOST important sources of water pollution (999 total).

What county do you live in?

County	Frequency	Percent	Valid Percent	Cumulative Percent
999999999	12	1.2	1.2	1.2
Alamance	18	1.8	1.8	3.0
Alexander	2	.2	.2	3.2
Anson	3	.3	.3	3.5
Ashe	2	.2	.2	3.7
Avery	3	.3	.3	4.0
Beaufort	13	1.3	1.3	5.3
Bertie	4	.4	.4	5.7
Bladen	5	.5	.5	6.2
Brunswick	9	.9	.9	7.1
Buncombe	20	2.0	2.0	9.1
Burke	8	.8	.8	9.9
Cabarrus	23	2.3	2.3	12.2
Caldwell	10	1.0	1.0	13.2
Camden	2	.2	.2	13.4
Carteret	6	.6	.6	14.0
Caswell	3	.3	.3	14.3
Catawba	11	1.1	1.1	15.4
Chatham	9	.9	.9	16.3
Cherokee	3	.3	.3	16.6
Chowan	3	.3	.3	16.9
Cleveland	18	1.8	1.8	18.7
Columbus	8	.8	.8	19.5
Craven	16	1.6	1.6	21.1
Cumberland	35	3.5	3.5	24.6
Currituck	1	.1	.1	24.7
Dare	1	.1	.1	24.8
Davidson	18	1.8	1.8	26.6
Davie	4	.4	.4	27.0
Duplin	7	.7	.7	27.7
Durham	24	2.4	2.4	30.1
Edgecombe	12	1.2	1.2	31.3
Forsyth	44	4.4	4.4	35.7
Franklin	8	.8	.8	36.5
Gaston	15	1.5	1.5	38.0
Gates	3	.3	.3	38.3
Graham	1	.1	.1	38.4
Granville	7	.7	.7	39.1
Greene	2	.2	.2	39.3
Guilford	48	4.8	4.8	44.1
Halifax	4	.4	.4	44.5
Harnett	13	1.3	1.3	45.8
Haywood	7	.7	.7	46.5

County	Frequency	Percent	Valid Percent	Cumulative Percent
Henderson	8	.8	.8	47.3
Hertford	6	.6	.6	47.9
Hoke	9	.9	.9	48.8
Iredell	9	.9	.9	49.7
Jackson	2	.2	.2	49.9
Johnston	14	1.4	1.4	51.3
Lee	3	.3	.3	51.6
Lenoir	11	1.1	1.1	52.7
Lincoln	5	.5	.5	53.2
Macon	5	.5	.5	53.7
Madison	3	.3	.3	54.0
Mcdowell	4	.4	.4	54.4
Mecklenburg	56	5.6	5.6	60.0
Mitchell	2	.2	.2	60.2
Montgomery	1	.1	.1	60.3
Moore	9	.9	.9	61.2
Nash	10	1.0	1.0	62.2
New Hanover	16	1.6	1.6	63.8
Northampton	5	.5	.5	64.3
Onslow	21	2.1	2.1	66.4
Orange	5	.5	.5	66.9
Pamlico	2	.2	.2	67.1
Pasquotank	5	.5	.5	67.6
Pender	6	.6	.6	68.2
Perquimans	2	.2	.2	68.4
Person	5	.5	.5	68.9
Pitt	20	2.0	2.0	70.9
Polk	3	.3	.3	71.2
Randolph	13	1.3	1.3	72.5
Richmond	6	.6	.6	73.1
Robeson	17	1.7	1.7	74.8
Rockingham	13	1.3	1.3	76.1
Rowan	13	1.3	1.3	77.4
Rutherford	2	.2	.2	77.6
Sampson	18	1.8	1.8	79.4
Scotland	3	.3	.3	79.7
Stanly	2	.2	.2	79.9
Stokes	6	.6	.6	80.5
Surry	10	1.0	1.0	81.5
Swain	2	.2	.2	81.7
Transylvania	5	.5	.5	82.2
Union	19	1.9	1.9	84.1
Vance	10	1.0	1.0	85.1
Wake	94	9.4	9.4	94.5
Warren	4	.4	.4	94.9

Appendix B – Frequency Tables

County	Frequency	Percent	Valid Percent	Cumulative Percent
Washington	2	.2	.2	95.1
Watauga	5	.5	.5	95.6
Wayne	17	1.7	1.7	97.3
Wilkes	5	.5	.5	97.8
Wilson	15	1.5	1.5	99.3
Yadkin	4	.4	.4	99.7
Yancey	3	.3	.3	100.0
Total	1000	100.0	100.0	

What is your zip code?

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
27010	1	.1	.1	.1
27011	1	.1	.1	.2
27012	6	.6	.6	.8
27013	1	.1	.1	.9
27014	1	.1	.1	1.0
27017	2	.2	.2	1.2
27018	1	.1	.1	1.3
27020	1	.1	.1	1.4
27021	1	.1	.1	1.5
27022	1	.1	.1	1.6
27024	1	.1	.1	1.7
27025	1	.1	.1	1.8
27028	3	.3	.3	2.1
27030	4	.4	.4	2.5
27036	1	.1	.1	2.6
27041	1	.1	.1	2.7
27043	1	.1	.1	2.8
27048	2	.2	.2	3.0
27051	4	.4	.4	3.4
27052	1	.1	.1	3.5
27053	2	.2	.2	3.7
27055	1	.1	.1	3.8
27101	3	.3	.3	4.1
27103	3	.3	.3	4.4
27104	3	.3	.3	4.7
27105	2	.2	.2	4.9
27106	5	.5	.5	5.4
27107	4	.4	.4	5.8
27127	2	.2	.2	6.0
27203	2	.2	.2	6.2
27204	2	.2	.2	6.4
27205	2	.2	.2	6.6
27209	1	.1	.1	6.7
27214	1	.1	.1	6.8
27215	7	.7	.7	7.5
27217	5	.5	.5	8.0
27230	1	.1	.1	8.1
27235	1	.1	.1	8.2
27239	1	.1	.1	8.3
27249	1	.1	.1	8.4
27253	5	.5	.5	8.9
27263	1	.1	.1	9.0
27269	1	.1	.1	9.1

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
27278	1	.1	.1	9.2
27281	1	.1	.1	9.3
27283	1	.1	.1	9.4
27284	8	.8	.8	10.2
27285	1	.1	.1	10.3
27288	3	.3	.3	10.6
27292	4	.4	.4	11.0
27293	1	.1	.1	11.1
27295	3	.3	.3	11.4
27297	1	.1	.1	11.5
27299	2	.2	.2	11.7
27301	1	.1	.1	11.8
27302	2	.2	.2	12.0
27310	1	.1	.1	12.1
27312	5	.5	.5	12.6
27314	1	.1	.1	12.7
27316	1	.1	.1	12.8
27317	1	.1	.1	12.9
27320	4	.4	.4	13.3
27330	3	.3	.3	13.6
27341	1	.1	.1	13.7
27344	3	.3	.3	14.0
27357	1	.1	.1	14.1
27360	2	.2	.2	14.3
27361	1	.1	.1	14.4
27370	2	.2	.2	14.6
27379	1	.1	.1	14.7
27401	3	.3	.3	15.0
27403	6	.6	.6	15.6
27405	5	.5	.5	16.1
27406	2	.2	.2	16.3
27407	6	.6	.6	16.9
27408	1	.1	.1	17.0
27409	1	.1	.1	17.1
27410	5	.5	.5	17.6
27420	1	.1	.1	17.7
27425	1	.1	.1	17.8
27429	1	.1	.1	17.9
27435	1	.1	.1	18.0
27455	4	.4	.4	18.4
27491	1	.1	.1	18.5
27495	1	.1	.1	18.6
27501	2	.2	.2	18.8
27502	3	.3	.3	19.1
27503	1	.1	.1	19.2

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
27509	2	.2	.2	19.4
27510	1	.1	.1	19.5
27511	3	.3	.3	19.8
27513	5	.5	.5	20.3
27515	2	.2	.2	20.5
27516	1	.1	.1	20.6
27519	3	.3	.3	20.9
27520	3	.3	.3	21.2
27521	1	.1	.1	21.3
27522	3	.3	.3	21.6
27524	3	.3	.3	21.9
27525	3	.3	.3	22.2
27526	4	.4	.4	22.6
27527	1	.1	.1	22.7
27529	3	.3	.3	23.0
27530	4	.4	.4	23.4
27531	1	.1	.1	23.5
27534	1	.1	.1	23.6
27536	7	.7	.7	24.3
27537	3	.3	.3	24.6
27540	4	.4	.4	25.0
27541	1	.1	.1	25.1
27545	3	.3	.3	25.4
27546	4	.4	.4	25.8
27549	3	.3	.3	26.1
27552	1	.1	.1	26.2
27557	3	.3	.3	26.5
27560	5	.5	.5	27.0
27562	1	.1	.1	27.1
27565	1	.1	.1	27.2
27569	2	.2	.2	27.4
27571	1	.1	.1	27.5
27572	1	.1	.1	27.6
27573	1	.1	.1	27.7
27574	2	.2	.2	27.9
27576	1	.1	.1	28.0
27577	2	.2	.2	28.2
27581	1	.1	.1	28.3
27583	1	.1	.1	28.4
27587	9	.9	.9	29.3
27588	1	.1	.1	29.4
27589	2	.2	.2	29.6
27591	1	.1	.1	29.7
27592	3	.3	.3	30.0
27594	1	.1	.1	30.1

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
27596	2	.2	.2	30.3
27601	1	.1	.1	30.4
27602	1	.1	.1	30.5
27603	7	.7	.7	31.2
27604	5	.5	.5	31.7
27607	2	.2	.2	31.9
27608	1	.1	.1	32.0
27609	3	.3	.3	32.3
27610	5	.5	.5	32.8
27612	1	.1	.1	32.9
27613	4	.4	.4	33.3
27614	1	.1	.1	33.4
27615	2	.2	.2	33.6
27616	3	.3	.3	33.9
27617	2	.2	.2	34.1
27620	1	.1	.1	34.2
27701	3	.3	.3	34.5
27703	4	.4	.4	34.9
27704	1	.1	.1	35.0
27705	2	.2	.2	35.2
27707	4	.4	.4	35.6
27712	2	.2	.2	35.8
27713	2	.2	.2	36.0
27717	4	.4	.4	36.4
27801	1	.1	.1	36.5
27803	3	.3	.3	36.8
27804	1	.1	.1	36.9
27806	2	.2	.2	37.1
27809	1	.1	.1	37.2
27812	1	.1	.1	37.3
27814	1	.1	.1	37.4
27821 27822	1	.1		37.5 37.6
27826	1	.1		37.6
27830	1	.1	.1	37.8
27831	2	.2	.2	38.0
27832	1	.1	.1	38.1
27834	10	1.0	1.0	39.1
27839	10	.1	.1	39.2
27852	2	.2	.2	39.4
27853	1	.1	.1	39.5
27854	1	.1	.1 .1	39.6
27855	2	.2	.2	39.8
27856	2	.2	.2	40.0
27858	10	1.0	1.0	41.0
21000	10	1.0	1.0	41.0

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
27862	1	.1	.1	41.1
27863	3	.3	.3	41.4
27864	3	.3	.3	41.7
27865	1	.1	.1	41.8
27870	2	.2	.2	42.0
27873	1	.1	.1	42.1
27882	3	.3	.3	42.4
27886	5	.5	.5	42.9
27889	8	.8	.8	43.7
27893	6	.6	.6	44.3
27896	2	.2	.2	44.5
27906	1	.1	.1	44.6
27907	1	.1	.1	44.7
27909	4	.4	.4	45.1
27910	3	.3	.3	45.4
27920	1	.1	.1	45.5
27921	1	.1	.1	45.6
27922	1	.1	.1	45.7
27924	1	.1	.1	45.8
27926	1	.1	.1	45.9
27928	1	.1	.1	46.0
27932	2	.2	.2	46.2
27935	1	.1	.1	46.3
27937	1	.1	.1	46.4
27944	1	.1	.1	46.5
27962	1	.1	.1	46.6
27976	1	.1	.1	46.7
27980	1	.1	.1	46.8
27983	2	.2	.2	47.0
28001	1	.1	.1	47.1
28018	1	.1	.1	47.2
28020	1	.1	.1	47.3
28025	8	.8	.8	48.1
28026	1	.1	.1	48.2
28027	7	.7	.7	48.9
28031	2	.2	.2	49.1
28033	1	.1	.1	49.2
28036	1	.1	.1	49.3
28046	1	.1	.1	49.4
28051	1	.1	.1	49.5
28052	3	.3	.3	49.8
28054	4	.4	.4	50.2
28056	1	.1	.1	50.3
28073	1	.1	.1	50.4
28075	2	.2	.2	50.6

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28078	5	.5	.5	51.1
28079	1	.1	.1	51.2
28080	3	.3	.3	51.5
28081	4	.4	.4	51.9
28086	3	.3	.3	52.2
28088	1	.1	.1	52.3
28090	1	.1	.1	52.4
28092	2	.2	.2	52.6
28103	2	.2	.2	52.8
28104	5	.5	.5	53.3
28105	2	.2	.2	53.5
28107	1	.1	.1	53.6
28110	3	.3	.3	53.9
28111	1	.1	.1	54.0
28112	2	.2	.2	54.2
28114	1	.1	.1	54.3
28115	3	.3	.3	54.6
28119	1	.1	.1	54.7
28120	4	.4	.4	55.1
28127	1	.1	.1	55.2
28133	1	.1	.1	55.3
28134	2	.2	.2	55.5
28139	1	.1	.1	55.6
28144	3	.3	.3	55.9
28146	2	.2	.2	56.1
28147	5	.5	.5	56.6
28150	6	.6	.6	57.2
28152	3	.3	.3	57.5
28164	1	.1	.1	57.6
28166	1	.1	.1	57.7
28168	1	.1	.1	57.8
28169	1	.1	.1	57.9
28170	1	.1	.1	58.0
28173	6	.6	.6	58.6
28202	1	.1	.1	58.7
28204	1	.1	.1	58.8
28205	4	.4	.4	59.2
28208	2	.2	.2	59.4
28209	1	.1	.1	59.5
28210	4	.4	.4	59.9
28211	2	.2	.2	60.1
28212	2	.2	.2	60.3
28213	1	.1	.1	60.4
28214	1	.1	.1	60.5
28215	2	.2	.2	60.7

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28216	4	.4	.4	61.1
28217	1	.1	.1	61.2
28226	2	.2	.2	61.4
28227	2	.2	.2	61.6
28262	2	.2	.2	61.8
28265	1	.1	.1	61.9
28269	1	.1	.1	62.0
28270	1	.1	.1	62.1
28273	1	.1	.1	62.2
28277	3	.3	.3	62.5
28278	2	.2	.2	62.7
28301	3	.3	.3	63.0
28302	3	.3	.3	63.3
28303	7	.7	.7	64.0
28304	2	.2	.2	64.2
28305	1	.1	.1	64.3
28306	3	.3	.3	64.6
28307	2	.2	.2	64.8
28308	1	.1	.1	64.9
28310	1	.1	.1	65.0
28314	1	.1	.1	65.1
28315	1	.1	.1	65.2
28318	1	.1	.1	65.3
28320	1	.1	.1	65.4
28326	1	.1	.1	65.5
28327	2	.2	.2	65.7
28328	11	1.1	1.1	66.8
28329	1	.1	.1	66.9
28333	3	.3	.3	67.2
28334	2	.2	.2	67.4
28337	1	.1	.1	67.5
28339	2	.2	.2	67.7
28340	2	.2	.2	67.9
28344	1	.1	.1	68.0
28345	1	.1	.1	68.1
28348	6	.6	.6	68.7
28352	3	.3	.3	69.0
28356	1	.1	.1	69.1
28358	5	.5	.5	69.6
28360	1	.1	.1	69.7
28361	1	.1	.1	69.8
28364	2	.2	.2	70.0
28365	2	.2	.2	70.2
28366	2	.2	.2	70.4
28374	1	.1	.1	70.5

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28376	8	.8	.8	71.3
28377	1	.1	.1	71.4
28379	3	.3	.3	71.7
28384	3	.3	.3	72.0
28385	1	.1	.1	72.1
28386	2	.2	.2	72.3
28387	2	.2	.2	72.5
28390	3	.3	.3	72.8
28393	1	.1	.1	72.9
28394	1	.1	.1	73.0
28401	1	.1	.1	73.1
28403	2	.2	.2	73.3
28405	2	.2	.2	73.5
28409	2	.2	.2	73.7
28411	3	.3	.3	74.0
28412	5	.5	.5	74.5
28420	1	.1	.1	74.6
28423	1	.1	.1	74.7
28424	1	.1	.1	74.8
28425	1	.1	.1	74.9
28431	1	.1	.1	75.0
28433	2	.2	.2	75.2
28434	1	.1	.1	75.3
28441	1	.1	.1	75.4
28443	3	.3	.3	75.7
28445	1	.1	.1	75.8
28451	1	.1	.1	75.9
28453	1	.1	.1	76.0
28457	1	.1	.1	76.1
28458	1	.1	.1	76.2
28460	2	.2	.2	76.4
28461	1	.1	.1	76.5
28462	1	.1	.1	76.6
28463	3	.3	.3	76.9
28464	1	.1	.1	77.0
28466	2	.2	.2	77.2
28467	3	.3	.3	77.5
28468	1	.1	.1	77.6
28470	1	.1	.1	77.7
28472	1	.1	.1	77.8
28478	1	.1	.1	77.9
28501	2	.2	.2	78.1
28502	1	.1	.1	78.2
28504	4	.4	.4	78.6
28508	1	.1	.1	78.7

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28512	1	.1	.1	78.8
28516	1	.1	.1	78.9
28523	1	.1	.1	79.0
28526	2	.2	.2	79.2
28529	1	.1	.1	79.3
28532	4	.4	.4	79.7
28536	1	.1	.1	79.8
28539	3	.3	.3	80.1
28540	6	.6	.6	80.7
28541	1	.1	.1	80.8
28546	3	.3	.3	81.1
28547	2	.2	.2	81.3
28551	2	.2	.2	81.5
28557	1	.1	.1	81.6
28560	4	.4	.4	82.0
28562	4	.4	.4	82.4
28570	3	.3	.3	82.7
28572	3	.3	.3	83.0
28574	2	.2	.2	83.2
28578	1	.1	.1	83.3
28580	1	.1	.1	83.4
28584	1	.1	.1	83.5
28586	1	.1	.1	83.6
28601	4	.4	.4	84.0
28602	3	.3	.3	84.3
28604	1	.1	.1	84.4
28605	1	.1	.1	84.5
28607	3	.3	.3	84.8
28610	1	.1	.1	84.9
28612	1	.1	.1	85.0
28613	1	.1	.1	85.1
28618	1	.1	.1	85.2
28621	2	.2	.2	85.4
28622	1	.1	.1	85.5
28625	1	.1	.1	85.6
28626	2	.2	.2	85.8
28630	2	.2	.2	86.0
28633	1	.1	.1	86.1
28637	1	.1	.1	86.2
28638	1	.1	.1	86.3
28645	6	.6	.6	86.9
28650	1	.1	.1	87.0
28655	6	.6	.6	87.6
28659	3	.3	.3	87.9
28673	1	.1	.1	88.0

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28677	4	.4	.4	88.4
28681	2	.2	.2	88.6
28685	2	.2	.2	88.8
28701	1	.1	.1	88.9
28704	1	.1	.1	89.0
28705	1	.1	.1	89.1
28712	2	.2	.2	89.3
28713	2	.2	.2	89.5
28714	3	.3	.3	89.8
28715	3	.3	.3	90.1
28716	1	.1	.1	90.2
28717	1	.1	.1	90.3
28718	1	.1	.1	90.4
28722	1	.1	.1	90.5
28730	1	.1	.1	90.6
28731	1	.1	.1	90.7
28732	1	.1	.1	90.8
28734	3	.3	.3	91.1
28737	1	.1	.1	91.2
28742	1	.1	.1	91.3
28744	1	.1	.1	91.4
28745	1	.1	.1	91.5
28748	1	.1	.1	91.6
28751	2	.2	.2	91.8
28752	2	.2	.2	92.0
28754	3	.3	.3	92.3
28756	1	.1	.1	92.4
28762	1	.1	.1	92.5
28763	1	.1	.1	92.6
28768	1	.1	.1	92.7
28771	1	.1	.1	92.8
28772	1	.1	.1	92.9
28778	1	.1	.1	93.0
28779	1	.1	.1	93.1
28782	1	.1	.1	93.2
28786	3	.3	.3	93.5
28787	3	.3	.3	93.8
28791	1	.1	.1	93.9
28792	4	.4	.4	94.3
28801	2	.2	.2	94.5
28802	1	.1	.1	94.6
28803	1	.1	.1	94.7
28804	1	.1	.1	94.8
28805	1	.1	.1	94.9
28807	1	.1	.1	95.0

Appendix B – Frequency Tables

Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent
28816	1	.1	.1	95.1
28880	1	.1	.1	95.2
28905	1	.1	.1	95.3
28906	2	.2	.2	95.5
99998	1	.1	.1	95.6
99999	44	4.4	4.4	100.0
Total	1000	100.0	100.0	

Appendix CCrosstabulations

I. Water Quality

1. by Dwelling

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Area * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	1000	100.0%	0	.0%	1000	100.0%

Area * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are						
		Poor	Poor Fair Good Excellent Refuse to answer				
	Urban	31	95	126	8	7	267
Area	Suburban	45	158	161	14	9	387
	Rural	56	141	137	7	5	346
	Total	132	394	424	29	21	1000

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.825(a)	8	.278
Likelihood Ratio	9.830	8	.277
Linear-by-Linear Association	5.432	1	.020
N of Valid Cases	1000		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.61.

Directional Measures

			Value
		Area Dependent	.085
Nominal by Interval	Eta	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.076

		Value	Approx. Sig.
Nominal by Nominal	Phi	.099	.278
	Cramer's V	.070	.278
	Contingency Coefficient	.099	.278
	N of Valid Cases	1000	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

I. Water Quality

2. by Gender

Case Processing Summary

	Cases							
	Valid		Missing		To	tal		
	N	Percent	N	Percent	N	Percent		
Record gender of respondent. * Based on your current knowledge, do you think the overall water quality of the river, streams and lake in your area are	1000	100.0%	0	.0%	1000	100.0%		

Record gender of respondent. * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

		Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are					
		Poor	Fair	Good	Excellent	Refuse to answer	Total
Record gender of respondent	Female	86	241	246	12	15	600
	Male	46	153	178	17	6	400
Total		132	394	424	29	21	1000

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.709(a)	4	.103
Likelihood Ratio	7.669	4	.105
Linear-by-Linear Association	.242	1	.623
N of Valid Cases	1000		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.40.

Directional Measures

			Value
Nominal by Interval Eta		Record gender of respondent. Dependent	.088
	Eta	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.016

		Value	Approx. Sig.
	Phi	.088	.103
Nominal by Nominal	Cramer's V	.088	.103
	Contingency Coefficient	.087	.103
	N of Valid Cases	1000	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

I. Water Quality

3. by Retirement Status

Case Processing Summary

	Cases						
	Valid		Missing		Total		
	N	Percent	N	Percent	N	Percent	
Are you retired? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	832	83.2%	168	16.8%	1000	100.0%	

Are you retired? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

	Based on you	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are					
	Poor	Fair	Good	Excellent	Refuse to answer	Total	
Are you retired?							
Yes	54	96	97	8	11	266	
No	53	203	198	10	7	471	
Don't know	4	29	30	3	0	66	
Refuse to answer	4	9	14	1	1	29	
Total	115	337	339	22	19	832	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.827(a)	12	.008
Likelihood Ratio	27.566	12	.006
Linear-by-Linear Association	.134	1	.714
N of Valid Cases	832		

a 5 cells (25.0%) have expected count less than 5. The minimum expected count is .66.

Directional Measures

			Value
		Are you retired? Dependent	.096
Nominal by Interval	Eta	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.034

		Value	Approx. Sig.
Nominal by Nominal	Phi	.180	.008
	Cramer's V	.104	.008
	Contingency Coefficient	.177	.008
	N of Valid Cases	832	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

I. Water Quality

4. by Education

Case Processing Summary

	Cases						
	Valid		Missing		Total		
	N	Percent	N	Percent	N	Percent	
Which of the following categories would you say best describes your education level? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	991	99.1%	9	.9%	1000	100.0%	

Which of the following categories would you say best describes your education level? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

	Based on	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are						
	Poor	Fair	Good	Excellent	Refuse to answer	Total		
Which of the following categories would you say best describes your education level?								
Less than high school	4	17	19	2	0	42		
Some high school	14	42	47	5	5	113		
High school graduate	29	83	112	4	5	233		
Some vocational or technical school	10	51	35	3	1	100		
Graduated from vocational or technical school	6	19	31	4	4	64		
Some college	27	53	63	4	3	150		
2-Year college graduate	12	25	19	1	1	58		
4-Year college graduate	20	70	59	3	1	153		
Post-graduate degree	9	29	37	2	1	78		
Total	131	389	422	28	21	991		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.003(a)	32	.184
Likelihood Ratio	37.005	32	.249
Linear-by-Linear Association	3.576	1	.059
N of Valid Cases	991		

a 17 cells (37.8%) have expected count less than 5. The minimum expected count is .89.

Directional Measures

			Value
Naminal by Interval	- Fto	Which of the following categories would you say best describes your education level? Dependent	.063
Nominal by Interval	Eta	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.136

		Value	Approx. Sig.
Nominal by Nominal	Phi	.198	.184
	Cramer's V	.099	.184
	Contingency Coefficient	.195	.184
N of Valid Cases		991	

a Not assuming the null hypothesis.

I. Water Quality

5. By Age

Case Processing Summary

	Cases						
	Va	lid	Missing		Total		
	N	Percent	N	Percent	N	Percent	
Which of these categories best describes your age? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	999	99.9%	1	.1%	1000	100.0%	

Which of these categories best describes your age? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

	Based on you					
	Poor	Fair	Good	Excellent	Refuse to answer	Total
Which of these categories	best describes	your age?				
18-24	6	45	51	4	2	108
25-34	6	38	36	1	0	81
35-44	43	122	136	8	4	313
45-54	21	71	75	7	3	177
55-64	24	57	50	2	4	137
Over 65	30	53	73	6	8	170
Don't know	2	7	3	1	0	13
Total	132	393	424	29	21	999

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.957(a)	24	.105
Likelihood Ratio	35.304	24	.064
Linear-by-Linear Association	.159	1	.690
N of Valid Cases	999		

a 12 cells (34.3%) have expected count less than 5. The minimum expected count is .27.

Directional Measures

			Value
Naminal by Interval	F4-	Which of these categories best describes your age? Dependent	.127
Nominal by Interval	Eta	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.080

		Value	Approx. Sig.
Nominal by Nominal	Phi	.182	.105
	Cramer's V	.091	.105
	Contingency Coefficient	.179	.105
N of Valid Cases		999	

a Not assuming the null hypothesis.

I. Water Quality 6. By Race

Case Processing Summary

	Cases						
	Va	lid	Missing		Total		
	N	Percent	N	Percent	N	Percent	
How would you classify yourself? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	969	96.9%	31	3.1%	1000	100.0%	

How would you classify yourself? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Crosstabulation

Count

		Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are					
	Poor	Fair	Good	Excellent	Refuse to answer	Total	
How would you classify yourself?							
Black or African-American 27 63 66 6 4				166			
Asian	3	14	18	1	1	37	
White	69	218	229	11	10	537	
Hispanic	9	29	43	6	0	87	
Other	15	24	28	2	4	73	
Don't know	7	25	23	3	1	59	
Refuse to answer	0	5	5	0	0	10	
Total	130	378	412	29	20	969	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.127(a)	24	.399
Likelihood Ratio	26.023	24	.352
Linear-by-Linear Association	.102	1	.750
N of Valid Cases	969		

a 16 cells (45.7%) have expected count less than 5. The minimum expected count is .21.

Directional Measures

			Value
Naminal by Interval	-	How would you classify yourself? Dependent	.029
Nominal by Interval Eta	Ета	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.042

		Value	Approx. Sig.
	Phi	.161	.399
Nominal by Nominal	Cramer's V	.081	.399
	Contingency Coefficient	.159	.399
	N of Valid Cases	969	

a Not assuming the null hypothesis.

I. Water Quality

7. By Income

Case Processing Summary

Cases						
	Valid		Mis	sing	То	tal
	N	Percent	N	Percent	N	Percent
Which of the following categories best describes your annual household income before taxes? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are	713	71.3%	287	28.7%	1000	100.0%

Which of the following categories best describes your annual household income before taxes? * Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Cosstabulation

Count

	Based on yo	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are						
	Poor	Fair	Good	Excellent	Refuse to answer	Total		
Which of the following categories best describes your annual household income before taxes?								
Less than \$12,000	20	28	29	6	3	86		
\$12,000 to \$25,000	17	42	37	1	2	99		
\$25,000 to \$35,000	11	36	37	3	1	88		
\$35,000 to \$50,000	15	44	36	2	2	99		
\$50,000 to \$75,000	13	42	46	2	1	104		
\$75,000 to \$100,000	6	27	23	0	0	56		
Over \$100,000	3	20	27	1	0	51		
Don't know	13	47	39	3	5	107		
Refuse to answer	3	8	10	0	2	23		
Total	101	294	284	18	16	713		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38.466(a)	32	.200
Likelihood Ratio	38.501	32	.199
Linear-by-Linear Association	2.321	1	.128
N of Valid Cases	713		

a 19 cells (42.2%) have expected count less than 5. The minimum expected count is .52.

Directional Measures

			Value
Nominal by Interval Eta	Eto	Which of the following categories best describes your annual household income before taxes? Dependent	.116
	Eld	Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are Dependent	.099

		Value	Approx. Sig.
	Phi	.232	.200
Nominal by Nominal	Cramer's V	.116	.200
	Contingency Coefficient	.226	.200
	N of Valid Cases	713	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

II. Where Stormwater Goes

1. by Age

Where would you say storm water runoff goes once it enters a storm drain? * Which of these categories best describes your age? Crosstabulation

Count

	Which of these categories best describes your age?							
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
Where would you say storm water runoff goes once it enters a storm drain?								
The city's regular sewer treatment plant	15	20	34	34	25	22	2	152
A separate special sewer treatment plant	1	5	8	17	13	9	0	53
Nearby fields and yards	6	13	9	15	8	17	2	70
Closest river, stream, or lake	15	27	55	49	53	67	2	268
Drainage pond	6	10	15	23	19	21	0	94
Refuse to answer	1	2	14	13	9	34	3	76
Total	44	77	135	151	127	170	9	713

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61.498(a)	30	.001
Likelihood Ratio	62.473	30	.000
Linear-by-Linear Association	25.017	1	.000
N of Valid Cases	713		

a 9 cells (21.4%) have expected count less than 5. The minimum expected count is .67.

			Value
Nominal by Interval	Eta	Where would you say storm water runoff goes once it enters a storm drain? Dependent	.214
		Which of these categories best describes your age? Dependent	.201

		Value	Approx. Sig.
	Phi	.294	.001
Nominal by Nominal	Cramer's V	.131	.001
	Contingency Coefficient	.282	.001
N of Valid Cases		713	

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

II. Where Stormwater Goes

2. by Area

Where would you say storm water runoff goes once it enters a storm drain? * Area Crosstabulation

Count

	Area			
	Urban	Suburban	Rural	Total
Where would you say storm water runoff goes once it enters a storm of	drain?			
The city's regular sewer treatment plant	46	60	46	152
A separate special sewer treatment plant	17	19	17	53
Nearby fields and yards	17	22	31	70
Closest river, stream, or lake	66	112	90	268
Drainage pond	23	37	34	94
Refuse to answer	16	24	36	76
Total	185	274	254	713

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.811(a)	10	.298
Likelihood Ratio	11.550	10	.316
Linear-by-Linear Association	5.754	1	.016
N of Valid Cases	713		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.75.

			Value
Nominal by Interval	Eta	Where would you say storm water runoff goes once it enters a storm drain? Dependent	.092
		Area Dependent	.106

		Value	Approx. Sig.
	Phi	.129	.298
Nominal by Nominal	Cramer's V	.091	.298
	Contingency Coefficient	.128	.298
N of Valid Cases		713	

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

II. Where Stormwater Goes

3. by Gender

Where would you say storm water runoff goes once it enters a storm drain? * Record gender of respondent. Crosstabulation

Count

	Record gender of respondent.		
	Female	Male	Total
Where would you say storm water runoff goes once it enters a storm drain?			
The city's regular sewer treatment plant	103	49	152
A separate special sewer treatment plant	38	15	53
Nearby fields and yards	45	25	70
Closest river, stream, or lake	131	137	268
Drainage pond	64	30	94
Refuse to answer	62	14	76
Total	443	270	713

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.882(a)	5	.000
Likelihood Ratio	38.788	5	.000
Linear-by-Linear Association	2.091	1	.148
N of Valid Cases	713		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.07.

			Value
Nominal by Interval	Eta	Where would you say storm water runoff goes once it enters a storm drain? Dependent	.054
		Record gender of respondent. Dependent	.230

		Value	Approx. Sig.
	Phi	.230	.000
Nominal by Nominal	Cramer's V	.230	.000
	Contingency Coefficient	.225	.000
N of Valid Cases		713	

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

- 1. Grass Clippings
 - a. by Dwelling

When you mow your grass, what do you do with the grass clippings? * Area Crosstabulation

Count

	Area			
	Urban	Suburban	Rural	Total
When you mow your grass, what do you do with a	the grass clippings?			
Leave them in the yard	98	192	179	469
Collect them and throw them in the garbage	63	91	74	228
Rake or blow them into a drain	3	4	6	13
Mulch or compost them	36	62	45	143
Something else	4	2	8	14
Refuse to answer	4	2	1	7
Total	208	353	313	874

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.120(a)	10	.128
Likelihood Ratio	15.020	10	.131
Linear-by-Linear Association	4.012	1	.045
N of Valid Cases	874		

a 6 cells (33.3%) have expected count less than 5. The minimum expected count is 1.67.

			Value
Nominal by Interval	Eta	When you mow your grass, what do you do with the grass clippings? Dependent	.074
Nominal by interval	⊏la	Area Dependent	.105

		Value	Approx. Sig.
	Phi	.132	.128
Nominal by Nominal	Cramer's V	.093	.128
	Contingency Coefficient	.130	.128
N of Valid Cases		874	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

1. Grass Clippings b. by Education

When you mow your grass, what do you do with the grass clippings? * Area Crosstabulation

Count

Count										
		Which o	f the followin	g categories wo	ould you say be	st describe	es your educa	ation level?	?	
	Less than high school	Some high school	High school graduate	Some vocational or technical school	Graduated from vocational or technical school	Some college	2-Year college graduate	4-Year college gradua te	Post- graduate degree	Total
When you mow your grass, what do you do with the grass clippings?										
Leave them in the yard	17	47	117	53	35	67	26	76	26	464
Collect them and throw them in the garbage	12	35	52	33	19	35	9	25	7	227
Rake or blow them into a drain	1	2	3	0	0	3	2	2	0	13
Mulch or compost them	2	12	19	7	6	23	16	30	26	141
Something else	1	1	3	0	0	3	0	2	4	14
Refuse to answer	1	0	1	0	0	2	0	1	2	7
Total	34	97	195	93	60	133	53	136	65	866

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	98.663(a)	40	.000
Likelihood Ratio	97.350	40	.000
Linear-by-Linear Association	23.445	1	.000
N of Valid Cases	866		

a 27 cells (50.0%) have expected count less than 5. The minimum expected count is .27.

Directional Measures

			Value
Nominal by Interval	Eto	When you mow your grass, what do you do with the grass clippings? Dependent	.235
	Eta	Which of the following categories would you say best describes your education level? Dependent	.240

		Value	Approx. Sig.
	Phi	.338	.000
Nominal by Nominal	Cramer's V	.151	.000
	Contingency Coefficient	.320	.000
	N of Valid Cases	866	

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

2. Fertilizer Use a. by Dwelling

About how often would you say you use fertilizer on your lawn? * Area Crosstabulation

Count

	Urban	Suburban	Rural	Total	
About how often would you say you use fertilizer on your lawn?					
Monthly	9	8	4	21	
Two or three times a year	50	72	45	167	
Once a year or less	36	69	63	168	
Refuse to answer	2	3	1	6	
Total	97	152	113	362	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.295(a)	6	.158
Likelihood Ratio	9.247	6	.160
Linear-by-Linear Association	1.244	1	.265
N of Valid Cases	362		

a 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.61.

Directional Measures

			Value
Naminal by Interval	Eto	About how often would you say you use fertilizer on your lawn? Dependent	.061
Nominal by Interval	Eta	Area Dependent	.157

		Value	Approx. Sig.
	Phi	.160	.158
Nominal by Nominal	Cramer's V	.113	.158
	Contingency Coefficient	.158	.158
	N of Valid Cases	362	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

2. Fertilizer Use

b. by Income

About how often would you say you use fertilizer on your lawn? * Which of the following categories best describes your annual household income before taxes? Crosstabulation

Count

	Which of	Which of the following categories best describes your annual household income before taxes?							1	
	Less than \$12,000	\$12,000 to \$25,000	\$25,000 to \$35,000	\$35,000 to \$50,000	\$50,000 to \$75,000	\$75,000 to \$100,000	Over \$100,000	Don't know	Refuse to answer	Total
About how often would you	About how often would you say you use fertilizer on your lawn?									
Monthly	0	2	2	0	1	1	5	2	0	13
Two or three times a year	3	3	8	15	22	10	20	17	5	103
Once a year or less	9	18	20	25	31	22	10	26	7	168
Refuse to answer	1	1	0	0	0	0	0	2	0	4
Total	13	24	30	40	54	33	35	47	12	288

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.962(a)	24	.017
Likelihood Ratio	42.453	24	.011
Linear-by-Linear Association	3.347	1	.067
N of Valid Cases	288		

a 20 cells (55.6%) have expected count less than 5. The minimum expected count is .17.

			Value
		About how often would you say you use fertilizer on your lawn? Dependent	.259
Nominal by Interval	Eta	Which of the following categories best describes your annual household income before taxes? Dependent	.159

		Value	Approx. Sig.
	Phi	.377	.017
Nominal by Nominal	Cramer's V	.218	.017
	Contingency Coefficient	.353	.017
	N of Valid Cases	288	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

2. Fertilizer Use c. by Age

About how often would you say you use fertilizer on your lawn? * Which of these categories best describes your age? Crosstabulation

Count

		Which of these categories best describes your age?						
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
About how often would you say you use fertilizer on your lawn								
Monthly	1	1	12	1	2	3	1	21
Two or three times a year	22	7	64	29	17	27	1	167
Once a year or less	3	14	23	36	42	46	4	168
Refuse to answer	0	0	2	1	0	2	1	6
Total	26	22	101	67	61	78	7	362

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	74.602(a)	18	.000
Likelihood Ratio	75.353	18	.000
Linear-by-Linear Association	16.321	1	.000
N of Valid Cases	362		

a 15 cells (53.6%) have expected count less than 5. The minimum expected count is .12.

			Value
Nominal by Interval	val Eta	About how often would you say you use fertilizer on your lawn? Dependent	.249
		Which of these categories best describes your age? Dependent	.302

Appendix C - Cross Tabulations

		Value	Approx. Sig.
Nominal by Nominal	Phi	.454	.000
	Cramer's V	.262	.000
	Contingency Coefficient	.413	.000
N of Valid Cases		362	

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

3. Soil Test

a. by Area

Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? * Area Crosstabulation

Count

	Urban	Suburban	Rural	Total		
Does anyone ever test the soil on your lawn to determine how much fertilizer is needed?						
Yes	50	63	48	161		
No	45	89	64	198		
Refuse to answer	2	2	2	6		
Total	97	154	114	365		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.436(a)	4	.488
Likelihood Ratio	3.434	4	.488
Linear-by-Linear Association	.237	1	.627
N of Valid Cases	365		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.59.

			Value
Nominal by Interval	Eta	Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? Dependent	.027
,		Area Dependent	.071

Appendix C – Cross Tabulations

		Value	Approx. Sig.
	Phi	.097	.488
Nominal by Nominal	Cramer's V	.069	.488
	Contingency Coefficient	.097	.488
	365		

a Not assuming the null hypothesis.b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

3. Soil Test b. by Age

Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? * Which of these categories best describes your age? Crosstabulation

Count

	Which of these categories best describes your age?							
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
Does anyone ever test the soil on your lawn to determine how much fertilizer is needed?								
Yes	20	6	66	26	20	20	3	161
No	6	15	36	43	41	55	2	198
Refuse to answer	0	1	0	0	0	3	2	6
Total	26	22	102	69	61	78	7	365

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	84.142(a)	12	.000
Likelihood Ratio	65.126	12	.000
Linear-by-Linear Association	23.701	1	.000
N of Valid Cases	365		

a 9 cells (42.9%) have expected count less than 5. The minimum expected count is .12.

			Value
Nominal by Interval	is peeded? Dependent	Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? Dependent	.357
		Which of these categories best describes your age? Dependent	.294

		Value	Approx. Sig.
	Phi	.480	.000
Nominal by Nominal	Cramer's V	.340	.000
	Contingency Coefficient	.433	.000
N of Valid Cases		365	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

III. Lawn Care

3. Soil Test

c. by Gender

Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? * Record gender of respondent.Crosstabulation

Count

	Record gender o			
	Female	Male	Total	
Does anyone ever test the soil on your lawn to determine how much fertilizer is needed?				
Yes	97	64	161	
No	121	77	198	
Refuse to answer	6	0	6	
Total	224	141	365	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.868(a)	2	.145
Likelihood Ratio	5.950	2	.051
Linear-by-Linear Association	3.286	1	.070
N of Valid Cases	365		

a 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.32.

			Value
Nominal by Interval Eta	Eta	Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? Dependent	.095
		Record gender of respondent. Dependent	.103

		Value	Approx. Sig.
	Phi	.103	.145
Nominal by Nominal	Cramer's V	.103	.145
	Contingency Coefficient	.102	.145
N of Valid Cases		365	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

- 1. Washing
 - a. by Dwelling

When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? * Area Crosstabulation

Count

	Area			
	Urban	Suburban	Rural	Total
When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?				
Into the grass, dirt or gravel	34	69	85	188
Into the street or driveway	36	54	38	128
Varies, sometimes one, sometimes another	1	9	4	14
Don't know	0	0	1	1
Total	71	132	128	331

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.432(a)	6	.025
Likelihood Ratio	14.877	6	.021
Linear-by-Linear Association	1.951	1	.162
N of Valid Cases	331		

a 4 cells (33.3%) have expected count less than 5. The minimum expected count is .21.

			Value
Nominal by Interval Eta	Eta	When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? Dependent	.092
,		Area Dependent	.173

		Value	Approx. Sig.
	Phi	.209	.025
Nominal by Nominal	Cramer's V	.148	.025
	Contingency Coefficient	.204	.025
N of Valid Cases		331	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

1. Washing

b. by Gender

When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? * Record gender of respondent. Crosstabulation

Count

	Record gender			
	Female	Male	Total	
When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?				
Into the grass, dirt or gravel	109	79	188	
Into the street or driveway	78	50	128	
Varies, sometimes one, sometimes another	6	8	14	
Don't know	1	0	1	
Total	194	137	331	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.455(a)	3	.483
Likelihood Ratio	2.791	3	.425
Linear-by-Linear Association	.058	1	.810
N of Valid Cases	331		

a 2 cells (25.0%) have expected count less than 5. The minimum expected count is .41.

			Value
Nominal by Interval Eta	Eta	When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? Dependent	.013
,		Record gender of respondent. Dependent	.086

		Value	Approx. Sig.
	Phi	.086	.483
Nominal by Nominal	Cramer's V	.086	.483
	Contingency Coefficient	.086	.483
N of Valid Cases		331	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

1. Washing

c. by Age

When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? * Which of these categories best describes your age? Crosstabulation

Count

		Which of these categories best describes your age?						
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?								
Into the grass, dirt or gravel	17	15	47	35	32	41	1	188
Into the street or driveway	15	5	52	19	19	15	3	128
sometimes one, sometimes another	1	2	5	4	1	1	0	14
Don't know	0	1	0	0	0	0	0	1
Total	33	23	104	58	52	57	4	331

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.304(a)	18	.015
Likelihood Ratio	25.624	18	.109
Linear-by-Linear Association	5.315	1	.021
N of Valid Cases	331		

a 16 cells (57.1%) have expected count less than 5. The minimum expected count is .01.

			Value
Nominal by Interval	Eta	When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? Dependent	.180
		Which of these categories best describes your age? Dependent	.127

		Value	Approx. Sig.
	Phi	.317	.015
Nominal by Nominal	Cramer's V	.183	.015
	Contingency Coefficient	.302	.015
N of Valid Cases		331	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

1. Washing

d. by Income

When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? * Which of the following categories best describes your annual household income before taxes? Crosstabulation

Count

	И	Which of the following categories best describes your annual household income before taxes?								
	Less than \$12,000	\$12,000 to \$25,000	\$25,000 to \$35,000	\$35,000 to \$50,000	\$50,000 to \$75,000	\$75,000 to \$100,00 0	Over \$100,000	Don't know	Refuse to answer	Total
When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?										
Into the grass, dirt or gravel	20	26	14	24	16	9	14	27	8	158
Into the street or driveway	5	5	6	10	14	7	9	11	3	70
Varies, sometimes one, sometimes another	0	3	2	2	2	2	2	1	0	14
Don't know	0	0	1	0	0	0	0	0	0	1
Total	25	34	23	36	32	18	25	39	11	243

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.906(a)	24	.411
Likelihood Ratio	22.198	24	.567
Linear-by-Linear Association	.148	1	.701
N of Valid Cases	243		

a 19 cells (52.8%) have expected count less than 5. The minimum expected count is .05.

			Value
Nominal by Interval	Eto	When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street? Dependent	.214
Nominal by Interval Eta	Which of the following categories best describes your annual household income before taxes? Dependent	.115	

		Value	Approx. Sig.
	Phi	.320	.411
Nominal by Nominal	Cramer's V	.185	.411
	Contingency Coefficient	.305	.411
N of Valid Cases		243	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

- 2. Oil Change
 - a. by Dwelling

When you change your oil at home, how do you dispose of the used oil? * Area Crosstabulation

Count

	Area				
	Urban	Suburban	Rural	Total	
When you change your oil at home, how do you dispose of to	he used oil?				
In a designated lawn area	2	10	10	22	
With other garbage (dumpster, placed in trash bags, etc)	7	14	15	36	
Pour it down a storm drain	3	6	7	16	
Take it somewhere it can be recycled	15	44	32	91	
Other	0	2	8	10	
Refuse to answer	2	1	1	4	
Total	29	77	73	179	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.730(a)	10	.239
Likelihood Ratio	13.030	10	.222
Linear-by-Linear Association	.565	1	.452
N of Valid Cases	179		

a 8 cells (44.4%) have expected count less than 5. The minimum expected count is .65.

			Value
Nominal by Interval	Eta	When you change your oil at home, how do you dispose of the used oil? Dependent	.074
,		Area Dependent	.227

		Value	Approx. Sig.
	Phi	.267	.239
Nominal by Nominal	Cramer's V	.189	.239
	Contingency Coefficient	.258	.239
N of Valid Cases		179	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

2. Oil Change

b. by Race

When you change your oil at home, how do you dispose of the used oil? * How would you classify yourself? Crosstabulation

Count

		How would you classify yourself?						
	Black or African- American	Asian	White	Hispanic	Other	Don't know	Refuse to answer	Total
When you change your oil at home, how do you dispose of the used oil?								
In a designated lawn area	2	0	9	2	3	6	0	22
With other garbage (dumpster, placed in trash bags, etc)	4	3	15	4	3	5	1	35
Pour it down a storm drain	2	4	2	3	2	2	0	15
Take it somewhere it can be recycled	6	1	72	4	6	2	0	91
Other	1	0	8	1	0	0	0	10
Refuse to answer	3	1	0	0	0	0	0	4
Total	18	9	106	14	14	15	1	177

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.618(a)	30	.000
Likelihood Ratio	74.064	30	.000
Linear-by-Linear Association	20.716	1	.000
N of Valid Cases	177		

a 33 cells (78.6%) have expected count less than 5. The minimum expected count is .02.

			Value
Nominal by Interval	Eta	When you change your oil at home, how do you dispose of the used oil? Dependent	.354
,		How would you classify yourself? Dependent	.347

		Value	Approx. Sig.
	Phi	.695	.000
Nominal by Nominal	Cramer's V	.311	.000
	Contingency Coefficient	.571	.000
	N of Valid Cases	177	

a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis.

IV. Vehicle Care

2. Oil Change

c. by Age

When you change your oil at home, how do you dispose of the used oil? * Which of these categories best describes your age? Crosstabulation

Count

	Which of these categories best describes your age?							
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
When you change your oil at home, how do you dispose of the used oil?								
In a designated lawn area	5	1	12	2	1	1	0	22
With other garbage (dumpster, placed in trash bags, etc)	7	1	15	8	3	2	0	36
Pour it down a storm drain	2	2	7	4	1	0	0	16
Take it somewhere it can be recycled	5	12	22	23	14	13	2	91
Other	1	0	2	4	0	3	0	10
Refuse to answer	1	1	0	1	0	1	0	4
Total	21	17	58	42	19	20	2	179

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.218(a)	30	.101
Likelihood Ratio	45.841	30	.032
Linear-by-Linear Association	7.596	1	.006
N of Valid Cases	179		

a 31 cells (73.8%) have expected count less than 5. The minimum expected count is .04.

			Value
Nominal by Interval	Eta	When you change your oil at home, how do you dispose of the used oil? Dependent	.336
,		Which of these categories best describes your age? Dependent	.292

		Value	Approx. Sig.
	Phi	.474	.101
Nominal by Nominal	Cramer's V	.212	.101
	Contingency Coefficient	.428	.101
N of Valid Cases		179	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

V. Pet Waste Disposal

1. by Dwelling

How often do you pick up their pet waste? * Area Crosstabulation

Count

	Area					
	Urban	Suburban	Rural	Total		
How often do you pick up their pet waste?						
Always	48	63	41	152		
Often	5	14	12	31		
Sometimes	23	26	19	68		
Rarely	45	45	55	145		
Never	25	67	64	156		
Refuse to answer	2	10	7	19		
Total	148	225	198	571		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.038(a)	10	.008
Likelihood Ratio	25.562	10	.004
Linear-by-Linear Association	9.107	1	.003
N of Valid Cases	571		

a 1 cells (5.6%) have expected count less than 5. The minimum expected count is 4.92.

			Value
		How often do you pick up their pet waste? Dependent	.129
Nominal by Interval	Eta	Area Dependent	.167

		Value	Approx. Sig.
Nominal by Nominal	Phi	.205	.008
Nonmal by Nonmal	Cramer's V	.145	.008
	Contingency Coefficient	.201	.008
	N of Valid Cases	571	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

V. Pet Waste Disposal

2. by Gender

How often do you pick up their pet waste? * Record gender of respondent. Crosstabulation

Count

	Record gender of respondent.		
	Female	Male	Total
How often do you pick up their pet waste?			
Always	99	53	152
Often	19	12	31
Sometimes	37	31	68
Rarely	72	73	145
Never	96	60	156
Refuse to answer	16	3	19
Total	339	232	571

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.670(a)	5	.018
Likelihood Ratio	14.252	5	.014
Linear-by-Linear Association	.017	1	.895
N of Valid Cases	571		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.72.

			Value
Nominal by Interval Eta		How often do you pick up their pet waste? Dependent	.006
	Ela	Record gender of respondent. Dependent	.155

		Value	Approx. Sig.
	Phi	.155	.018
Nominal by Nominal	Cramer's V	.155	.018
	Contingency Coefficient	.153	.018
N of Valid Cases		571	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

V. Pet Waste Disposal

3. by Age

How often do you pick up their pet waste? * Which of these categories best describes your age? Crosstabulation

Count

	Which of these categories best describes your age?							
	18-24	25-34	35-44	45-54	55-64	Over 65	Don't know	Total
How often do you pick up	their pet wast	e?						
Always	24	8	58	24	16	19	3	152
Often	3	2	18	3	3	1	1	31
Sometimes	14	5	20	14	6	8	1	68
Rarely	19	2	86	19	13	2	4	145
Never	16	16	46	36	27	15	0	156
Refuse to answer	4	0	13	2	0	0	0	19
Total	80	33	241	98	65	45	9	571

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.000(a)	30	.000
Likelihood Ratio	87.337	30	.000
Linear-by-Linear Association	1.204	1	.273
N of Valid Cases	571		

a 16 cells (38.1%) have expected count less than 5. The minimum expected count is .30.

			Value
Nominal by Interval Eta	E+c	How often do you pick up their pet waste? Dependent	.111
	Which of these categories best describes your age? Dependent	.126	

	Value	Approx. Sig.	
	Phi	.367	.000
Nominal by Nominal	Cramer's V	.164	.000
	Contingency Coefficient	.345	.000
N of Valid Cases		571	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.