



**Keep Iowa Beautiful, Iowa Department of Natural Resources and
Iowa Department of Transportation**

**2013 Litter Survey – Online Survey
Executive Summary Report
October 2013**

Project Overview

Essman/Research, an independent marketing research firm in Des Moines, Iowa, was retained by Keep Iowa Beautiful (KIB) in collaboration with the Iowa Department of Transportation (DOT) and the Iowa Department of Natural Resources (DNR) in August 2013 to conduct the 2013 Statewide Litter Survey. The overall purpose of the 2013 Litter Survey was to gather statistical data to benchmark to the 2001 Direct Mail Litter Survey and assess current attitudes and behaviors toward littering.

The research data and information gathered in the 2013 Litter Survey will assist KIB, the DOT, the DNR and others to create and support programs, policies, and activities aimed at reducing litter across the state of Iowa.

Project Objectives

- Assess the seriousness of litter along Iowa roadways.
- Identify the types of litter discarded.
 - Primary sources of litter in the community.
 - Litter and dumping.
- Assess the impact of reducing litter.
- Assess the awareness of Keep Iowa Beautiful.
- Communications
 - Awareness and perceptions of public service advertising related to litter or littering.
 - Identify the most effective way to receive information about litter and/or littering.

2001 Research Methodology, Sample and Statistical Validity

Methodology

- The DOT in collaboration with Keep Iowa Beautiful developed the methodology for the 2001 Litter Survey.
 - The 2001 Litter Survey was conducted by direct mail.
 - A total of 5,000 surveys were mailed to a representative sample of Iowa households.
 - The 2001 Litter Survey was designed to allow its return by folding and mailing it, utilizing postage-paid business reply mail.
- As an incentive, a copy of the Iowa 2001 Transportation Map was included with the survey.
- A reminder postcard was also mailed thanking those who had returned their survey, as well as encouraging others to complete the survey and return it.
- The 2001 research data, as reported in the 2001 Litter Survey Results prepared by the Iowa DOT, was not representative of gender or age (specifically among women and Iowans younger than 25 years of age).

Sample

- The 2001 sample consisted of 4,000 households representative of Iowa overall and an additional 1,000 households with representation of Iowans less than 25 years of age.
- Of the 5,000 surveys mailed, the U.S. Postal Service returned 258 as being undeliverable. Of the remaining 4,742 surveys that were delivered, a total of 2,217 surveys were returned during a period of approximately 40 days, resulting in a return rate of 46.75 percent.

Statistical Validity

- Based on the total number of returns (2,217) and a 95 percent confidence level, the results generalized across the entire sample carried an error rate of +/- 2.1 percent.

2013 Research Methodology, Sample and Statistical Validity

Methodology

- To collect representative data among lowans for the 2013 Litter Survey, Essman/Research recommended conducting an online survey, using online research panels.
- Implementation of the online survey for the 2013 Litter Survey allowed Essman/Research the ability to establish gender, age and county quotas to ensure representative sampling among lowans.
- To effectively benchmark to the 2001 Litter Survey, the content for the 2013 Litter Survey followed the 2001 Litter Survey and focused on roadside appearance, attitudes and behaviors toward littering and recommendations for reducing littering.
- A monetary cash incentive was provided to each respondent in exchange for fully completing the 2013 Litter Survey.
- Essman/Research developed the online program and the research panels, hosted the survey, developed the cross tabulation tables and prepared the Executive Summary Report.

Sample

- A total of 18,263 email invitations were sent to lowans encouraging their participation in the 2013 Litter Survey.
- To effectively control the demographic quotas (gender, age and county), the email invitations were distributed to lowans in random groups of 3,000. The first random group of email invitations was distributed on September 5, 2013. The final group of email invitations was distributed on September 13, 2013.
- A total of 1,234 lowans completed the online survey, resulting in a 1% response rate.
Note: Since we established age, gender and county quotas to represent the state of Iowa, not all lowans who received the online survey were eligible to participate.

Statistical Validity

- Based on the total number of returns (1,234) and a 95 percent confidence level, the results generalized across the entire sample carried an error rate of +/- 2.7 percent.

Note: See the Appendix for the online survey questionnaire.

Demographics

■ Gender			<u>2010 Census</u>	<u>2001 Survey</u>
— Female	55% / 680 respondents		50.5%	29%
— Male	45% / 554 respondents		49.5%	71%
■ Age			<u>2010 Census</u>	<u>2001 Survey</u>
— Less than 25	11% / 129 respondents		14%	1%
— 25 – 39	27% / 333 respondents		18%	
— 40 – 64	42% / 522 respondents		33%	71%(25-64)
— 65 and older	20% / 250 respondents		15%	28%
■ Geography			<u>2010 Census</u>	<u>2001 Survey*</u>
— Urban counties	60% / 745 respondents		52%	48%
— Rural counties	40% / 489 respondents		48%	52%

Note: For the purpose of the 2013 Litter Survey, respondents living in Black Hawk, Dallas, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, Warren and Woodbury counties were designated as Urban. All other counties were designated as Rural.

* Note: In 2001, 49% of the survey respondents did not provide their county of residence.

Age	2013 Total 1,234 (100%)	Gender		Geography	
		Male	Female	Rural	Urban
Less than 25 years of age	11%	7%	14%	12%	10%
25 – 39	27%	29%	25%	20%	31%
40 – 64	42%	39%	45%	45%	41%
65 years of age and older	20%	25%	17%	23%	19%

■ **County of Residence**

County URBAN	2013 Total 745 Resp. 100%	Gender	
		Male 339 Resp. 46%	Female 406 Resp. 54%
Polk	195 16%	94 17%	101 15%
Linn	119 10%	48 9%	71 10%
Scott	92 8%	38 7%	54 8%
Johnson	77 6%	34 6%	43 6%
Black Hawk	58 5%	22 4%	36 5%
Story	45 4%	24 4%	21 3%
Dubuque	44 4%	21 4%	23 3%
Woodbury	40 3%	18 3%	22 3%
Dallas	36 3%	20 4%	16 2%
Pottawattamie	25 2%	10 2%	15 2%
Warren	14 1%	10 2%	4 1%

County RURAL	2013 Total 489 Resp. 100%	Gender	
		Male 215 Resp. 44%	Female 274 Resp. 56%
Des Moines	28 2%	8 1%	20 3%
Muscatine	19 2%	12 2%	7 1%
Marion	17 1%	8 1%	9 1%
Wapello	17 1%	11 2%	6 1%
Clinton	16 1%	8 1%	8 1%
Jefferson	15 1%	5 1%	10 2%
Boone	14 1%	7 1%	7 1%
Iowa	14 1%	4 1%	10 2%
Cerro Gordo	13 1%	7 1%	6 1%
Sioux	12 1%	7 1%	5 1%
Jackson	11 1%	7 1%	4 1%
Bremer	11 1%	5 1%	6 1%
Marshall	10 1%	4 1%	6 1%
Lee	10 1%	6 1%	4 1%
Benton	9 1%	5 1%	4 1%

County RURAL (cont.)	2013 Total 489 Resp. 100%	Gender	
		Male 215 Resp. 44%	Female 274 Resp. 56%
Plymouth	9 1%	2 0.4%	7 1%
Hamilton	9 1%	3 0.5%	6 1%
Henry	9 1%	4 1%	5 1%
Clay	8 1%	3 0.5%	5 1%
Floyd	8 1%	1 0.2%	7 1%
Carroll	8 1%	1 0.2%	7 1%
Jasper	8 1%	4 1%	4 1%
Buena Vista	7 1%	1 0.2%	6 1%
O'Brien	7 1%	3 0.5%	4 1%
Lyon	7 1%	2 0.4%	5 1%
Butler	7 1%	1 0.2%	6 1%
Jones	7 1%	2 0.4%	5 1%
Washington	7 1%	2 0.4%	5 1%
Fayette	6 0.5%	3 0.5%	3 0.4%
Page	6 0.5%	2 0.4%	4 1%
Clayton	6 0.5%	3 0.5%	3 0.4%
Buchanan	6 0.5%	1 0.2%	5 1%
Appanoose	6 0.5%	4 1%	2 0.3%
Howard	6 0.5%	5 1%	1 0.1%
Webster	6 0.5%	2 0.4%	4 1%
Keokuk	5 0.4%	1 0.2%	4 1%
Harrison	5 0.4%	2 0.4%	3 0.4%
Tama	5 0.4%	1 0.2%	4 1%
Cass	4 0.3%	4 1%	0
Hancock	4 0.3%	1 0.2%	3 0.4%
Hardin	4 0.3%	0	4 1%
Dickinson	4 0.3%	3 0.5%	1 0.1%
Cedar	4 0.3%	2 0.4%	2 0.3%
Pocahontas	4 0.3%	4 1%	0
Poweshiek	4 0.3%	2 0.4%	2 0.3%

County RURAL (cont.)	2013 Total 489 Resp. 100%	Gender	
		Male 215 Resp. 44%	Female 274 Resp. 56%
Shelby	4 0.3%	1 0.2%	3 0.4%
Kossuth	4 0.3%	3 0.5%	1 0.1%
Delaware	4 0.3%	1 0.2%	3 0.4%
Humboldt	4 0.3%	2 0.4%	2 0.3%
Madison	4 0.3%	1 0.2%	3 0.4%
Grundy	4 0.3%	4 1%	0
Winnebago	4 0.3%	0	4 1%
Mitchell	3 0.2%	1 0.2%	2 0.3%
Monona	3 0.2%	3 0.5%	0
Monroe	3 0.2%	0	3 0.4%
Cherokee	3 0.2%	1 0.2%	2 0.3%
Union	3 0.2%	1 0.2%	2 0.3%
Crawford	3 0.2%	1 0.2%	2 0.3%
Mahaska	3 0.2%	2 0.4%	1 0.1%
Guthrie	3 0.2%	3 0.5%	0
Lucas	3 0.2%	2 0.4%	1 0.1%
Wright	3 0.2%	2 0.4%	1 0.1%
Adair	2 0.2%	0	2 0.3%
Audubon	2 0.2%	1 0.2%	1 0.1%
Emmet	2 0.2%	1 0.2%	1 0.1%
Davis	2 0.2%	0	2 0.3%
Van Buren	2 0.2%	1 0.2%	1 0.1%
Adams	2 0.2%	0	2 0.3%
Louisa	2 0.2%	0	2 0.3%
Greene	2 0.2%	2 0.4%	0
Ringgold	2 0.2%	2 0.4%	0
Winneshiek	2 0.2%	0	2 0.3%
Sac	2 0.2%	1 0.2%	1 0.1%
Mills	1 0.1%	1 0.2%	0
Ida	1 0.1%	1 0.2%	0
Wayne	1 0.1%	1 0.2%	0

County RURAL (cont.)	2013 Total 489 Resp. 100%	Gender	
		Male 215 Resp. 44%	Female 274 Resp. 56%
Calhoun	1 0.1%	1 0.2%	0
Franklin	1 0.1%	0	1 0.1%
Montgomery	1 0.1%	1 0.2%	0
Allamakee	1 0.1%	1 0.2%	0

■ **Marital Status**

- Married 61% / 757 respondents
- Single 33% / 405 respondents
- Other 6% / 72 respondents

■ **Household Income**

- Less than \$10,000 4% / 50 respondents
- \$10,000-\$29,999 14% / 173 respondents
- \$30,000-\$49,999 23% / 289 respondents
- \$50,000-\$74,999 24% / 297 respondents
- More than \$75,000 34% / 425 respondents

■ **Type of Vehicle you drive most often?**

- Car 58% / 718 respondents
- SUV 21% / 259 respondents
- Pickup truck 9% / 106 respondents
- Van/mini-van 8% / 95 respondents
- Other 0.4% / 5 respondents
- I don't drive 4% / 51 respondents

Key Findings

Essman/Research, an independent marketing research firm in Des Moines, Iowa, in collaboration with Keep Iowa Beautiful (KIB), the Iowa Department of Transportation (DOT) and the Iowa Department of Natural Resources (DNR) conducted an online survey of Iowans in September 2013. The overall purpose of the 2013 Litter Survey was to gather statistical data to benchmark to the 2001 Direct Mail Litter Survey and assess current attitudes and behaviors toward littering.

Roadside Questions

Among the seven behaviors evaluated, more than half (58%) of the Iowans surveyed recalled “trash falling out of the vehicle they were driving or riding in” within the past two years – an increase of 12% from 2001.

(Scale: 0 = has never happened, 1 = within the past 3 months, 2 = within the past 3-12 months, 3 = within the past 1-2 years, 4 = over 2 years ago)

<u>Action</u>	<u>2013</u>	<u>2001</u>
— You noticed that some trash fell out of a vehicle you were driving or riding in.	58%	46%
— You threw out a candy wrapper, cigarette butt, lottery ticket, or some other small item.	43%	43%
— Someone in a vehicle you were in threw out a can or bottle (glass or plastic), or other litter onto the side of the road.	39%	38%
— Someone in a vehicle you were in threw out trash in an area that was already littered.	36%	26%
— Rather than keep an alcohol container in the car, you or someone in the vehicle you were in, threw out a can or bottle (glass or plastic).	21%	19%
— You had problems with a vehicle and left a tire, muffler, or other debris on the roadside.	9%	5%
— You or someone you were with got a ticket or a warning for littering.	5%	2%

Seriousness of the Litter Problem

Overall, 65% of lowans surveyed say that fast food containers/wrappers are, and continue to be, a moderate to a major problem along Iowa's roadways. Although cigarette/cigar butts or containers were considered a less serious litter problem in 2001, in 2013, 63% of lowans believe that cigarette/cigar butts or containers are a moderate or a major problem on the roadways.

(Scale: 0 = not a problem, 1 = minor problem, 2 = moderate problem, 3 = major problem)

<u>Materials</u>	<u>2013 Mod/Major Problem</u>	<u>2013 Mean Rating</u>	<u>2001 Avg.</u>
— Cigarette or cigar butts or containers	63%	1.86	1.63
— Fast food containers or wrappers	65%	1.85	2.00
— Paper	56%	1.63	1.80
— Cans and bottles (glass or plastic)	53%	1.63	1.60
— Other food or candy wrappers	52%	1.60	1.59
— Diapers, plastic bags or other plastic items	49%	1.57	1.74
— Animal remains	44%	1.39	1.39
— Tires and other car-related items	35%	1.30	1.40
— Construction debris	32%	1.24	1.23
— Food or organic material	21%	.91	1.03

Likelihood to Litter

Although the question was redesigned in 2013, the overall research findings in 2013 were consistent with the 2001 Litter Survey.

Ninety-four percent of the lowans surveyed in 2013 indicated that "younger adults" (lowans less than 25 years of age) are more likely to litter as well as men (87%), pickup drivers (78%) and visitors to Iowa (73%).

(Scale: 1 = not at all likely, 2 = not very likely, 3 = slightly more likely, 4 = far more likely)

	<u>2013 % likely to litter</u>	<u>2013 Mean</u>
— Younger adults (< 25 years of age)	94%	3.53
— Men	87%	3.17
— Pickup drivers	78%	3.00
— Visitors to Iowa	73%	2.90
— Truckers	56%	2.71
— Residents of Iowa	55%	2.62
— Women	41%	2.43
— Older adults (65+ years of age)	13%	1.88

In 2001, the lowans surveyed indicated that younger adults, males, pickup drivers and visitors to Iowa were more likely to litter. Older adults (65+ years of age) were less likely to litter.

Impact on Reducing Litter

Iowans were asked to rate nine actions and the overall impact the actions would have on reducing littering.

(Scale: 0 = no impact, 1 = slight impact, 2 = moderate impact, 3 = major impact)

As reported in 2001, the actions that carried a consequence were typically rated higher, or potentially having the greatest impact (moderate or major) on reducing litter.

In 2013, the top three actions that would have the greatest impact (moderate or major) on reducing litter on Iowa's roadways include:

- Increasing the penalties for littering (75%)
- Increasing the enforcement of anti-litter laws (73%)
- Reminding people there is a fine for littering (64%)

The actions that would have a lesser impact on reducing litter include:

- Telling people not to litter is the "right thing to do" (27%)
- Having celebrities speak out against littering (28%)

<u>Potential Action</u>	<u>2013 Mean Rating</u>	<u>2001 Avg.</u>
— Increasing penalties for littering	2.08	2.12
— Increasing enforcement of anti-litter laws	2.02	2.09
— Reminding people about the fine for littering	1.76	1.79
— Costs millions of dollars to pick up litter	1.55	1.57
— Calling the toll-free hotline	1.53	1.56
— Remind people that small items contribute	1.48	1.49
— Message that emphasizes "pride in Iowa"	1.47	1.53
— Telling people it's the "right thing to do"	1.10	1.14
— Having celebrities speak out again littering	1.05	1.19

Personal Littering Behaviors

Iowans were asked if they themselves had ever littered and “why” they had discarded the litter on Iowa’s roadways.

(Scale: 0 = has never happened, 1 = within the past 3 months, 2 = within the past 3-12 months, 3 = within the past 1-2 years)

Among the nine materials evaluated, overall, 50% of the Iowans say they have discarded as litter “food/organic materials” in the past two years. Of those, 38% felt it was minor.

“Paper” (30%) and “other food/candy wrappers” (25%) were also mentioned frequently. Of those who discarded paper, 40% said it was an accident; whereas, 40% who had discarded food/candy wrappers thought it was a minor thing.

The discarding of food/organic materials as well as cans and bottles along Iowa roadways increased significantly in 2013.

<u>Items Discarded as Litter within the past two years</u>	<u>2013</u>	<u>2001</u>
— Food/organic material	51%	38%
— Paper	30%	28%
— Other food/candy wrappers	25%	23%
— Cigarette/cigar butts or containers	17%	18%
— Cans and bottles (glass or plastic)	16%	4%
— Fast food containers/wrappers	16%	11%
— Diapers/plastic bags/other plastics	7%	4%
— Tires and other car-related debris	4%	2%
— Construction debris	3%	2%

Anti-Littering Behaviors

Iowans were asked to select the activities they “have done in the past” or “would do” to help reduce or clean up litter.

(Scale: 0 = would not do, 1 = might do, 2 = definitely would do, 3 = have done)

The research findings in 2001 and 2013 were fairly consistent. In 2001, more than half (53%) of the Iowans surveyed reported picking up litter they saw and disposed of it. And in 2013, 54% of the Iowans surveyed have picked up litter they saw and disposed of it.

With regard to litter that was discarded from their own personal vehicle, in 2001, 83% of the Iowans had or would stop their vehicle to pick up the litter; whereas, only 51% of the respondents had or would stop their vehicle to pick up litter that flew out of another vehicle. And in 2013, 81% of the Iowans have or would stop their vehicle to pick up the litter; whereas, only 48% of the respondents have or would stop their vehicle to pick up litter that flew out of another vehicle.

Community: Primary Sources of Litter

The survey respondents were presented with 15 potential sources of litter and were asked to select the sources they would consider to be the primary sources of litter within their own local community.

The research findings in 2013 were fairly consistent with the 2001 research results. Overall, in 2013, 76% of the lowans indicated that “motorists, littering from their vehicles” is the primary source of litter in their community.

Primary sources of litter (2013):

— Motorists, littering from vehicles	76%
— Teenagers hanging out	46%
— Uncovered vehicle/trucks	41%
— Pedestrians	40%
— Illegal dumping	35%
— Uncovered or overflowing public receptacles	30%
— Careless citizens putting out their garbage	29%
— Dumpsters at multi-family dwelling	21%
— Careless garbage crews	19%
— Construction sites	19%
— Animals upsetting garbage receptacles	18%
— Dumpsters at commercial sites	12%
— Local garbage/waste facilities	10%
— Businesses	8%
— Loading docks	3%

In 2001, 77% of the lowans surveyed also indicated that “motorists, littering from vehicles” was the primary source of litter within their own local community.

Primary sources of litter (2001):

— Motorists, littering from vehicles	77%
— Uncovered vehicles	54%
— Teenagers hanging out	53%
— Illegal dumping	45%
— Animals upsetting garbage receptacles	40%
— Pedestrians	39%
— Careless citizens putting out their garbage	36%

Community: Litter and Illegal Dumping

Nearly all of the lowans surveyed in 2001 and 2013 “agree” that it’s important to maintain a clean environment.

Overall, in 2013, 56% of the lowans surveyed agreed to some extent that litter is a problem along the roads entering their community and 52% agree that litter is a problem in their community. However, only 35% of the respondents say they are involved in efforts to clean up their community.

<u>Agreement with the Statements</u>	<u>2013</u>	<u>2001</u>
<i>(Scale: 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = agree)</i>		
— It is important to maintain a clean environment	96%	97%
— Litter along the roads entering my community is a problem	56%	60%
— Litter in my community is a problem	52%	57%
— Illegal dumping occurs in my community	45%	52%
— I am involved in efforts to clean up my community	35%	46%
— Litter in my immediate neighborhood is a problem	31%	35%

<u>Agreement with the Statements</u>	<u>2013 (mean)</u>	<u>2001 (avg.)</u>
— It is important to maintain a clean environment	3.68	3.83
— Litter along the roads entering my community is a problem	2.58	2.64
— Litter in my community is a problem	2.47	2.53
— Illegal dumping occurs in my community	2.32	2.46
— I am involved in efforts to clean up my community	2.08	2.25
— Litter in my immediate neighborhood is a problem	2.00	2.07

The research findings in 2001 and 2013 were consistent. Of the four activities presented, nearly 84% of the lowans surveyed in 2013 and 80% of the lowans surveyed in 2001 agreed to some extent that each of the four activities could have an impact on reducing littering and illegal dumping.

<u>Agreement with the Statements</u>	<u>2013 (mean)</u>	<u>2001 (avg.)</u>
<i>(Scale: 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = agree)</i>		
— Increasing enforcement of rules and regulations	3.38	3.41
— Providing better access to disposal sites	3.21	3.36
— Raising public awareness of issues	3.02	3.20
— Providing educational programs on what can be done	2.90	3.04



Keep Iowa Beautiful, Iowa Department of Natural Resources and Iowa Department of Transportation

2013 Litter Survey – Online Survey Detailed Findings October 2013

PART ONE: ROADSIDE LITTER

Part One of the 2013 Litter Survey asked Iowans about their thoughts on litter along Iowa roadways, the seriousness of the litter problem along Iowa roadways and the time respondents typically spend on Iowa roadways.

Recent Happenings

- **How recently have any of the following happened to you?**
(Scale: 0 = has never happened, 1 = within the past 3 months, 2 = within the past 3-12 months, 3 = within the past 1-2 years, 4 = over 2 years ago)

Among the seven behaviors evaluated, more than half (58%) of the Iowans surveyed recalled “trash falling out of the vehicle they were driving or riding in” within the past two years – an increase of 12% from 2001.

In 2013, the overall occurrence for “throwing out a candy wrapper, cigarette butt, lottery ticket or some other small item” within the past two years remained consistent with the 2001 Litter Survey results, with 43% of Iowans engaging in this behavior.

The occurrence for discarding cans or bottles in 2013 was also consistent with the 2001 Litter Survey. In 2013, 39% of Iowans recalled someone in their vehicle discarding cans, bottles or other litter onto the side of the road, compared with 38% in 2001.

	<u>2013</u>	<u>2001</u>
— You noticed that some trash fell out of a vehicle you were driving or riding in.	58%	46%
— You threw out a candy wrapper, cigarette butt, lottery ticket, or some other small item.	43%	43%
— Someone in a vehicle you were in threw out a can or bottle (glass or plastic), or other litter onto the side of the road.	39%	38%
— Someone in a vehicle you were in threw out trash in an area that was already littered.	36%	26%

- Rather than keep an alcohol container in the car, you or someone in the vehicle you were in, threw out a can or bottle (glass or plastic). 21% 19%
- You had problems with a vehicle and left a tire, muffler, or other debris on the roadside. 9% 5%
- You or someone you were with got a ticket or a warning for littering. 5% 2%

The lowans who are more likely to engage in these types behaviors include:

- Men
- Younger adults (less than 39 years of age)
- lowans living in rural counties

Behavior (Past two years)	2013 Total	Gender		Age				County	
		Male	Female	< 25	25 – 39	40 – 64	65 +	Rural	Urban
You noticed that some trash fell out of a vehicle you were driving or riding in	58%	59%	57%	64%	63%	54%	55%	59%	57%
You threw out a candy wrapper, cigarette butt, lottery ticket, or some other small item	43%	45%	42%	47%	50%	40%	39%	46%	41%
Someone in a vehicle you were in threw out a can or bottle (glass or plastic), or other litter onto the side of the road	39%	41%	38%	54%	46%	36%	30%	46%	35%
Someone in a vehicle you were in threw out trash in an area that was already littered	36%	35%	36%	49%	41%	33%	28%	38%	34%
Rather than keep an alcohol container in the car, you or someone in the vehicle you were in, threw out a can or bottle (glass or plastic)	21%	24%	19%	30%	27%	20%	12%	27%	18%
You had problems with a vehicle and left a tire, muffler, or other debris on the roadside	9%	11%	8%	16%	12%	8%	5%	10%	9%
You or someone you were with got a ticket or a warning for littering	5%	6%	4%	8%	8%	4%	3%	7%	4%

Seriousness of the Litter Problem

■ **How serious of a litter problem is each of the following materials along Iowa's roadways?**

(Scale: 0 = not a problem, 1 = minor problem, 2 = moderate problem, 3 = major problem)

Overall, 65% of the lowans surveyed say that fast food containers/wrappers are, and continue to be, a moderate to a major problem along Iowa's roadways. Although cigarette/cigar butts or containers were considered a less serious litter problem in 2001, in 2013, 63% of lowans believe that cigarette/cigar butts or containers are a moderate/major problem on the roadways.

Among the 10 materials evaluated, food or organic material was considered a lesser problem or not as serious of a litter problem along Iowa's roadways.

Overall, a higher percentage of women than men consider litter along Iowa's roadways a more serious problem (moderate or major problem). And, lowans over the age of 40 when compared with younger lowans tended to rate the seriousness of litter along Iowa's roadways higher.

There were no significant differences among lowans living in the rural and urban counties.

Materials/Litter Considered to be a Moderate or Major Problem	2013 Total	Gender		Age				County	
		Male	Female	< 25	25 – 39	40 – 64	65 +	Rural	Urban
Fast food containers or wrappers	65%	61%	68%	62%	54%	67%	77%	67%	64%
Cigarette or cigar butts or containers	63%	59%	66%	58%	60%	64%	67%	62%	64%
Paper	56%	55%	56%	42%	43%	58%	74%	54%	57%
Cans and bottles (glass or plastic)	53%	50%	56%	52%	47%	51%	66%	57%	51%
Other food or candy wrappers	52%	50%	54%	49%	44%	53%	64%	52%	52%
Diapers, plastic bags or other plastic items	49%	44%	52%	48%	41%	49%	59%	49%	48%
Animal remains	44%	38%	48%	36%	43%	46%	43%	47%	41%
Tires and other car-related items	35%	35%	35%	40%	31%	32%	43%	37%	34%
Construction debris	32%	33%	32%	46%	28%	30%	37%	32%	33%
Food or organic material	21%	22%	21%	14%	18%	18%	36%	22%	21%
Other specified responses	27%	30%	25%	9%	32%	23%	35%	26%	29%

With the exception of “cans and bottles,” lowans living in communities with populations over 10,000 tended to rate the seriousness of litter along Iowa roadways higher than lowans living in less populated communities.

Materials/Litter Considered to be a Moderate or Major Problem	2013 Total	County		Community Size			
		Rural	Urban	< 5K	5 – 9K	10 – 49K	50K +
Fast food containers or wrappers	65%	67%	64%	64%	60%	67%	67%
Cigarette or cigar butts or containers	63%	62%	64%	59%	60%	63%	67%
Paper	56%	54%	57%	47%	57%	55%	61%
Cans and bottles (glass or plastic)	53%	57%	51%	57%	52%	53%	52%
Other food or candy wrappers	52%	52%	52%	52%	44%	52%	56%
Diapers, plastic bags or other plastic items	49%	49%	48%	47%	46%	51%	49%
Animal remains	44%	47%	41%	45%	42%	45%	42%
Tires and other car-related items	35%	37%	34%	35%	35%	36%	34%
Construction debris	32%	32%	33%	34%	30%	35%	30%
Food or organic material	21%	22%	21%	18%	18%	24%	23%
Other specified responses	27%	26%	29%	26%	22%	44%	18%

Other specified responses

— Garbage bags/sacks/trash bags	10 responses
— Yard waste, tree limbs	9 responses
— Furniture	5 responses
— Clothing/shoes	4 responses
— Appliances	3 responses
— Abandoned cars	2 responses
— Junk	2 responses
— Winter sand	2 responses

Single responses

- Auto/trucks parts falling off vehicle. They remain along roadway for days.
- Beer boxes
- Biodegradable material
- Bottles of urine
- Boxes/containers
- Car accident debris
- Cars on road
- Cassettes, cell phones
- Grain debris
- Household items
- Litter in cities
- Littering as a whole
- Medical waste
- Metal objects
- Miscellaneous items that fall from vehicles
- Need more recycled trash
- Oil containers
- People dump trash bags full of trash on our country road

- Plastic pop can rings
- Rags
- Rocks from haulers
- Shredded tires from semis
- Signs - garage sales and advertising
- Something flew out of a pickup bed without owner's knowledge
- Tarps, large plastic items
- Vehicles hauling with no covers

Seriousness of the Litter Problem

(Scale: 0 = not a problem, 1 = minor problem, 2 = moderate problem, 3 = major problem)

<u>Materials</u>	<u>2013 Mean Rating</u>	<u>2001 Avg.</u>
— Cigarette or cigar butts or containers	1.86	1.63
— Fast food containers or wrappers	1.85	2.00
— Paper	1.63	1.80
— Cans and bottles (glass or plastic)	1.63	1.60
— Other food or candy wrappers	1.60	1.59
— Diapers, plastic bags or other plastic items	1.57	1.74
— Animal remains	1.39	1.39
— Tires and other car-related items	1.30	1.40
— Construction debris	1.24	1.23
— Food or organic material	.91	1.03

■ In a typical day, how many miles do you drive or ride in a vehicle?

The majority of Iowans surveyed travel less than 20 miles in a typical day. However, a higher percentage of younger adults (less than 25 years of age) than older adults travel 20-49 miles in a typical day.

— Under 20 miles	58%
— 20 – 49 miles	31%
— 50 – 149 miles	11%
— 150 – 299 miles	1%
— Over 300 miles	0.2%

PART TWO: LITTER BEHAVIORS

Part Two of the 2013 Litter Survey asked Iowans about their thoughts on littering behaviors.

Likelihood to Litter

■ Who do you believe is **most likely** to litter?

(This question was redesigned for the 2013 Litter Survey.)

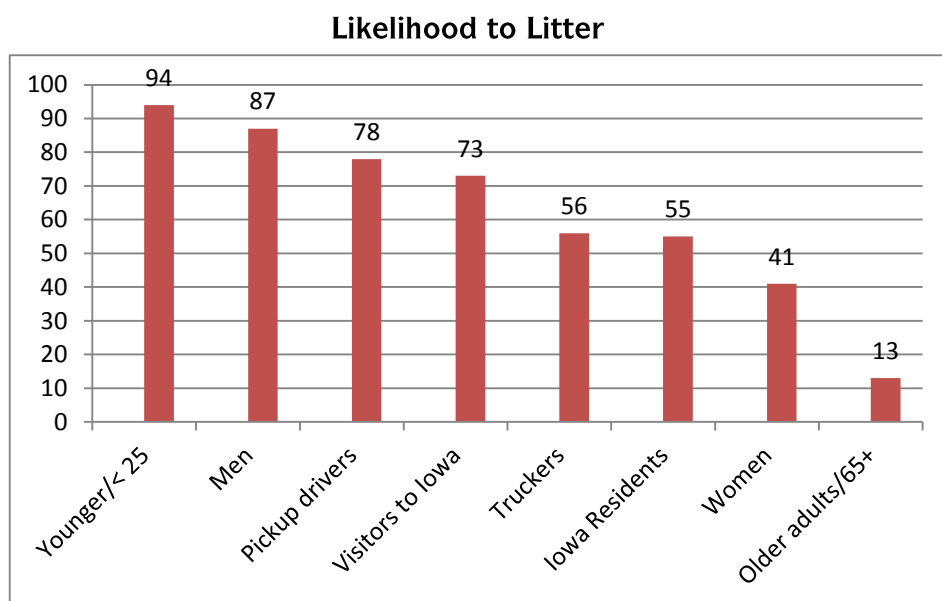
- *Men*
- *Women*
- *Pickup drivers*
- *Truckers*
- *Visitors to Iowa*
- *Iowa residents*
- *Younger adults (< 25 years of age)*
- *Older adults (65 +)*

(Scale: 1 = not at all likely, 2 = not very likely, 3 = slightly more likely, 4 = far more likely)

The overall research findings in 2013 were fairly consistent with the 2001 Litter Survey research results.

Ninety-four percent of the Iowans surveyed in 2013 indicated that “younger adults” (Iowans younger than 25 years of age) are more likely to litter as well as men (87%), pickup drivers (78%) and visitors to Iowa (73%).

The majority of Iowans also believe that older adults, over the age of 65, are much less likely to litter than others.



In 2001, the Iowans surveyed also indicated that younger adults, males, pickup drivers and visitors to Iowa were more likely to litter. And, older adults (65+ years of age) were less likely to litter.

Impact on Reducing Litter

■ What impact do you believe each of the following actions would have on reducing littering?

(Scale: 0 = no impact, 1 = slight impact, 2 = moderate impact, 3 = major impact)

Iowans were asked to rate the potential impact the following nine actions would have on reducing littering.

- Telling people not to litter is the “right thing to do”
- Presenting a message that emphasizes pride in Iowa
- Reminding people that even small items contribute to the litter problem
- Reminding people there is a fine for littering
- Telling people it costs millions of dollars each year to pick up litter
- Calling the Iowa toll-free hotline to report littering from a vehicle
- Increasing the enforcement of anti-litter laws
- Increasing the penalties for littering
- Having celebrities speaking out against littering

The 2013 research findings were consistent with the 2001 research. As the DOT reported in 2001, the actions that carried a consequence were typically rated higher/ potentially having the greatest impact (moderate or major) on reducing litter.

In 2013, the top three actions that would have the greatest impact (moderate or major) on reducing litter on Iowa’s roadways include:

- Increasing the penalties for littering (75%)
- Increasing the enforcement of anti-litter laws (73%)
- Reminding people there is a fine for littering (64%)

The actions that would have a lesser impact on reducing litter include:

- Telling people not to litter is the “right thing to do” (27%)
- Having celebrities speak out against littering (28%)
 - However, 41 % of the respondents younger than 25 years of age and typically lower household income (less than \$30,000) believe celebrities speaking out against littering would have an impact on reducing litter on Iowa’s roadways.

A higher percentage of women than men and lowans over the age of 40 believe the nine actions evaluated would have a greater impact (moderate or major) on reducing littering in Iowa.

Potential Actions that could have a Moderate or Major Impact on Reducing Litter

Potential Actions that could have a Moderate or Major Impact in Reducing Litter	2013 Total	Gender		Age				County	
		Male	Female	< 25	25 – 39	40 – 64	65 +	Rural	Urban
Increasing the penalties for littering	75%	69%	79%	69%	73%	76%	77%	74%	75%
Increasing the enforcement of anti-litter laws	73%	68%	77%	70%	68%	74%	80%	72%	73%
Reminding people there is a fine for littering	64%	55%	70%	68%	60%	63%	67%	65%	63%
Telling people it costs millions of dollars each year to pick up litter	52%	46%	57%	43%	50%	53%	56%	52%	52%
Calling the Iowa toll-free hotline to report littering from a vehicle	50%	44%	55%	44%	39%	54%	56%	50%	49%
Reminding people that even small items contribute to the litter problem	48%	42%	53%	43%	46%	50%	50%	50%	47%
Presenting a message that emphasizes pride in Iowa	48%	44%	52%	42%	42%	52%	51%	51%	46%
Having celebrities speaking out against littering	28%	22%	32%	41%	26%	26%	26%	25%	29%
Telling people not to litter is the “right thing to do”	27%	26%	28%	23%	20%	30%	32%	29%	25%

Potential Action	2013 Mean Rating	2001 Avg.
— Increasing penalties for littering	2.08	2.12
— Increasing enforcement of anti-litter laws	2.02	2.09
— Reminding people about the fine for littering	1.76	1.79
— Costs millions of dollars to pick up litter	1.55	1.57
— Calling the toll-free hotline	1.53	1.56
— Remind people that small items contribute	1.48	1.49
— Message that emphasizes “pride in Iowa”	1.47	1.53
— Telling people it’s the “right thing to do”	1.10	1.14
— Having celebrities speak out again littering	1.05	1.19

Personal Littering Behaviors

- When was the last time you may have discarded as litter any of the following items? (Scale: 0 = has never happened, 1 = within the past 3 months, 2 = within the past 3-12 months, 3 = within the past 1-2 years)

You mentioned that you had discarded as litter one or more of the following items. Why do you think that happened?

- *I thought it was minor*
- *It was an accident*
- *Not sure/don't recall*

Iowans were asked if they themselves had ever littered and “why” they had discarded the litter on Iowa’s roadways.

Among the nine materials evaluated, overall, 50% of the Iowans say they have discarded as litter “food/organic materials” in the past two years. Of those, 38% felt it was minor.

“Paper” (30%) and “other food/candy wrappers” (25%) were also mentioned frequently. Of those who discarded paper, 40% said it was an accident; whereas, 40% who had discarded food/candy wrappers thought it was a minor thing.

Although 17% of the Iowans surveyed say they have discarded cigarette/cigar butts or containers, 56% of those Iowans believe their littering was a minor thing.

Overall, 16% of Iowans surveyed have discarded either cans and bottles or fast food containers/wrappers. Of those Iowans, 32% believe their littering was a minor thing.

Items Discarded	Timeframe			Reason			
	Never	Last two years		Thought it was minor	It was an accident	Not sure	Some other reason
Food/organic material	50%	50%		38%	9%	15%	38%
Paper	70%	30%		30%	40%	23%	7%
Other food/candy wrappers	75%	25%		40%	21%	29%	10%
Cigarettes/cigar butts or containers	83%	17%		56%	9%	18%	17%
Cans and bottles (glass or plastic)	84%	16%		32%	19%	39%	11%
Fast food containers/wrappers	84%	16%		31%	24%	34%	10%
Diapers/plastic bags/other plastics	93%	7%		27%	34%	27%	12%
Tires and other car-related debris	97%	3%		16%	42%	33%	9%
Construction debris	97%	3%		24%	19%	46%	11%

Overall, a higher percentage of men than women, lowans younger than 40 years of age as well as lowans living in the rural counties recalled littering in the past two years.

Items Discarded	Total (1234)	Gender		Age				County	
		Male	Female	< 25	25-39	40-65	65 +	Rural	Urban
Food/organic material	51%	48%	53%	56%	58%	50%	38%	55%	48%
Paper	30%	33%	28%	39%	32%	28%	26%	35%	26%
Other food/ candy wrappers	25%	27%	23%	30%	27%	23%	22%	29%	22%
Cigarette/cigar butts	17%	21%	15%	23%	22%	16%	12%	19%	16%
Cans and bottles	16%	19%	14%	31%	23%	13%	6%	18%	15%
Fast food containers	16%	18%	14%	26%	19%	13%	12%	18%	14%
Diapers/plastic bags/other plastics	7%	7%	7%	19%	9%	5%	3%	8%	6%
Tires and other car- related debris	4%	4%	3%	10%	7%	1%	1%	4%	3%
Construction debris	3%	4%	2%	9%	5%	1%	1%	4%	3%

The respondents living in less populated communities (less than 10,000 population) as well as lowans who drive pickup trucks had a higher tendency to discard cans and bottles (glass or plastic) and fast food containers along Iowa's roadways.

Items Discarded	Total	Community Size				Vehicle Type			
		< 5K	5 – 9K	10 – 49K	50K+	Car	Truck	Van	SUV
Food/organic material	51%	55%	51%	50%	48%	53%	47%	55%	49%
Paper	30%	34%	31%	29%	27%	29%	29%	32%	33%
Other food/ candy wrappers	25%	28%	28%	25%	21%	23%	29%	26%	28%
Cigarette/cigar butts	17%	16%	19%	18%	17%	16%	24%	15%	16%
Cans and bottles	16%	18%	21%	14%	14%	14%	27%	14%	18%
Fast food containers	16%	17%	20%	15%	14%	15%	23%	15%	17%
Diapers/plastic bags/other plastics	7%	7%	9%	8%	5%	7%	4%	6%	7%
Tires and other car- related debris	4%	5%	6%	3%	3%	3%	2%	2%	4%
Construction debris	3%	3%	5%	3%	2%	3%	3%	2%	2%

The discarding of food/organic materials and cans and bottles along Iowa roadways increased significantly in 2013.

<u>Items Discarded as Litter within the past two years</u>	<u>2013</u>	<u>2001</u>
— Food/organic material	51%	38%
— Paper	30%	28%
— Other food/candy wrappers	25%	23%
— Cigarette/cigar butts or containers	17%	18%
— Cans and bottles (glass or plastic)	16%	4%
— Fast food containers/wrappers	16%	11%
— Diapers/plastic bags/other plastics	7%	4%
— Tires and other car-related debris	4%	2%
— Construction debris	3%	2%

Public Service Messages

■ Have you seen or heard any ads or public service messages related to litter or littering in the past 3 months or the past year?

In an effort to determine if public service messages and advertising are reaching lowans, the survey asked if respondents had seen or heard an ad or public service message related to litter/littering in the past three months or within the past year.

Overall, only 12% of the lowans surveyed recalled seeing or hearing an ad or public service message related to littering in the past three months. However, the percentage more than doubled (30%) when asked if the respondent had seen or heard an ad or public service message within the past year.

Interesting to note, although 36% of the younger adults (less than 25 years of age) recalled seeing an ad or public service message related to littering within the past year, a higher percentage of those lowans younger than 40 years of age had littered in the past two years.

The majority (70%) of lowans surveyed in 2013 had not seen or heard any type of advertising or public service message related to litter/littering.

There were no differences based on county, community size, or vehicle driven.

Seen/Heard Ads or Public Service Messages	Total (1234)	Gender		Age				County	
		Male	Female	< 25	25-39	40-65	65 +	Rural	Urban
Yes, in the past 3 months	12%	13%	11%	19%	9%	10%	17%	11%	13%
Yes, in the past year	30%	30%	29%	36%	20%	28%	43%	28%	31%
No, have not seen or heard messages	70%	69%	70%	61%	80%	72%	56%	71%	69%

A much higher percentage of lowans surveyed in 2001 recalled seeing or hearing advertising or a public service message related to littering than lowans surveyed in 2013.

<u>Awareness of ads/public service messages</u>	<u>2013</u>	<u>2001</u>
— Yes, in the past three months	12%	24%
— Yes, in the past year	30%	50%

■ **Are you aware of the organization Keep Iowa Beautiful?**
(This question was added in 2013.)

In an effort to determine if messaging is reaching Iowans, the survey asked if respondents were aware of Keep Iowa Beautiful.

More than half (57%) of the Iowans surveyed are aware of Keep Iowa Beautiful. Overall, a higher percentage of women (63%) than men (50%) and Iowans over the age of 25 (57%) than younger Iowans (52%) have an awareness of the Keep Iowa Beautiful organization.

Anti-Littering Behaviors

■ **Which of the following activities have you done or would do?**
(Scale: 0 = would not do, 1 = might do, 2 = definitely would do, 3 = have done)

Iowans were asked to select the activities they “have done in the past” or “would do” to help reduce or clean up litter.

- Picked up litter you saw and disposed of it
- Stopped your vehicle and picked up litter that flew out of your vehicle
- Stopped your vehicle and picked up litter that flew out of another vehicle
- Reported someone who you saw littering
- Told someone you saw littering that it was wrong to litter
- Volunteered to pick up litter in your community
- Volunteered to pick up litter along the roadway

More than half (54%) of the Iowans surveyed have picked up litter they saw and disposed of it.

Although many Iowans surveyed say they have not “volunteered to pick up litter,” the majority of those Iowans are not opposed to volunteering to pick up litter in their community or along Iowa’s roadways.

With regard to litter that was discarded from their own personal vehicle, 81% of the Iowans have or would stop their vehicle to pick up the litter; whereas, only 48% of the respondents have or would stop their vehicle to pick up litter that flew out of another vehicle.

Activity - 2013	Would Not Do	Might Do	Definitely Would Do	Have Done
Picked up litter you saw and disposed of it	5%	31%	11%	54%
Volunteered to pick up litter in your community	15%	48%	16%	22%
Volunteered to pick up litter along the roadway	21%	47%	14%	18%
Stopped your vehicle and picked up litter that flew out of your vehicle	19%	39%	26%	16%
Told someone you saw littering that it was wrong to litter	26%	46%	19%	10%
Stopped your vehicle and picked up litter that flew out of another vehicle	53%	39%	4%	5%
Reported someone who you saw littering	29%	55%	14%	2%

The research findings in 2001 and 2013 were fairly consistent. More than half (53%) of the lowans surveyed reported picking up litter they saw and disposed of it.

With regard to litter that was discarded from their own personal vehicle, 83% of the lowans in 2001 had or would stop their vehicle to pick up the litter; whereas, only 51% of the respondents had or would stop their vehicle to pick up litter that flew out of another vehicle.

Activity - 2001	Would Not Do	Might Do	Definitely Would Do	Have Done
Picked up litter you saw and disposed of it	9%	30%	9%	53%
Picked up litter that flew from your vehicle	16%	30%	29%	24%
Volunteered to pick up litter in your community	23%	43%	12%	22%
Volunteered to pick up litter along the roadway	29%	42%	9%	19%
Told someone you saw littering that it was wrong to litter	28%	43%	15%	14%
Stopped your vehicle and picked up litter that flew out of another vehicle	49%	38%	4%	9%
Reported someone who you saw littering	33%	51%	13%	3%

Community: Primary Sources of Litter

■ **What are the primary sources of litter in your community?**

The survey respondents were presented with 15 potential sources of litter and were asked to select the sources they consider to be the primary sources of litter within their own local community.

Overall, 76% of the lowans indicated that “motorists, littering from their vehicles” is the primary source of litter in their community.

Primary sources of litter (2013):

— Motorists, littering from vehicles	76%
— Teenagers hanging out	46%
— Uncovered vehicle/trucks	41%
— Pedestrians	40%
— Illegal dumping	35%
— Uncovered or overflowing public receptacles	30%
— Careless citizens putting out their garbage	29%
— Dumpsters at multi-family dwelling	21%
— Careless garbage crews	19%
— Construction sites	19%
— Animals upsetting garbage receptacles	18%
— Dumpsters at commercial sites	12%
— Local garbage/waste facilities	10%
— Businesses	8%
— Loading docks	3%

- Other responses
 - Wind and weather (2 responses)
 - Fast food business
 - Low income areas with very low rates of home ownership.
 - Not enough public trash cans & the ones the city provides are not emptied frequently enough
 - Fishermen
 - People attending the UI Football Games
 - Signs/garage sales and advertising

The primary sources of litter identified in 2013 were consistent with the 2001 research results. In 2001, 77% of the lowans surveyed indicated that “motorists, littering from vehicles” was the primary source of litter within their own local community.

Primary sources of litter (2001):

— Motorists, littering from vehicles	77%
— Uncovered vehicles	54%
— Teenagers hanging out	53%
— Illegal dumping	45%
— Animals upsetting garbage receptacles	40%
— Pedestrians	39%
— Careless citizens putting out their garbage	36%

■ **Do you agree or disagree with the following statements?**

(Scale: 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = agree)

Iowans were asked to provide their level of agreement with the following statements:

- Litter in my community is a problem
- Litter along the roads entering my community is a problem
- Litter in my immediate neighborhood is a problem
- Illegal dumping occurs in my community
- I am involved in efforts to clean up my community
- It is important to maintain a clean environment

Nearly all (96%) of the Iowans surveyed “agree” that it’s important to maintain a clean environment.

Overall, 56% of the Iowans surveyed agreed to some extent that litter is a problem along the roads entering their community and 52% agree that litter is a problem in their community. However, only 35% of the Iowans say they are involved in efforts to clean up their community.

Although litter is a problem, overall, within their community, when asked if litter was a problem in their immediate neighborhood, 70% disagreed.

Statements	Level of Agreement				Mean
	(1) Disagree	(2) Somewhat Disagree	(3) Somewhat Agree	(4) Agree	
It is important to maintain a clean environment	2%	2%	22%	74%	3.68
Litter along the roads entering my community is a problem	14%	30%	41%	16%	2.58
Litter in my community is a problem	17%	31%	42%	11%	2.47
Illegal dumping occurs in my community	27%	28%	30%	14%	2.32
I am involved in efforts to clean up my community	37%	28%	26%	9%	2.08
Litter in my immediate neighborhood is a problem	39%	31%	23%	8%	2.00

Significant differences were noted among community size. The Iowans living in more populated areas (10,000+) of the state see litter as a bigger problem within their neighborhoods, their community and along the roads entering their community than Iowans living in lesser populated communities.

Agreement with the Statement	Total	Age				County		Community Size			
		< 25	25-39	40-64	65 +	Rural	Urban	< 5K	5-9K	10-49K	50K +
Important to maintain a clean environment	96%	91%	93%	98%	97%	98%	94%	96%	95%	97%	95%
Litter along the roads entering my community is a problem	56%	57%	54%	55%	61%	54%	58%	53%	46%	59%	61%
Litter in my community is a problem	52%	59%	51%	50%	55%	48%	55%	44%	42%	53%	62%
Illegal dumping occurs in my community	45%	34%	32%	52%	52%	49%	42%	38%	47%	47%	47%
I am involved in efforts to clean up my community	35%	34%	27%	39%	39%	38%	33%	35%	39%	35%	35%
Litter in my neighborhood is a problem	31%	35%	33%	30%	26%	31%	30%	28%	25%	33%	33%

Overall, in 2013, litter and/or illegal dumping within the local community was considered somewhat of a lesser problem than in 2001.

<u>Agreement with the Statements</u>	<u>2013</u>	<u>2001</u>
(Scale: 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = agree)		
— It is important to maintain a clean environment	96%	97%
— Litter along the roads entering my community is a problem	56%	60%
— Litter in my community is a problem	52%	57%
— Illegal dumping occurs in my community	45%	52%
— I am involved in efforts to clean up my community	35%	46%
— Litter in my immediate neighborhood is a problem	31%	35%

<u>Agreement with the Statements</u>	<u>2013 (mean)</u>	<u>2001 (avg.)</u>
— It is important to maintain a clean environment	3.68	3.83
— Litter along the roads entering my community is a problem	2.58	2.64
— Litter in my community is a problem	2.47	2.53
— Illegal dumping occurs in my community	2.32	2.46
— I am involved in efforts to clean up my community	2.08	2.25
— Litter in my immediate neighborhood is a problem	2.00	2.07

■ **Do you agree or disagree with the following activities?**

(Scale: 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = agree)

Iowans were asked to provide their level of agreement with the following four activities – activities that might reduce littering and illegal dumping in their communities:

- Raising public awareness of issues.
- Providing educational programs on what can be done.
- Increasing enforcement of litter/dumping rules and regulations.
- Providing better access to disposal sites.

Of the four activities presented, nearly 84% of the Iowans surveyed agreed to some extent that each of the four activities could have an impact on reducing littering and illegal dumping in their community.

Ninety percent of the Iowans surveyed agree that increasing the enforcement of rules and regulations could have the greatest impact on reducing littering and illegal dumping.

Statements	Level of Agreement				Mean
	(1) Disagree	(2) Somewhat Disagree	(3) Somewhat Agree	(4) Agree	
Increasing enforcement of litter/dumping rules and regulations	3 %	7 %	39%	51%	3.38
Providing better access to disposal sites	4 %	12 %	43%	41%	3.21
Raising public awareness of issues	4 %	12 %	61%	23%	3.02
Providing educational programs on what can be done	7 %	18 %	55%	21%	2.90

Overall, a higher percentage of women as well as lowans over the age of 40 agreed to some extent that each of the activities could have an impact on reducing littering and dumping.

Agreement with the Statement	Total	Gender		Age				Community Size			
		Male	Female	< 25	25-39	40-64	65 +	< 5K	5-9K	10-49K	50K +
Increasing enforcement of rules and regulations	90%	89%	91%	88%	87%	91%	93%	89%	90%	90%	91%
Providing better access to disposal sites	84%	80%	87%	85%	85%	86%	80%	84%	81%	86%	84%
Raising public awareness of issues	84%	80%	87%	75%	79%	87%	88%	84%	80%	83%	85%
Providing educational programs	76%	72%	79%	72%	70%	78%	82%	75%	71%	77%	78%

Agreement with the Statements	2013 (mean)	2001 (avg.)
— Increasing enforcement of rules and regulations	3.38	3.41
— Providing better access to disposal sites	3.21	3.36
— Raising public awareness of issues	3.02	3.20
— Providing educational programs on what can be done	2.90	3.04

Residency

■ How long have you lived in your:

	<u>< 2 years</u>	<u>2-5 years</u>	<u>6-10 years</u>	<u>10+ years</u>
Current community	10%	15%	13%	63%
Lived in Iowa	3%	6%	7%	85%

■ Population of your community?

— Less than 5,000	25% / 312 respondents
— 5,000 – 9,999	15% / 182 respondents
— 10,000 – 49,999	25% / 308 respondents
— 50,000 or more	35% / 432 respondents

General Information

■ Which of the following sources do you use to get information?

	<u>2013</u>	<u>2011</u>
— Internet	90%	37%
— Television	88%	93%
— Print (newspaper, magazine, etc.)	70%	84%
— Radio	68%	78%

2013 Sources	Total	Gender		Age			
		Male	Female	< 25	25 – 39	40 – 64	65 +
Internet	90%	88%	92%	93%	93%	90%	85%
Television	88%	87%	89%	79%	82%	92%	92%
Print	70%	67%	74%	47%	59%	76%	87%
Radio	68%	66%	69%	67%	67%	72%	62%

■ Do you have a personal computer at home?

■ Do you have a personal computer at work?

	<u>2013</u>	<u>2011</u>
— Yes, at home	98%	65%
— Yes, at work	52%	55%

■ Which of the following social media sites do you follow?

(This question was added in 2013.)

— Facebook	72%
— You Tube	36%
— Pinterest	24%
— LinkedIn	21%
— Twitter	18%
— Blogs	13%
— Instagram	9%
— Flickr	1%
— Other sites	1%
— Do not follow any social media sites	19%

Conclusion

The research data and information gathered in the 2013 Litter Survey will assist KIB, the DOT, the DNR and others to create and support programs, policies, and activities aimed at reducing litter across the state of Iowa.

A total of 1,234 random online interviews were collected – with interviews conducted in nearly all of Iowa's 99 counties. The research data presented in this Executive Summary Report can be generalized to the population of Iowa.