

**Iowa Department
of Natural Resources
&
Keep Iowa Beautiful**

***2005 Illegal Dumping
Follow-Up Survey Results***

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EXECUTIVE SUMMARY

The Iowa Department of Natural Resources (DNR), in collaboration with Keep Iowa Beautiful, Inc. (KIB), conducted a mail survey in September 2005 in Appanoose, Boone and Linn counties as a wrap up to a pilot program aimed at illegal dumping education. In addition to knowledge, opinions and behaviors regarding illegal dumping looked at in the initial June 2004 survey; this effort looked at aspects of the pilot education program. A total of 536 (8.9%) of the 6,000 surveys were returned. Specific topics covered were: knowledge and awareness, attitudes regarding illegal dumping, potential impact of actions to discourage illegal dumping, behaviors and actions, and the information developed and distributed through the pilot program.

Knowledge / Awareness

There are generally high levels of knowledge associated with knowing it is illegal to dump junk outside designated areas (98%); knowing how to properly disposal of furniture, tires and appliances (82%); and knowing how to tell if something has been dumped illegally (70%). These results are nearly identical to those from the original survey.

Nearly two-fifths (38%) of those responding know how to report an illegal dumping incident and a little over one fifth (22%) know the penalties for illegal dumping. Both represent small increases compared to the initial survey. Under one fifth (18%) of those having seen an illegal dumping site or person illegally dumping in the past year did anything about it, down slightly from the initial survey.

Trends/Differences of Note

- Those with the knowledge of how to report illegal dumping were five times as likely to do something about it.
- People were twice as likely to do something about illegal dumping if they saw a person illegally dumping as opposed to finding an illegal dumping site.

Attitudes Regarding Illegal Dumping

Based on ratings using a 4-point scale (higher meaning more agreement), there is overwhelming agreement that illegal dumping; negatively affects the appearance of a community (3.94), negatively affects the environment (3.90), has a negative effect on public health and safety (3.83), and has a negative economic impact on a community (3.81). These results are very close to those of the initial survey.

There appears to be moderate agreement that illegal dumping is a problem in the communities of survey respondents (3.15), nearly identical to that of the initial survey.

Trends/Differences of Note

- Females have stronger negative views towards illegal dumping than males.

Potential Impact

Actions identified as having or facilitating a consequence for illegal dumpers are believed to have the most effect on discouraging illegal dumping. These included: increasing the enforcement of illegal dumping laws, publicizing convictions for illegal dumping and increasing fines and penalties for illegal dumping.

Among the actions listed, those believed to have the least impact on discouraging illegal dumping included telling people that not dumping is the right thing to do, presenting a message emphasizing community pride and reminding people of the costs to clean up illegally dumped items.

Factor analysis suggests respondents sorted the actions into two groups: 1) ‘hard-nosed’ actions that deliver or facilitated the delivery of a negative consequence – which received higher ratings, and 2) ‘softer’ actions that provide support or information – which received the lower ratings.

All of the above findings are similar to and confirm the results of the initial survey.

Trends/Differences of Note

- Ratings of impact tended to be lower in Appanoose County.
- Females rate actions as having more impact than males.
- Ratings of impact tend to increase for ‘softer actions’ as age increases.
- Impact ratings tend to decrease as income level increases among the ‘softer’ actions.

Behavior/Action

A clear majority of respondents are likely to report an illegal dumping site (77%) or a person dumping illegally (79%). There is near unanimous support of efforts to reduce illegal dumping (97%). These results are similar to those of the initial survey.

Trends/Differences of Note

- None of note.

Information Sources

Overall, three out of every ten respondents (31%) reported seeing or hearing information about illegal dumping. Traditional media sources (newspaper, television, and radio) were reported most often as the means by which the information was seen or heard.

Trends/Differences of Note

- Those reporting they had heard or seen information about illegal dumping reported significantly higher levels of knowledge and awareness.
- Those reporting lower levels of annual income reported higher rates of seeing/hearing illegal dumping information.

ACROSS BOTH SURVEYS

Observations supported by the results of both surveys.

Knowledge - General knowledge and awareness is high, though knowing how to report illegal dumping and the associated penalties trails far behind. Given those with the knowledge to report illegal dumping are far more likely to act, future efforts should include how to report illegal dumping as a major component.

Attitudes - There is agreement regarding the negative impacts of illegal dumping, with women holding stronger views.

Potential Impact - Hard-nosed approaches, those that include or facilitate consequences to illegal dumpers, are believed to have the best chance of discouraging illegal dumping.

Behavior/Action - There is a willingness to support efforts to reduce illegal dumping as well as report illegal dumping, though results suggest the latter is mitigated by lack of knowing how to do so.

Information Sources – Those hearing/seeing the results of the pilot program efforts were positively impacted as seen in the increase in levels of knowledge and awareness.

INTRODUCTION

Iowans illegally dump trash for a number of reasons – some want to avoid paying landfill fees, others are unaware of where and how to properly dispose of items, and a few dump because it's easy and convenient. Unfortunately, it's hard to catch and prosecute illegal dumpers, so usually the crime goes unpunished. Because people who illegally dump know they won't likely get caught, they continue doing it.

The initial pilot program survey, conducted in June 2004, included a section on the potential impact of several messages and tactics on discouraging illegal dumping. Respondents indicated that messages stressing that illegal dumping is wrong, harms the environment and adversely affects the quality of life in the surrounding area would not be effective in a public campaign to discourage dumping. Instead, they suggested that increasing enforcement of illegal dumping laws and publicizing convictions would work best.

As a result, the DNR and KIB, along with the pilot community task forces, decided to develop a campaign that would assist law enforcement agencies increase illegal dumping arrests and convictions. Its main purpose would be to encourage residents to report illegal dumping without “preaching” or demanding action.

Strategic America, a Des Moines marketing firm hired to develop the creative materials, created a branded campaign with the tagline “Take a Stand for Your Land.” Pieces featured color photos of illegal dump sites in Iowa with signs reminding readers of the negative consequences of illegal dumping such as “Don’t worry, it will go away on its own in about 50,000 years” and “One man’s trash is another man’s trash.” All campaign materials included the Take a Stand for Your Land tagline along with a phone number and call to action urging readers to report illegal dumping.

This report details the results of the survey conducted in September and October of 2005 after the implementation of the pilot program. A review of the sample and methodology used to conduct the survey is followed by summaries of both statewide and county results. The results are presented in the order in which questions were asked on the survey.

SAMPLE

Response

Of the 6,000 surveys (2,000 to each of the three counties) that were mailed out to the counties, 536 were returned. This yielded an overall return rate of 8.9 percent. County specific returns are listed below:

County	Number Sent	Number Returned	Response Rate
Appanoose	2,000	174	8.70%
Boone	2,000	199	9.95%
Linn	2,000	163	8.15%

The overall return rate is lower than that of the initial survey (11.8%). No pre-notification, incentives or follow-ups were utilized.

Demographics

A total of 354 respondents provided gender information. A total of 156 (44.1%) were male and 198 (55.9%) were female. A total of 182 surveys did not provide gender data.

Gender	Survey		Census*
	Number	Percent	Percent
Male	156	44.1%	48.3%
Female	198	55.9%	51.7%
Total	354	100.0%	100.0%

* - Data from 2000 Census.

As illustrated in the table below, compared to 2000 census data, the sample is not representative for those under 25 and generalizations for this group can not be made based on the results of this survey. The sample tends to under-represent those 26 to 39 years of age and over-represent those 40 years of age or older.

Age	Survey		Census*
	Number	Percent	Percent
18-25	18	3.5%	15.2%
26-39	87	17.0%	24.9%
40-64	243	45.3%	40.0%
65 and over	165	30.8%	19.9%
Total	536	100.0%	100.0%

* - Data from 2000 Census with percentages using total number of individuals 18 and older as a base.

Measurement Error

Measurement error is present in all surveys. In general, the more information a result is based on the lower the amount of error.

Based on the number of returns and a 95 percent confidence level, results generalized across the entire sample carry an error rate of +/- 4.2 percent. Results generalized to counties carry the following error rates: Appanoose, 7.4 percent; Boone, 7.0 percent; Linn, 7.6 percent.

Given the number of returns, it is recommended that results broken down by other demographic characteristics be used for information purposes only. Given the measurement error associated with both the initial and follow-up surveys, no effort has been made to establish the statistical significance of change between the two surveys.

METHODOLOGY

Design

The survey was developed in a joint effort by DNR and KIB, to address issues and gather information of interest connected to illegal dumping in Iowa. Matching the original survey, content of the follow-up survey focused on knowledge and awareness of illegal dumping issues, attitudes regarding illegal dumping, potential impacts of various activities on illegal dumping, as well as behavior and actions. To follow the impact of efforts since the initial survey, a section asking if and how respondents had seen or heard any of the developed messages was developed.

Distribution

The survey was conducted by mail. To better understand knowledge and perceptions of residents in each county, DNR/KIB chose to send the survey to a list of 2,000 random households. Strategic America, along with a mail services company, coordinated the mailing. A total of 536 of the original 6,000 mailed surveys were returned during a period of approximately 35 days.

Each county's survey form was printed in a different color to easily track responses – white for Appanoose, yellow for Linn and brown for Boone. The survey was accompanied by a letter from each county's illegal dumping task force asking recipients to participate in the survey that will assist the county with efforts to prevent illegal dumping.

The survey was mailed in early September 2005. The bulk of responses were received throughout September and early October. The responses were returned to Strategic America, where they were opened and sorted. They were then sent to DNR staff to begin compiling the results.

Mailing List

A list of addresses was purchased from a list provider. The list consisted of a representative sample of 2,000 single-family dwellings from each of the 3 counties for a total sample size of 6,000.

Analysis

This report contains three levels of detail. General overall results are given in the executive summary. The body of the report presents more detailed overall results with comments on any identified trends or differences among various subgroups. Appendix B of the report provides the greatest detail, with results presented for all subgroups. Analysis was performed and reports written by staff in the Director's Staff Division of the Iowa Department of Transportation.

Results are presented in the same order in which the questions appeared in the survey. Subgroup reporting was done by demographic information provided by survey respondents. These include: county, gender, marital status, age group, presence of school-aged children, residency (inside

city limits or not), and income level. Surveys not providing an answer to a question, nor demographic data, were excluded from the results on a question-by-question and analysis-by-analysis basis. This led to individual question response total lower than the 536 surveys that were returned. Rounding may lead to percentage totals not equaling 100 percent.

Separate reports were written summarizing county-level results.

Comment

Following a trend of recent mail surveys, there was a very low return rate from respondents under 25 years of age. As was the case after the initial survey, it is suggested that other methods (phone surveys with quota sampling, focus groups, etc.) be investigated to collect information from this group in future efforts.

Knowledge/Awareness

The first portion of the survey asked respondents about their knowledge and awareness of illegal dumping. It asked a series of yes/no questions on general and local community knowledge. It concluded by asking if the respondent had seen either an illegal dumping site or a person dumping illegally and if they had done anything about it.

In General

Do you know it is illegal to dump junk outside of designated areas?

Nearly all respondents (98.3%) indicated they knew it was illegal to dump junk outside of designated areas. There was little difference in responses across the three counties or within any other demographic group.

Do you know how to tell if something has been dumped illegally?

Seven out of ten respondents (70.0%) said they know how to tell if something has been dumped illegally. Though there were differences between the counties (Appanoose-75.0% Boone-69.2%, Linn-65.6%), these differences were not found to be significant.

Respondents under 40 reported a significantly lower level of knowledge (54.8%) than those 40 to 64 (72.9%) and those 65 or older (75.6%). Those living outside city limits reported a significantly higher level of knowledge (80.7%) than those living inside city limits (67.6%).

There were no significant differences within the other demographic groups.

Within Your Community

If you see an illegal dumping incident, do you know how to report it?

Overall, close to two of every five (38.1%) responding reported know how to report an illegal dumping incident if they see it. This knowledge was significantly lower in Linn County (23.2%) than either Appanoose (49.1%) or Boone (40.1%) counties. Those under the age of 40 reported a significantly lower level of knowledge (32.7%) than those 65 or older (44.7%).

There were no significant differences within the other demographic groups.

Do you know how to properly dispose of items such as furniture, tires and appliances?

Knowledge of how to dispose of items such as furniture, tires and appliances was high overall, with more than four out of every five (82.4%) responding they know how to dispose of such items. Reported knowledge was found to be significantly lower for respondents from Appanoose County (75.9%) than respondents from Linn (87.2%) county.

Respondents under 40 reported a significantly lower level of knowledge of how to properly dispose of items (74.0%) than those 40 to 64 (85.4%) and those 65 or older (84.3%). There were no significant differences within the other demographic groups.

Do you know what the penalties are for illegal dumping?

Slightly more than one in five respondents (21.6%) reported knowing what the penalties are for illegal dumping. The reported level of knowledge of the penalties in Appanoose County (26.3%) was significantly higher than that in Linn County (14.8%).

Knowledge of the penalties for illegal dumping was significantly higher among respondents with an annual income under \$25,000 (33.3%) than for respondents in all other income groups. There were no other significant differences within demographic groups.

Within the Last Year

This portion of the survey asked respondents if within the last year they had seen an illegal dumping site or a person dumping material illegally and, if they had seen either, whether they did anything about it.

Within the last year, have you seen: A site where you believe material was illegally dumped?

Overall, just over half of those responding (50.7%) indicated they had seen a site where they believed material was illegally dumped within the last year. Though there were differences

between counties (Appanoose – 50.9%, Boone – 53.1%, Linn – 47.5%), these were not found to be statistically significant.

Males reported having seen a site where they believed material has been illegally dumped with the last year significantly more often (56.9%) than females (38.7%) and those who were married reported having seen a site where they believed material had been illegally dumped within the last year significantly more often (55.6%) than those who were not married or single.

Respondents 65 or older reported they had seen a site where they believed material had been illegally dumped within the last year significantly less often (42.4%) than those respondents ages 40 to 64 (53.1%). Those living outside city limits reported they had seen a site where they believed material had been dumped illegally within the last year significantly more often (67.0%) than those living inside city limits (46.4%).

Individuals reporting an annual income level of under \$25,000 reported they had seen a site where they believed material had been dumped illegally within the last year significantly less often than all other income groups. In addition, those in the \$50,000 to \$74,999 range reported a significantly

Within the last year, have you seen: A person you believe was dumping material illegally?

Approximately one out of every 16 respondents (6.3%) reported they had seen a person they believed was dumping material illegally within the past year. Those indicating they lived outside city limits reported they had seen a person they believed was dumping material illegally significantly more often (11.1%) than those living inside city limits (4.2%). There were no other significant differences found.

Nearly everyone (93.9%) who reported they had seen a person they believed was dumping material illegally within the last year also reported seeing a site where they believe material was illegally dumped within the last year.

IF you answered YES to either of the above, did you do anything about it?

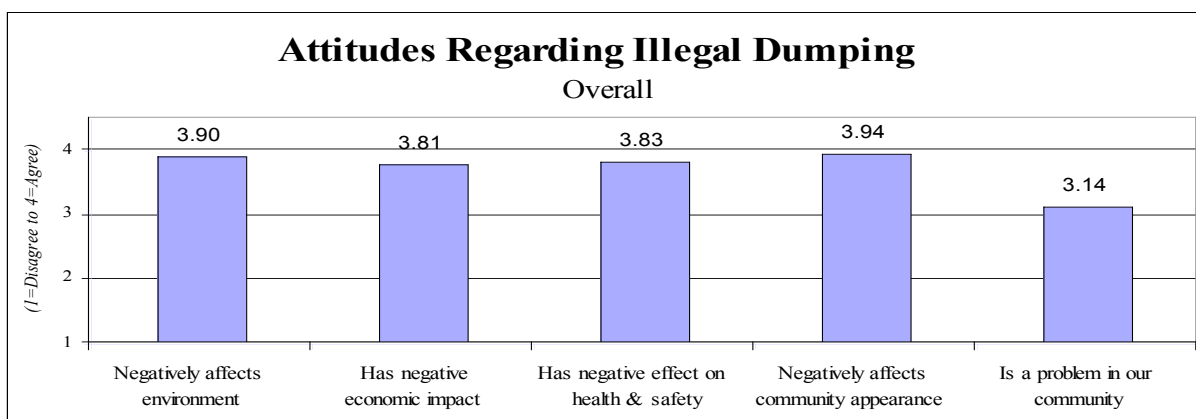
Of those reporting they had either seen an illegal dumping site or person dumping material illegally within the last year, less than one in five (18.3%) indicated they did something about it. There were no significant differences found between counties or within any other demographic group.

Individuals reporting they had seen an individual dumping material illegally were twice as likely (39.4% to 19.3%) to do something about it than those reporting they had seen an illegal dumping site. Among those respondents who had either seen an illegal dumping site or person dumping material illegally, a person was close to five times as likely (38.5% to 8.2%) to do something about it if they knew how to report it.

Attitudes Regarding Illegal Dumping

The second part of the survey asked respondents to indicate their level of agreement to five statements on attitudes regarding illegal dumping using a four point scale (1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree). It presented four statements covering the negative effects and impacts of illegal dumping on the environment, the economy of a community, public health and safety, and the appearance of a community. It concluded with a question focusing on illegal dumping as a problem in their community.

Respondent ratings for the four items focusing on the negative effects and impacts of illegal dumping were all above 3.8 on the 4-point scale. The statement that illegal dumping negatively affects the appearance of a community had the highest level of agreement (3.94). Level of agreement fell for the statement illegal dumping is a problem in our community to 3.14 on the 4-point scale.



Note: Given the high ratings on the four statements covering the negative effects and impacts of illegal dumping, significant differences identified in the ratings of agreement are more statistical in nature than practical.

Illegal dumping negatively affects the environment.

Overall, the level of agreement with the statement that illegal dumping negatively affects the environment was high with a rating of 3.90. The ratings for Appanoose County (3.83) were significantly lower than those for Boone (3.93) and Linn (3.94) counties.

Female respondents reported a significantly higher level of agreement (3.94) to the statement that illegal dumping negatively affects the environment than did male respondents (3.85). Those ages 40 to 64 reported a significantly higher level of agreement (3.96) than those under 40 (3.85) and those 65 or older (3.83). Respondents with school-aged children reported a significantly higher level of agreement (3.95) than those without school-aged kids (3.88).

Illegal dumping has a negative economic effect on a community.

Overall, respondents shared a high level of agreement (3.81) with the statement that illegal dumping has a negative economic effect on a community. There was little variance in the level of agreement across the three counties.

Female respondents reported a significantly higher level of agreement (3.89) to the statement that illegal dumping has a negative economic impact on a community than did male respondents (3.73). Those respondents ages 40 to 64 (3.86) shared a significantly higher level of agreement than those under 40 (3.72) and those 65 or older (3.76).

Illegal dumping has a negative effect on public health and safety.

Overall, respondents reported a high level of agreement to the statement that illegal dumping has a negative effect on public health and safety, with a rating of 3.83 on the 4-point scale.

Female respondents reported a significantly higher level of agreement (3.91) to the statement illegal dumping has a negative effect on public health and safety than did male respondents (3.72). There were no significant differences in levels of agreement within other demographic groups.

Illegal dumping negatively affects the appearance of a community.

Overall, respondents reported the highest level of agreement to the statement that illegal dumping negatively affects the appearance of a community, with a rating of 3.94 on the 4-points scale. There was little difference in the level of agreement across the three counties.

Those respondents ages 40 to 64 reported a significantly higher level of agreement (3.97) than those 65 or older (3.90). Level of agreement among school-aged children to the statement that illegal dumping negatively affects the appearance of a community practically topped out the scale (3.99) and was significantly higher than those without school-aged children (3.92).

Illegal dumping is a problem in our community.

Respondents provided a moderately high level of agreement to the statement that illegal dumping is a problem in their community, with a rating of 3.14 on the 4-point scale.

Those respondents under 40 reported a significantly lower level of agreement (2.92) than those ages 40 to 64 (3.24). There were no other significant differences within demographic groups.

Potential Impacts

This portion of the survey asked respondents to rate the effect eleven actions would have on discouraging illegal dumping using a four-point scale (1 = none, 2 = slight, 3 = moderate, 4 = major). Suggestions respondents provided to an ‘Other’ option are summarized in the written comment summary of this report. After a look at overall results, differences are presented by demographic group.

Overall

Respondents rated things that carried a consequence as having the most effect on discouraging illegal dumping. This is evidenced by the top three items being: “increasing the enforcement of illegal dumping laws” (average = 3.53), “publicizing convictions for illegal dumping” (average = 3.52), and “increasing fines and penalties for illegal dumping” (average = 3.51).

The lowest rated item, the only one to fall below the theoretical mid-point of 2.5, was “telling people not dumping is the right thing to do” (average = 2.38). Next were three items that fell below the 3.0 average: “presenting a message emphasizing community pride” (average 2.70), “reminding people of the costs to clean up illegally dumped items” (average = 2.79), and “providing education on the effects of illegal dumping” (average = 2.95).

Factor analysis revealed a pattern of responses that place the top five rated actions together in a ‘hard-nosed’ set and the remainder in a second ‘softer’ set of actions. Respondents believe these ‘hard-nosed’ potential actions will have more impact on discouraging illegal dumping.

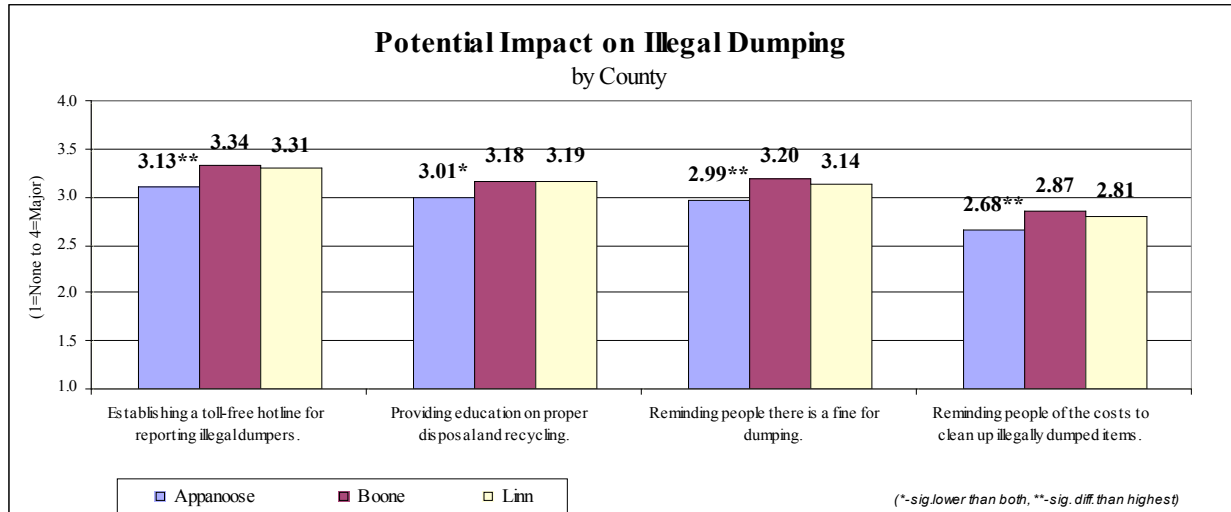
Potential Action	Overall Impact Rating*	
Increasing the enforcement of illegal dumping laws.....	3.53	set of actions ‘Hard-Nosed’
Publicizing convictions for illegal dumping	3.52	
Increasing fines and penalties for illegal dumping.....	3.51	
Establishing a toll-free hotline for reporting illegal dumpers	3.26	
Providing rewards for turning in illegal dumpers	3.20	
<i>Providing education on proper disposal and recycling.....</i>	<i>3.13</i>	<i>‘Softer’ set of actions</i>
<i>Reminding people there is a fine for dumping.....</i>	<i>3.12</i>	
<i>Providing education on the effects of illegal dumping.....</i>	<i>2.95</i>	
<i>Reminding people of the costs to clean up illegally dumped items</i>	<i>2.79</i>	
<i>Presenting a message emphasizing community pride.....</i>	<i>2.70</i>	
<i>Telling people that not dumping is the “right thing to do”</i>	<i>2.38</i>	

* - 4-point scale (1=none, 2=slight, 3=moderate, 4=major)

The highest items, lowest items and factor analysis results match those of the initial survey.

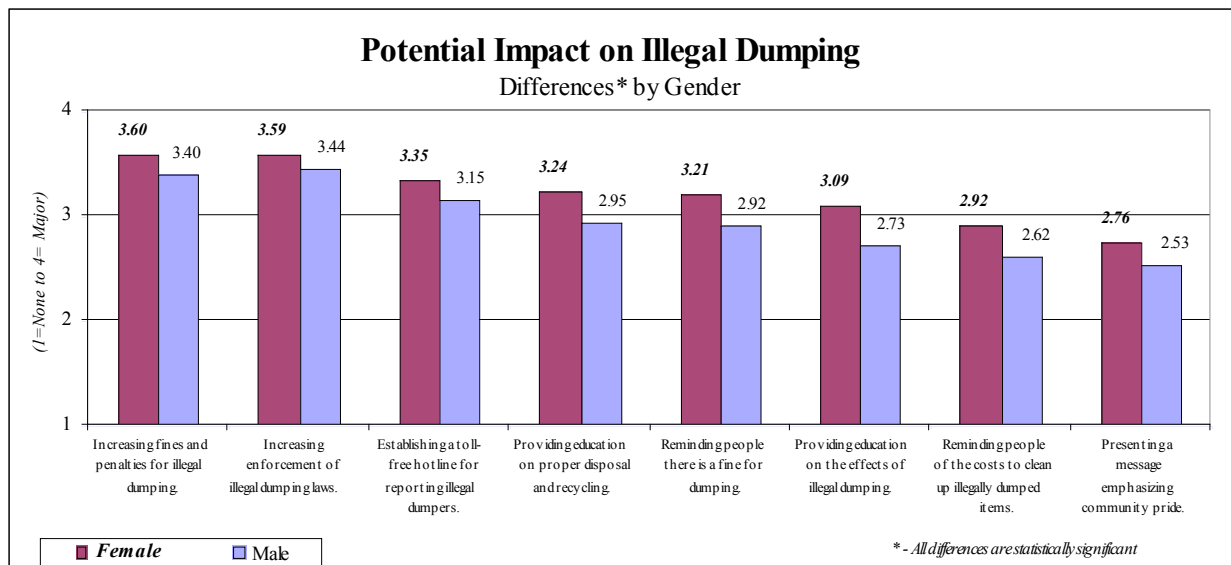
County

The impact ratings for establishing a toll-free hotline for reporting illegal dumpers, reminding people there is a fine for dumping, reminding people of the costs to clean up were significantly lower in Appanoose County when compared to Boone County. The impact rating in Appanoose County for providing education on disposal and recycling was significantly lower (3.01) than that in Boone (3.18) or Linn (3.19) counties.



Gender

Females uniformly rated the impact of the items higher than males. The difference was significant for the following items:



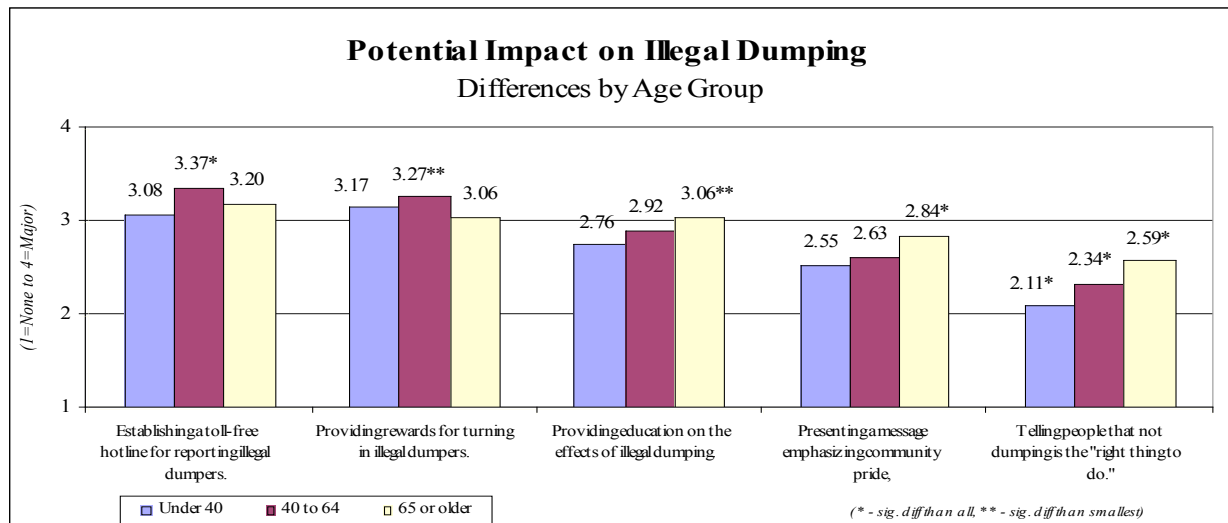
Marital Status

With the exception of publicizing convictions and increasing fines, the ratings of impact were higher for respondents indicating they were single. None of the differences, however, were statistically significant.

Age

Significant differences in impact ratings were found between age groups in five of the eleven items. Respondents ages 40-64 rated the items involving a consequence higher than the other age groups. The impact rating among those ages 40-64 for establishing a toll-free hotline (3.37) was significantly higher than those under 40 (3.08) and those 65 or older (3.20). The impact rating among those 40-64 for providing rewards for turning in illegal dumpers (3.27) was significantly higher than those 65 or older.

For those items that did not involve a 'consequence', the impact ratings often increased with age. The impact ratings for telling people that not dumping is the 'right thing to do' were all significantly different from each other (under 40: 2.11, 40-64: 2.34, 65 or older: 2.59). The impact rating for those 65 or older (2.84) for presenting a message emphasizing community pride was significantly higher than those 40 to 64 (2.63) and those under 40 (2.55). The rating for those 65 or older (3.06) was significantly higher than those under 40 for providing education on the effects of illegal dumping.



School-Aged Children

Respondents with without school-aged children tended to rate impacts higher than those with school-aged children. This difference was significant for telling people that not dumping is the 'right thing to do' (2.42 compared to 2.26) and for providing education on proper disposal and recycling (2.99 compared to 2.80).

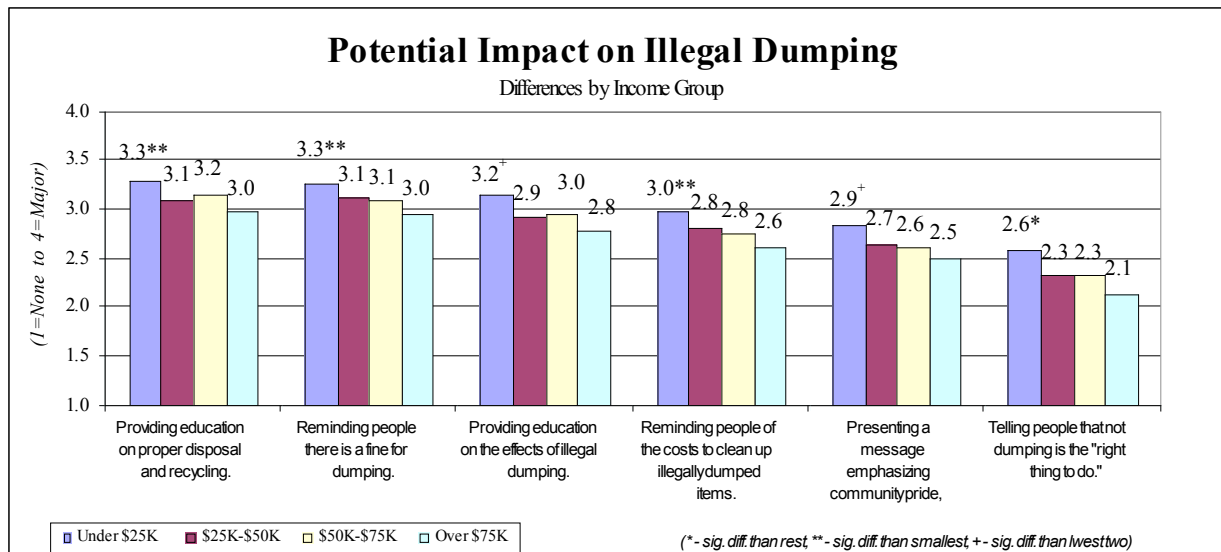
Residency

There were no differences in impact ratings between residents living inside or living outside of city limits.

Income Level

Differences in impact ratings among income groups existed for the six ‘non-consequence’ items. For these items, the impact ratings tended to fall as income rose. The impact ratings for the under \$25,000 group was significantly higher than some or all of the other groups for each of the six actions.

As in the initial survey, there were no significant differences among income groups for the five actions identified as having the most impact.



BEHAVIOR/ACTION

This section of the survey presented three questions concerning actions/behaviors that would help address illegal dumping. The first two questions focused on the likeliness of reporting, while the last asked about support for efforts to reduce illegal dumping.

Are you likely to report an illegal dumping site if you find one?

More than three out of every four respondents (77.2%) indicated they were likely to report an illegal dumping site if they found one. There were no significant differences in likeliness to report a site found between counties or within any other demographic group.

Are you likely to report a person you believe is dumping material illegally?

Approximately four out of every five respondents (79.3%) indicated they were likely to report a person they believed was dumping material illegally. The likelihood of reporting a person they

believed was dumping material illegally was significantly lower for those under 40 years of age (72.1%) than for those ages 40 to 64 (82.4%). There were no other significant differences within demographic groups.

Would/do you support efforts to reduce illegal dumping in and around your community?

Nearly all respondents (97.3%) indicated they would/do support efforts to reduce illegal dumping in and around their community.

Nearly all respondents (99.2%) with school-aged children reported support for such efforts and this was significantly higher level of support than those without school-aged children (96.5%). There were no other significant differences within demographic groups.

Note: Given the high levels of support for efforts to reduce illegal dumping in and around their community, significant differences identified are more statistical in nature than practical.

INFORMATION SOURCES

Messages

This portion of the survey asked respondents to indicate whether or not they had seen or heard any of the messages or information generated within the past year.

Overall

One in ten respondents (9.9%) indicated they had seen or heard the slogan: “Take a Stand for Your Land” or a telephone number (9.5%) for reporting illegal dumping in their area. One in four (25.4%) reported hearing or seeing other information about illegal dumping. Overall, 30 percent of respondents indicated they had seen or heard information about illegal dumping.

County

Linn County respondents reported the lowest rates for each of the three questions, with responses to telephone and other information being significantly different.

Gender

There were no differences based on gender.

Marital Status

There were no differences based on marital status.

Age

There were no differences based on age.

School-Aged Children

There were no differences based on whether respondents reported having school-aged children or not.

Residency

There were no differences based on residency.

Income Level

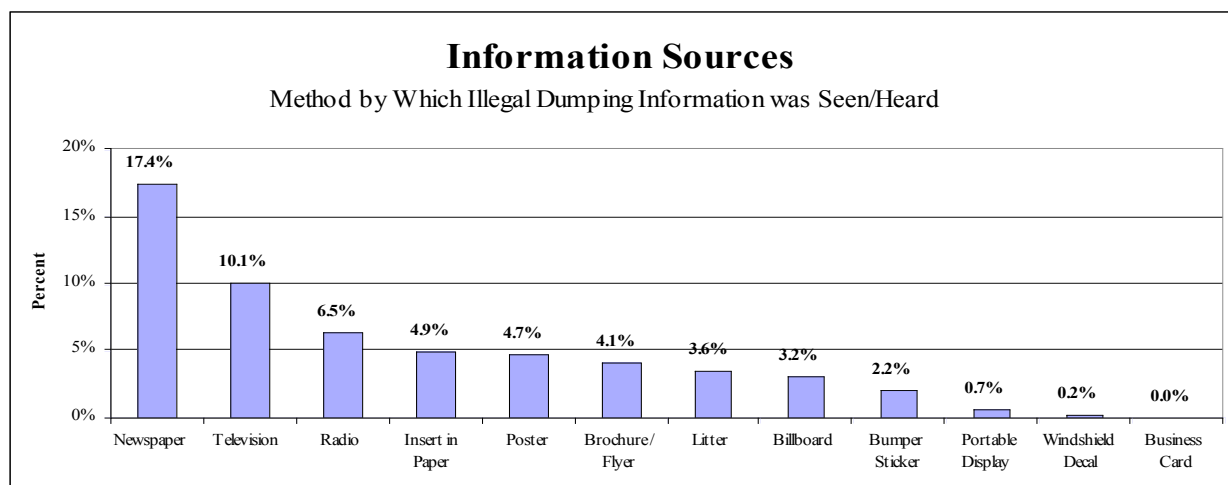
Among those indicating they had heard or seen any other information regarding illegal dumping, those with an annual income under \$25,000 reported a significantly higher rate (33.6%) than those whose annual income was \$50,000 to \$74,999 (21.7%) or \$75,00 or more (17.9%).

Sources

The survey then asked, *“If you answered **Yes** to any of the above, what was the source?”* Respondents could select as many as they desired from 12 (twelve) options provided as well as provide other sources. Differences are presented by demographic group.

Overall

Respondents indicated the top three sources through which they had heard or seen an illegal dumping message in the past year were newspaper (17.4%), television (10.1%), and radio (6.5%). None of the respondents indicated business cards were the source by which they had heard or seen illegal dumping information.



Note: Though paid advertising was not always conducted for television or radio, respondents may have seen reports about illegal dumping prevention activities in local media.

County

Respondents from Linn County did report a significantly lower rate (9.2%) of newspaper as a vehicle of an illegal dumping message than those from either Appanoose (19.1%) or Boone (22.6%) counties. Respondents from Linn County also reported a significantly lower rate (6.8%) of television as a vehicle of an illegal dumping message than those from Boone (13.1%) county.

Gender

There were no significant differences based on gender.

Marital Status

There were no significant differences based on marital status.

Age

Those ages 65 or older tended to report higher rates for the sources, though none of the differences were significant.

School-Aged Children

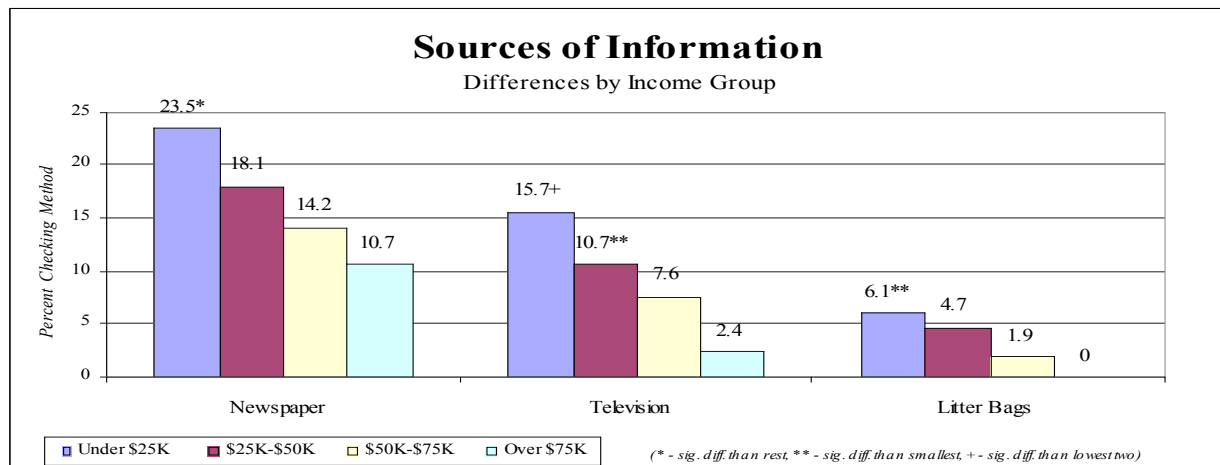
There were no significant differences based on whether respondents had school-aged children or not.

Residency

Rates for sources tended to be higher for those living inside city limits than for those living outside city limits. The results for television (12.3% compared to 4.5%) and billboards (4.4% compared to 0.9%) were significantly different.

Income Level

There was a general tendency for identification of the various sources to decrease as income increased. There were significant differences found within the following sources: newspaper, television, and litter bags.



Impacts

As stated elsewhere in this report, sample sizes and corresponding measurement error prevents any meaningful direct comparison between the initial and follow-up surveys. The follow-up survey did, however, ask whether respondents had heard or seen an illegal dumping message during the past year. For those having reported having heard or seen an illegal dumping message during the past year, the following was found:

- With the exception of knowing it was illegal to dump in undesignated areas where both reported 98%, levels of knowledge and awareness was found to be significantly higher on all items. Theses included:
 - Knowing how to tell of something has been dumped illegally – 82% compared to 65%
 - Knowing how to report it – 58% compared to 29%
 - Knowing how to properly dispose of material – 93% compared to 78%
 - Knowing the penalties for illegal dumping – 33% compared to 16%
 - Having seen a site where material was dumped illegally – 58% compared to 48%
 - Having seen a person dumping material illegally – 10% compared to 5%
 - Doing something when they see it – 30% compared to 11%
- Among the attitude items in the survey, those having seen or heard an illegal dumping message in the past year reported a significantly higher level of agreement (3.29 on a 4-pt scale) than those who had not (3.08). There were no other attitudes for which there was a difference.
- Among the eleven actions rated for their impact on discouraging illegal dumping, those having heard or seen an illegal dumping message in the past year tended to rate the impact higher. However, only the difference for the impact of publicizing convictions for illegal dumping significantly higher (3.63) for those who had seen/heard a message than for those had had not (3.36). There were no other actions for which there was a difference.
- There were no significant differences in regard to behaviors and actions.

BACKGROUND INFORMATION

General background information was asked at the end of the survey. This information was used to investigate possible differences to responses among various groups to gain a better understanding of the results of this survey. The county from which responses were received was also tracked. Gender and age information was used to evaluate the sample against 2000 census information. Specific results based on this information have been presented throughout the report and are not repeated here.

Marital Status

A majority of respondents (63.8%) indicated they were married. Those indicating they were single accounted for 26.8 percent of responses while the remaining respondents (9.4%) indicated 'other' for marital status. Because of the low number of returns and difficulty in interpreting the 'other' category, results by marital status will present information for two groups: married and single. A total of 25 surveys did not provide marital status data.

Gender

Male respondents accounted for 44.1% of responses while females accounted for 55.9%. A total of 182 surveys did not provide gender data.

Age

As with past KIB survey efforts, the sample severely under-represents the youngest age group. Results by age should be reviewed knowing the over-representation of the older age groups. Results by age group will present information for three groups: under 40, 40-64 and 65 and over. A total of 23 surveys did not provide age data.

Age	Survey		Census*
	Number	Percent	Percent
18-25	18	3.5%	15.2%
26-39	87	17.0%	24.9%
40-64	243	45.3%	40.0%
65 and over	165	30.8%	19.9%
Total	536	100.0%	100.0%

** - Data from 2000 Census with percentages using total number of individuals 18 and older as a base.*

Do You Have School-Aged Children?

One out of every four respondents (25.1%) indicated they have school-aged children. A total of 27 surveys did not provide responses to this item.

Do You Live Inside City Limits?

More than three out of every four respondents (76.6%) indicated they live inside city limits. A total of 58 surveys did not provide responses to this item.

Annual Household Income

The largest groups of respondents (32.8%) indicated their annual household income was between \$25,000 and \$49,999. Responses appear to match well with state-wide 2000 Census data. A total of 82 surveys did not provide annual income data.

Annual Household Income				
Range	Survey Frequency	Survey Percent	Survey Valid Percent	Census Percent
Less than \$25,000	115	21.5%	25.3%	18.0%
\$25,000-\$49,999	149	27.8%	32.8%	34.4%
\$50,000-\$74,999	106	19.8%	23.3%	26.3%
\$75,000 or more	84	15.7%	18.5%	21.3%
Sub-Total	454	84.7	100.0%	100.0%
Missing	82	15.3		
Total	536	100.0%		

WRITTEN COMMENTS - SUMMARY

The following is a synopsis of comments made by respondents to the Illegal Dumping Survey. Respondents offered more than 100 written comments in addition to their survey responses. Though comments were found in all sections of the survey, a majority of comments focused on how to impact illegal dumping. The actual comments are listed in Appendix C.

Less Cost – More Convenient – The primary theme among written comments focused on removing the barriers of costs and access. It is believed doing so would have a major impact on illegal dumping - “. . . it would reduce the number of illegal dumpers.”

Enforcement and Penalties – Respondents expressed the need to improve enforcement and make sure there is an impact on those not interested in doing what is right. Having offenders assist in cleaning up was suggested as a way to impact future behavior.

Clean-Up Days – Often singled out, many mentioned the use of clean-up days where fees would be waived or greatly reduced. These could be associated with special clean-up events and/or aimed at specific items such as tires, appliances, etc. This was suggested for use at both the city and county level.

Education – Respondents felt that more education and signage would be beneficial. Focusing on what, where and how to dump legally would be helpful, as well as knowing how to report illegal dumping.

Reality – Respondents reported the negative impacts illegal dumping. However, they also shared those who dump illegally just don't care and probably won't get caught.

The first three themes were also found in comments from the initial survey.

APPENDIX A – 2004 Illegal Dumping Survey



The Iowa Department of Natural Resources (DNR) and Keep Iowa Beautiful are working with your community to address illegal dumping. You can help by completing this brief, five-minute questionnaire. Responses are, and will remain, anonymous. When done, return the questionnaire by following the directions on the back. Postage has been pre-paid. Your answers will help make your community's efforts as effective as possible.

Thank you for taking the time to read through and complete this questionnaire.

Knowledge/Awareness – (Circle the appropriate response)

In general:		
Do you know it is illegal to dump junk outside of designated sites?	Yes	No
Do you know how to tell if something has been dumped illegally?	Yes	No
Within your community:		
If you see an illegal dumping incident, do you know how to report it?	Yes	No
Do you know how to properly dispose of items such as furniture, tires and appliances? ...	Yes	No
Do you know what the penalties are for illegal dumping?	Yes	No
Within the last year, have you seen:		
A site where you believe material was illegally dumped?	Yes	No
A person you believe was dumping material illegally?	Yes	No
<i>If you answered Yes to either of the above, did you do anything about it?</i>	Yes	No

Attitudes Regarding Illegal Dumping – Indicate your level of agreement with the following statements:

(Circle the appropriate response)

	<i>Disagree</i>	<i>Somewhat Disagree</i>	<i>Somewhat Agree</i>	<i>Agree</i>
Illegal dumping negatively affects the environment	1	2	3	4
Illegal dumping has a negative economic effect on a community	1	2	3	4
Illegal dumping has a negative effect on public health and safety	1	2	3	4
Illegal dumping negatively affects the appearance of a community	1	2	3	4
Illegal dumping is a problem in our community	1	2	3	4

Potential Impact – What effect do you believe each of the following would have on discouraging illegal dumping?

(Circle the appropriate response)

	<i>None</i>	<i>Slight</i>	<i>Moderate</i>	<i>Major</i>
Telling people that not dumping is the "right thing to do"	1	2	3	4
Presenting a message emphasizing community pride	1	2	3	4
Reminding people there is a fine for dumping	1	2	3	4
Reminding people of the costs to clean up illegally dumped items	1	2	3	4
Establishing a toll-free hotline for reporting illegal dumpers	1	2	3	4
Increasing the enforcement of illegal dumping laws	1	2	3	4
Increasing fines and penalties for illegal dumping	1	2	3	4
Publicizing convictions for illegal dumping	1	2	3	4
Providing rewards for turning in illegal dumpers	1	2	3	4
Providing education on proper disposal and recycling	1	2	3	4
Providing education on the effects of illegal dumping	1	2	3	4
Other (specify)	1	2	3	4

(place tape here)

Behavior / Action – (Circle the appropriate response)

Are you likely to report an illegal dumping site if you find one? Yes No
Are you likely to report a person you believe is dumping material illegally?..... Yes No
Would/do you support efforts to reduce illegal dumping in and around your community?..... Yes No

Information Sources – Within the past year, have you seen or heard: (Circle the appropriate response)

The slogan: "Take a Stand for Your Land." Yes No
A telephone number for reporting illegal dumping in your area..... Yes No
Any other information about illegal dumping..... Yes No

If you answered **Yes** to any of the above, what was the source? (Check [✓] all that apply)

☐ Newspaper ☐ Television ☐ Bumper sticker ☐ Poster
☐ Radio ☐ Billboard ☐ Windshield decal ☐ Litter Bag
☐ Brochure/Flyer ☐ Business card ☐ Portable display ☐ Insert in paper
☐ Other (please specify) _____

Background Information (Check [✓] the appropriate response)

Marital Status: ☐ Single ☐ Married ☐ Other **Gender:** ☐ Male ☐ Female
Age: ☐ 18-25 ☐ 26-39 ☐ 40-64 ☐ 65 and over
Do you have school-age children? ☐ Yes ☐ No **Do you live inside city limits?** ☐ Yes ☐ No
Annual Household Income: ☐ Less than \$24,999 ☐ \$50,000 to \$74,999
☐ \$25,000 to \$49,999 ☐ \$75,000 or more

Thank you, you're done! Fold along the dotted line (address showing), tape shut (top center) and mail.

APPENDIX B - Numerical Sub-Group Results

This appendix contains detailed breakdowns of the responses to the survey. Results are presented table format in the order in which the questions appeared in the survey.

At the top of each table is the lead-in statement and/or question that was asked. The top cell of the table describes the results in the white cells. Each table presents information from eight different perspectives, with the bold term describing the perspective, the non-bolded terms to the right describing the each subgroup, and the shaded cell indicating the number of respondents. For example, for the table below:

Overall results: 528 responded to the question
The overall rating: 2.38

When looked at by residency:

156 males responded
Their average rating: 2.29

196 females responded
Their average rating: 2.41

When looked at by age:

105 - under 40 responded
Their average rating: 2.11

242 - 40 to 64 responded
Their average rating: 2.34

162 - 65 or older responded
Their average rating: 2.59

What effect do you believe each of the following would have on discouraging illegal dumping?
Telling people that not dumping is the “right thing to do.”

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	2.38
172/196/160	2.40	2.41	2.33	528	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
156/196	2.29	2.41			
Marital Status	Single	Married			
136/322/48	2.46	2.32 ³			
Age	Under 40	40 to 64	65 or older		
105/242/162	2.11**	2.34**	2.59**		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/377	2.26	2.42*	363/109	2.36	2.45
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
113/147/105/83	2.60**	2.33 ¹	2.33 ¹	2.14 ¹	

NOTE: Sub-group membership is determined through self-reporting. Those for which background information is left blank are not included in the results. This can lead to a smaller total number of respondents included in subgroup results than the overall results. For example, the sum of the gender subgroup respondents (156 + 196 = 352) is smaller than the overall number of respondents (528) to the question.

Knowledge/Awareness

Do you know it is illegal to dump junk outside of designated sites?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	98.3
171/197/158	97.1	99.0	98.7	526	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/196	97.4	98.0			
Marital Status	Single	Married			
137/322/47	98.5	98.8			
Age	Under 40	40 to 64	65 or older		
104/240/162	97.1	98.3	98.8		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/376	97.6	98.4	361/110	96.4	99.2
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
111/149/105/83	96.4	98.7	98.1	98.8	

Do you know how to tell if something has been dumped illegally?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	70.0
168/195/154	75.0	69.2	65.6	517	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
151/194	72.9	67.0			
Marital Status	Single	Married			
135/316/45	71.1	69.0			
Age	Under 40	40 to 64	65 or older		
104/236/157	54.8**	72.9	75.2		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
124/368	66.1	71.5	352/109	67.6	80.7*
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
108/147/102/82	75.0	68.7	71.6	63.4	

If you see an illegal dumping incident, do you know how to report it?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	38.1
171/197/155	49.1 ³	40.1 ³	23.2**	523	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
153/194	41.2	26.6			
Marital Status	Single	Married			
136/319/46	39.0	36.7			
Age	Under 40	40 to 64	65 or older		
104/239/159	32.7 ³	35.6	44.7 ¹		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/372	37.3	38.2	358/109	36.0	42.2
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
112/148/103/83	37.5	38.5	38.9	33.7	

Do you know how to properly dispose of items such as furniture, tires and appliances?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	82.4
170/196/156	77.7 ³	82.7	87.2 ¹	522	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
152/195	85.5	79.5			
Marital Status	Single	Married			
136/319/46	80.2	84.3	80.4		
Age	Under 40	40 to 64	65 or older		
104/239/159	74.0**	85.4 ¹	84.3 ¹		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
125/373	82.4	82.6	357/110	84.0	77.3
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
111/148/103/84	78.4	81.1	83.5	84.5	

Do you know what the penalties are for illegal dumping?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	21.6
171/197/155	26.3 ³	22.8	14.8 ¹	523	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
152/195	18.4	24.6			
Marital Status	Single	Married			
134/320/47	23.9	19.1	27.7		
Age	Under 40	40 to 64	65 or older		
103/240/160	19.4	19.6	25.0		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
124/374	18.6	22.5	358/109	19.6	26.6
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
111/148/102/84	33.3**	14.9 ¹	17.7 ¹	16.7 ¹	

Within the last year, have you seen: A site where you believe material was illegally dumped?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	50.7
1715/196/158	50.9	53.1	47.5	525	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
153/194	56.9*	38.7			
Marital Status	Single	Married			
137/322/45	46.0	55.6 ³	31.1 ²		
Age	Under 40	40 to 64	65 or older		
105/241/158	54.3	53.1 ³	42.4 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
127/373	55.1	48.8	360/109	46.4	67.0*
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
112/148/104/84	31.3**	56.1 ^{1,3}	68.3 ^{1,2}	63.1 ¹	

Within the last year, have you seen: A person you believe was dumping material illegally?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	6.3
169/195/157	7.1	6.2	5.7	521	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
151/193	6.6	2.6			
Marital Status	Single	Married			
136/320/44	5.2	6.3			
Age	Under 40	40 to 64	65 or older		
105/240/155	8.6	3.8	7.1		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
127/369	6.3	6.5	357/108	4.2	11.1*
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
109/147/104/84	5.5	10.2	4.8	4.8	

If you answered yes to either of the above, did you do anything about it?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	18.3
88/108/78	15.9	19.4	19.2	274	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
87/77	12.6	13.0			
Marital Status	Single	Married			
67/181/15	14.9	20.4			
Age	Under 40	40 to 64	65 or older		
62/127/69	21.0	19.7	11.6		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
72/188	25.0	16.8	172/73	14.0	24.7
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
38/83/72/51	18.4	20.5	13.9	19.6	

Attitudes Regarding Illegal Dumping

Illegal dumping negatively affects the environment.

(average on a 4-point scale) 1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree					
County	Appanoose	Boone	Linn	Overall	3.90
172/197/161	3.83**	3.93 ¹	3.94 ¹	530	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/195	3.85	3.94*			
Marital Status	Single	Married			
137/324/47	3.91	3.92			
Age	Under 40	40 to 64	65 or older		
105/242/163	3.85 ²	3.96**	3.83 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/378	3.95*	3.88	364/111	3.90	3.89
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
113/149/106/84	3.89	3.86	3.94	3.87	

Illegal dumping has a negative economic effect on a community.

(average on a 4-point scale) 1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree					
County	Appanoose	Boone	Linn	Overall	3.81
173/195/161	3.75	3.85	3.81	529	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/195	3.73	3.89*			
Marital Status	Single	Married			
136/323/48	3.85 ³	3.81 ³			
Age	Under 40	40 to 64	65 or older		
105/240/164	3.72 ²	3.86**	3.76 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
127/378	3.80	3.81	364/110	3.80	3.82
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/148/106/83	3.82	3.75	3.79	3.82	

Illegal dumping has a negative effect on public health and safety.

(average on a 4-point scale) 1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree					
County	Appanoose	Boone	Linn	Overall	3.83
173/197/161	3.77	3.86	3.86	531	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/196	3.72	3.91*			
Marital Status	Single	Married			
137/324/48	3.86 ³	3.83 ³			
Age	Under 40	40 to 64	65 or older		
105/242/164	3.79	3.89 ³	3.75 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/379	3.85	3.82	365/111	3.83	3.81
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/149/106/84	3.87	3.75	3.83	3.83	

Illegal dumping negatively affects the appearance of a community.

(average on a 4-point scale) 1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree					
County	Appanoose	Boone	Linn	Overall	3.94
172/198/161	3.89	3.95	3.97	531	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/196	3.90	3.96			
Marital Status	Single	Married			
137/323/48	3.96 ³	3.96 ³	3.73 ^{**}		
Age	Under 40	40 to 64	65 or older		
105/241/164	3.91	3.97 ³	3.90 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/378	3.99*	3.92	364/111	3.94	3.90
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/148/106/84	3.93	3.90	3.96	3.95	

Illegal dumping is a problem in our community.

(average on a 4-point scale) 1=disagree, 2=somewhat disagree, 3=somewhat agree, 4=agree					
County	Appanoose	Boone	Linn	Overall	3.14
165/189/155	3.22	3.11	3.10	509	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
152/185	3.14	3.08			
Marital Status	Single	Married			
131/311/47	3.21	3.13	3.00		
Age	Under 40	40 to 64	65 or older		
100/233/156	2.92 ²	3.24 ¹	3.10		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
122/364	3.16	3.13	349/108	3.09	3.24
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
108/144/101/82	3.19	3.10	3.15	3.22	

Potential Impact

Telling people that not dumping is the “right thing to do.”

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	2.38
172/196/160	2.40	2.41	2.33	528	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/196	2.29	2.41			
Marital Status	Single	Married			
136/322/48	2.46	2.32 ³			
Age	Under 40	40 to 64	65 or older		
105/242/162	2.11**	2.34**	2.59**		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/377	2.26	2.42*	363/109	2.36	2.45
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
113/147/105/83	2.60**	2.33 ¹	2.33 ¹	2.14 ¹	

Presenting a message emphasizing community pride.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	2.70
173/198/160	2.64	2.73	2.72	531	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	2.53	2.76*			
Marital Status	Single	Married			
137/324/48	2.80	2.64			
Age	Under 40	40 to 64	65 or older		
105/243/163	2.55 ³	2.63 ³	2.84**		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
127/379	2.66	2.70	364/111	2.69	2.59
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/147/106/84	2.86 ^{3,4}	2.65	2.61 ¹	2.52 ¹	

Reminding people there is a fine for dumping.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.12
173/198/159	2.99 ²	3.20 ¹	3.14	530	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/197	2.92	3.21*			
Marital Status	Single	Married			
137/323/48	3.18	3.08			
Age	Under 40	40 to 64	65 or older		
105/242/163	3.10	3.10	3.15		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/379	3.01	3.15	363/111	3.14	3.00
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/147/106/83	3.27 ⁴	3.12	3.09	2.96 ¹	

Reminding people of the costs to clean up illegally dumped items.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	2.79
173/198/159	2.68 ²	2.87 ¹	2.81	530	
Gender	Male	Female		* - significantly different 1 - significantly different than first	
156/197	2.62	2.92*			
Marital Status	Single	Married	Other	2 - significantly different than second 3 - significantly different than third	
137/323/48	2.94 ²	2.73 ¹	2.79		
Age	Under 40	40 to 64	65 or older	4 - significantly different than fourth ** - significantly different than all	
105/242/163	2.80	2.78	2.78		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/379	2.69	2.80	363/111	2.80	2.63
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
114/147/106/83	2.98 ⁴	2.82	2.75	2.63 ¹	

Establishing a toll-free hotline for reporting illegal dumpers.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.26
172/197/159	3.13 ²	3.34 ¹	3.31	528	
Gender	Male	Female		* - significantly different 1 - significantly different than first	
155/196	3.15	3.35*			
Marital Status	Single	Married	Other	2 - significantly different than second 3 - significantly different than third	
136/322/48	3.31	3.26	3.29		
Age	Under 40	40 to 64	65 or older	4 - significantly different than fourth ** - significantly different than all	
105/242/161	3.08 ²	3.37**	3.20 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/377	3.17	3.29	361/111	3.28	3.20
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
113/147/105/83	3.35	3.27	3.31	3.12	

Increasing enforcement of illegal dumping laws.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.53
172/197/159	3.45	3.56	3.57	528	
Gender	Male	Female		* - significantly different 1 - significantly different than first	
156/195	3.44	3.59*			
Marital Status	Single	Married	Other	2 - significantly different than second 3 - significantly different than third	
136/323/48	3.59	3.54	3.42		
Age	Under 40	40 to 64	65 or older	4 - significantly different than fourth ** - significantly different than all	
104/242/162	3.48	3.59	3.48		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
125/378	3.46	3.57	361/11	3.53	3.48
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
112/147/106/83	3.62	3.59	3.53	3.51	

Increasing fines and penalties for illegal dumping.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.51
172/196/160	3.46	3.57	3.50	528	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
159/197	3.40	3.60*			
Marital Status	Single	Married			
136/324/48	3.47	3.55			
Age	Under 40	40 to 64	65 or older		
104/242/163	3.49	3.57	3.45		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/378	3.47	3.52	362/111	3.50	3.48
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
112/147/106/84	3.54	3.53	3.57	3.57	

Publicizing convictions for illegal dumping.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.52
171/194/157	3.51	3.55	3.50	522	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/193	3.42	3.58			
Marital Status	Single	Married			
135/320/47	3.43	3.57			
Age	Under 40	40 to 64	65 or older		
103/241/159	3.46	3.56	3.50		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
124/374	3.48	3.53	356/11	3.51	3.48
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
110/147/105/83	3.58	3.54	3.62	3.58	

Providing rewards for turning in illegal dumpers.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.20
169/192/160	3.13	3.24	3.21	521	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
154/192	3.12	3.20			
Marital Status	Single	Married			
134/322/46	3.25	3.19			
Age	Under 40	40 to 64	65 or older		
103/242/158	3.17	3.27 ²	3.06 ³		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
126/372	3.29	3.15	356/111	3.14	3.29
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
112/145/106/84	3.25	3.18	3.23	3.30	

Providing education on proper disposal and recycling.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	3.13
172/196/158	3.01**	3.18 ¹	3.19 ¹	526	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
155/195	2.95	3.24*			
Marital Status	Single	Married			
135/321/48	3.23	3.10			
Age	Under 40	40 to 64	65 or older		
105/241/160	3.07	3.11	3.17		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
127/374	3.09	3.14	360/110	3.16	3.04
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
110/147/105/84	3.31 ⁴	3.11	3.17	2.98 ¹	

Providing education on the effects of illegal dumping.

(average on a 4-point scale) 1=none, 2=slight, 3=moderate, 4=major					
County	Appanoose	Boone	Linn	Overall	2.95
171/194/158	2.85	3.03	2.96	523	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
155/196	2.73	3.09*			
Marital Status	Single	Married			
136/319/48	3.01	2.91			
Age	Under 40	40 to 64	65 or older		
104/241/160	2.76 ³	2.92	3.06 ¹		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
125/375	2.80	2.99*	358/111	2.96	2.90
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
113/146/106/81	3.15 ^{2,4}	2.92 ¹	2.96	2.79 ¹	

Behavior / Action

Are you likely to report an illegal dumping site if you find one?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	77.2
169/192/159	77.5	75.0	79.3	520	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/193	76.1	81.9			
Marital Status	Single	Married			
134/322/47	77.6	76.4			
Age	Under 40	40 to 64	65 or older		
104/240/160	70.2	79.6	78.8		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
125/374	77.6	77.5	359/109	76.3	78.9
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
110/146/106/84	80.9	79.5	69.8	78.6	

Are you likely to report a person you believe is dumping material illegally?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	79.3
169/189/160	79.9	77.3	81.2	518	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/193	83.2	80.8			
Marital Status	Single	Married			
136/321/44	78.7	79.1			
Age	Under 40	40 to 64	65 or older		
104/239/159	72.1 ²	82.4 ¹	79.3		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
124/373	81.5	78.8	358/108	77.9	85.2
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
110/146/106/83	82.7	77.4	77.4	81.9	

Would/do you support efforts to reduce illegal dumping in and around your community?

(percent 'Yes')					
County	Appanoose	Boone	Linn	Overall	97.3
164/192/159	95.7	99.0	96.9	515	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
152/194	97.4	98.5			
Marital Status	Single	Married			
134/319/47	95.5	98.1			
Age	Under 40	40 to 64	65 or older		
100/240/159	95.0	98.3	96.9		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
121/375	99.2*	96.5	357/108	97.5	97.2
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
107/147/105/84	96.2	96.6	99.1	96.4	

Information Sources – Within the past year, have seen or heard:

The slogan: “Take a Stand for Your Land”

(percent ‘Yes’)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	9.9
172/195/160	11.1	11.8	6.3	527	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 – significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/196	5.8	10.2			
Marital Status	<i>Single</i>	<i>Married</i>			
137/325/46	9.5	9.5			
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
105/243/162	11.4	8.2	9.9		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	Inside City Limits	Outside City Limits
128/378	10.2	9.0	363/112	9.1	10.7
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
113/149/106/84	11.5	10.7	6.6	8.3	

A telephone number for reporting illegal dumping in your area.

(percent ‘Yes’)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	9.5
172/196/160	12.2 ³	11.7 ³	3.8 ^{**}	528	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 – significantly different than third 4 - significantly different than fourth ** - significantly different than all	
155/197	9.0	9.1			
Marital Status	<i>Single</i>	<i>Married</i>			
136/325/47	8.8	9.2			
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
104/243/163	11.5	8.2	8.6		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	Inside City Limits	Outside City Limits
127/379	11.0	8.4	363/112	8.5	10.7
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
113/149/106/84	10.6	9.4	3.8	11.9	

Any other information about illegal dumping

(percent ‘Yes’)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	25.4
171/197/159	26.3	30.5 ³	18.2 ²	527	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 – significantly different than third 4 - significantly different than fourth ** - significantly different than all	
154/197	19.5	26.9			
Marital Status	<i>Single</i>	<i>Married</i>			
135/325/48	27.4	23.7			
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
105/242/163	25.7	22.7	27.6		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	Inside City Limits	Outside City Limits
128/378	26.6	25.1	363/112	24.1	25.3
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
113/149/106/84	33.6 ^{3,4}	26.9	21.7 ¹	17.9 ¹	

If you answered **Yes** to any of the above, what was the source? (*check all that apply*)

Newspaper

(percent checking response)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	17.4
173/199/163	19.1 ³	22.6 ³	9.2 ^{**}	535	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	16.7	16.7			
Marital Status	<i>Single</i>	<i>Married</i>			
137/326/48	15.3	17.8	20.8		
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
105/243/165	14.3	16.1	21.2		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	<i>Inside City Limits</i>	<i>Outside City Limits</i>
128/381	14.8	18.1	366/112	18.3	17.0
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
115/149/106/84	23.5 ⁴	18.1	14.2	10.7 ¹	

Television

(percent checking response)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	10.1
173/199/163	9.8	13.1 ³	6.8 ²	535	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	9.0	13.1			
Marital Status	<i>Single</i>	<i>Married</i>			
137/326/48	11.0	9.5	12.5		
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
105/243/165	8.6	9.1	12.1		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	<i>Inside City Limits</i>	<i>Outside City Limits</i>
128/381	8.6	11.0	366/112	12.3*	4.5
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
115/149/106/84	15.7 ^{3,4}	10.7 ⁴	7.6 ¹	2.4 ^{1,2}	

Bumper Sticker

(percent checking response)					
County	<i>Appanoose</i>	<i>Boone</i>	<i>Linn</i>	Overall	2.2
173/199/163	1.7	2.5	2.5	535	
Gender	<i>Male</i>	<i>Female</i>		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	2.6	0.5			
Marital Status	<i>Single</i>	<i>Married</i>			
137/326/48	2.2	2.5	2.1		
Age	<i>Under 40</i>	<i>40 to 64</i>	<i>65 or older</i>		
105/243/165	4.8 ²	1.2 ¹	2.4		
School-Aged Kids	<i>Yes</i>	<i>No</i>	Residency	<i>Inside City Limits</i>	<i>Outside City Limits</i>
128/381	3.9	1.8	366/112	2.5	0.9
Income Level	<i>Under \$25,000</i>	<i>\$25,000-\$49,999</i>	<i>\$50,000-\$74,999</i>	<i>\$75,000 +</i>	
115/149/106/84	2.6	2.0	1.9	3.6	

Poster

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	4.7
173/199/163	5.2	5.5	3.1	535	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
156/198	5.8	2.5			
Marital Status	Single	Married			
137/326/48	4.4	4.9	6.3		
Age	Under 40	40 to 64	65 or older		
105/243/165	3.8	3.7	5.5		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	5.5	4.7	366/112	5.2	3.6
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	7.0	4.7	5.7	2.4	

Radio

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	6.5
173/199/163	7.5	7.5	4.3	535	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
156/198	5.1	6.6			
Marital Status	Single	Married			
137/326/48	5.1	6.4	8.3		
Age	Under 40	40 to 64	65 or older		
105/243/165	5.7	4.1 ³	10.3 ²		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	7.0	6.6	366/112	6.6	4.5
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	7.0	6.0	4.7	3.6	

Billboard

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	3.2
173/199/163	1.7	4.5	3.1	535	
Gender	Male	Female	* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all		
156/198	4.5	3.5			
Marital Status	Single	Married			
137/326/48	4.4	3.1	2.1		
Age	Under 40	40 to 64	65 or older		
105/243/165	6.7 ²	2.1 ¹	3.0		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	3.9	3.2	366/112	4.4*	0.9
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	4.4	2.7	2.8	2.4	

Windshield Decal

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	0.2
173/199/163	0.6	0.0	0.0	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	0.6	0.0			
Marital Status	Single	Married			
137/326/48	0.7	0.0	0.0		
Age	Under 40	40 to 64	65 or older		
105/243/165	0.0	0.0	0.6		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	0.3	0.0	366/112	0.3	0.0
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	0.9	0.0	0.0	0.0	

Litter Bag

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	3.6
173/199/163	4.1	5.0	1.2	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	4.5	3.0			
Marital Status	Single	Married			
137/326/48	5.1	3.1	4.2		
Age	Under 40	40 to 64	65 or older		
105/243/165	2.9	3.7	4.2		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	2.3	4.2	366/112	4.1	1.8
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	6.1 ⁴	4.7	1.9	0.0 ¹	

Brochure / Flyer

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	4.1
173/199/163	5.8	4.5	1.8	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	3.9	5.6			
Marital Status	Single	Married			
137/326/48	5.8	3.7	4.2		
Age	Under 40	40 to 64	65 or older		
105/243/165	4.8	3.7	4.9		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	4.7	3.7	366/112	4.4	3.6
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	7.8	5.4	2.8	2.4	

Business Card

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	0.0
173/199/163	0.0	0.0	0.0	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	0.0	0.0			
Marital Status	Single	Married			
137/326/48	0.0	0.0	0.0		
Age	Under 40	40 to 64	65 or older		
105/243/165	0.0	0.0	0.0		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	0.0	0.0	366/112	0.0	0.0
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	0.0	0.0	0.0	0.0	

Portable Display

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	0.7
173/199/163	1.7	0.5	0.0	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	0.6	0.0			
Marital Status	Single	Married			
137/326/48	1.5	0.6	0.0		
Age	Under 40	40 to 64	65 or older		
105/243/165	1.0	0.4	1.2		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	0.8	0.5	366/112	0.8	0.0
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	0.9	0.7	0.9	1.2	

Insert in Paper

(percent checking response)					
County	Appanoose	Boone	Linn	Overall	4.9
173/199/163	3.5	7.0	3.7	535	
Gender	Male	Female		* - significantly different 1 - significantly different than first 2 - significantly different than second 3 - significantly different than third 4 - significantly different than fourth ** - significantly different than all	
156/198	5.1	5.1			
Marital Status	Single	Married			
137/326/48	3.753.2	4.6	10.4		
Age	Under 40	40 to 64	65 or older		
105/243/165	2.9	4.1	6.1		
School-Aged Kids	Yes	No	Residency	Inside City Limits	Outside City Limits
128/381	4.7	5.0	366/112	4.9	2.7
Income Level	Under \$25,000	\$25,000-\$49,999	\$50,000-\$74,999	\$75,000 +	
115/149/106/84	8.7	3.4	4.7	2.4	

APPENDIX C - Written Comments

This portion of the report presents the actual comments made by respondents in the survey. All attempts were made to maintain the actual comments, though minor grammatical changes may have been made to assist in reading the comments. Comments are arranged by the sections of the survey. The lagging code represents the county the comment came from (A-Appanoose, B-Boone, L-Linn) and has a unique tracking number assigned to each survey that can be used to monitor multiple comments from a single respondent.

APPANOOSE

Potential Impact

Publish names of illegal dumpers.
People who do it should have to clean it up.
Restart clean-up days with free pick up.
Curb side pickup.
Effects on animals and their habitat.
Stress recycling.
Have someone to pickup your old appliances.
Make it simpler to get rid of tires, oil, batteries and so on.
Making safe dumping or pickup more available i.e.- spring cleanups.
I will dump where I want! Q44: My dumping found and police did nothing, Ha Ha.
Automatic 30 days in jail!
People ignore this.
Dumping causes misquotes and other health hazards.
Make recycling of furniture, etc. more easy to be picked up at curb and mandatory recycling at the club.
The charges of service is too high for senior people on limited income.
Dumping is a symptom of an underlying malady. Hide the symptom and the malady may become fatal.
There is a large # of people in our community young and elderly that cannot afford the landfill fee for tires, appliances, etc. I feel the city and county could have a clean-up day 2 times a year to help in this. Cost would be lower than the cost of road crews going out to clean up. Some don't have a way to haul. Also look at dumping of unwanted pets.
People who litter aren't people who catch on regardless of what you do! Sad, isn't it? How about the tire mess immediately south of McCarthy tire store?
Keeping a local landfill at a reasonable cost.
Landfills stay open longer hours, more than 1 landfill in county, lower charges for use of landfill, I have filled out these forms before and you are not interested in addressing the real problems of illegal dumping. Most people can't afford the rated charges to dump legally and aren't going to take the stuff all the way cross country. Landfill OPS are on bankers hours.

Behavior / Action

"Maybe".
Because it might be a private land owner on his own property.

Information Sources

At the DNR exhibit at Iowa State Fair.
People on committee.
Law enforcement.
Personal experience.
Pancake Day Parade 2004.
Float in parade.
I work at the Appanoose County Recycling Center.

Background Information

Widow.
Widower.

Other

Didn't know there were fines, don't know what to do if they see illegal dumping.

BOONE

Knowledge / Awareness

Couldn't prove that someone dumped it there.

Attitudes Regarding Illegal Dumping

These are stupid questions, only an idiot would mark disagree.
I don't know.

Potential Impact

"Amnesty days at the landfill".
Need proper disposal information.
Provide free dumping of specific items like other cities.
Impound their vehicle 30 days 1st offense 90 days second offense, take title 3rd offense.
Make it more convenient to dispose of items commonly found illegally dumped.
Additional signage informing people about illegal dumping.
Free paint drop off and \$20 trash collection fee.
Education on reporting illegal dumping.
Put in jail for at least 9 years and make them clean up the mess.
Providing low/no cost sites for dumping.
Provide education on WHERE to properly dispose and recycle.
Make it easier and cheaper to dispose of major appliances and junk cars/tires.
We need more emphasis on cleaning up property. Two non-drivable cars have been in our square block for some time.
Just be a good citizen.
Advertise sites for disposal.
Expand landfill hours, maybe free 'dumping' days at landfill.
Lower cost of dumping appliances, 1 or 2 total free dump days.
Front page newspaper- who, what where and punishment; In this day and time I feel many people don't care about anything except money.
Make it cheaper to put in the dump, \$30 is too much money to have to pay per appliance; Q44: your survey last year.
Show people where they can dump and have a free day. Some of the people who are illegally dumping probably can't afford to it right.
Providing a free waste day once a year for Boone residents.
Lower rates at landfill.
Link the issue with the broader "Save the Planet Movement".
Provide low cost price to dispose of tires and appliances (example the landfill cost \$12 to get rid of an appliance from store the it don't cost \$12 to get rid of. I am a plumbing contractor and I can remanufacture water heaters and dispose of them for \$3.
Advertise where to properly dump nuisance items- tires, paint, oil, etc.
Mandate I.D. tags on all furniture and appliances.

Behavior / Action

Who to report to?
If I knew my name would remain anonymous.
If I think it will have some effect such as getting cleaned up.
Yard waste in the road ditches is usually what I see.

Information Sources

"Magazine".
DNR news release.
Courthouse posting (same as poster?).
Don't remember.
Word of mouth.
State Fair.
Other information source was roadside signs with fines posted on them.

Background Information

Widowed.

Other

Focus efforts on facilitating convenient proper management - make the landfill more user friendly.
Property on sides and alleys need to be cleaned.

LINN

Potential Impact

"Use Common Sense".
"Community Clean-up Events".
No fees to dispose of such items as tires.
Yard sign.
I feel that persons who would do this type of thing will just turn sneakier as the pressure mounts to comply with expectations to legally dispose of materials. What is wrong with some people? I totally applaud all efforts to Keep Iowa Beautiful!
Thanks and good luck.
Most people who act illegally don't care until they are caught and punished. Make 24r hotline work; it doesn't.
People who illegally dump don't care.
Illegal dumping fines and penalties should include roadside cleaning.
Make them come and clean it up.
Someone who will follow up on a reported dumping site and not just pass it off. How about the open burning within city limits? Reported- told 'we can't do anything about it'.
A county wide .01 cent tax to cover cost of disposal. The cost for dumping is the primary reason for illegal dumping. Q44:
Not sure where.
There needs to be signs and a huge awareness along the interstate and other roads. Cedar Rapids looks awful. We can prevent this, we just have to go full force.
Educate people, what substances are illegal to dump and where to properly turn in "junk" materials.
Providing more dates to pick up appliances and other large items.
If it was free or more convenient to get rid of certain items, it would reduce the number of illegal dumpers.
Lower the cost to get rid of unneeded items.
Get after some of these people who have junk & garbage on their properties. They are very bad eye sores to our state.
City pick-up is the best way to discourage illegal dumping.

Behavior / Action

I don't know who to call.

You should check east of 94, the Ellis river road, also lone tree road west of 94 and Linn-Benton road.

I don't know how to.

Information Sources

Cannot recall, but think several of the above.

Discussing with people.

Signs at "popular" sites.

Other

Reduce landfill fees and illegal dumping will decrease. Left no room for comments on what the real problem is.

Sometime ago we turned in a person who had been dumping illegally near our farm- a name was on the paper in the site. The

Officer who came out said he doesn't do anything about it because nothing is ever followed through.

This is the first time that I've been made aware of the issue, would like to see more information out there.