



2016 Idling Awareness Survey

Final Report

July 19, 2016



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SUMMARY OF FINDINGS

In 2016, Lacombe County contracted Banister Research & Consulting Inc. (Banister Research) to conduct a survey amongst their employees regarding vehicle idling. The survey was a follow-up to the research conducted with employees in 2015.

A web and hard copy survey was conducted with employees of Lacombe County. A total of 71 surveys were completed out of a possible 100; results provide a margin of error no greater than $\pm 6.3\%$ at the 95% confidence level, or 19 times out of 20.¹

Attitudes About Idling

- To begin the survey, respondents were asked to rate their level of concern with vehicle idling as an environmental issue using a scale of 1 to 5, where 1 meant “not at all concerned” and 5 meant “very concerned.” Over half of the respondents (51%) were concerned, providing ratings of 4 (39%) or 5 (11%) out of 5. This is an increase from 36% of pre-campaign respondents who were concerned, providing ratings of 4 (24%) or 5 (12%) out of 5.
- Using the same scale, respondents were then asked to rate how concerned they were with the effects of idling on the environment, their health and well-being, and the wasting of resources. Over half of the respondents (62%) were concerned (ratings of 4 or 5 out of 5) with the waste of resources (comparable to 57% of pre-campaign respondents), followed by 59% who were concerned with the environment (an increase from 46% of pre-campaign respondents) and 52%, who were concerned with their health and well-being (an increase from 46% of pre-campaign respondents).
- Respondents were then asked to state any major concerns they have with regards to vehicle idling. The most common response was polluting the environment (44%) followed by waste of County resources (24%), health concerns (17%), and a waste of fuel (11%). Forty-two percent (42%) of the respondents were unsure.

Idling Behaviour

- When asked if they operate a County vehicle, nearly half of the respondents (45%) indicated that they operate a County vehicle for Lacombe County business, comparable to 51% of pre-campaign respondents. Forty-five percent (45%) of respondents also indicated they operate other fleet machinery, comparable to 43% of pre-campaign respondents. When asked if they operate their own vehicle for County business, 38% of respondents said yes, comparable to 45% of pre-campaign respondents.

¹ Based on a total population of 100 employees.

- Those who use their own vehicle for County business (n=27), those who use a County vehicle (n=32) and those who use other fleet machinery (n=32) were asked how many trips they make each week using each type of vehicle while on County business. Over half of those who use a County vehicle (53%) made 20 trips or more in a week. Nearly half of those who used their own vehicle (48%) made 3 trips per week or less and 25% of those who used other fleet machinery made 1 to 3 trips in a week.
- Those who use their own vehicle for County business (n=27), those who use a County vehicle (n=32) and those who use other fleet machinery (n=32) were then asked how often they idle these vehicles. Nearly two-thirds (63%) of those who use their own vehicle for County business, 47% of those who use a County vehicle, and 31% of those who use other fleet machinery only idle their vehicles in the winter months.
 - Those who idle their own vehicle for County business (n=27), those who idle a County vehicle (n=32) and those who idle other fleet machinery (n=32) were asked how long they leave these vehicles idling for, on average. Twenty-two percent (22%) of those who use their own vehicle idle for 1 to 2 minutes, while 34% of those who use a County vehicle and 28% of those who use other fleet machinery idle for 3 to 5 minutes.
- Respondents were asked what they believe are the major reasons people idle. The vast majority of the respondents (68%) stated that the major reason people idle is to warm up their vehicle, followed by 13% who stated convenience, in general.
- Respondents were asked to identify any barriers for people, in terms of reducing idling behavior. The most common response was the weather (24%), followed by ambivalence (17%), and lack of education (17%).
- When asked to identify any “hotspots”, or areas where idling occurs more often for employees while on County business, the most frequent response was on job sites or work locations, in general (24%).
- When asked if there were any areas in Lacombe County where idling is a major concern, or areas where people should not be idling, 25% of respondents identified a specific area. Air intake vents near buildings (10%) was the most common response.

Knowledge About Idling

- Respondents were given a list of statements and were asked to indicate whether they believed each statement was true or false. The vast majority (85% or higher) labeled the following as true:
 - Idling waste fuel and money (96% rated this statement as true, comparable to 93% in the pre-campaign); and
 - In the winter, the best way to warm up a vehicle is to drive it (90%, a significant increase from 57% in the pre-campaign);
 - Using a block heater helps an engine warm up quickly, which means less fuel consumption (89%, comparable to 90% in the pre-campaign); and
 - Idling negatively impacts the environment (89%, comparable to 90% in the pre-campaign).

- Less than one-quarter of respondents labeled the following statements as true:
 - Idling warms up the entire vehicle (11%, a significant decrease from 27% in the pre-campaign); and
 - Idling is only a problem in the winter (6%, a significant decrease from 19% in the pre-campaign).
- Respondents were then asked, to the best of their knowledge, to state known effects of reducing idling behavior. Nearly half of the respondents (45%) stated improved air quality as a known effect of reducing idling behavior, followed by 34% who stated reduced idling saves money and less fuel consumption.

Idle Reduction Program

- Using a scale of 1 to 5, where 1 meant “not at all useful” and 5 meant “very useful,” respondents were given a list of communication methods and asked to rate their usefulness for educating them on the Idle Reduction Program. Posters on bathroom stalls was the most useful method, with 47% of respondents rating it a 4 (25%) or a 5 (21%) out of 5, followed by interactive days such as emissions training and social pledge days with 45% of the respondents rating it a 4 (21%) or 5 (24%) out of 5.
- Using a scale of 1 to 5, where 1 meant “not at all informative” and 5 meant “very informative,” respondents were given the same list of communication methods and asked how informative each method was in educating them on the Idle Reduction Program. Insider articles was the most informative method, with 49% of respondents rating it a 4 (34%) or a 5 (16%) out of 5, followed by interactive days such as emissions training and social pledge days with 48% of the respondents rating it a 4 (21%) or 5 (27%) out of 5.
- When asked what the most effective method of communication was in educating them on the Idle Reduction Program, nearly one-third of respondents said interactive days such as emissions training and social pledge days (32%) or posters on bathroom stalls (31%).
- Lacombe County implemented the following engineering related changes with regards to the Idle Reduction Program:
 1. An auxiliary battery in one of the enforcement vehicles;
 2. Changes to major equipment maintenance such as blade changes on graders; and
 3. Trialing of interior heating systems in company vehicles.
 - Given this information, respondents were asked whether they were aware of each engineering related change. Thirty-five percent (35%) of respondents were aware of the auxiliary battery in one of the enforcement vehicles, followed by 34% of respondents who were aware of the changes made to major equipment maintenance such as blade changes on graders. Twenty-eight percent (28%) of respondents were aware of trialing of interior heating systems in company vehicles.

- Those who were aware of each initiative were asked how effective each change was using a scale of 1 to 5 where 1 meant “not at all effective” and 5 meant “very effective.” Thirty-five percent of respondents (35%) who were aware of the trialing of interior heating systems in company vehicles (n=20) indicated that this change was effective (ratings of 4 or 5 out of 5) followed by 33% of those who were aware of the changes made to major equipment maintenance such as blade changes on graders (n=24) rated this as effective (ratings of 4 or 5 out of 5).
- Respondents were asked how successful the program was in terms of reducing idling behavior both among employees and themselves personally using a 1 to 5 scale where 1 meant “not at all successful” and 5 meant “very successful.” Nearly two-thirds of respondents (61%) indicated that the program was successful (ratings of 4 or 5 out of 5) in terms of reducing their own idling behavior, while under half of respondents (42%) indicated that the program was successful (ratings of 4 or 5 out of 5) in terms of reducing idling behavior amongst employees, in general.
 - Those who believed the program was not successful in terms of reducing idling behavior amongst **employees** (n=37; ratings of 1, 2, or 3 out of 5) most commonly indicated that people are ignorant towards idling reduction (16%) or that it is difficult to break old habits (14%).
 - When those who believed the program was successful in terms of reducing idling behavior amongst **employees** (n=30; ratings of 4 or 5 out of 5) were asked why they felt this way, two-thirds of respondents indicated that idling awareness and education has increased (67%).
 - Those who believed the program was not successful in terms of reducing idling behavior amongst **themselves personally** (n=26; ratings of 1, 2, or 3 out of 5) most commonly indicated that they do not idle (n=8).
- To help employees develop long lasting habits to reduce idling behavior, other options for reducing idling behavior in the County could include the following types of enforcement:
 1. Signage (signage would be placed strategically around the parking lot and in idling “hotspots” as a reminder to limit idling);
 2. Policy (this policy would state generalizations of proper behavior regarding idling); and
 3. Negative reinforcement (for example, mock fines on your vehicle or pictures of offenders in the Insider).
- Respondents were asked how strongly they would support each type of measure, using a 1 to 5 scale where 1 meant “strongly oppose” and 5 meant “strongly support.” Nearly half of respondents (48%) supported signage (ratings of 4 or 5 out of 5) followed by 31% who supported policy and 13% who supported negative reinforcement.
- Respondents were asked if they believed that the Idle Reduction Program should continue. Over three-quarters of respondents (76%) indicated that the Idle Reduction Program should continue.
 - Those who believed that the Idle Reduction Program should continue (n=54) were then asked which area Lacombe County should focus its efforts on with regards to reducing idling behavior amongst employees. Over half of respondents (52%) said that the County should focus on education (for example, Insider articles, interactive days, posters, and leaflets).

1.0 STUDY BACKGROUND

In 2016, Lacombe County contracted Banister Research to conduct an Idling Awareness Survey with their employees in order to objectively measure public opinion on vehicle idling, and identify priorities amongst employees as part of the County's planning processes regarding idling programs.

Survey topics included:

- Employees' attitudes regarding vehicle idling;
- Employee idling behaviour;
- Employees' knowledge about idling;
- Communication and education regarding idling; and
- The Idle Reduction Program.

As part of this research, Banister Research completed the following:

- **Pre-Campaign Survey (n=83)** A pre-campaign survey was conducted in February, 2015 with employees of Lacombe County
- **Post-Campaign Survey (n=71)** In May, 2016, following the implementation of an anti-idling campaign, Banister Research conducted a survey with employees of Sylvan Lacombe over the age of 16 who drive a vehicle (car/van/SUV etc.) at least once in an average week.

This report outlines the results for the 2016 Lacombe County Idling Awareness Survey. Where applicable, comparisons have been made to the pre-campaign data collected in February, 2015.

2.0 METHODOLOGY

All components of the project were designed and executed in close consultation with Lacombe County (the Client). A detailed description of each task of the project is outlined in the remainder of this section.

2.1 Project Initiation and Questionnaire Design

At the outset of the project, all background information relevant to the study was identified and subsequently reviewed by Banister Research. The consulting team familiarized itself with the objectives of the Client, ensuring a full understanding of the issues and concerns to be addressed in the project. The result of this task was an agreement on the research methodology, a detailed work plan and project initiation.

The questionnaire for the 2016 Lacombe County Idling Awareness Survey was designed in consultation with the Client. The survey included both quantitative and qualitative questions, in order to elicit a more in-depth investigation of the issues and concerns pertinent to the evaluation assignment. The survey instrument implementing for the post-campaign research was similar to the pre-campaign survey instrument to maintain comparability to the pre-campaign results. Questions were added to the post-campaign survey to gather respondents' knowledge and awareness of the anti-idling campaign developed by the County. A copy of the final questionnaire is provided in Appendix A.

2.2 Survey Population and Data Collection

A web and hard copy survey was conducted with employees of Lacombe County. A total of 71 surveys were completed out of a possible 100:

- Online web-based survey – 51% (n=36); and
- Hard copy survey – 49% (n=35).

Results provide a margin of error no greater than $\pm 6.3\%$ at the 95% confidence level, or 19 times out of 20.²

2.2.1 Web Surveys

Web-based surveys were conducted from May 18th to June 3rd, 2016. Respondents were invited by the Client via e-mail to complete the web-based survey; a link for the survey was embedded in the e-mail invitation. The survey was hosted on the Banister Research's web server to ensure anonymity and the confidentiality of responses.

A total of 36 Lacombe County employees completed this version of the survey.

2.2.2 Hard Copy Services

On May 18th, 2016, Lacombe County sent out hard copies of the survey to employees; 35 surveys were completed. Completed surveys and sealed surveys were collected by the Client and returned to Banister Research on June 3rd, 2016. Banister Research's call centre entered the data from the surveys for data analysis and coding.

² Based on a total population of 100 employees.

2.3 Data Analysis and Project Documentation

While data was being collected, Banister Research provided either a written or verbal progress report to the Client. After the questionnaires were completed and verified, all survey data was compiled into a computerized database for analysis.

Data analysis included cross-tabulation, whereby the frequency and percentage distribution of the results for each question were broken down based on respondent characteristics and responses (e.g. demographics, etc.). Statistical analysis included a Z-test to determine if there were significant differences in responses between respondent subgroups. Results were reported as statistically significant at the 95% confidence level.

A list of responses to each open-ended question was generated by Banister Research. The lead consultant reviewed the list of different responses to the open-ended or verbatim question and then a code list was established. To ensure consistency of interpretation, the same team of coders was assigned to this project from start to finish. The coding supervisor verified at least 10% of each coder's work. Once the questionnaires were fully coded, computer programs were written to check the data for quality and consistency. All survey data was compiled into a computerized database for analysis. Utilizing SPSS analysis software, the survey data was reviewed to guarantee quality and consistency (e.g., proper range values and skip patterns).

The detailed data tables have been provided under a separate cover. It is important to note that any discrepancies between charts, graphs or tables are due to rounding of the numbers.

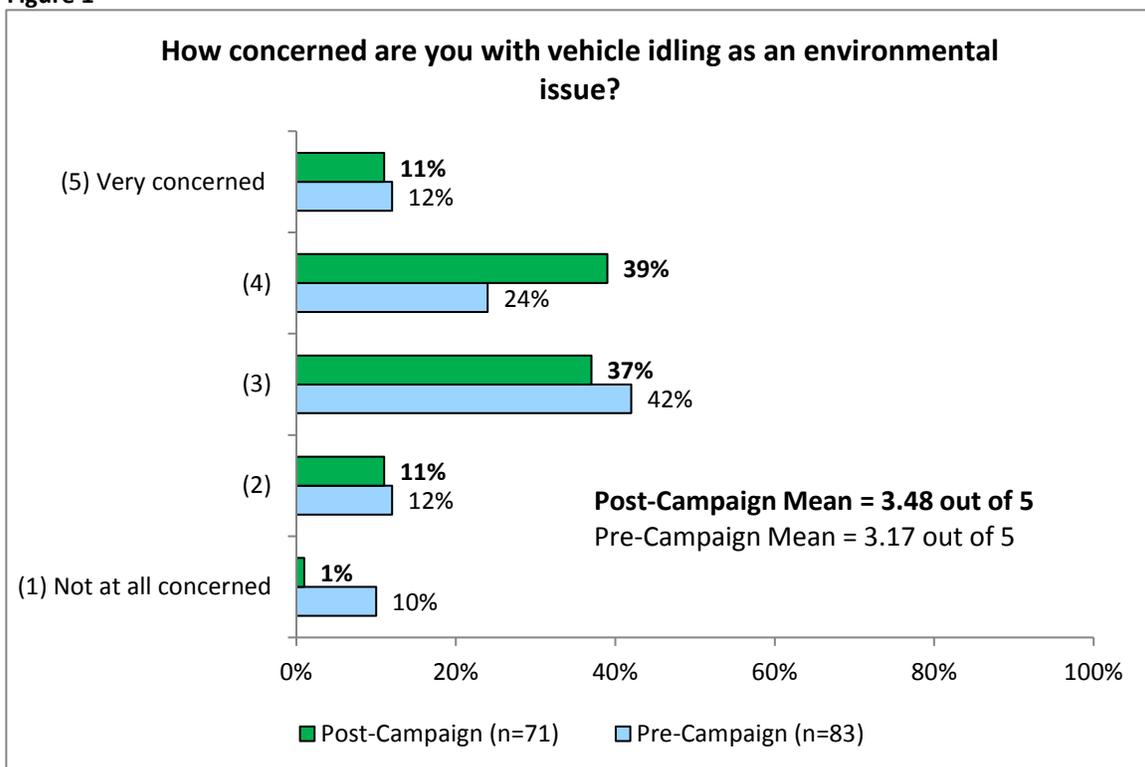
3.0 STUDY FINDINGS

Results of the survey are presented as they relate to the specific topic areas addressed by the survey. It is important to note when reading the report that the term *significant* refers to “statistical significance”. Only those respondent subgroups which reveal statistically significant differences at the 95% confidence level (19 times out of 20) have been reported on. Respondent subgroups that are statistically similar have been omitted from the presentation of findings.

3.1 Attitudes About Idling

To begin the survey, respondents were asked to rate their level of concern with vehicle idling as an environmental issue using a scale of 1 to 5, where 1 meant “not at all concerned” and 5 meant “very concerned.” Over half of the respondents (51%) were concerned, providing ratings of 4 (39%) or 5 (11%) out of 5. This is an increase from 36% of pre-campaign respondents who were concerned, providing ratings of 4 (24%) or 5 (12%) out of 5. See Figure 1, below.

Figure 1



Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (78%) were significantly more likely to be concerned (ratings of 4 or 5 out of 5) with vehicle idling as an issue versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (21%).

Using the same scale, respondents were then asked to rate how concerned they were with the effects of idling on the environment, their health and well-being, and the wasting of resources. Over half of the respondents (62%) were concerned (ratings of 4 or 5 out of 5) with the waste of resources (comparable to 57% of pre-campaign respondents), followed by 59% who were concerned with the environment (an increase from 46% of pre-campaign respondents) and 52%, who were concerned with their health and well-being (an increase from 46% of pre-campaign respondents). See Figure 2, below, and Table 1, on the following page.

Figure 2

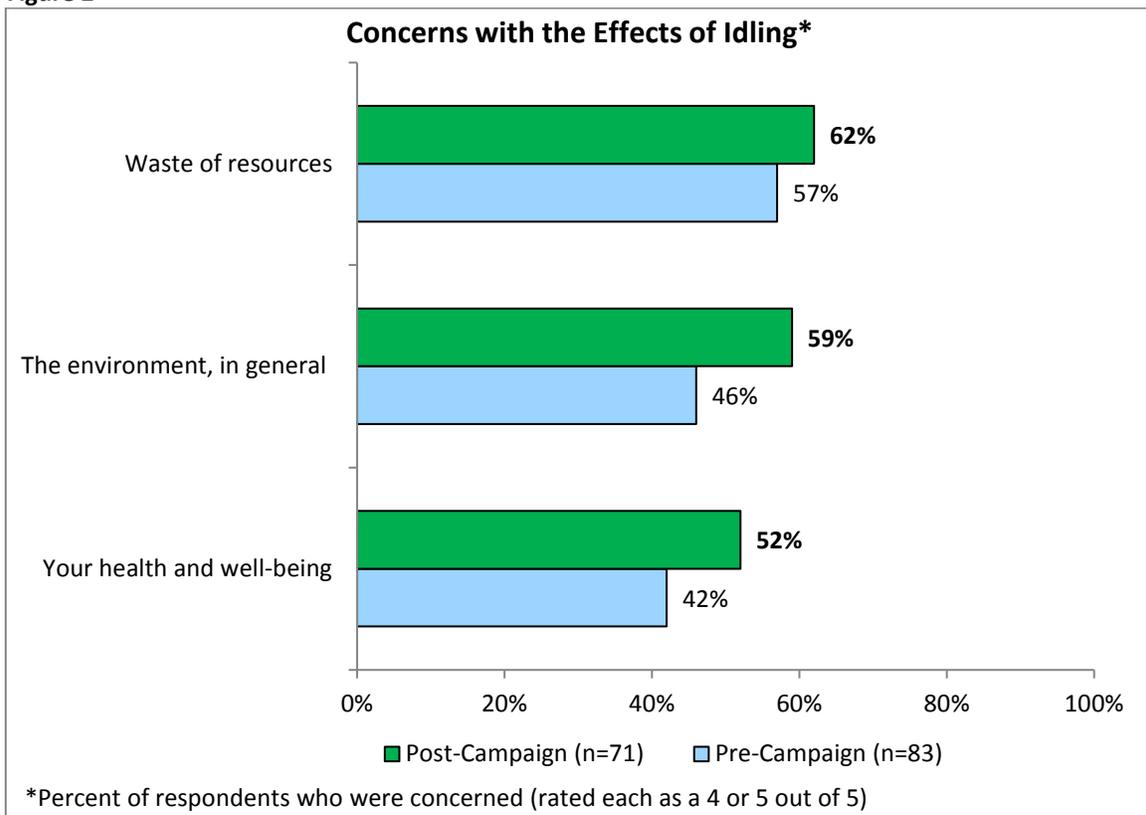


Table 1

How concerned are you with the effects of idling on each of the following...?														
	Percent of Respondents													
	Not at all Concerned (1)		(2)		(3)		(4)		Very Concerned (5)		Don't Know/Not Stated		Mean (out of 5)	
	Post (n=71)	Pre (n=83)	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre
Waste of resources	-	4	9	15	30	24	39	39	23	18	-	1	3.76	3.54
The environment, in general	1	2	13	18	27	34	47	33	13	13	-	-	3.56	3.36
Your health and well-being	1	8	11	17	35	30	37	29	16	13	-	-	3.54	3.22

Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (89%) were significantly more likely to be concerned (ratings of 4 or 5 out of 5) with the environment, in general versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (27%).

Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling as an environmental issue (81%) were significantly more likely to be concerned (ratings of 4 or 5 out of 5) with their health and well-being versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (23%).

Respondent subgroups significantly more likely to be concerned (ratings of 4 or 5 out of 5) with the waste of resources included:

- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling as an environmental issue (89%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (34%); and
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (95%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (27%).

Respondents were then asked to state any major concerns they have with regards to vehicle idling. The most common response was polluting the environment (44%) followed by a waste of County resources (24%), health concerns (17%), and a waste of fuel (11%). Forty-two percent (42%) of the respondents were unsure. See Table 2, below.

Table 2

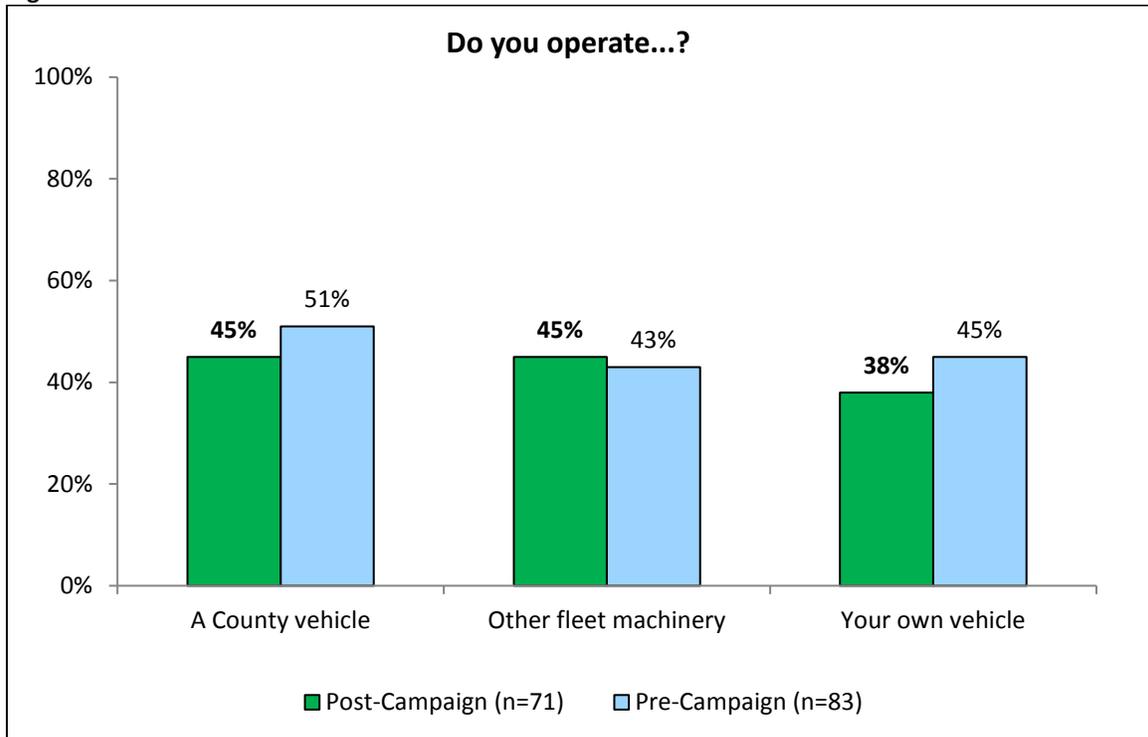
What do you think are the major reasons for concern, if any, with regards to idling?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Polluting the environment/poor air quality	44	45
Waste of County resources (in general)	24	16
Health concerns	17	16
Waste of fuel	11	15
Optimum vehicle maintenance	6	-
Waste of money	3	8
Refuse/Don't Know	42	28

*Multiple responses

3.2 Idling Behaviour

When asked if they operate a County vehicle, nearly half of the respondents (45%) indicated that they operate a County vehicle for Lacombe County business, comparable to 51% of pre-campaign respondents. Forty-five percent (45%) of respondents also indicated they operate other fleet machinery, comparable to 43% of pre-campaign respondents. When asked if they operate their own vehicle for County business, 38% of respondents said yes, comparable to 45% of pre-campaign respondents. See Figure 3, below.

Figure 3



Respondent subgroups significantly more likely to **use their own vehicle for County business** included:

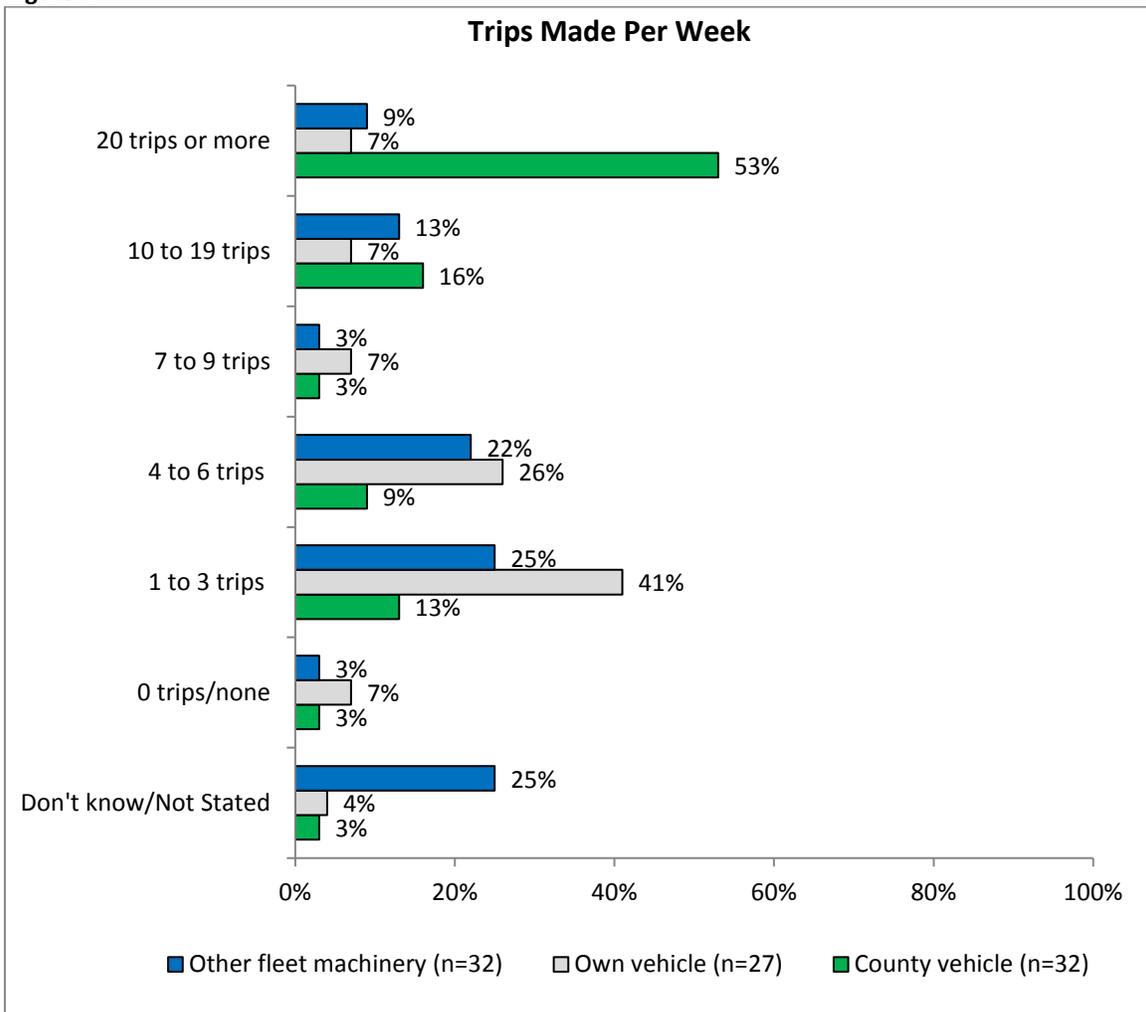
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling as an environmental issue (50%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (26%); and
- Those who do not use a County vehicle for County business (62%) versus those who do (9%).

Those who use other fleet machinery for County business (66%) were versus significantly more likely to **use a County vehicle for County business** versus those who do not (28%).

Those who use a County vehicle for County business (66%) were versus significantly more likely to **use other fleet machinery for County business** versus those who do not (28%).

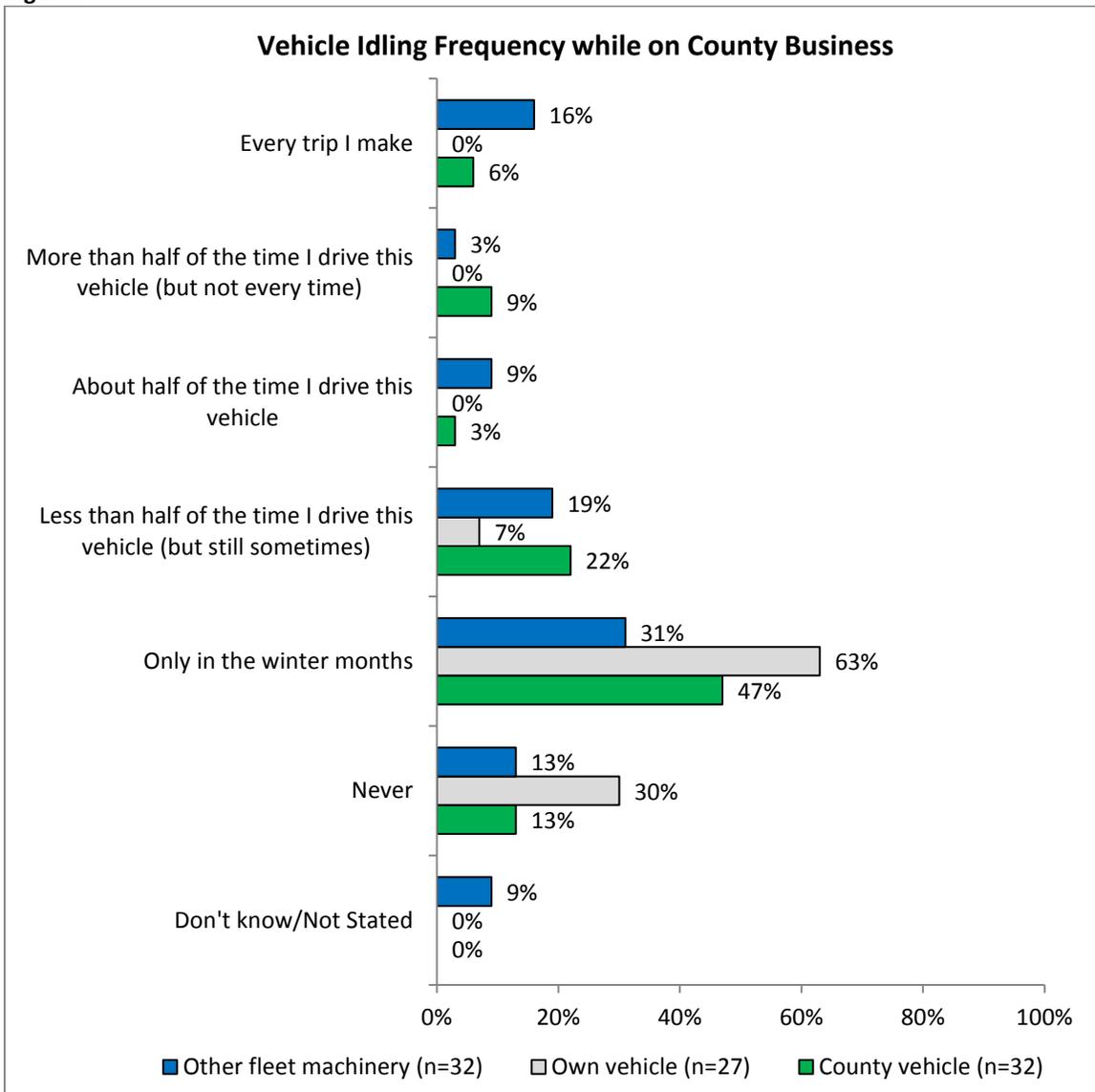
Those who use their own vehicle for County business (n=27), those who use a County vehicle (n=32) and those who use other fleet machinery (n=32) were asked how many trips they make each week using each type of vehicle while on County business. For the purpose of this study, a trip was defined as any level of travel that takes a person from one location to another location while on County business. Over half of those who use a County vehicle (53%) made 20 trips or more in a week. Nearly half of those who used their own vehicle (48%) made 3 trips per week or less and 25% of those who used other fleet machinery made 1 to 3 trips in a week. See Figure 4, below. For comparisons to the pre-campaign results, refer to Appendix B.

Figure 4



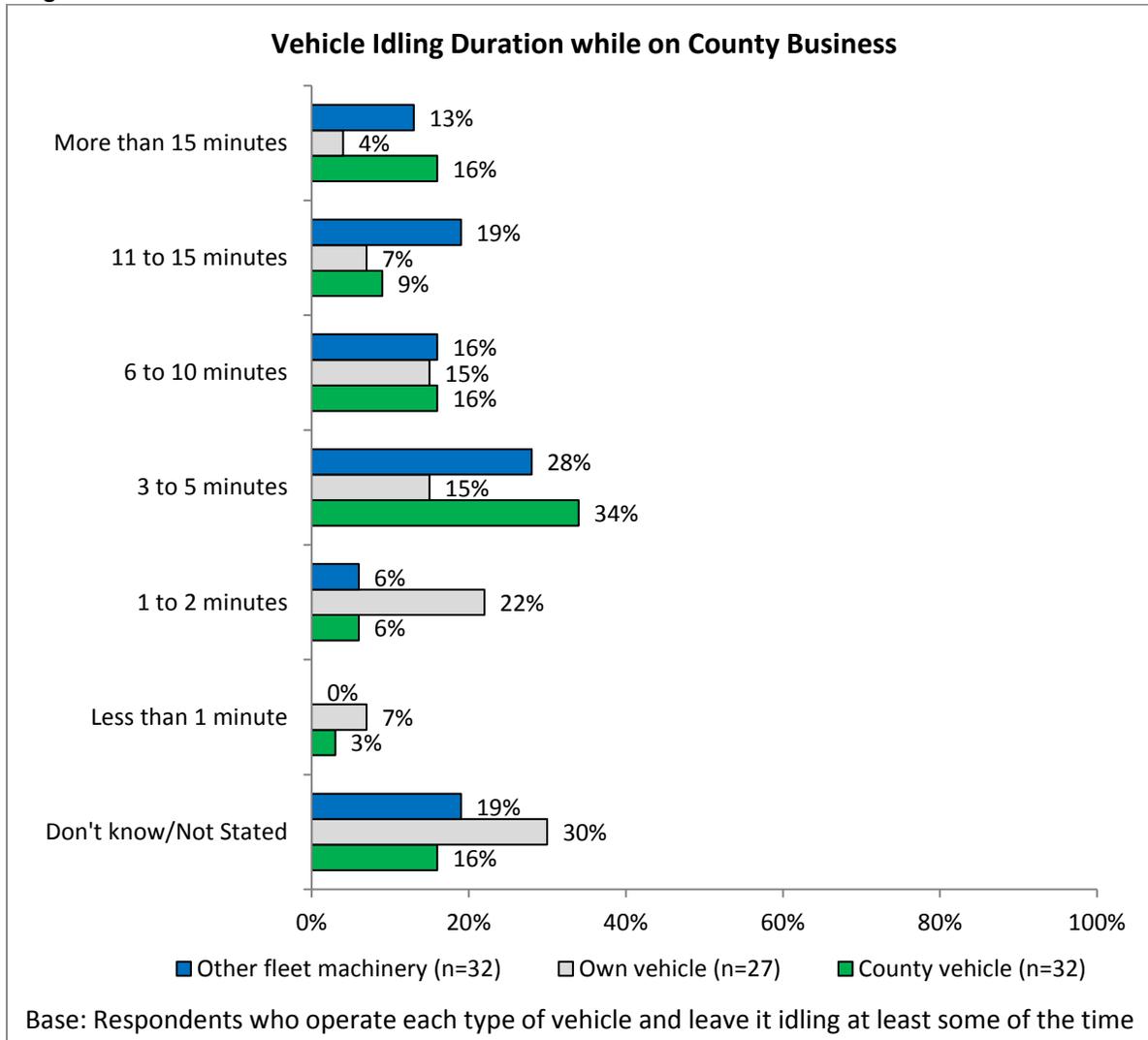
Those who use their own vehicle for County business (n=27), those who use a County vehicle (n=32) and those who use other fleet machinery (n=32) were then asked how often they idle these vehicles. For the purpose of this study, idling is defined as leaving the engine running while the vehicle is stopped and parked. Nearly two-thirds (63%) of those who use their own vehicle for County business, 47% of those who use a County vehicle, and 31% of those who use other fleet machinery only idle their vehicles in the winter months. See Figure 5, below. For comparisons to the pre-campaign results, refer to Appendix B.

Figure 5



Those who idle their own vehicle for County business (n=27), those who idle a County vehicle (n=32) and those who idle other fleet machinery (n=32) were asked how long they leave these vehicles idling for, on average. Twenty-two percent (22%) of those who use their own vehicle idle for 1 to 2 minutes, while 34% of those who use a County vehicle and 28% of those who use other fleet machinery idle for 3 to 5 minutes. See Figure 6, below. For comparisons to the pre-campaign results, refer to Appendix B.

Figure 6



Respondents were asked what they believe are the major reasons people idle. The vast majority of the respondents (68%) stated that the major reason people idle is to warm up their vehicle, followed by 13% who stated convenience, in general. See Table 3, below.

Table 3

What do you think are the major reasons people idle?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Warm up vehicle	68	83
Convenience (in general)	13	6
Laziness	10	12
Cool vehicle/run air conditioning in warm weather	10	4
Habit/routine	7	1
Engine health/life/warm up engine	6	4
Carelessness/negligence	4	8
Uneducated/unaware of idling hazards	1	6
To operate auxiliary equipment from the vehicle (e.g., lights, sirens)	1	-
Keep car running while in traffic/at red light	1	1
Refuse/Don't Know	10	4

*Multiple responses

Respondents were asked to identify any barriers for people, in terms of reducing idling behavior. The most common response was the weather (24%), followed by ambivalence (17%), and lack of education (17%). See Table 4, below.

Table 4

What do you think are the major barriers for people, in terms of reducing idling behavior?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Weather/climate (e.g., Winter, summer, etc.)	24	43
Lack of education/uninformed/unaware of idling hazards	17	17
Ambivalence (i.e. don't care)	17	-
Habit/routine	11	17
Lack of motivation	9	-
Comfort	4	1
Need to use the vehicle for heat/power	3	-
Convenience (in general)	3	1
Lack of courtesy	3	-
None/no barriers	3	1
Refuse/Don't Know	23	12

*Multiple responses

When asked to identify any “hotspots”, or areas where idling occurs more often for employees while on County business, the most frequent response was on job sites or work locations, in general (24%). See Table 5, below.

Table 5

Can you think of any “hotspots” for employee idling while on County business?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
None/no hotspots	10	4
Yes; specify	49	55
Job sites/work locations (in general)	24	17
Starting up/running County vehicle/equipment (area unspecified)	11	7
The shop/shop yard	10	11
County office	6	7
Parking lots	3	5
Employee lunch/coffee breaks (in general)	3	4
Refuse/Don't know	41	41

*Multiple responses

When asked if there were any areas in Lacombe County where idling is a major concern, or areas where people should not be idling, 25% of respondents identified a specific area. Air intake vents near buildings (10%) was the most common response. See Table 6, below.

Table 6

Are there any areas in Lacombe County where idling is a major concern?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
No particular areas of concern	27	23
Yes; Specify	25	30
Air intake vents near buildings	10	2
The shop/shop yard	4	6
In front of buildings (unspecified)	3	-
Fuel stations/pumps	3	5
Job sites/work locations (in general)	3	4
County office	1	6
Parking lots	1	-
Refuse/Don't Know	48	47

*Multiple responses

3.3 Knowledge About Idling

Next, respondents were given a list of statements and were asked to indicate whether they believed each statement was true or false. The vast majority (85% or higher) labeled the following as true:

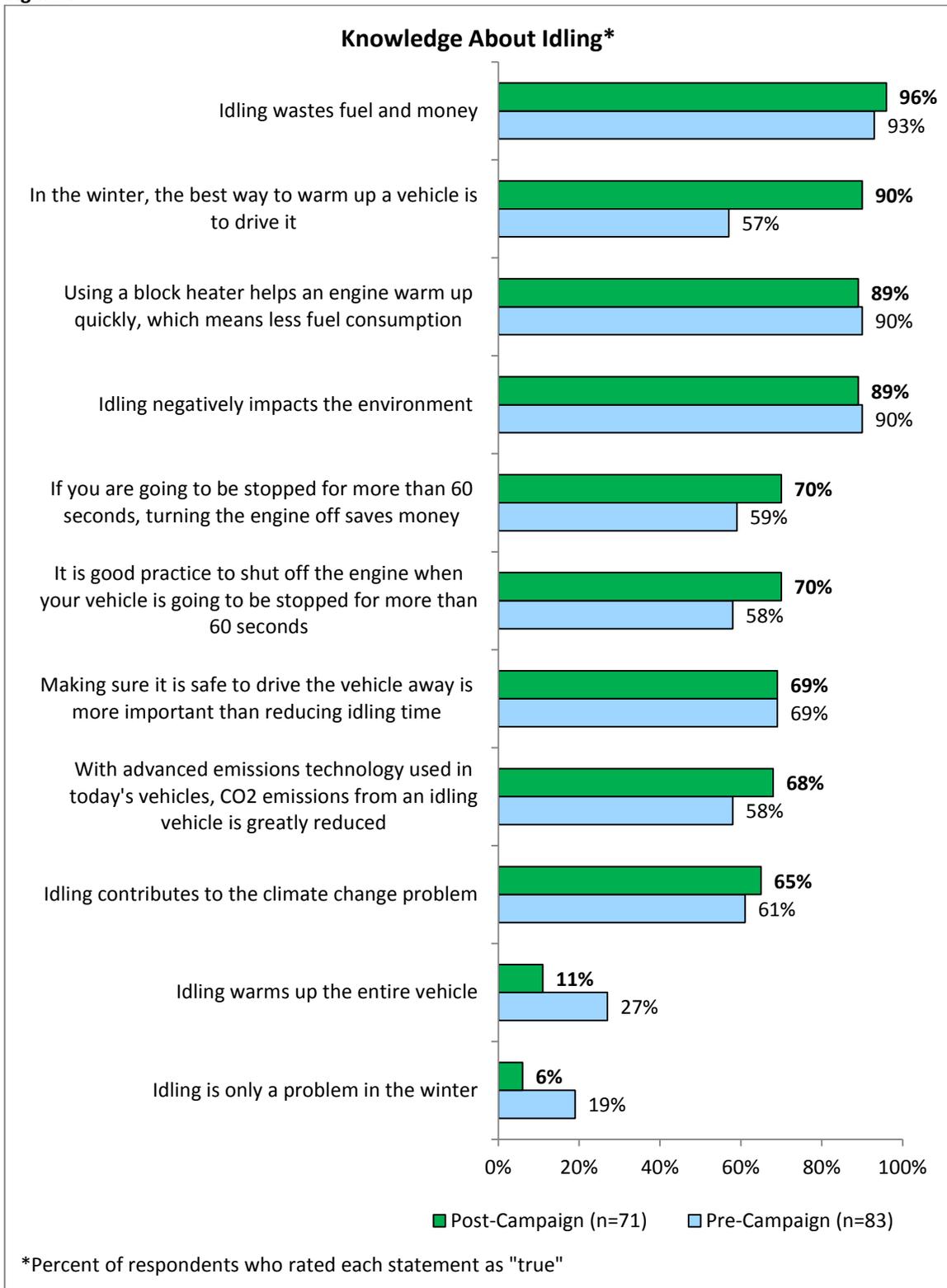
- Idling waste fuel and money (96% rated this statement as true, comparable to 93% in the pre-campaign); and
- In the winter, the best way to warm up a vehicle is to drive it (90%, a significant increase from 57% in the pre-campaign);
- Using a block heater helps an engine warm up quickly, which means less fuel consumption (89%, comparable to 90% in the pre-campaign); and
- Idling negatively impacts the environment (89%, comparable to 90% in the pre-campaign).

Less than one-third of respondents labeled the following statements as true:

- Idling warms up the entire vehicle (11%, a significant decrease from 27% in the pre-campaign); and
- Idling is only a problem in the winter (6%, a significant decrease from 19% in the pre-campaign).

See Figure 7, on the following page.

Figure 7



Respondent subgroups significantly more likely to label the statement **“idling negatively impacts the environment” as true** included:

- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (100%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (77%); and
- Those who do not operate other fleet machinery for County business (97%) versus those who do (78%).

Those who do not operate other fleet machinery for County business (77%) were significantly more likely to label the statement **“idling contributes to the climate change problem” as true** versus those who do (50%).

Those who do not operate other fleet machinery for County business (82%) were significantly more likely to label the statement **“it’s good practice to shut off the engine when your vehicle is going to be stopped for more than 60 seconds” as true** versus those who do (56%).

Respondent subgroups significantly more likely to label the statement **“if you are going to be stopped for 60 seconds, turning the engine off saves money” as true** included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (86%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (54%);
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (81%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (59%); and
- Those who do not operate other fleet machinery for County business (87%) versus those who do (50%).

Respondents were then asked, to the best of their knowledge, to state known effects of reducing idling behavior. Nearly half of the respondents (45%) stated improved air quality as a known effect of reducing idling behavior, followed by 34% who stated reduced idling saves money and less fuel consumption. See Table 7, below.

Table 7

To the best of your knowledge, what are the known effects of reducing idling behaviour?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Improved air quality/better for the environment/less pollution	45	47
Saves money/less fuel consumption	34	42
Reduced wear and tear on engine/vehicle	11	7
Decreased personal health risks/issues	6	6
Increased public awareness/education of vehicle idling	3	5
Decreased noise pollution	1	1
Refuse/Don't Know	47	36

*Multiple responses

3.4 Idle Reduction Program

Beginning in May, 2015, Lacombe County developed an Idle Reduction Program. During the Idle Reduction Program, Lacombe County communicated program information with its employees through the following:

- a. Insider articles (staff newsletter)
- b. Interactive days such as emissions training and social pledge days
- c. Posters on bathroom stalls
- d. Leaflets in coffee rooms
- e. Leaflets in pay stubs

Using a scale of 1 to 5, where 1 meant “not at all useful” and 5 meant “very useful,” respondents were given a list of communication methods and asked to rate their usefulness for educating them on the Idle Reduction Program. Posters on bathroom stalls was the most useful method, with 47% of respondents rating it a 4 (25%) or a 5 (21%) out of 5, followed by interactive days such as emissions training and social pledge days with 45% of the respondents rating it a 4 (21%) or 5 (24%) out of 5. See Figure 8, below, and Table 8, on the following page for a detailed breakdown of each method.

Figure 8

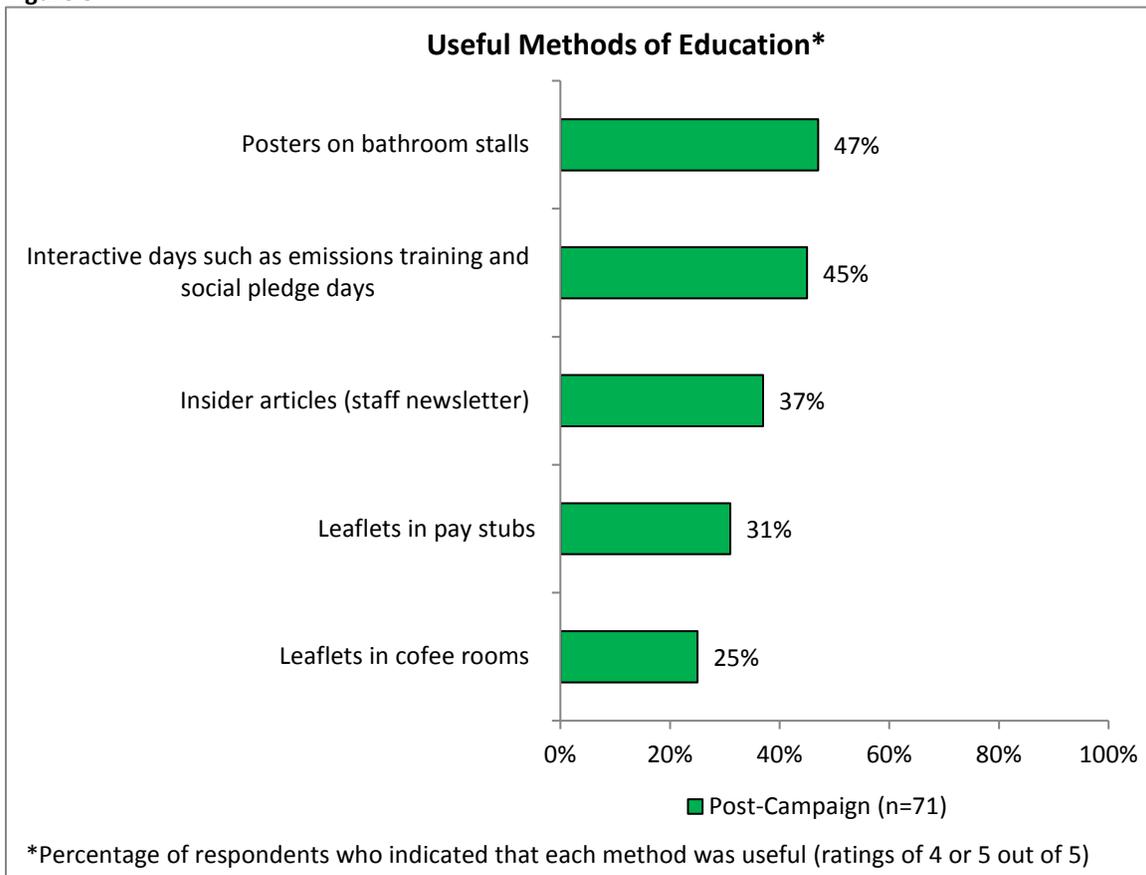


Table 8

How useful were each of the above methods in educating you on the Idle Reduction Program, using a 1 to 5 scale where 1 means 'not at all useful' and 5 means 'very useful'?							
	Percent of Respondents* (n=71)						Mean (out of 5)
	Not at all Useful (1)	(2)	(3)	(4)	Very Useful (5)	Don't Know/Not Stated	
Interactive days such as emissions training and social pledge days	4	13	34	21	24	4	3.50
Posters on bathroom stalls	13	13	25	25	21	3	3.30
Insider articles	9	14	41	27	10	-	3.15
Leaflets in pay stubs	16	14	37	23	9	3	2.94
Leaflets in coffee rooms	14	25	32	17	9	3	2.80

Respondent subgroups significantly more likely to have rated **insider articles (staff newsletters)** as a useful method of education (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (50%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (23%);
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (51%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (21%); and
- Those who do not use other fleet machinery for County business (49%) versus those who do (22%).

Respondent subgroups significantly more likely to have rated **interactive days** as a useful method of education (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (61%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (29%);
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (57%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (32%); and
- Those who do not use other fleet machinery for County business (56%) versus those who do (31%).

Respondent subgroups significantly more likely to have rated **posters on bathroom stalls** as a useful method of education (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (64%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (29%); and
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (62%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (29%).

Respondent subgroups significantly more likely to have rated **leaflets in coffee rooms** as a useful method of education (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (39%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (11%); and
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (41%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (9%).

Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (42%) were significantly more likely to have rated **leaflets in pay stubs** as a useful method of education (ratings of 4 or 5 out of 5) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (20%).

Next, using a scale of 1 to 5, where 1 meant “not at all informative” and 5 meant “very informative,” respondents were given the same list of communication methods and asked how informative each method was in educating them on the Idle Reduction Program. Insider articles was the most informative method, with 49% of respondents rating it a 4 (34%) or a 5 (16%) out of 5, followed by interactive days such as emissions training and social pledge days with 48% of the respondents rating it a 4 (21%) or 5 (27%) out of 5. See Figure 9, below, and Table 9, on the following page for a detailed breakdown of each method.

Figure 9

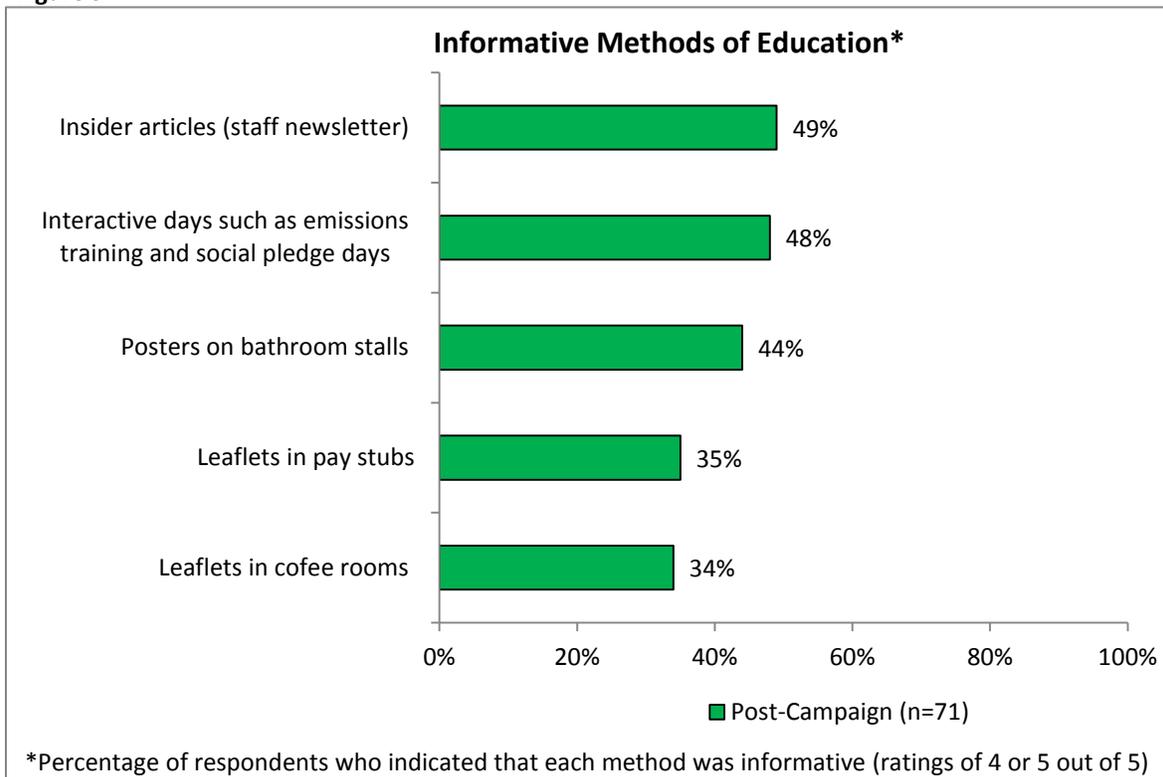


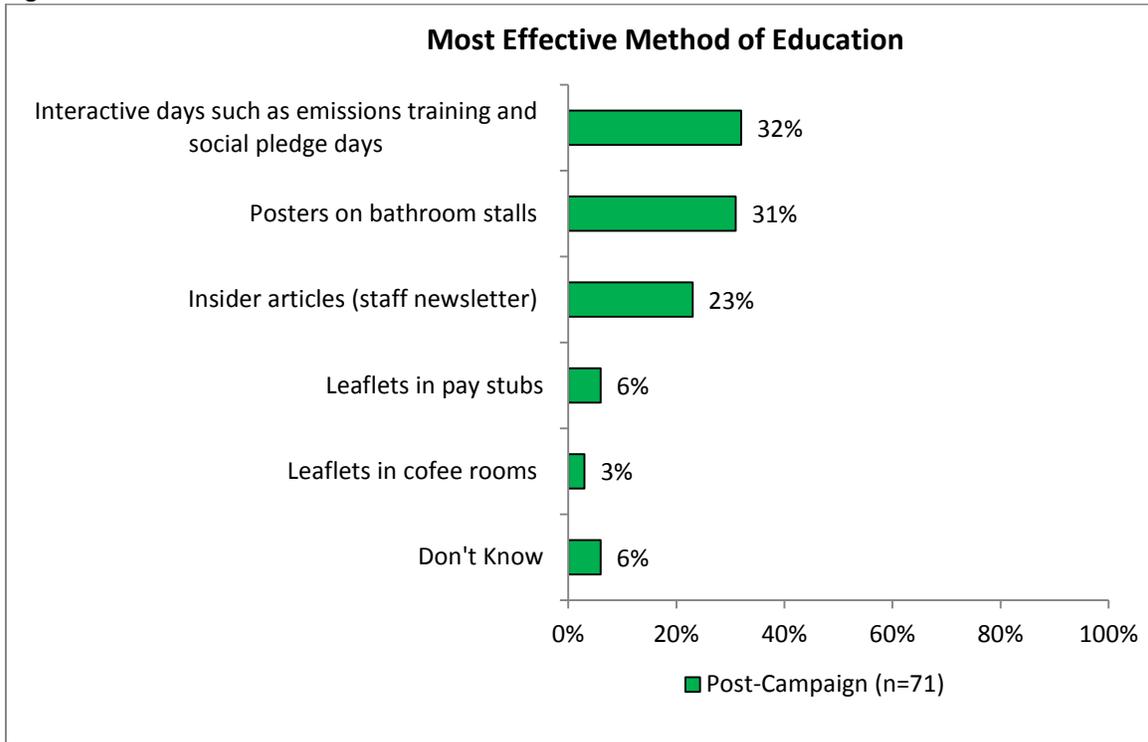
Table 9

Overall, how informative were these methods in educating you on the Idle Reduction Program, using a scale of 1 to 5 scale where 1 means “not at all informative” and 5 means “very informative.”							
	Percent of Respondents* (n=71)						
	Not at all Informative (1)	(2)	(3)	(4)	Very Informative (5)	Don't Know/Not Stated	Mean (out of 5)
Interactive days such as emissions training and social pledge days	3	7	37	21	27	6	3.66
Insider articles	4	13	31	34	16	3	3.45
Posters on bathroom stalls	10	17	28	21	23	1	3.30
Leaflets in pay stubs	11	17	32	24	11	4	3.07
Leaflets in coffee rooms	13	14	35	24	10	4	3.04

Those who do not use other fleet machinery for County business (62%) were significantly more likely to have rated **Insider articles** as informative (ratings of 4 or 5 out of 5) versus those who do (34%).

When asked what the most effective method of communication was in educating them on the Idle Reduction Program, nearly one-third of respondents said interactive days such as emissions training and social pledge days (32%) or posters on bathroom stalls (31%). See Figure 10, below.

Figure 10



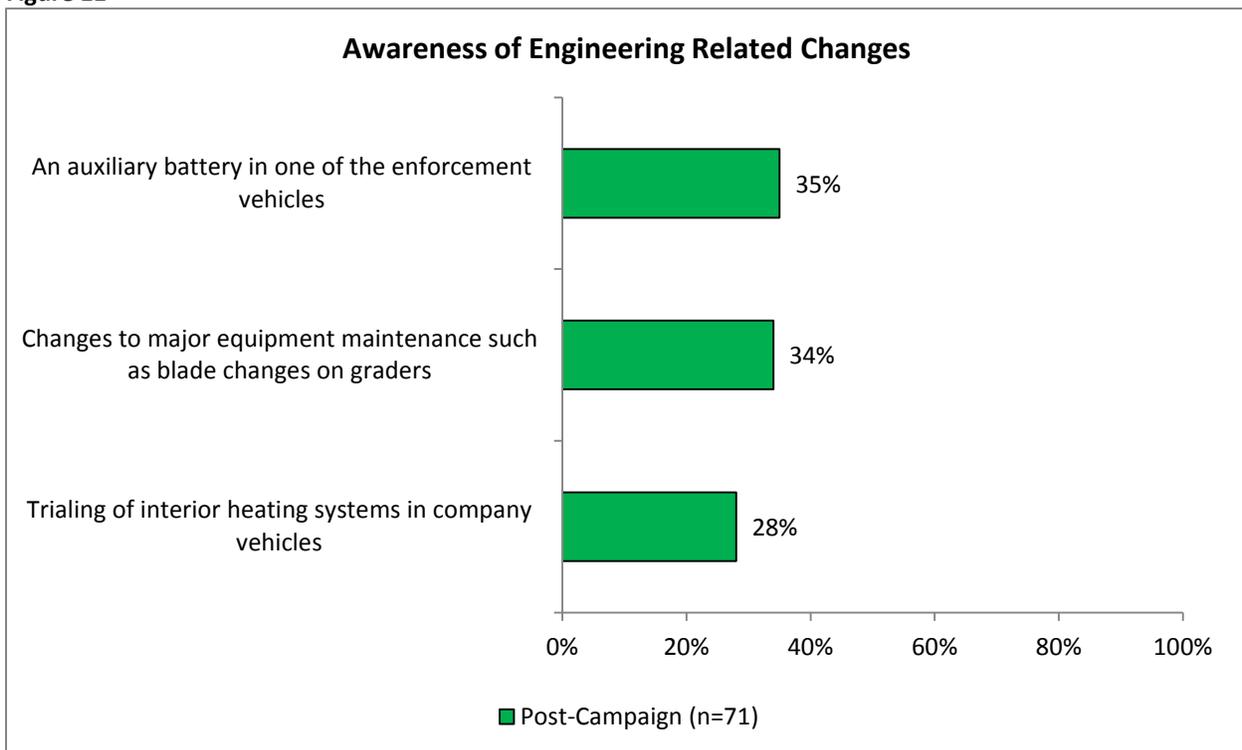
Those who do not use other fleet machinery for County business (44%) were significantly more likely to have rated **interactive days** as the most effective method of communication versus those who do (19%).

Lacombe County implemented the following engineering related changes with regards to the Idle Reduction Program:

1. An auxiliary battery in one of the enforcement vehicles;
2. Changes to major equipment maintenance such as blade changes on graders; and
3. Trialing of interior heating systems in company vehicles.

Given this information, respondents were asked whether they were aware of each engineering related change. Thirty-five percent (35%) of respondents were aware of the auxiliary battery in one of the enforcement vehicles, followed by 34% of respondents who were aware of the changes made to major equipment maintenance such as blade changes on graders. Twenty-eight percent (28%) of respondents were aware of trialing of interior heating systems in company vehicles. See Figure 11 below.

Figure 11



Those who use a County vehicle for County business were significantly more likely to be aware of **all three engineering related changes** versus those who do not.

Next, those who were aware of each initiative were asked how effective each change was using a scale of 1 to 5 where 1 meant “not at all effective” and 5 meant “very effective.” Thirty-five percent of respondents (35%) who were aware of the trialing of interior heating systems in company vehicles (n=20) indicated that this change was effective (ratings of 4 or 5 out of 5) followed by 33% of those who were aware of the changes made to major equipment maintenance such as blade changes on graders (n=24) rated this as effective (ratings of 4 or 5 out of 5). See Figure 12 below, and Table 10, on the following page.

Figure 12

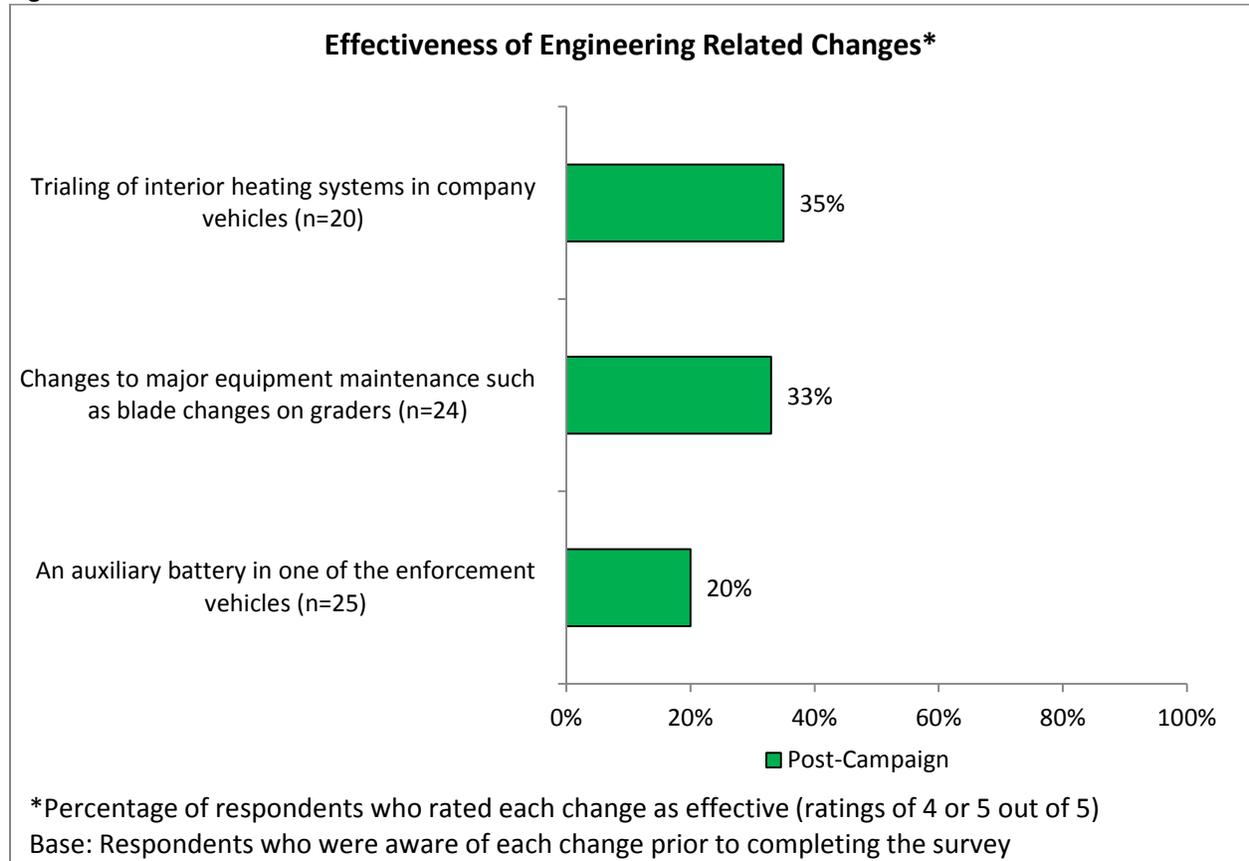
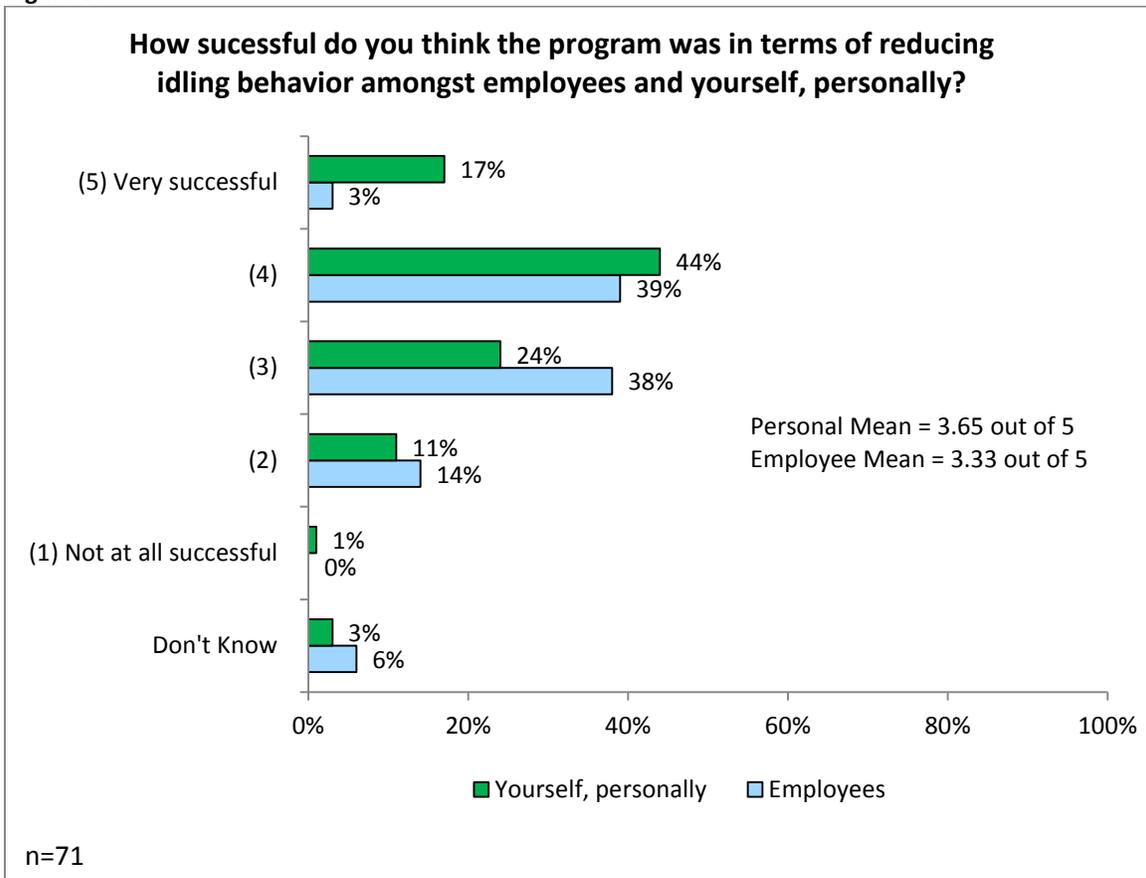


Table 10

How effective were each of these initiatives pertaining to the Idle Reduction Program in terms of reducing energy consumption?							
Base: Respondents that were aware of each change prior to completing the survey	Percent of Respondents*						
	Not at all Effective (1)	(2)	(3)	(4)	Very Effective (5)	Don't Know/Not Stated	Mean (out of 5)
An Auxiliary battery in one of the enforcement vehicles (n=25)	12	16	36	8	12	16	2.90
Changes to major equipment maintenance such as blade changes on graders (n=24)	-	13	42	25	8	13	3.33
Trialing of interior heating systems in company vehicles (n=20)	5	20	25	20	15	15	3.24

Next, respondents were asked how successful the program was in terms of reducing idling behavior both among employees and themselves personally using a 1 to 5 scale where 1 meant “not at all successful” and 5 meant “very successful.” Nearly two-thirds of respondents (61%) indicated that the program was successful (ratings of 4 or 5 out of 5) in terms of reducing their own idling behavior, while under half of respondents (42%) indicated that the program was successful (ratings of 4 or 5 out of 5) in terms of reducing idling behavior amongst employees, in general. See Figure 13, below.

Figure 13



Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (75%) were significantly more likely to have rated the program as successful in terms of reducing idling behaviors for them, personally (ratings of 4 or 5 out of 5) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (46%).

Those who believed the program was not successful in terms of reducing idling behavior amongst **employees** (n=37; ratings of 1, 2, or 3 out of 5) were asked why they felt this way. Most commonly, respondents indicated that people are ignorant towards idling reduction (16%) or that it is difficult to break old habits (14%). See Table 11, below.

Table 11

Why do you feel that the program was not successful in terms of reducing idling behavior amongst employees?	
Base: Respondents that rated this program as unsuccessful amongst employees (ratings of 1, 2, or 3 out of 5)	Percent of Respondents*
	Post-Campaign (n=37)
People do not care/are ignorant towards idling reduction	16
Difficult to break old habits/routines	14
Laziness/unwilling to make the personal effort	8
Idling is not a serious/important issues of concern (in general)	8
Motorists are still idling their vehicles (in general)	8
Lack of education/need more information on idling reduction	5
Vehicle/engine needs to be warmed up in cold weather	3
Idling reduction is not enforced/no penalties/fines are given	3
Refuse/Don't Know	43

*Multiple responses

When those who believed the program was successful in terms of reducing idling behavior amongst **employees** (n=30; ratings of 4 or 5 out of 5) were asked why they felt this way, two-thirds of respondents indicated that idling awareness and education has increased (67%). See Table 12, below.

Table 12

Why do you feel that the program was successful in terms of reducing idling behavior amongst <u>employees</u> ?	
Base: Respondents that rated this program as successful amongst employees (ratings of 4 or 5 out of 5)	Percent of Respondents*
	Post-Campaign (n=30)
Idling awareness/education has increased/more people are aware (in general)	67
Has noticed less idling among motorists (in general)	3
Refuse/Don't Know	30

*Multiple responses

Those who believed the program was not successful in terms of reducing idling behavior amongst **themselves personally** (n=26; ratings of 1, 2, or 3 out of 5) were asked why they felt this way. Most commonly, respondents indicated that they do not idle (n=8). See Table 13, below.

Table 13

Why do you feel that the program was not successful in terms of reducing idling behavior for you <u>personally</u> ?	
Base: Respondents that rated this program as unsuccessful for them personally (ratings of 1, 2, or 3 out of 5)	Number of Respondents*
	Post-Campaign (n=26)**
I do not idle/try to reduce idling when possible	8
Vehicle/engine needs to be warmed up in cold weather	2
Difficult to break old habits/routines	2
Should not over-enforce anti-idling/idling reduction	2
Laziness/unwilling to make the personal effort	1
Refuse/Don't Know	11

*Multiple responses

**Use caution interpreting results when n<30

When those who believed the program was successful in terms of reducing idling behavior for **themselves personally** (n=43; ratings of 4 or 5 out of 5) were asked why they felt this way, over half of respondents indicated that idling awareness and education has increased (58%). See Table 14, below.

Table 14

Why do you feel that the program was successful in terms of reducing idling behavior for you personally?	
Base: Respondents that rated this program as successful for themselves personally (ratings of 4 or 5 out of 5)	Percent of Respondents*
	Post-Campaign (n=43)
Idling awareness/education has increased/more people are aware (in general)	58
I do not idle/try to reduce idling when possible	33
Has noticed less idling among motorists (in general)	2
Refuse/Don't Know	19

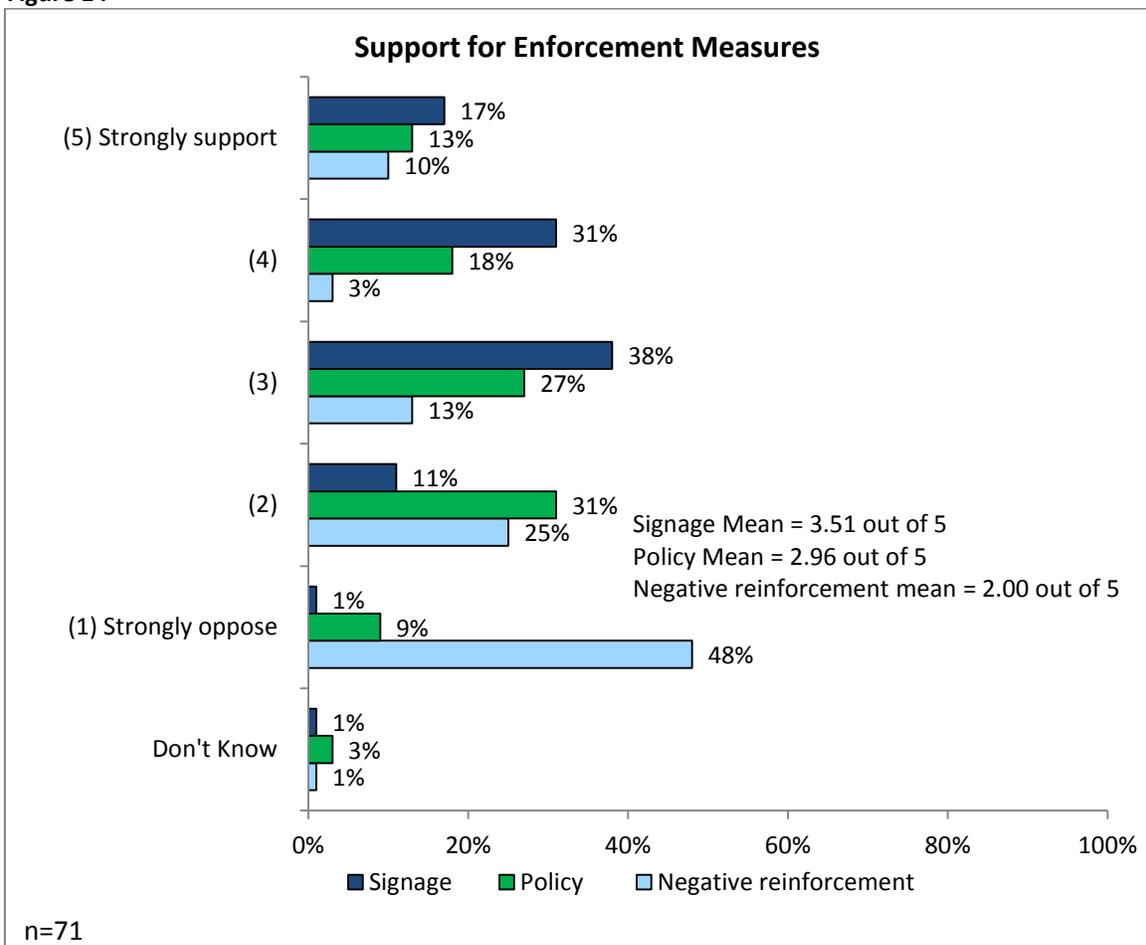
*Multiple responses

To help employees develop long lasting habits to reduce idling behavior, other options for reducing idling behavior in the County could include the following types of enforcement:

- Signage (signage would be placed strategically around the parking lot and in idling “hotspots” as a reminder to limit idling);
- Policy (this policy would state generalizations of proper behavior regarding idling); and
- Negative reinforcement (for example, mock fines on your vehicle or pictures of offenders in the Insider).

Respondents were asked how strongly they would support each type of measure, using a 1 to 5 scale where 1 meant “strongly oppose” and 5 meant “strongly support.” Nearly half of respondents (48%) supported signage (ratings of 4 or 5 out of 5) followed by 31% who supported policy and 13% who supported negative reinforcement. See Figure 14, below.

Figure 14



Respondent subgroups significantly more likely to support **signage** (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (64%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (31%);
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (60%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (35%);
- Those who do not use a County vehicle for County business (62%) versus those who do (31%); and
- Those who do not use other fleet machinery for County business (67%) versus those who do (25%).

Respondent subgroups significantly more likely to support **policy** (ratings of 4 or 5 out of 5) included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (50%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (11%); and
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (43%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (18%).

Respondents were asked what advice they would give to the County to further encourage County employees to reduce their idling behavior. Most commonly, respondents indicated that the County needs to educate or provide awareness to employees, in general (16%). See Table 15, below.

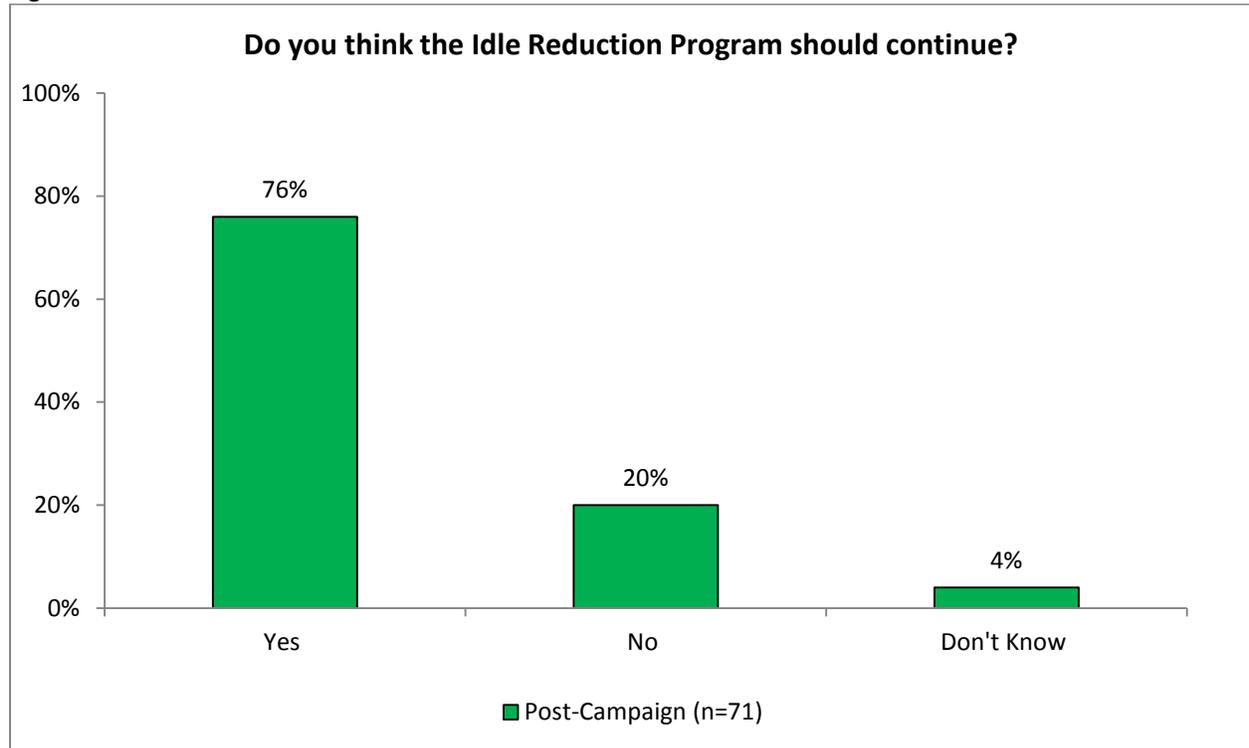
Table 15

What advice would you give to the County to further encourage County employees to reduce their idling behavior?	
	Percent of Respondents*
	Post-Campaign (n=71)
Need to educate/inform/provide awareness to employees (in general)	16
Provide incentives to staff who comply with anti-idling policy	7
Provide anti-idling signage	3
Enforce anti-idling policy/issue penalties/fines for non-compliance	1
Encourage employee involvement/participation in idling reduction	1
Need to be more environmentally conscious/responsible (in general)	1
Provide fact based data/evidence of idling	1
Provide positive feedback/recognition	1
Encourage employees to not idle vehicle when not necessary	1
Continue to run this program (in general)	1
Provide ways/methods to reduce idling	1
None/no advice to give	1
Refuse/Don't Know	66

*Multiple responses

Next, respondents were asked if they believed that the Idle Reduction Program should continue. Over three-quarters of respondents (76%) indicated that the Idle Reduction Program should continue. See Figure 15, below.

Figure 15

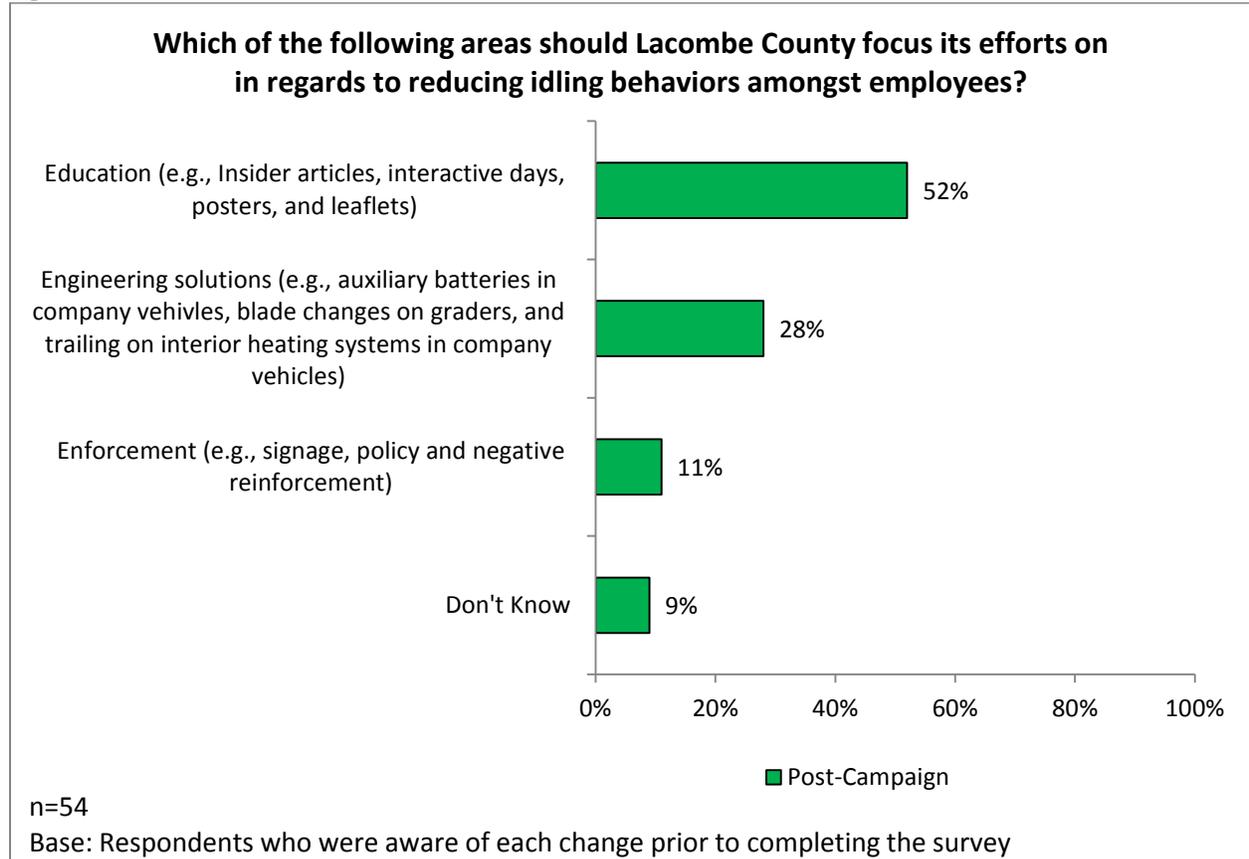


Respondent subgroups significantly more likely to agree that the Idle Reduction Program should continue included:

- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (86%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (66%); and
- Those who use a County vehicle for County business (88%) versus those who do not (67%).

Those who believed that the Idle Reduction Program should continue (n=54) were then asked which area Lacombe County should focus its efforts on with regards to reducing idling behavior amongst employees. Over half of respondents (52%) said that the County should focus on education (for example, Insider articles, interactive days, posters, and leaflets). See Figure 16, below.

Figure 16



3.5 Final Comments

When asked if there were any additional comments regarding the topics in this survey, the vast majority (86%) did not provide any comments. See Table 16, below for all responses provided.

Table 16

Is there anything else we need to know regarding the topics in the survey?		
	Percent of Respondents*	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
No final comments	86	90
Yes; Specify	6	6
Idling will always exist/idling is a choice (in general)	1	-
Need to educate/inform/provide awareness (in general)	1	-
Ensure that all County employees are complying with anti-idling	1	1
Idling Reduction Committee is not necessary/needed	1	-
Refuse/Don't Know	9	4

*Multiple responses

3.6 Respondent Profile

Tables 17 and 18, below and on the following page, provide a demographic profile of the respondents surveyed for the 2016 Lacombe County Idling Awareness Survey.

Table 17

	Percent of Respondents	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Gender		
Male	68	71
Female	27	27
Other	1	-
Unreported	4	2
Age		
18 to 24	3	4
25 to 34	14	17
35 to 44	13	12
45 to 54	27	27
55 to 64	30	33
65 years or older	3	5
Refuse/Don't Know	11	4
Percent of respondents with at least one (1) member in the household belonging to the following age groups:	(n=57)*	(n=74)*
12 years of age or younger	23	24
Between 13 and 18 years old	16	21
Between 19 and 44 years old	54	43
Between 45 and 64 years old	70	68
65 years of age or older	4	7
Mean Household Size	2.63 people	2.61 people
What is the highest level of education you have achieved to date?	(n=71)	(n=83)
Less than high school	1	10
Graduated high school	17	23
Some or completed technical or vocational school	18	16
Some or completed college	25	23
Some or completed university	13	16
Post graduate	7	7
Refuse/Don't Know	18	6

*Excludes "don't know" responses

Table 18

	Percent of Respondents	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
How long have you worked for Lacombe County		
Less than a year	-	2
1 to 5 years	20	35
6 to 10 years	20	11
11 to 15 years	7	13
16 to 20 years	10	8
21 to 25 years	3	5
26 to 30 years	6	8
More than 30 years	6	8
Refuse/Don't Know/Not Applicable	30	12
How long have you lived in Lacombe County?		
5 years or less	10	2
6 to 10 years	4	7
11 to 15 years	4	12
16 to 20 years	9	10
More than 20 years	25	28
Refuse/Don't Know/Not applicable	48	12
Mean number of years	25.40	30.75

Appendix A
Survey Instrument



2016 Idling Awareness Survey

Lacombe County is currently conducting a survey with its employees to assess idling awareness and ad effectiveness. Your responses are very important to allow us to achieve our goals of idle reduction and reduced energy consumption, as identified under our Environmental Management Plan. The survey should take approximately **15 minutes** to complete.

As a thank you for completing the survey, you may enter in a draw to win a \$50 Tim Hortons gift card.

Please note that all information you provide will be kept in strictest confidence and will be used only for the purposes of this study. It is important to note that all analysis and reporting of the survey findings will be provided in aggregate only – no individual responses will be provided.

The survey may only be completed once per person. If you have already completed the survey, please disregard this.

Please note that this survey is intended for employees who have been employed with Lacombe County since **February 17th, 2015**. If you have not been an employee of the County since February 17th, 2015, please disregard this survey.

If you have any questions or concerns, you may contact Monica Boudreault, Environmental Coordinator, DID. 265 on our County phone system, or 403-782-8968.

Please submit your survey by **June 3rd, 2016**.

Please note that by continuing with the survey, you agree to the terms and conditions of data collection and data use, as detailed above.

SECTION 1: ATTITUDES ABOUT IDLING

Please Note: For the purposes of this survey, idling a vehicle is *any amount of time* spent leaving the engine running *while the vehicle is stopped and parked*.

A) Have you been an employee of Lacombe County since February 17th, 2015?

- Yes
- No

1) Using a scale of 1 to 5, where 1 means “not at all concerned” and 5 means “very concerned,” how concerned are you with **vehicle idling as an environmental issue**?

(1)	(2)	(3)	(4)	(5)
Not at all Concerned				Very Concerned
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2) Using the same scale of 1 to 5, how concerned are you with the **effects of idling** on each of the following? **(Check one box per row)**

How concerned are you with the effects of idling on...?	(1) Not at all Concerned	(2)	(3)	(4)	(5) Very Concerned
CHECK ONE BOX PER ROW					
a) The environment, in general	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Your health and well-being	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Waste of resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3) What do you think are the **major reasons for concern**, if any, with regards to idling?

6) How often do you idle each type of vehicle that you operate (i.e., leave the engine running while the vehicle is stopped and parked)?

Please select "Not Applicable" for each type of vehicle that you DO NOT operate.

a) Your personal vehicle

- Every time I drive this vehicle/every trip I make
- More than half of the time I drive this vehicle (but not every time)
- About half of the time I drive this vehicle
- Less than half of the time I drive this vehicle (but still sometimes)
- Only in the winter months
- Never/I do not idle this vehicle
- Don't Know
- Not Applicable

b) A County vehicle

- Every time I drive this vehicle/every trip I make
- More than half of the time I drive this vehicle (but not every time)
- About half of the time I drive this vehicle
- Less than half of the time I drive this vehicle (but still sometimes)
- Only in the winter months
- Never/I do not idle this vehicle
- Don't Know
- Not Applicable

c) Other fleet machinery

- Every time I drive this vehicle/every trip I make
- More than half of the time I drive this vehicle (but not every time)
- About half of the time I drive this vehicle
- Less than half of the time I drive this vehicle (but still sometimes)
- Only in the winter months
- Never/I do not idle this vehicle
- Don't Know
- Not Applicable

7) When operating each type of vehicle, how long would you estimate you leave it idling for, on average?

Please select "Not Applicable" for each type of vehicle that you DO NOT operate.

a) Your personal vehicle

- 0 minutes – I do not idle this vehicle
- Less than 1 minute
- 1 to 2 minutes
- 3 to 5 minutes
- 6 to 10 minutes
- 11 to 15 minutes
- More than 15 minutes
- Don't Know
- Not Applicable

b) The County vehicle

- 0 minutes – I do not idle this vehicle
- Less than 1 minute
- 1 to 2 minutes
- 3 to 5 minutes
- 6 to 10 minutes
- 11 to 15 minutes
- More than 15 minutes
- Don't Know
- Not Applicable

c) Other fleet machinery

- 0 minutes – I do not idle this vehicle
- Less than 1 minute
- 1 to 2 minutes
- 3 to 5 minutes
- 6 to 10 minutes
- 11 to 15 minutes
- More than 15 minutes
- Don't Know
- Not Applicable

8) What do you think are the major reasons people idle?

9) What do you think are the major **barriers** for people, in terms of reducing idling behavior?

10) Can you think of any “hotspots” for employee idling while on County business – i.e., areas where idling occurs more often?

Yes – **please specify:** _____

- None/no hotspots
- Don't Know

11) Are there any areas in Lacombe County where idling is a major concern – i.e., areas where people **should not** be idling?

Yes – **please specify:** _____

- None/no particular areas of concern
- Don't Know

SECTION 3: KNOWLEDGE ABOUT IDLING

12) For each of the following statements, please indicate whether you believe it is **TRUE** or **FALSE**.

Is each statement TRUE or FALSE?	True	False	Don't Know
CHECK ONE BOX PER ROW			
a) Idling wastes fuel and money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Idling negatively impacts the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) With the advanced emissions technology used in today's vehicles, carbon dioxide (CO ₂) emissions from an idling vehicle are greatly reduced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Idling contributes to the climate change problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) In the winter, the best way to warm up a vehicle is to drive it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Using a block heater helps an engine warm up quickly, which means less fuel consumption.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Idling warms up the entire vehicle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) It's a good practice to shut off the engine when your vehicle is going to be stopped for more than 60 seconds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Idling is only a problem in the winter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Making sure it's safe to drive the vehicle away is more important than reducing idling time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) If you are going to be stopped for more than 60 seconds, turning the engine off saves money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13) To the best of your knowledge, what are the **known effects** of reducing idling behaviour?

SECTION 4: IDLE REDUCTION PROGRAM

Beginning in May, 2015, Lacombe County developed an Idle Reduction Program. During the Idle Reduction Program, Lacombe County communicated program information with its employees through the following:

- a. Insider articles (staff newsletter)
- b. Interactive days such as emissions training and social pledge days
- c. Posters on bathroom stalls
- d. Leaflets in coffee rooms
- e. Leaflets in pay stubs

14) How useful were each of the above methods in educating you on the Idle Reduction Program, using a 1 to 5 scale where 1 means “not at all useful” and 5 means “very useful”

How <u>useful</u> were each of the following methods?	(1) Not at all Useful	(2)	(3)	(4)	(5) Very Useful
Insider articles (staff newsletter)	<input type="checkbox"/>				
Interactive days such as emission training and social pledge days	<input type="checkbox"/>				
Posters on bathroom stalls	<input type="checkbox"/>				
Leaflets in coffee rooms	<input type="checkbox"/>				
Leaflets in pay stubs	<input type="checkbox"/>				

15) How informative were these methods in educating you on the Idle Reduction Program, using a 1 to 5 scale where 1 means “not at all informative” and 5 means “very informative”

How <u>informative</u> were each of the following methods?	(1) Not at all Informative	(2)	(3)	(4)	(5) Very Informative
Insider articles (staff newsletter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactive days such as emission training and social pledge days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Posters on bathroom stalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaflets in coffee rooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaflets in pay stubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16) What was the most effective method of communication in educating you on the Idle Reduction Program?
(Please select only 1 response)

- Insider articles (staff newsletter)
- Interactive days such as emissions training and social pledge days
- Posters on bathroom stalls
- Leaflets in coffee rooms
- Leaflets in pay stubs

17) The Program included a number of engineering changes. For each of the following, please indicate whether or not you were aware of each change prior to completing this survey. For each change you were aware of, please rate how effective the initiative was in terms of reducing energy consumption, using a 1 to 5 scale where 1 means “not at all effective” and 5 means “very effective”

	17) Were you aware of each change prior to completing this survey?		18) How <u>effective</u> do you feel this initiative was in terms of reducing energy consumption?				
	No, not aware	Yes, aware	(1) Not at all Effective	(2)	(3)	(4)	(5) Very Effective
a) An auxiliary battery in one of the enforcement vehicles	<input type="checkbox"/> → SKIP TO 'b'	<input type="checkbox"/> → GO TO Q18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Changes to major equipment maintenance such as blade changes on graders	<input type="checkbox"/> → SKIP TO 'c'	<input type="checkbox"/> → GO TO Q18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Trialing of interior heating systems in company vehicles	<input type="checkbox"/> → SKIP TO Q19	<input type="checkbox"/> → GO TO Q18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19) How successful do you think the program was overall in terms of reducing idling behavior amongst **employees**, using a 1 to 5 scale where 1 means “not at all successful” and 5 means “very successful”

(1) Not at all Successful (2) (3) (4) (5) Very Successful

19a). If you checked 1, 2, or 3, why do you feel that the program was not successful in terms of reducing idling behavior amongst employees?

19b). If you checked 4 or 5, why do you feel that the program was successful in terms of reducing idling behavior amongst employees?

20) Overall, how successful do you think the program was in terms of reducing idling behavior for **you personally**, using a 1 to 5 scale where 1 means “not at all successful” and 5 means “very successful”

(1) Not at all Successful	(2)	(3)	(4)	(5) Very Successful
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20a). If you checked 1, 2, or 3, why do you feel that the program was not successful in terms of reducing idling behavior for you personally?

20b). If you checked 4 or 5, why do you feel that the program was successful in terms of reducing idling behavior for you personally?

21) To help employees develop long lasting habits to reduce idling behavior, other options for reducing idling behavior in the County could include different types of enforcement. How strongly would you support or oppose each type of measure, using a scale of 1 to 5 where 1 means “strongly oppose” and 5 means “strongly support”

How strongly would you support or oppose each type of measure?	(1) Strongly Oppose	(2)	(3)	(4)	(5) Strongly Support
Signage (Signage would be placed strategically around the parking lot and in idling “hotspots” as a reminder to limit idling)	<input type="checkbox"/>				
Policy (This policy would state generalizations of proper behavior regarding idling)	<input type="checkbox"/>				
Negative reinforcement (For example, mock fines on your vehicle or pictures of offenders in the Insider)	<input type="checkbox"/>				

22) What advice would you give to the County to further encourage County employees to reduce their idling behaviour?

23) Do you think the Idle Reduction Program should continue?

- Yes **Go to Q23a**
- No **Go to Q24**

23a). If you checked 'yes', which of the following three areas should Lacombe County focus its efforts on in regards to reducing idling behaviours amongst employees? **(Please select only 1 response)**

- Education (For example, Insider articles, interactive days, posters and leaflets)
- Engineering (For example, auxiliary batteries in company vehicles, blade changes on graders and trialing of interior heating systems in company vehicles)
- Enforcement (For example, signage, policy and negative reinforcement)

SECTION 5: FINAL COMMENTS

24) Is there anything else we need to know, regarding the topics in this survey?

SECTION 6: RESPONDENT PROFILE

In order for us to better understand the different views and needs of employees, the next few questions allow us to analyze the data into sub-groups. Please note that survey responses will not be linked to your personal information in any way.

25) Gender

- Male
- Female
- Other
- Prefer not to say

26) How old are you?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 or older
- Prefer not to say

27) How long have you **worked for** Lacombe County?

- _____ years **(please enter the number of years)**
- Prefer not to say

28a) How long have you lived in Lacombe County?

- _____ years (please enter the number of years)
 Prefer not to say

28) **Including yourself**, how many people in each of the following age groups live in your household?

- _____ Under 13 years old
_____ Between 13 and 18 years old
_____ Between 19 and 44 years old
_____ Between 45 and 64 years old
_____ 65 years of age or older

29) What is the highest level of education you have achieved to date?

- Less than high school
 Graduated high school
 Some or completed technical or vocational school
 Some or completed college
 Some or completed university
 Post-graduate
 Prefer not to say

DRAW ENTRY FORM

Thank you for completing the Lacombe County Idling Awareness Survey! As a token of our appreciation, you may enter a draw to win a \$50 Tim Hortons gift card.

To enter your name in the draw, please enter your contact information below. **Please note that your personal information will not be linked to your survey responses**, and will only be used to contact you if you are the draw winner.

First name: _____ **(MANDATORY)**

Telephone Number: _____ **(MANDATORY)**

E-mail address: _____ **(OPTIONAL)**

Do we have your permission to collect and release your contact information to Lacombe County to follow up with you if you are the winner of the draw?

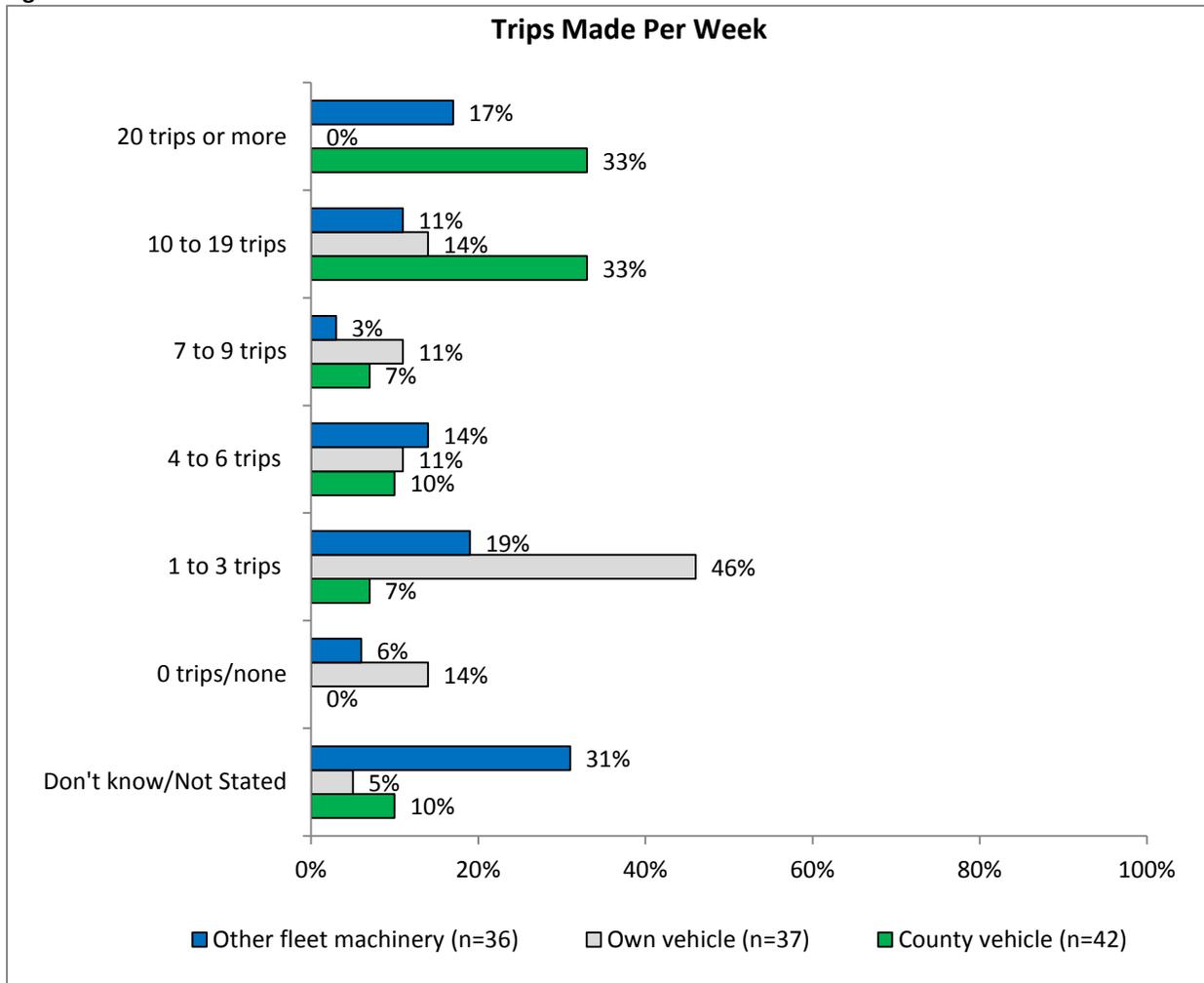
Please be assured that your contact information will only be released in regard to the draw, and will not be linked to individual survey responses in any way. **(MANDATORY IF YOU WISH TO BE ENTERED IN THE DRAW)**

- Yes
- No

Appendix B
Select Pre-Campaign Results

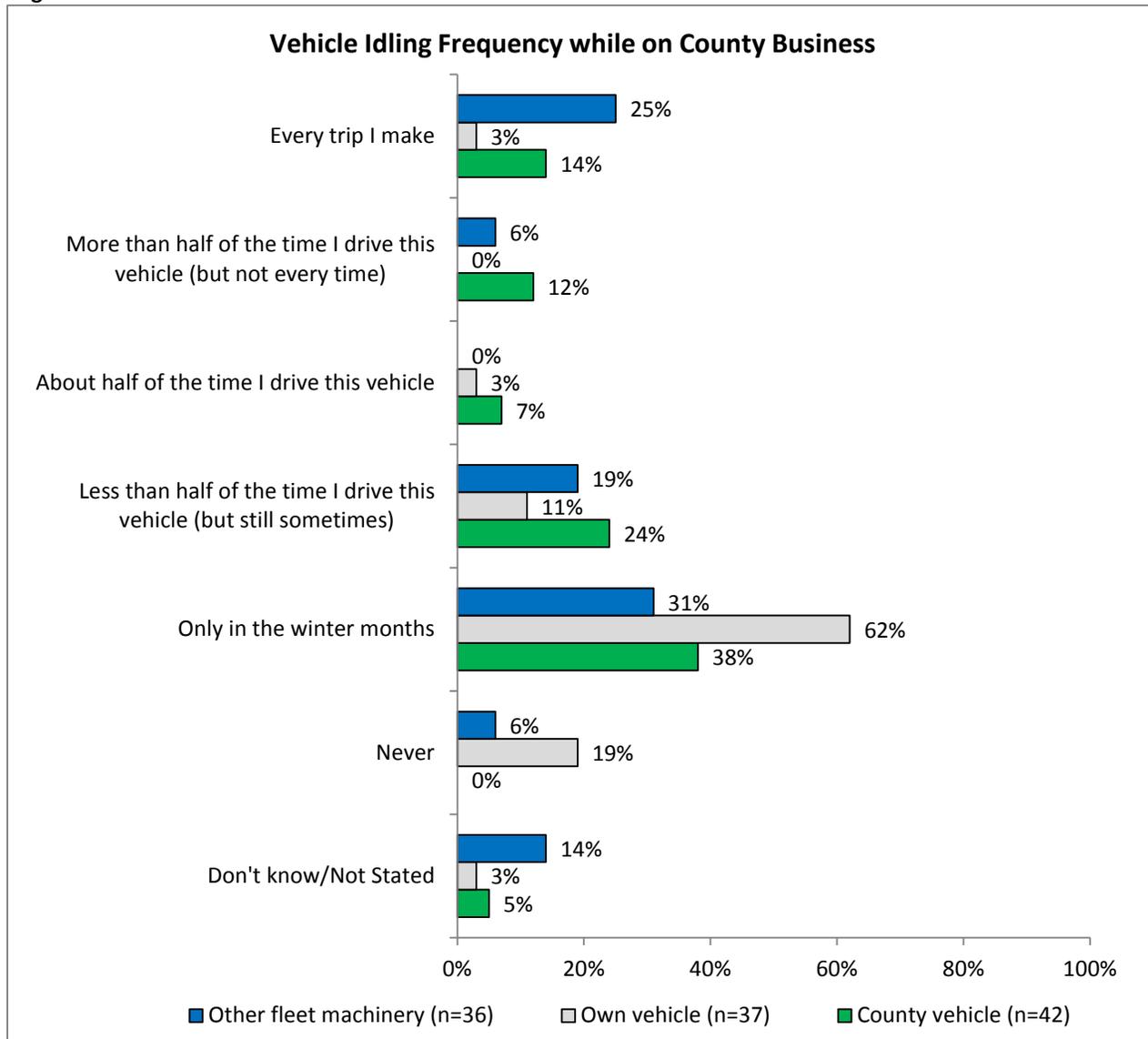
Those who use their own vehicle for County business (n=37), those who use a County vehicle (n=42) and those who use other fleet machinery (n=36) were asked how many trips they make each week using each type of vehicle while on County business. For the purpose of this study, a trip was defined as any level of travel that takes a person from one location to another location while on County business. One-third of those who use a County vehicle (33%) made 20 trips or more in a week. Nearly half of those who used their own vehicle (46%) made 1 to 3 trips per week and 19% of those who used other fleet machinery made 1 to 3 trips in a week. See Figure A, below.

Figure A



Those who use their own vehicle for County business (n=37), those who use a County vehicle (n=42) and those who use other fleet machinery (n=36) were then asked how often they idle these vehicles. For the purpose of this study, idling is defined as leaving the engine running while the vehicle is stopped and parked. Nearly two-thirds (62%) of those who use their own vehicle for County business, 38% of those who use a County vehicle, and 31% of those who use other fleet machinery only idle their vehicles in the winter months. One-quarter (25%) of those who use other fleet machinery idle their vehicles every trip they make. See Figure B, below.

Figure B



Those who idle their own vehicle for County business (n=30), those who idle a County vehicle (n=42) and those who idle other fleet machinery (n=34) were asked how long they leave these vehicles idling for, on average. Nearly half (47%) of those who use their own vehicle and 26% of those who use a County vehicle idle for 3 to 5 minutes. Eighteen percent (18%) of those who use other fleet machinery idle their vehicles for more than 15 minutes, 11 to 15 minutes, 6 to 10 minutes, and 3 to 5 minutes. See Figure C, below.

Figure C

