



## 2016 Idling Awareness Survey

### Final Report

July 19, 2016



Lacombe County

2016 Idling Awareness Survey Final Report

### TABLE OF CONTENTS

<b>SUMMARY OF FINDINGS</b>	<b>3</b>
Attitudes About Idling	3
Idling Behaviour	3
Knowledge About Idling	4
Idle Reduction Program	5
<b>1.0 STUDY BACKGROUND</b>	<b>7</b>
<b>2.0 METHODOLOGY</b>	<b>8</b>
2.1 Project Initiation and Questionnaire Design	8
2.2 Survey Population and Data Collection	9
2.2.1 Web Surveys	9
2.2.2 Hard Copy Services	9
2.3 Data Analysis and Project Documentation	10
<b>3.0 STUDY FINDINGS</b>	<b>11</b>
3.1 Attitudes About Idling	11
3.2 Idling Behaviour	15
3.3 Knowledge About Idling	22
3.4 Idle Reduction Program	26
3.5 Final Comments	42
3.6 Respondent Profile	43
<b>DRAW ENTRY FORM</b>	<b>14</b>
Appendix A – Survey Instrument	



**Lacombe County**

**2016 Idling Awareness Survey Final Report 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.<sup>1</sup>

**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.

<sup>1</sup> 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).

4



Lacombe County

### 2016 Idling Awareness Survey Final Report

- 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.

5



Lacombe County

#### 2016 Idling Awareness Survey Final Report

- 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).



Lacombe County

2016 Idling Awareness Survey Final Report **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.



**Lacombe County**

## **2016 Idling Awareness Survey Final Report 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.



Lacombe County

---

2016 Idling Awareness Survey Final Report

## 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.<sup>2</sup>

### 2.2.1 Web Surveys

Web-based surveys were conducted from May 18<sup>th</sup> to June 3<sup>rd</sup>, 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 18<sup>th</sup>, 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 3<sup>rd</sup>, 2015. Banister Research's call centre entered the data from the surveys for data analysis and coding.

<sup>2</sup>Based on a total population of 100 employees.

9



Lacombe County

2016 Idling Awareness Survey Final Report

## 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.



Lacombe County

## 2016 Idling Awareness Survey Final Report **3.0 STUDY FINDINGS**

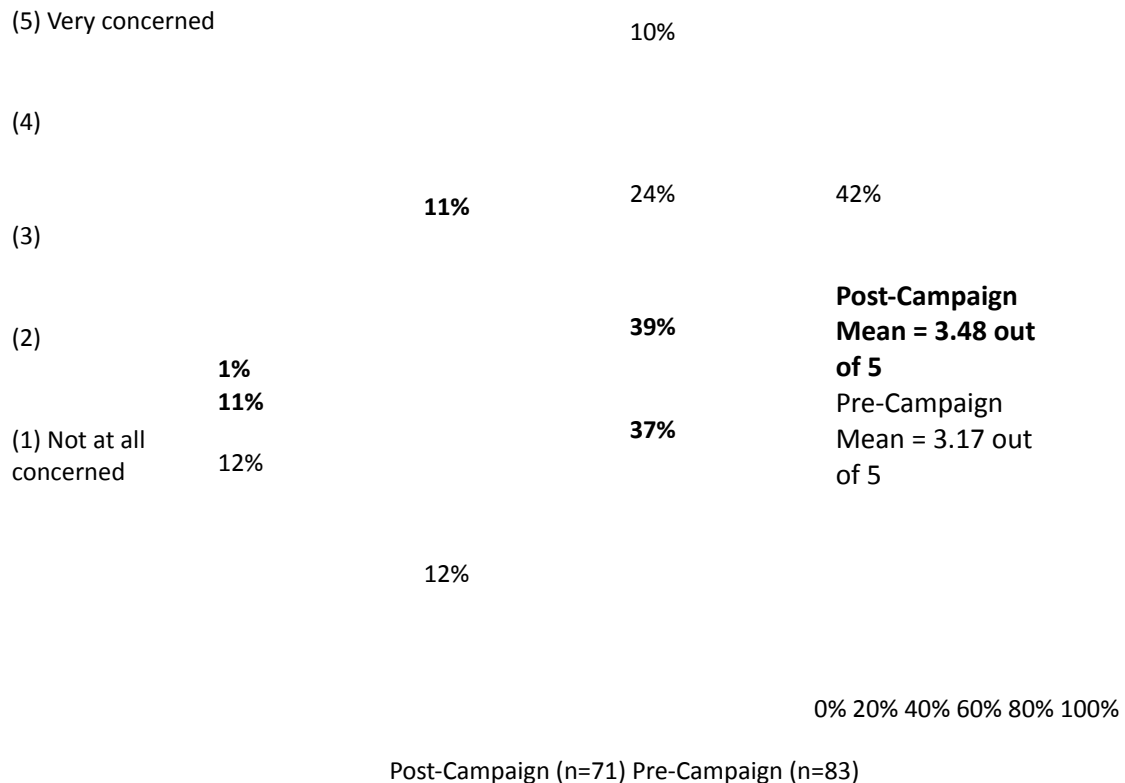
Results of the survey are presented as they relate to the specific topic areas addressed by the survey. It is important to note when reading the report that the term *significant* refers to “statistical significance”. Only those respondent subgroups which reveal statistically significant differences 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

**How concerned are you with vehicle idling as an environmental issue?**



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%). 11



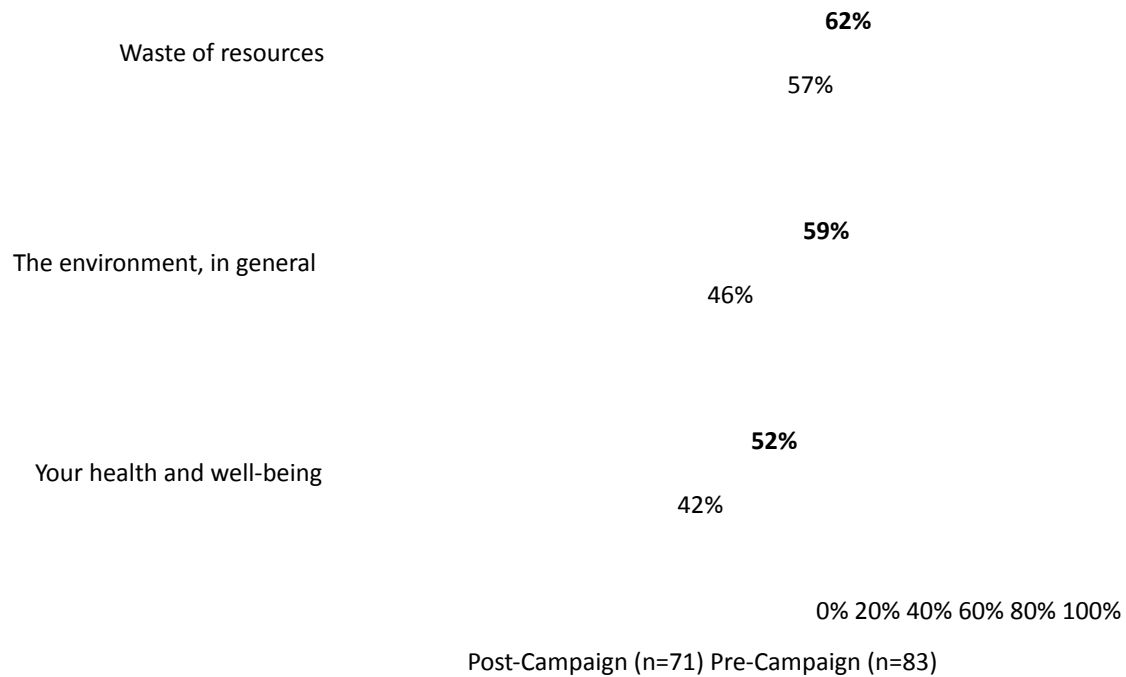
Lacombe County

**2016 Idling Awareness Survey Final Report**

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

**Concerns with the Effects of Idling\***



\*Percent of respondents who were concerned (rated each as a 4 or 5 out of 5)



Lacombe County  
2016 Idling Awareness Survey Final Report

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)

	Post (n=71)	Pre (n=83)	Post	Pre	Post	Pre	Post	Pre	Post	Pre	P
Waste of resources	-	4	9	15	30	24	39	39	23	18	
The environment, in general	1	2	13	18	27	34	47	33	13	13	
Your health and well-being	1	8	11	17	35	30	37	29	16	13	

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%).

13



Lacombe County

2016 Idling Awareness Survey Final Report

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*

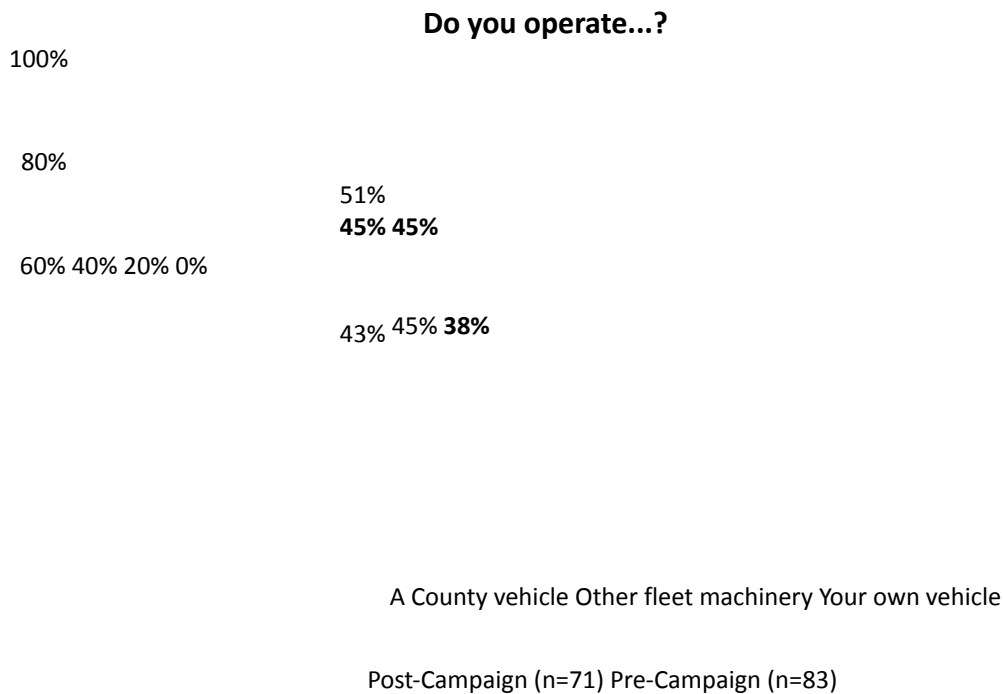
	Post-Campaign (n=71)	Pre-Campaign (n=83)
Polluting the environment/poor air quality	44	45
Waste of County resources (in general)	24	16
Health concerns	17	16
Waste of fuel	11	15
Optimum vehicle maintenance	6	-
Waste of money	3	8
Refuse/Don't Know	42	28

\*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**

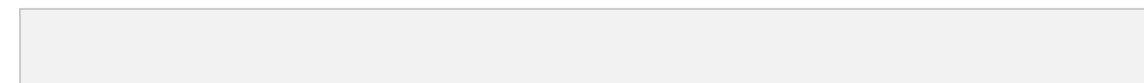


Respondent subgroups significantly more likely to **use their own vehicle for County business** included:

- 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%).

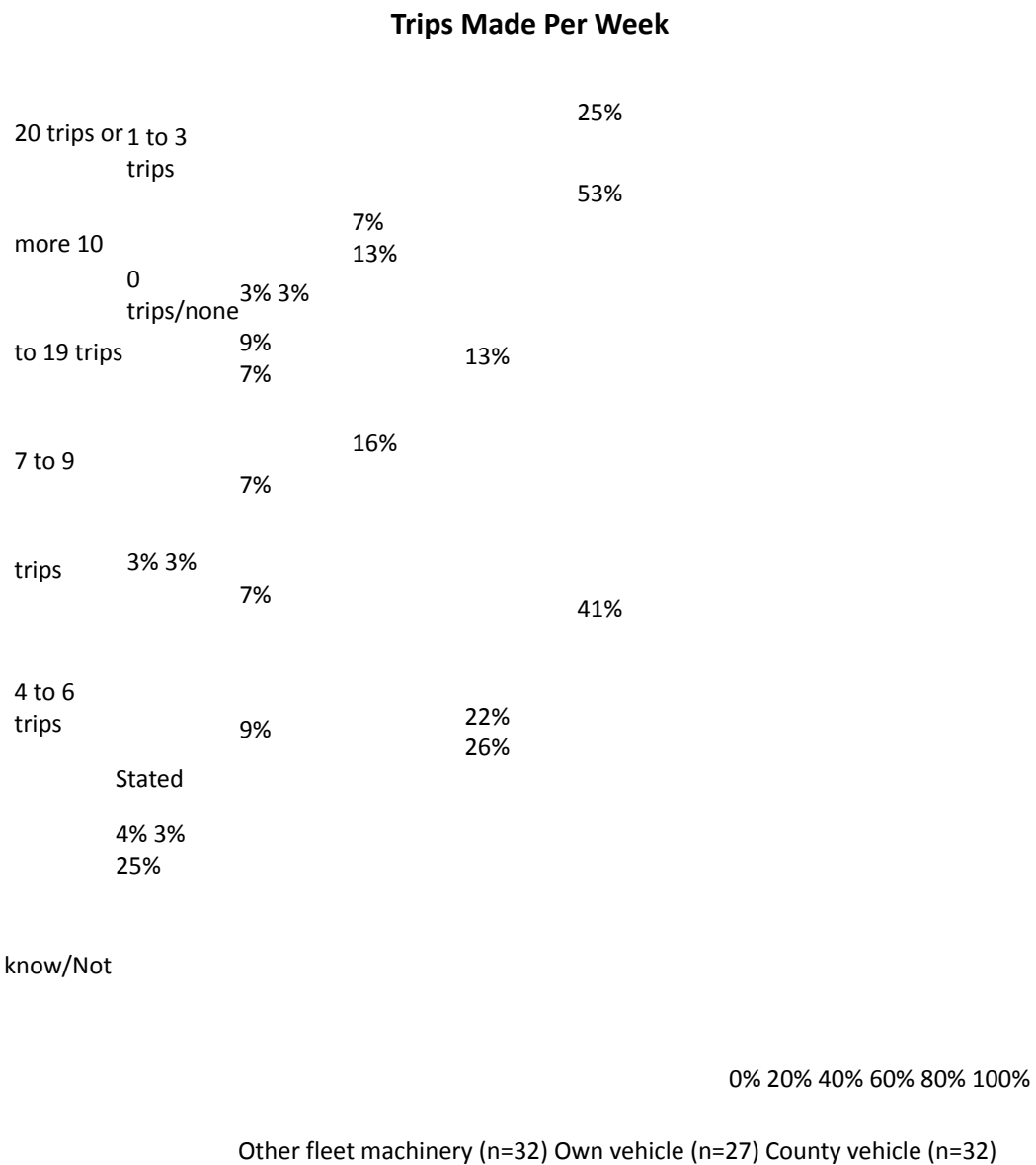
Those who use other fleet machinery for County business (66%) were versus significantly more likely to **use a County vehicle for County business** versus those who do not (28%).

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%).

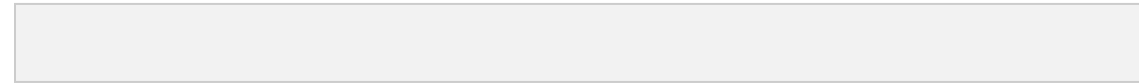


Those who use their own vehicle for County business (n=27), those who use a County vehicle (n=32) and those who use other fleet machinery (n=32) were asked how many trips they make each week using each type of vehicle while on County business. For the purpose of this study, a trip was defined as any 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**







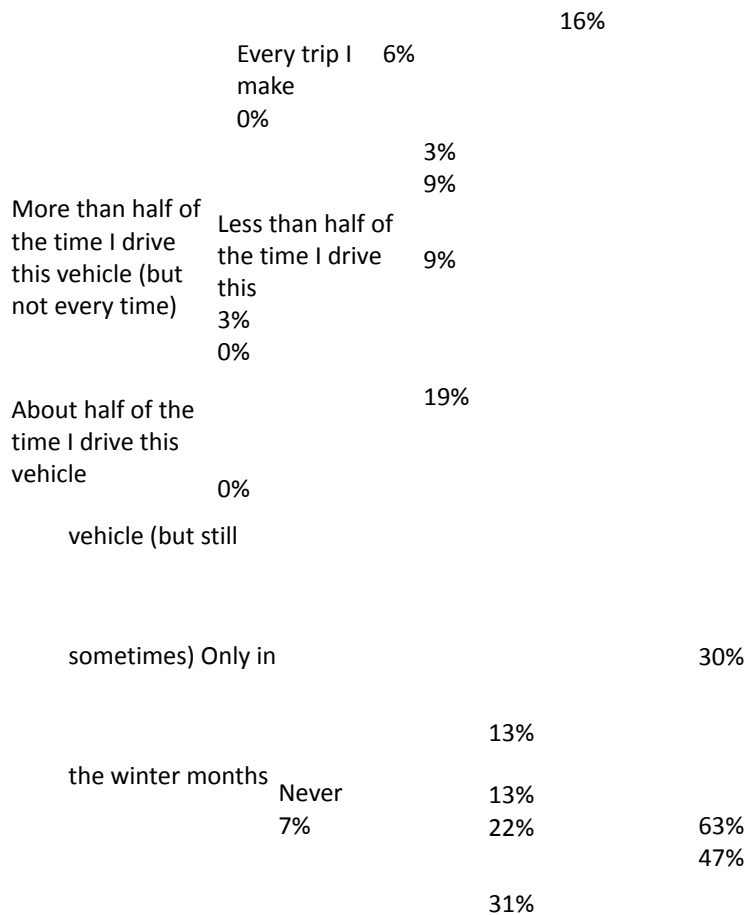
Lacombe County

2016 Idling Awareness Survey Final Report

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

Vehicle Idling Frequency while on County Business

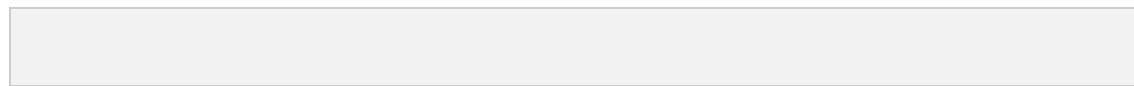


Stated  
 9%  
 0%  
 0%

Don't know/Not

0% 20% 40% 60% 80% 100%

Other fleet machinery (n=32) Own vehicle (n=27) County vehicle (n=32)



Lacombe County

**2016 Idling Awareness Survey Final Report**

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**

**Vehicle Idling Duration while on County Business**

minutes	Other fleet machinery (n=32)	Own vehicle (n=27)	County vehicle (n=32)
More than 15 minutes	19%	7%	9%
3 to 5 minutes	16%	15%	16%
1 to 2 minutes	15%	22%	6%
Less than 1 minute	6%	6%	0%
to 10 minutes	7%	13%	4%
	16%		

34%

28%

16%

Don't know/Not Stated 30%

3%

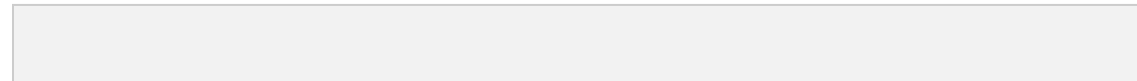
19%

0% 20% 40% 60% 80% 100%

Other fleet machinery (n=32) Own vehicle (n=27) County vehicle (n=32)

Base: Respondents who operate each type of vehicle and leave it idling at least some of the time

18



Lacombe County

2016 Idling Awareness Survey Final Report

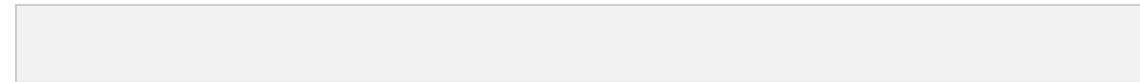
Respondents were asked what they believe are the major reasons people idle. The vast majority of the respondents (68%) stated that the major reason people idle is to warm up their vehicle, followed by 13% who stated convenience, in general. See Table 3, below.

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**

<b>What do you think are the major barriers for people, in terms of reducing idling behavior?</b>		
	<b>Percent of Respondents*</b>	
	<b>Post-Campaign (n=71)</b>	<b>Pre-Campaign (n=83)</b>
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**

Lacombe County

2016 Idling Awareness Survey Final Report

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
<b>Yes; specify</b>	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**

**Lacombe County**

**2016 Idling Awareness Survey Final Report**

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**

<b>Are there any areas in Lacombe County where idling is a major concern?</b>		
	<b>Percent of Respondents*</b>	
	<b>Post-Campaign</b>	<b>Pre-Campaign</b>

	(n=71)	(n=83)
No particular areas of concern	27	23
<b>Yes; Specify</b>	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:

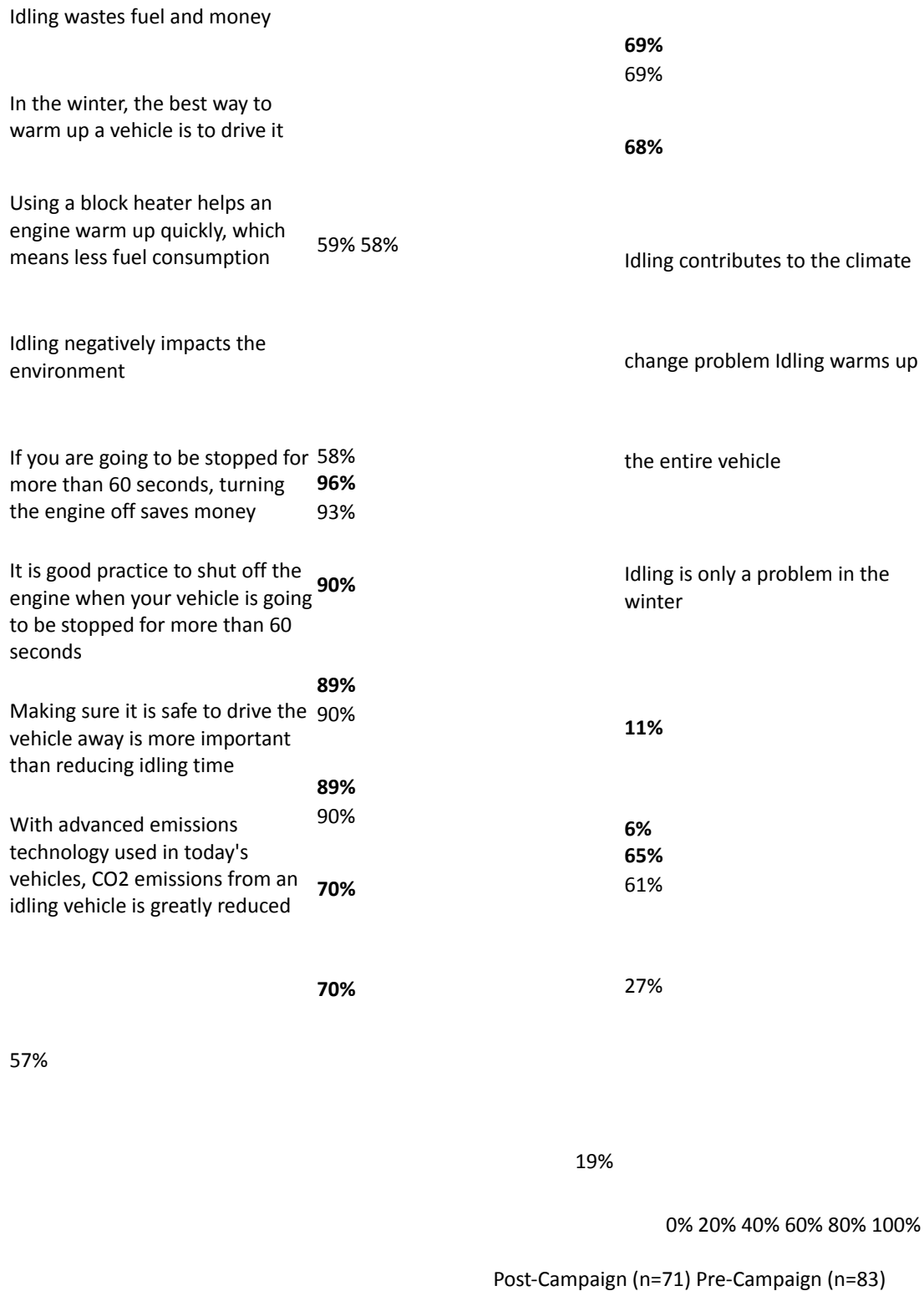
- Idling warms up the entire vehicle (11%, a significant decrease from 27% in the pre-campaign); and
- Idling is only a problem in the winter (6%, a significant decrease from 19% in the pre-campaign).

See Figure 7, on the following page.

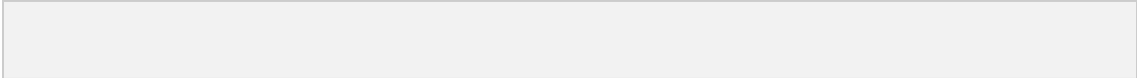


**Figure 7**

**Knowledge About Idling\***



\*Percent of respondents who rated each statement as "true"



Lacombe County

2016 Idling Awareness Survey Final Report

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%).

**Lacombe County**

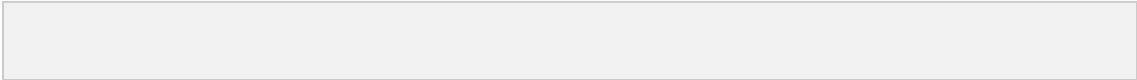
**2016 Idling Awareness Survey Final Report**

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**

<b>To the best of your knowledge, what are the known effects of reducing idling behaviour?</b>		
	<b>Percent of Respondents*</b>	
	<b>Post-Campaign (n=71)</b>	<b>Pre-Campaign (n=83)</b>
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**



Lacombe County

2016 Idling Awareness Survey Final Report

### 3.4 Idle Reduction Program

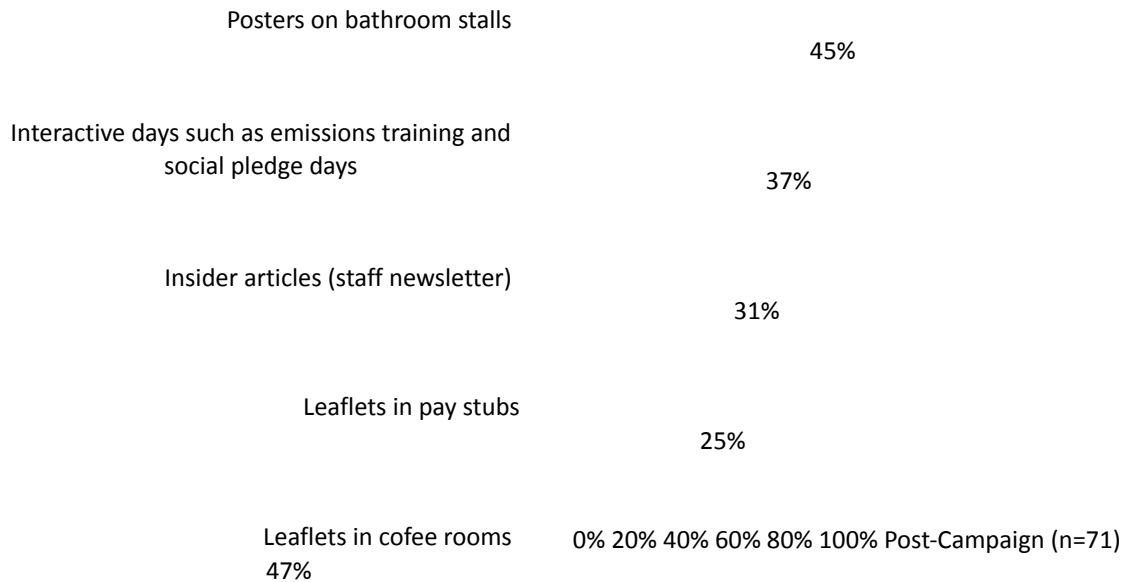
Beginning in May, 2015, Lacombe County developed an Idle Reduction Program. During the Idle Reduction Program, Lacombe County communicated program information with its employees through the following:

- 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

**Useful Methods of Education\***



\*Percentage of respondents who indicated that each method was useful (ratings of 4 or 5 out of 5)

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/N ot 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	<b>2.80</b>
--------------------------	----	----	----	----	---	---	-------------

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:

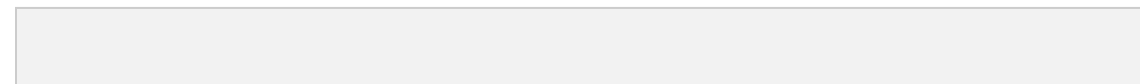
- Those who were concerned (ratings of 4 or 5 out of 5) with vehicle idling as an environmental issue (50%) versus those who were not concerned (ratings of 1, 2, or 3 out of 5) (23%);
- Those who were concerned (ratings of 4 or 5 out of 5) with the effects of vehicle idling on their health (51%) versus 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%).



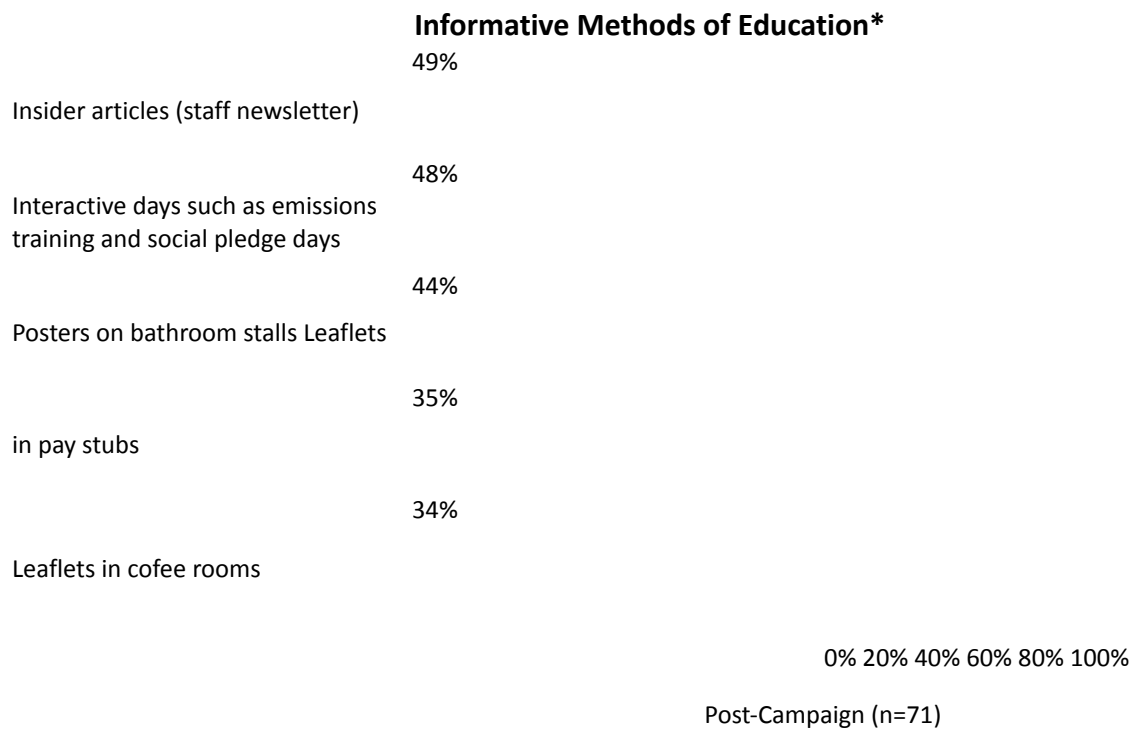
Respondent subgroups significantly more likely to have rated **leaflets in coffee rooms** as a useful method of education (ratings of 4 or 5 out of 5) included:

- 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**



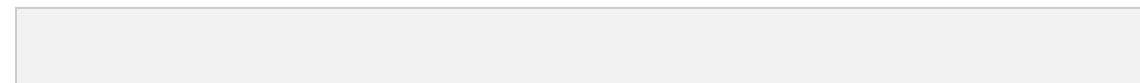
\*Percentage of respondents who indicated that each method was informative (ratings of 4 or 5 out of 5)

**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	<b>3.66</b>
Insider articles	4	13	31	34	16	3	<b>3.45</b>
Posters on bathroom stalls	10	17	28	21	23	1	<b>3.30</b>
Leaflets in pay stubs	11	17	32	24	11	4	<b>3.07</b>
Leaflets in coffee rooms	13	14	35	24	10	4	<b>3.04</b>

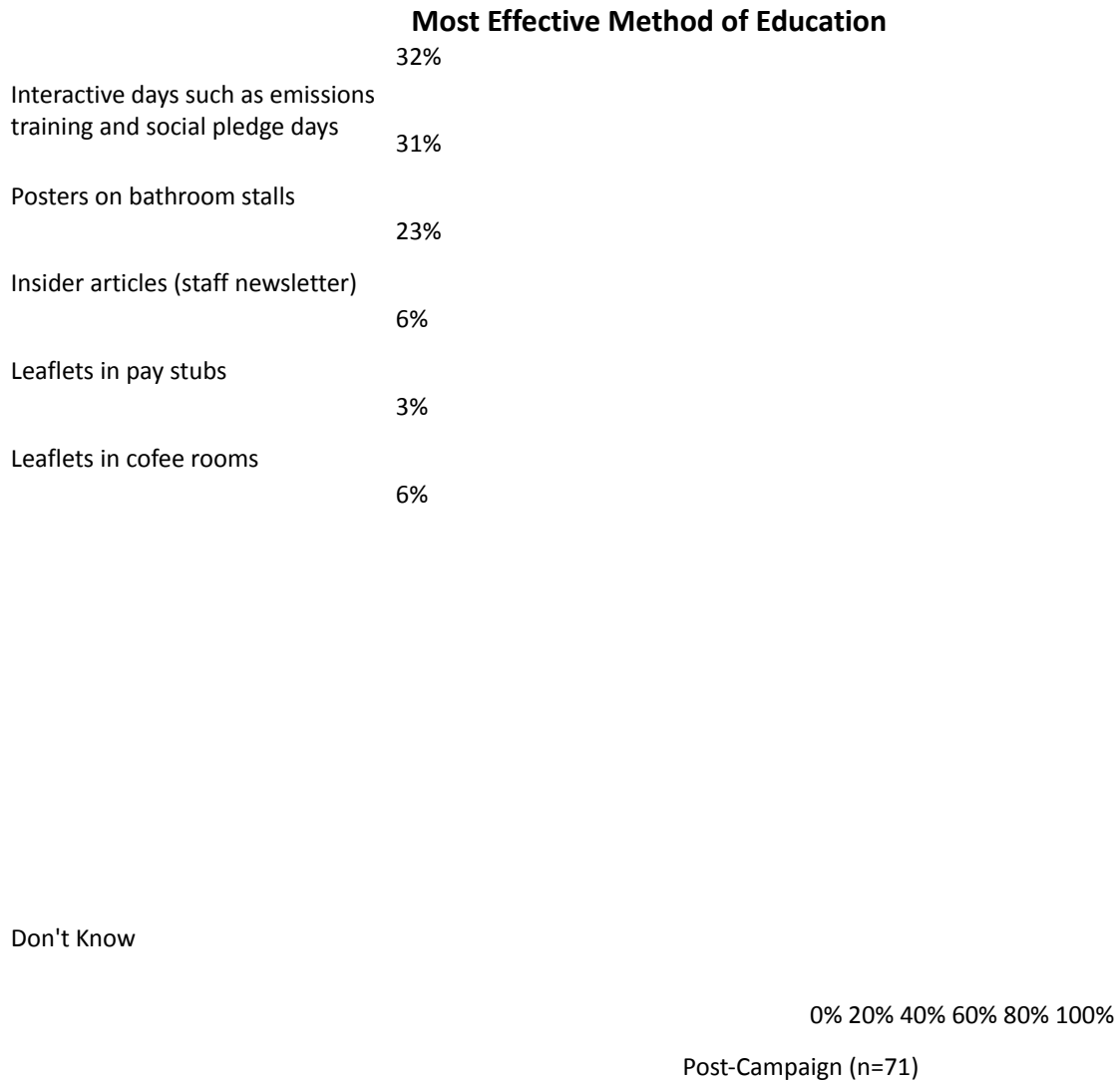
Those who do not use other fleet machinery for County business (62%) were significantly more likely to have rated **Insider articles** as informative (ratings of 4 or 5 out of 5) versus those who do (34%).



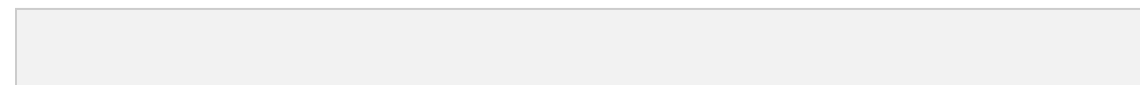


When asked what the most effective method of communication was in educating them on the Idle Reduction Program, nearly one-third of respondents said interactive days such as emissions training and social pledge days (32%) or posters on bathroom stalls (31%). See Figure 10, below.

**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**

**2016 Idling Awareness Survey Final Report**

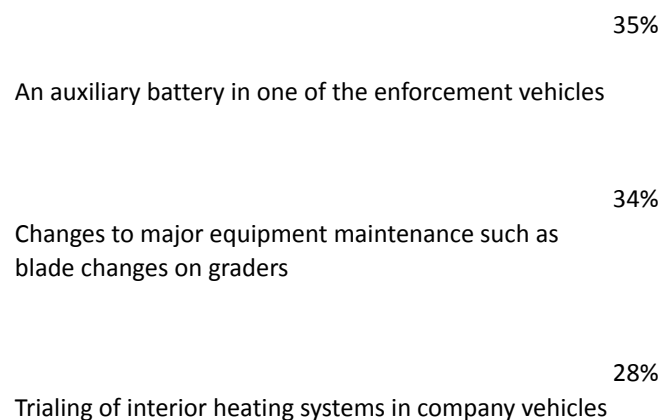
Lacombe County implemented the following engineering related changes with regards to the Idle Reduction Program:

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**

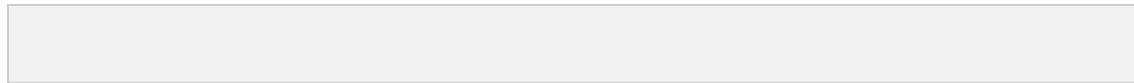
**Awareness of Engineering Related Changes**



0% 20% 40% 60% 80% 100%

Post-Campaign (n=71)

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.



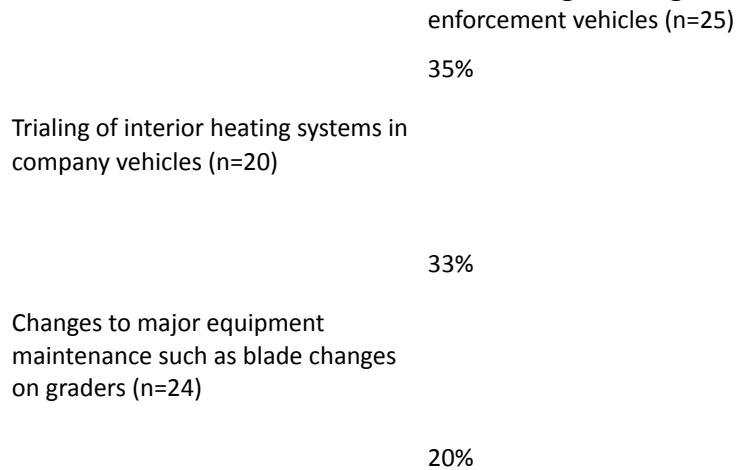
Lacombe County

**2016 Idling Awareness Survey Final Report**

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**

**Effectiveness of Engineering Related Changes\***



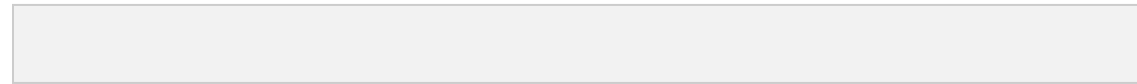
An auxiliary battery in one of the

0% 20% 40% 60% 80% 100%

Post-Campaign

\*Percentage of respondents who rated each change as effective (ratings of 4 or 5 out of 5)

Base: Respondents who were aware of each change prior to completing the survey



Lacombe County

2016 Idling Awareness Survey Final Report

Table 10

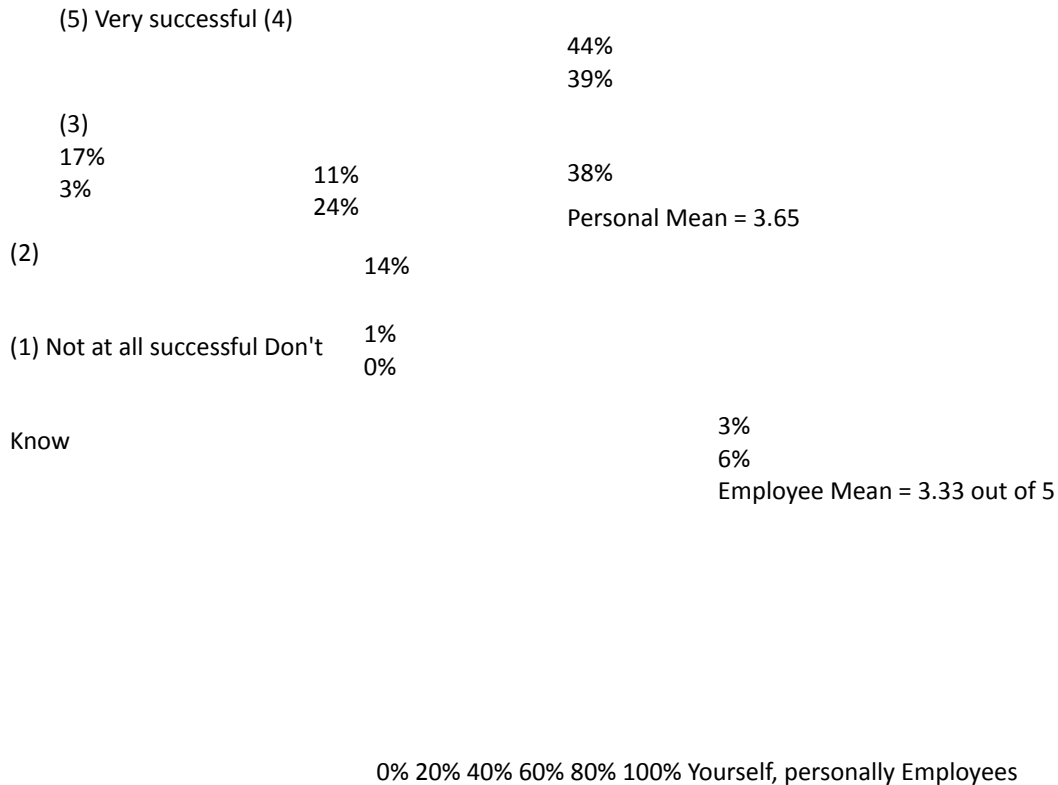
How effective were each of these initiatives pertaining to the Idle Reduction Program in terms of reducing energy consumption?							
Base: Respondents that were aware of each change prior to completing the survey	Percent of Respondents*						
	Not at all Effective (1)	(2)	(3)	(4)	Very Effective (5)	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

**How successful do you think the program was in terms of reducing idling behavior amongst employees and yourself, personally?**  
out of 5



n=71

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%).

Lacombe County

2016 Idling Awareness Survey Final Report

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

<b>Why do you feel that the program was not successful in terms of reducing idling behavior amongst employees?</b>	
<b>Base: Respondents that rated this program as unsuccessful amongst employees (ratings of 1, 2, or 3 out of 5)</b>	<b>Percent of Respondents*</b>
	<b>Post-Campaign (n=37)</b>
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

Lacombe County

2016 Idling Awareness Survey Final Report

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

<b>Why do you feel that the program was successful in terms of reducing idling behavior amongst employees?</b>	
<b>Base: Respondents that rated this program as successful amongst employees (ratings of 4 or 5 out of 5)</b>	<b>Percent of Respondents*</b>
	<b>Post-Campaign (n=30)</b>
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

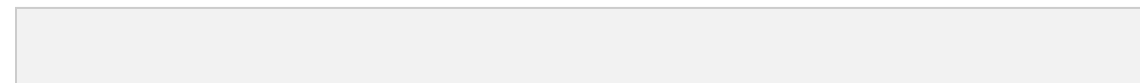
Those who believed the program was not successful in terms of reducing idling behavior amongst **themselves personally** (n=26; ratings of 1, 2, or 3 out of 5) were asked why they felt this way. Most commonly, respondents indicated that they do not idle (n=8). See Table 13, below.

**Table 13**

<b>Why do you feel that the program was not successful in terms of reducing idling behavior for you personally?</b>	
<b>Base: Respondents that rated this program as unsuccessful for them personally (ratings of 1, 2, or 3 out of 5)</b>	<b>Number of Respondents*</b>
	<b>Post-Campaign (n=26)**</b>
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



**Lacombe County**

**2016 Idling Awareness Survey Final Report**

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.

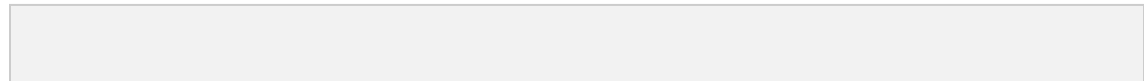
**Table 14**

<b>Why do you feel that the program was successful in terms of reducing idling behavior for</b>
---



<b>you personally?</b>	
<b>Base: Respondents that rated this program as successful for themselves personally (ratings of 4 or 5 out of 5)</b>	<b>Percent of Respondents*</b>
	<b>Post-Campaign (n=43)</b>
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

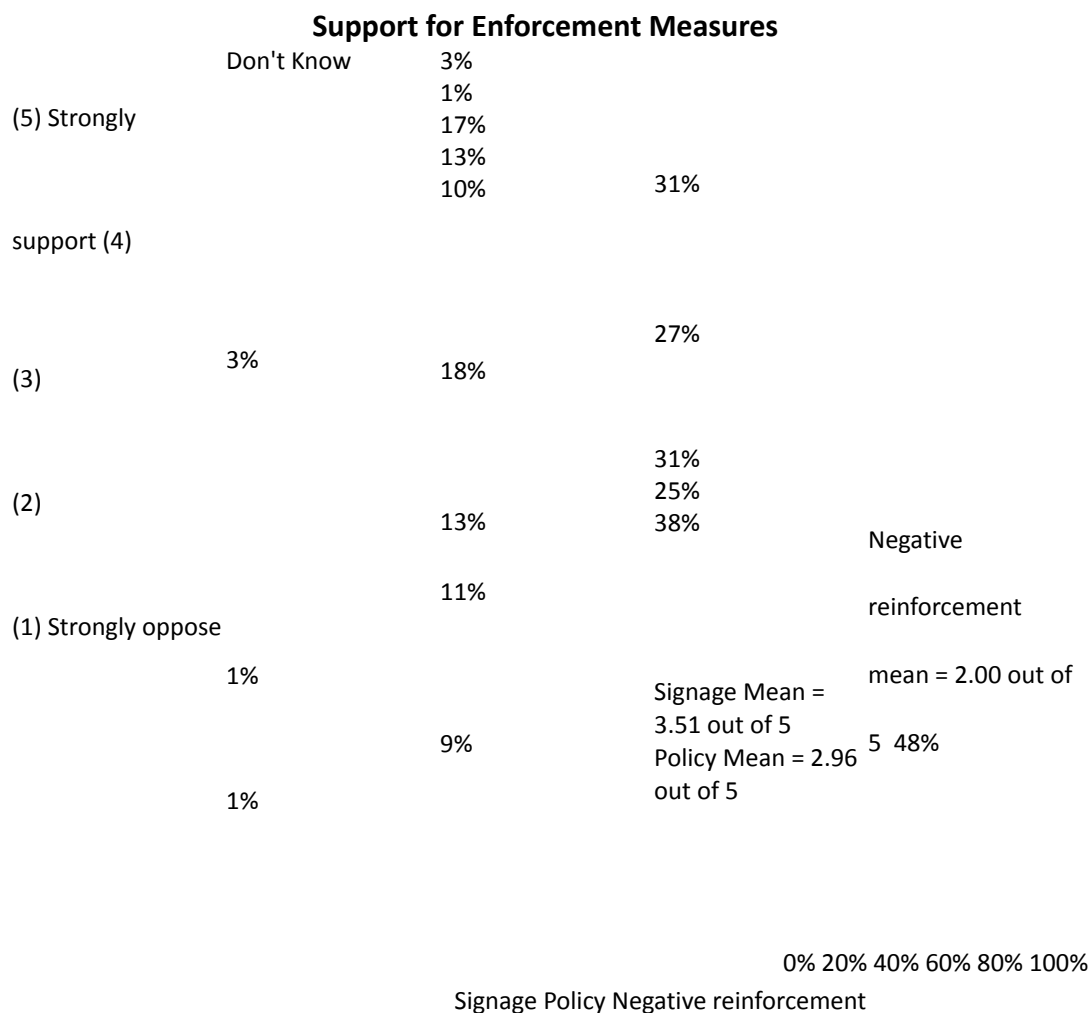


To help employees develop long lasting habits to reduce idling behavior, other options for reducing idling behavior in the County could include the following types of enforcement:

- 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**



n=71

## Lacombe County

## 2016 Idling Awareness Survey Final Report

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.

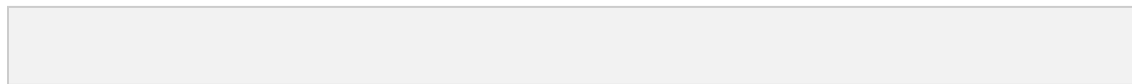
Table 15

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

39



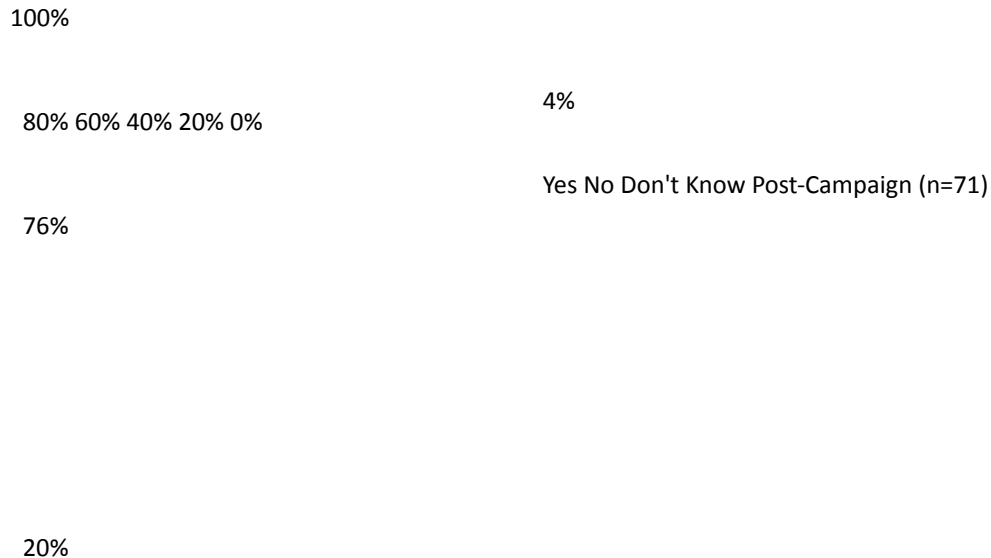
Lacombe County

**2016 Idling Awareness Survey Final Report**

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**

**Do you think the Idle Reduction Program should continue?**



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%).

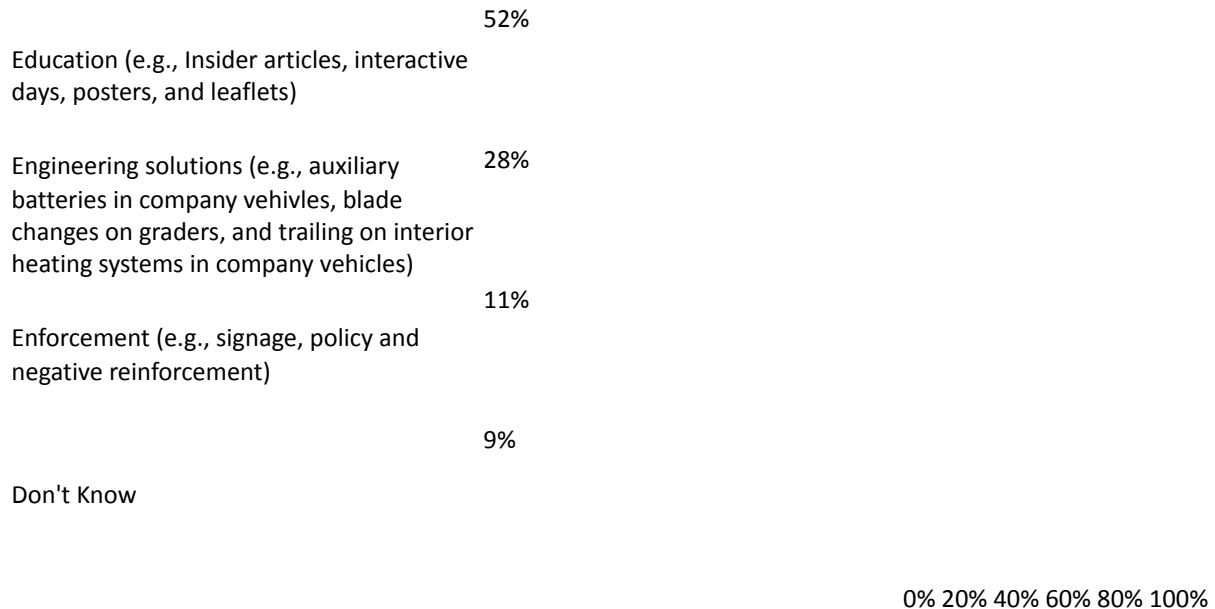
## Lacombe County

## 2016 Idling Awareness Survey Final Report

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

**Which of the following areas should Lacombe County focus its efforts on in regards to reducing idling behaviors amongst employees?**



Post-Campaign

n=54

Base: Respondents who were aware of each change prior to completing the survey

Lacombe County

2016 Idling Awareness Survey Final Report

### 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
<b>Yes; Specify</b>	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

Lacombe County

2016 Idling Awareness Survey Final Report

### 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)
<b>Gender</b>		
Male	68	71
Female	27	27
Other	1	-
Unreported	4	2

<b>Age</b>		
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
<b>Percent of respondents with at least one (1) member in the household belonging to the following age groups:</b>	<b>(n=57)*</b>	<b>(n=74)*</b>
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
<b>Mean Household Size</b>	<b>2.63 people</b>	<b>2.61 people</b>
<b>What is the highest level of education you have achieved to date?</b>	<b>(n=71)</b>	<b>(n=83)</b>
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

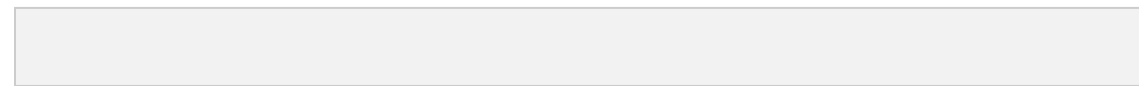
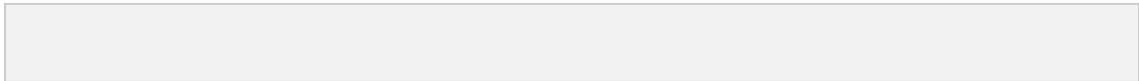




Table 18

	Percent of Respondents	
	Post-Campaign (n=71)	Pre-Campaign (n=83)
<b>How long have you worked for Lacombe County</b>		
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
<b>How long have you lived in Lacombe County?</b>		
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
<b>Mean number of years</b>	<b>25.40</b>	<b>30.75</b>



**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 17<sup>th</sup>, 2015**. If you have not been an employee of the County since February 17<sup>th</sup>, 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 3<sup>rd</sup>, 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.**

Lacombe County

2016 Idling Awareness Survey Banister Research & Consulting Inc. **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 17<sup>th</sup>, 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) **Not at all Concerned**  
(2) (3) (4) (5) **Very Concerned**

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**)

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

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

---

---

---

Lacombe County

2016 Idling Awareness Survey Banister Research & Consulting Inc. **SECTION 2: IDLING BEHAVIOUR**

4) Do you operate any of the following? **Please check “yes” or “no” for each.**

Do you operate...?

**CHECK ONE BOX PER ROW** Yes No a) Your own vehicle for County business

b) A county vehicle

c) Other fleet machinery

5) In an average week, how many trips do you make using each of the following vehicles, **while on County business?**

**For the purpose of this study, a trip is defined as any travel that takes you from one location to another location while on County business.**

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

How many trips do you make per week using...?

b) A County vehicle 0

CHECK ONE BOX PER ROW

c) Other fleet machinery Know Not

a) Your own personal vehicle for County business (none) 1-3 4-6 7-9 10-19 20-24 25-50 51+ Applicable Don't

Lacombe County

2016 Idling Awareness Survey Banister Research & Consulting Inc.

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

Lacombe County

2016 Idling Awareness Survey Banister Research & Consulting Inc. 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

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc.** 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

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc. 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**?

**CHECK ONE BOX PER ROW** True False Don't Know a) Idling wastes fuel and money

b) Idling negatively impacts the environment

c) With the advanced emissions technology used in today's vehicles, carbon dioxide (CO<sub>2</sub>) emissions from an idling vehicle are greatly reduced.

d) Idling contributes to the climate change problem.

e) In the winter, the best way to warm up a vehicle is to drive it.

f) Using a block heater helps an engine warm up quickly, which means less fuel consumption.

g) Idling warms up the entire vehicle.

h) It's a good practice to shut off the engine when your vehicle is going to be stopped for more than 60 seconds.

i) Idling is only a problem in the winter.

j) Making sure it's safe to drive the vehicle away is more important than reducing idling time.

k) If you are going to be stopped for more than 60 seconds, turning the engine off saves money.

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

---



---



---

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc. 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 useful were each of the following methods?**

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

Leaflets in pay stubs

**Not at all Useful (2) (3) (4) (5)**  
**(1)**  
**Very Useful**

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 informative were each of the following methods?**

Insider articles (staff

newsletter)  
 Interactive days such as emission training and social pledge days  
 Posters on bathroom stalls

Leaflets in coffee rooms  
 Leaflets in pay stubs  
**(1)**  
**Not at all Informative**

**(2) (3) (4)**  
**(5)**  
**Very Informative**

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

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc.**

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”

18) How **effective** do you feel this initiative was in terms of reducing energy consumption?

17) Were you aware of each change prior to completing this survey?

(5)  
**Very Effective**

a) An auxiliary battery in one  
**No, not aware**

Yes, aware	Not Effective
<input type="checkbox"/> GO TO Q18	

<input type="checkbox"/> GO TO Q18	
<input type="checkbox"/> GO TO Q18	

- of the enforcement vehicles  
 **SKIP TO 'b'**
- b) Changes to major equipment maintenance such as blade changes on graders  
 **SKIP TO 'c'**
- c) Trialing of interior heating systems in company  
 **SKIP TO Q19**

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"

Lacombe County

**2016 Idling Awareness Survey Banister Research & Consulting Inc.**

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

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?	placed strategically around the parking lot and in idling "hotspots" as a reminder to limit idling)	proper behavior regarding idling)	(1) Strongly Oppose
Policy (This policy would state generalizations of	Negative reinforcement (For example, mock fines on your vehicle or pictures of offenders in the Insider)	(2) (3) (4) (5)	Strongly Support
Signage (Signage would be			

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

---

---

---

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc. 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

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc.**

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

**Lacombe County**

**2016 Idling Awareness Survey Banister Research & Consulting Inc. 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

		Trips Made Per Week	
	10 to 19 trips		
		11%	
20 trips or more		17%	
	0%	33%	
		33%	
	3%	7%	
	7%		
7 to 9 trips	14%	19%	
4 to 6 trips	11%	46%	
		1 to 3 trips	
	14%	10%	
	11%		
Stated	6%	5%	
		14%	
0 trips/none	Don't know/Not	0%	

10%

31%

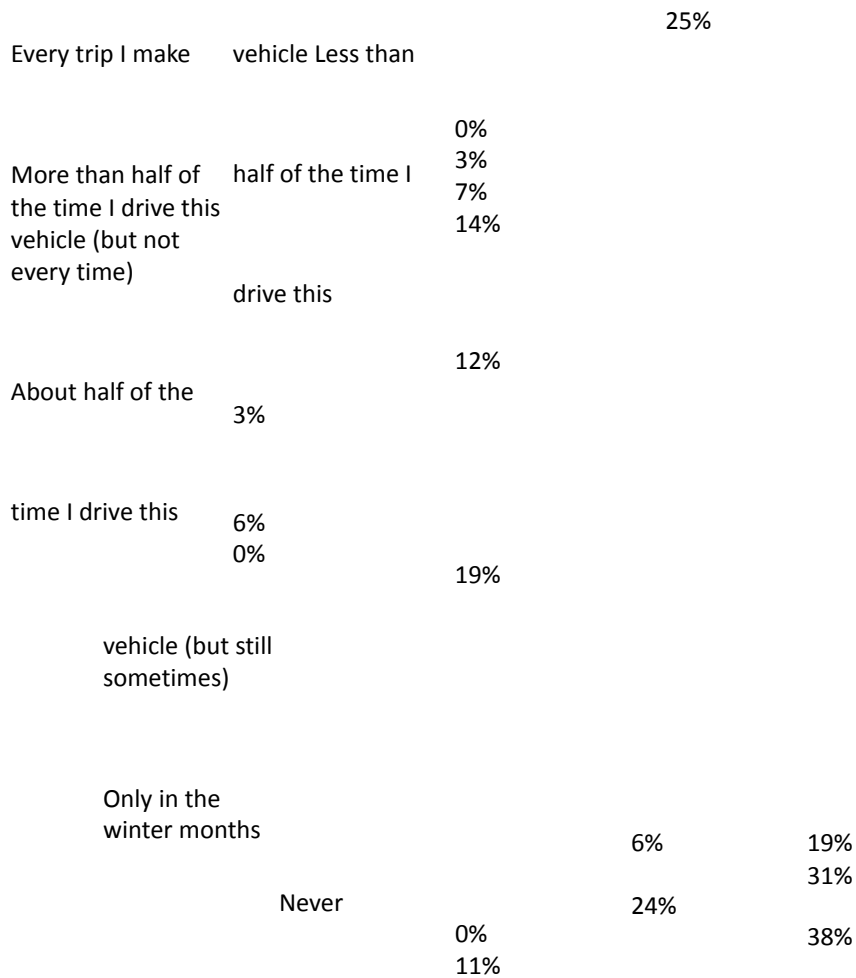
0% 20% 40% 60% 80% 100% Other fleet machinery (n=36) Own vehicle (n=37)

County vehicle (n=42)

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 vehicle every trip they make. See Figure B, below.

**Figure B**

**Vehicle Idling Frequency while on County Business**



62%

Stated  
14%  
3%  
5%

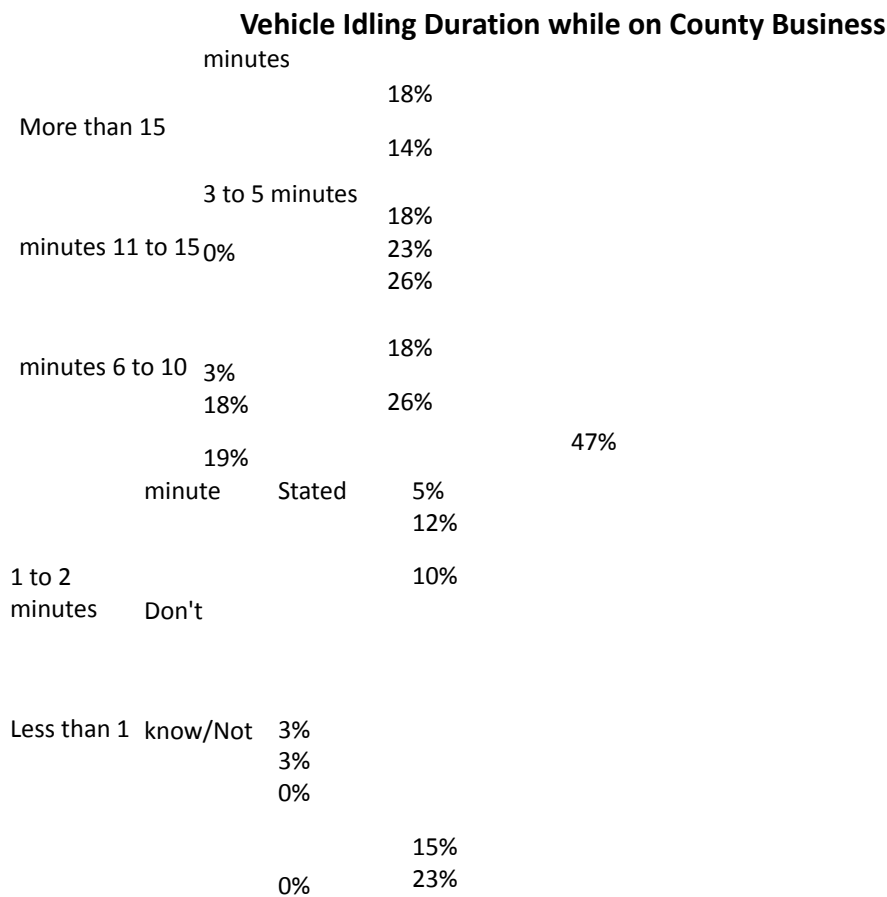
Don't know/Not

0% 20% 40% 60% 80% 100%

Other fleet machinery (n=36) Own vehicle (n=37) County vehicle (n=42)

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



0% 20% 40% 60% 80% 100% Other fleet machinery (n=34) Own vehicle (n=30) County vehicle (n=42) Base:  
Respondents who operate each type of vehicle and leave it idling at least some of the time