DON'T SIT IDLY BY:

A Two-Pronged Approach to Reduce Unnecessary Idling in The Okanagan

PURPOSE

The purpose of this plan is twofold:

PART A:	Seek solutions that work to change the behaviour of unnecessary idling through a behavioural insights approach
PART B:	Raise awareness on City of Kelowna's anti-idling bylaw through a traditional communications approach

**For the purpose of this two-pronged approach, we will take a regional approach with Part A and a City of Kelowna focused approach for Part B.*

PART A: CHANGING UNNECESSARY IDLING BEHAVIOUR WITH A BEHAVIOURAL INSIGHTS APPROACH

BEHAVIOUR INSIGHTS BACKGROUND

Value of Behavioural Insights (BI)

Behavioural Insights (BI) is the application of an empirical approach to understanding and then modifying human behaviour – all for good – and without restricting freedom of choice. When we take a BI approach, we embrace the concept of a "choice architect" and help people make decisions that they were likely to make in the first place. These "nudges" benefit the decision maker and improve health, wealth and happiness, in the eye of the decision maker. They may also improve the health, wealth and happiness of the wider population.

Value of Experimentation

When we use an empirical or scientific approach to understand and then change behaviour, we make a conceited effort to monitor and measure whether an intervention is successful. A methodology based on sound principles can also help us have greater confidence that the intervention that we test applies to the larger population. While this may seem "over the top" or unnecessary, the cost of not testing or guessing and not measuring may cost more in the long run and have limited impact on the target behaviour change (or an unknown impact!).

Why this challenge is a fit for a BI approach

We have an opportunity to really understand the motivations around the behaviour of unnecessary idling in the City of Kelowna – and then testing an approach with a small sub-population to determine the impact of our idea / intervention. While a wide-spread education campaign might be the easiest solution to deliver, we propose an approach that is much smaller in scale, empirical in nature and likely to cost much less over time.

This project is ideal for BI as the target behaviour change of reducing unnecessary idling positively impacts the health of the community and environment. If the intervention is successful, then we can roll this out to a wider population (with a larger investment) knowing that our efforts will make a difference rather that guessing.

SCOPE RIDE SCALE MODEL

There are several key components to a project based on behavioural insights. They include:

1. **Scoping:** The scoping phase seeks outline the problem at hand and identifies the behaviour that we are trying to change. A high-level understanding of our audience, the likely barriers, whether we can reach the population of interest and then measure the target behaviour, will set the project up for success. This bird's eye view of the project will help to determine if the project is a good fit for a BI intervention.
2. **Research:** Exploratory secondary research conducted through literature reviews, cross-jurisdictional scans and / or qualitative research with the target population, for example, will help to dig into the problem, how it flows, deep dive into barriers, and understand the "how" behind reaching the population and target audience. This phase provides a more comprehensive understanding to the problem and target behaviour change.
3. **Innovation:** In this stage we will design a methodology. Best practice in this field is to use a randomized controlled trial (RCT). This research technique aims to gather a target population that is as close to the real-world as possible and helps us make sound recommendations. It should be noted that for this project, an RCT is likely not feasible due to budget constraints. In this phase we will also determine how to measure and record the target behaviour so that we can understand whether the intervention accurately represents the population or was due to chance or external factors.
4. **Data Collection:** This stage is the implementation phase of our "innovation." It's here where we trial the BI intervention and where we monitor results and collect our data.
5. **Evaluation:** At the conclusion of the experiment, we will interpret, analyse and visualize our data to understand if the intervention impacted behaviour and in what way. At the conclusion of this, we will develop recommendations for scaling.
6. **Scale:** BI projects serve as rigorous pilot projects, with the idea of rolling out something larger with a larger population. This phase looks at that larger roll-out if the intervention is successful at changing the target behaviour.

AIR QUALITY BI RESEARCH DESIGN

SCOPING

Problem Statement: Transportation is the largest contributor to greenhouse gas (GHG) emissions within the City of Kelowna. Vehicle emissions also directly contribute harmful emissions into the city's air supply. Idling control is an action to reduce GHG emissions and improve air quality from the transportation sector, which has also been outlined in policy documents such as Kelowna's Community Climate Action Plan and the Central Okanagan Clean Air Strategy. Idling creates smog that can seriously affect residents' health. Benefits of reducing air pollution can be measured by the prevention of premature deaths. Improving the conditions for pedestrians and bicyclists in areas where idling frequently occurs is an important consideration for the overall health of the community.

Target behaviour: Reduce unnecessary vehicle idling (vehicle is in operation, but not in motion)

Population of interest: City of Kelowna residents who operate motor vehicles; does not apply to zero emission vehicles or vehicles while in traffic (to be further refined in the Research Phase)

Assumed barriers to performing target behaviour:

- Idling is a deeply engrained behaviour;
- Idling is often done for convenience or comfort, which gets prioritized over the attributed negative environmental impacts, long-term health impacts, or curbing behaviour for the greater good, rather than for the self
- Misconceptions or misinformation about how turning a car off and on wastes fuel, etc.

RESARCH

In this phase, we will gather insights as to how the problem flows. This step will ultimately help to better design our research methodology. We proposed to conduct additional exploratory research over the summer of 2022 to help decide WHO and WHAT LOCATIONS will receive the treatment. This is also an important consideration for the final step of scaling.

Some questions we might consider are:

- Who is idling?
- Why are they idling?
- What are the actual barriers to stopping?
- How will we reach our target audience?

We can learn more about the problem by conducting the following over the summer months:

- Literature Reviews
- Cross Jurisdictional Scan
- Qualitative Research (interviews, focus groups, surveys)

INNOVATION / METHODOLOGY

This phase will outline our research methodology, which will be refined through our research. Below are a few examples as to who we may target, when and how we will measure behaviour.

Time of Study: September and October 2022

Example A Target Audience: Families who use indoor recreational facilities or who participate in indoor extra-curricular activities

According to Natural Resource Canada (2017), the amount of idling a driver does tends to increase with the number of people in the household. A driver living with children is more likely to idle than one without children. Therefore, for the purpose of this study, we may target families who accesses indoor facilities such as: rec centres, skating rinks, martial arts locations, gymnastics, etc., where idling behaviour of the parent or guardian may be exhibited while waiting for their child to finish their activity.

OR

Example B Target Audience: Individuals who participate in drop-off and pick-up at YLW

According to initial research conducted by the Regional Air Quality Program, 49% of the cars observed at the Kelowna airport participate in idling behaviour for roughly four minutes. Therefore, for the purpose of this study, we will target this audience to curb unnecessary idling.

Treatment: The "intervention" or "treatment" that the target audience will receive may include the following for a defined period:

- Pamphlet on window shield
- On-site signage
- Anti-idling ambassador on-site to answer questions

The treatment will be identified once we have conducted additional research and have designed our methodology.

How will we measure and record behaviour: Some options to measuring behaviour may include:

- Monitor the behaviour before and after a set period, both with and without the treatment
- Monitor the behaviour with a treatment group (ie. 4 locations) and compare against the control group (no treatment @ ie. 4 locations)
- On-site observation
- Participant survey

DATA COLLECTION, EVAULATION, SCALE

Each of these components will be delivered once the BI pilot is complete. At the end of this trial, we can make the decision on whether the treatment was effective and how and if we scale.

PART A: ACTION PLAN

Activity	Date
Research	July/Aug 2022
Innovation / Methodology	July/Aug 2022
Develop Assets	July/Aug 2022
Data Collection	Sept/Oct 2022
Evaluation	Oct/Nov 2022
Scale	TBD

BUDGET

The budget to deliver the BI port of this project has already been allocated through a regional Air Quality communications contract with Urban Systems.

PART B. COMMUNICATING THE ANTI-IDLING BYLAW (CITY OF KELOWNA)

PURPOSE

To raise awareness on City of Kelowna's anti-idling bylaw.

BACKGROUND

To reduce vehicle idling in the City of Kelowna, an Anti-Idling Bylaw has been proposed to Council. The bylaw, if adopted, would enforce regulations against vehicle idling.

KEY AUDIENCE

City of Kelowna Overview:

- Population: 143,148
- Households: 59,332
- Average household income: $108,814
- Households mostly 2-person: 39%
- Median maintainer age: 53
- 47.7% of residents have post-secondary education
- Average labor force participation: 70%
- Low level of visible minorities: 10.7%
- Few immigrants: 14.3%

Connection to Key Plans and Policies

The creation of an anti-idling bylaw is supported by several strategic plans:

- Kelowna's Community Climate Action Plan
- Central Okanagan Clean Air Strategy
- Imagine Kelowna's Goals to:
  - Protect land, water and air (Principle 4-Responsible)
  - Take action in the face of climate change (Principle 2-Smarter)
- Council's Strategic Priorities – Environmental Protection

Central Okanagan vehicle statistics:

- Approximately 4 out of 5 trips within Kelowna are made in a personal vehicle.[1]
- Over 25,000 vehicles a day enter the Central Okanagan, most are destined for Central Okanagan communities.[2]
- Results of the Baseline Idling Survey[3] reveal that vehicles were commonly found idling at drive-thru's, elementary schools, the Queensway transit exchange and the airport.
  - 94% of vehicles at an elementary school were found idling
  - 92% of vehicles and 75% of buses were found idling at the Queensway transit exchange
  - 96% of vehicles in drive-thru's were found idling for an average of 4 minutes and 12 seconds.
  - 49% of vehicles at airports were found idling for an average time of 3 minutes and 46 seconds

Stakeholder	Primary or Secondary	Interest	Political / Social / Economical Influences	Level of Engagement
City of Kelowna Motor Vehicle Operators	Primary	Bylaw enforcement	Social	Inform

[1] *Source: 2040 Transportation Master Plan (2022)* https://kelownapublishing.escribemeetings.com/filestream.ashx?DocumentId=36466

[2] *Source: Central Okanagan Planning Study (2020)* https://www2.gov.bc.ca/gov/content/transportation/transportation-reports-and-reference/reports-studies/okanagan/central-okanagan-planning-study/central-okanagan-data

[3] *Source: Idling Control Regulation Proposal Presentation (2022)*

VULNERABILITIES & OPPORTUNITIES

Vulnerabilities	Opportunities
› Potential for negative dialogue on social media › Low adoption rate › RDCO air quality initiative, but CoK bylaw (potential for confusion) › Lack of bylaw enforcement	› Public education process

BUSINESS OBJECTIVES

› Support community health by raising awareness on improving air quality in the Central Okanagan by reducing vehicle idling

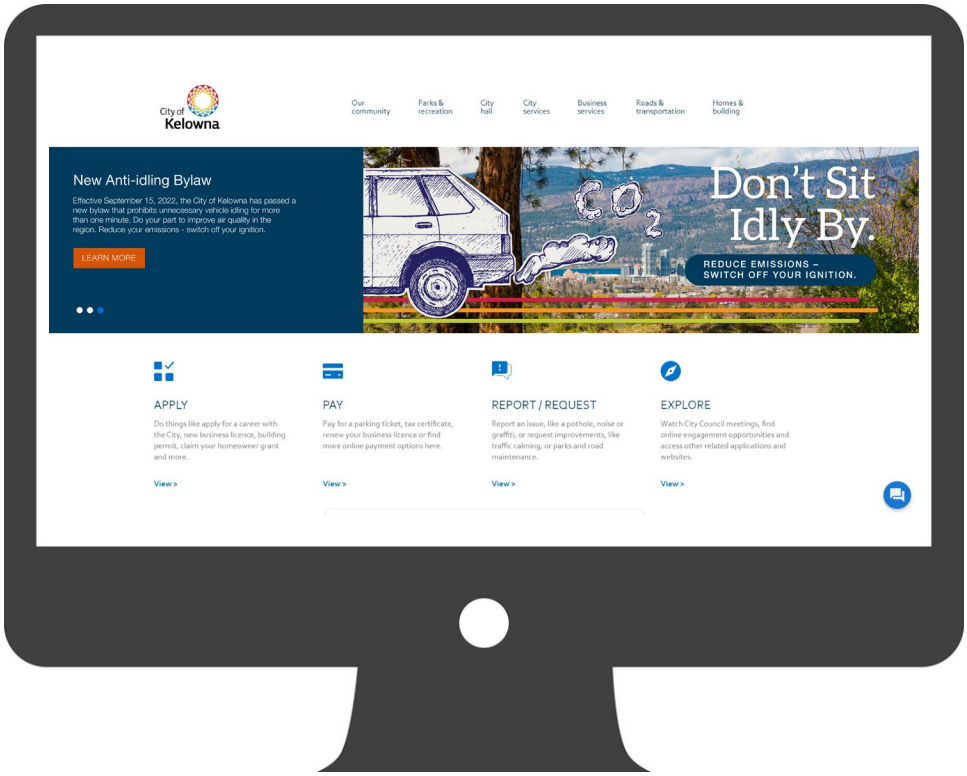
COMMUNICATION OBJECTIVES

Objective	Measure of success
› Educate and inform the community of the components of the anti-idling bylaw (i.e., 60-second idling, idling locations, enforcement, vehicle types) using City of Kelowna communications channels by the end of 2022.	› By Fall / Winter 2022, social media efforts will reach at least 20,000 viewers, RDCO website views will obtain 100 views, and there will be 1-2 media stories

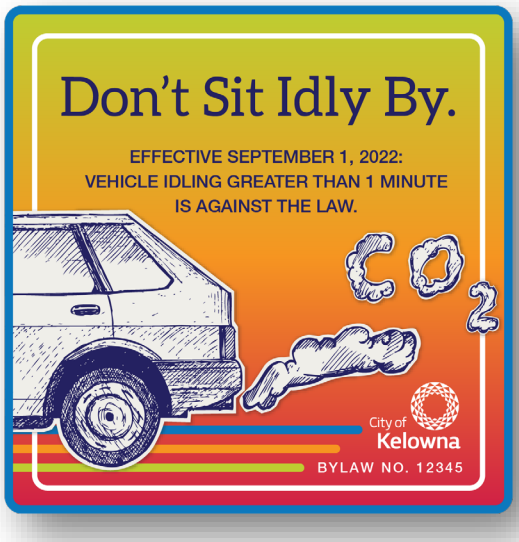
KEY CAMPAIGN MESSAGES: Don't Sit Idly By

Sample Social Media Graphics

Sample Web Banner Graphic



Sample Pay Parking Sticker



ACTION PLAN

This plan is to promote the anti-idling bylaw. Urban Systems is responsible for drafting the content and CoK responsible for posting content, responding to inquiries and media requests.

Activity	Contact	Launch Date
City of Kelowna / RDCO website update	Samantha / Daylin (URBAN Systems)	September 2022
Facebook Ad directing people to website	"	"
Website slider (CoK)	"	"
Social media (Facebook) messaging - 3 messages 2 posts first week (RDCO, CoK) 1 post every week after for 6 weeks (RDCO, CoK)	"	"
News release	"	"
PSA (e-newsletter bulletin)	"	"
Castanet ad (big box)	"	"
Newspaper ad	"	"
Parking meter and pay station stickers (300 decals)	Application by CoK	"

BUDGET

Media		
Newspaper ad	City in Action (Friday) / Display ad	$150 / $300
Castanet ad		$375
Facebook ad (2 ads)		$350
Pay Parking Stall Stickers (3"x4")	$0.95 / unit @ 310 units	$300
Total		**$1475**