

# Recommendation to Purchase Bear-Resistant Curbside Garbage Containers

Presentation to Prince George Mayor and City Council

By Northern Bear Awareness Society

May 27, 2024



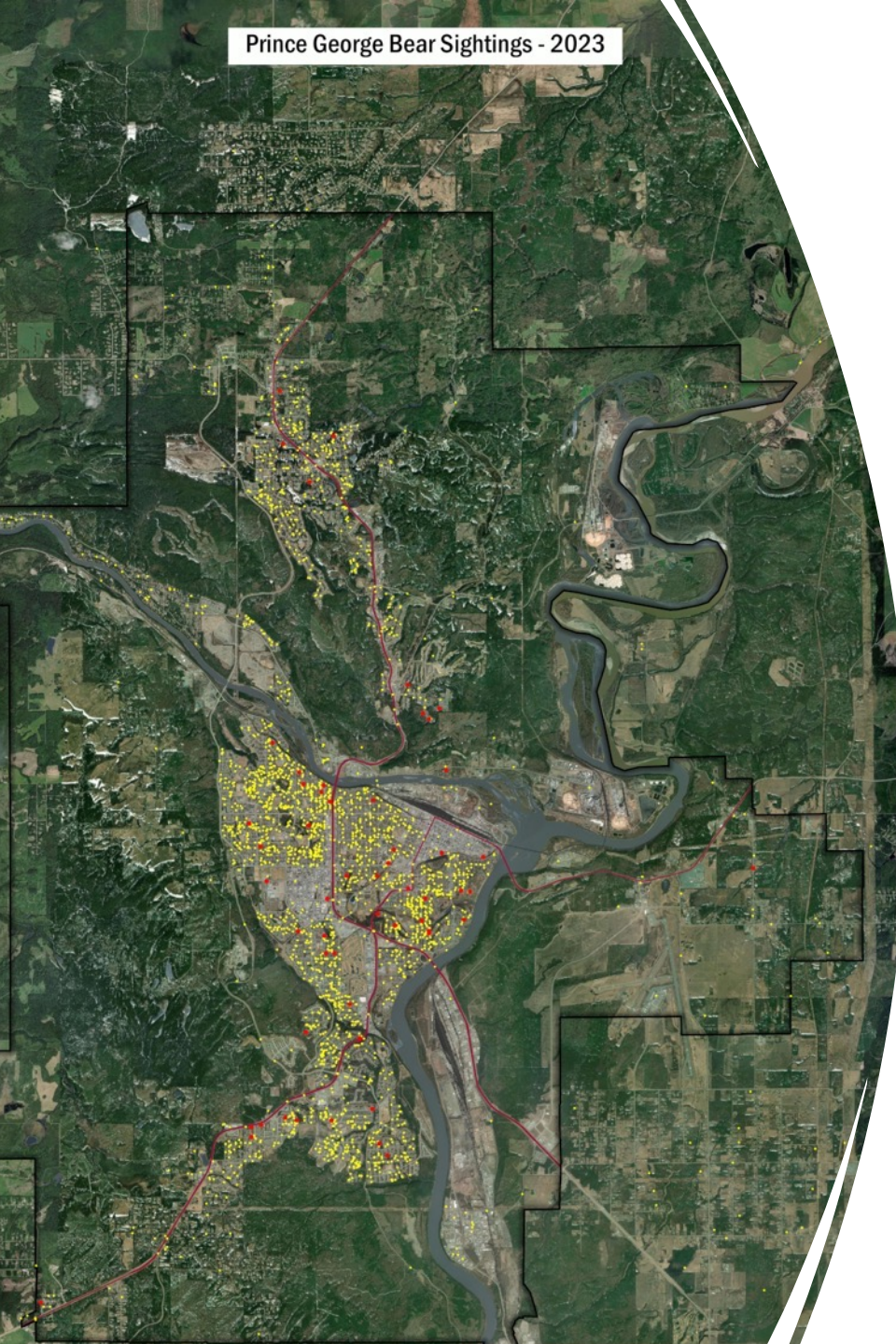
# Outline

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- The Problem: Human / bear conflict
- The Solution: Bear Smart recommendations
- 2019 Bear-resistant bins pilot project
  - City residents support bear-resistant bins
- Bear-resistant cart examples



Prince George Bear Sightings - 2023



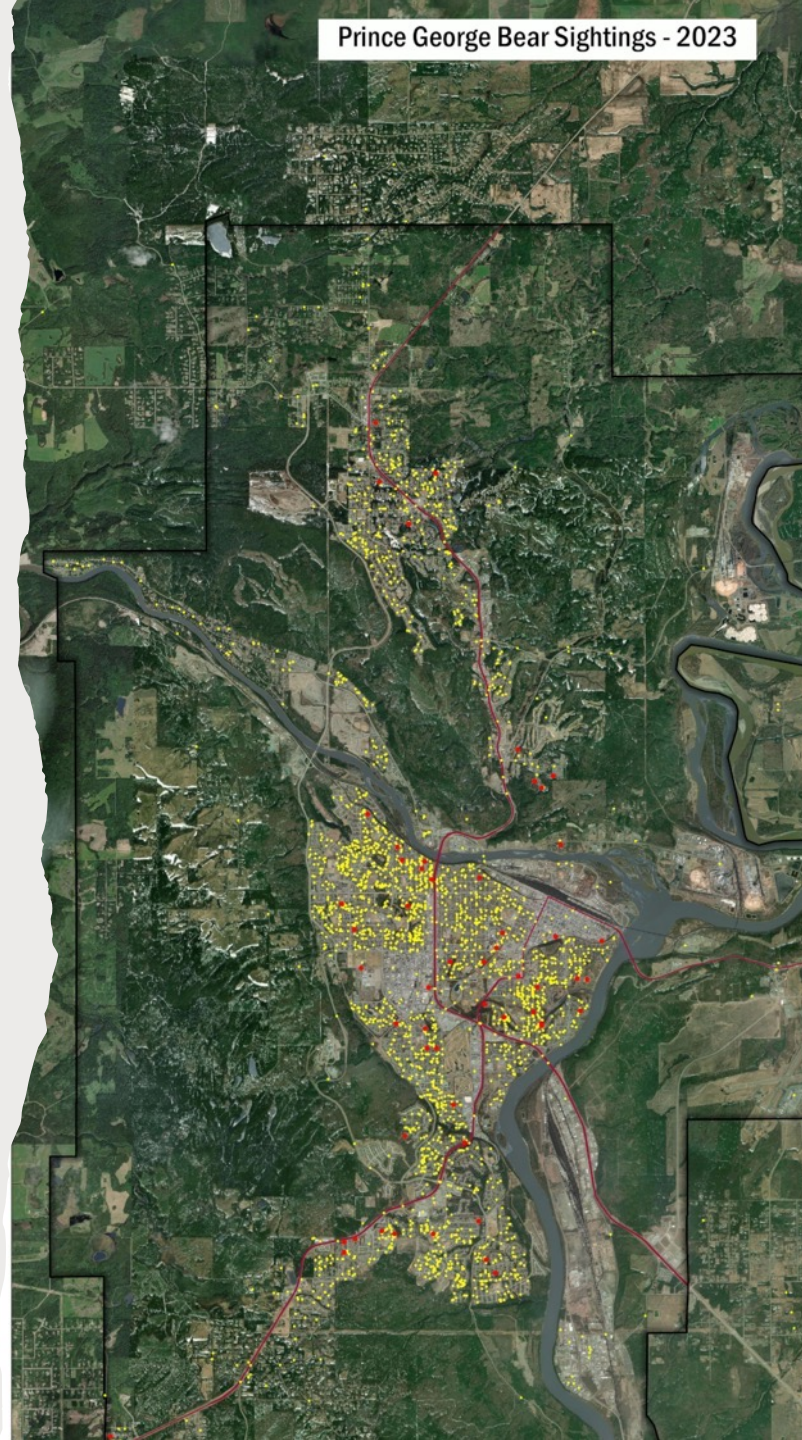
# The Problem

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Human / Bear Conflict in Prince George, BC

# Prince George IS Bear Habitat

- Two rivers
- Surrounded by forests
- Green spaces throughout
- Lots of natural plant foods
  
- **Bears will always be here!**
- The *problem* is when they linger



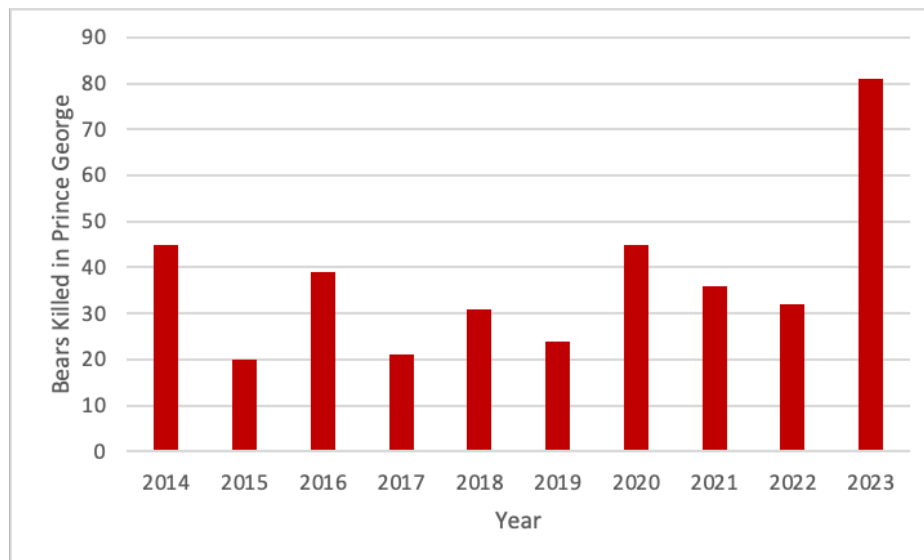
# We Feed Bears

- Unnatural, EASY, calorie-rich food sources:
  - Garbage
  - Apples
  - Birdseed, pet food, etc.
- **Result:**
  - **Food-conditioned bears**
  - **Habituated bears**
  - **Public safety concerns**



# Perpetuating the Problem

- Fat bears have more offspring
- Unnatural foods artificially inflate local bear populations
- Perpetuation of the “problem” of human / bear conflict in our city
- Bears seen as a public safety risk are killed



## Wildlife group names the 'deadliest communities' for black bears in B.C.

236 black bears were killed in Prince George from 2015-2022, according to Fur-Bearers

CBC News · Posted: Jun 28, 2023 6:00 AM PDT | Last Updated: June 28, 2023



Conservation officers in Prince George put down 32 black bears in 2022, according to the Association for the Protection of Fur-Bearing Animals. (Monique Spencer)



# The Solution

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Bear Smart Recommendations

# Securing Attractants

- If there are **no unnatural attractants**:
  - Bears *pass through* neighbourhoods
  - They do not become food conditioned or habituated
  - **Public safety risk is minimized**
  - Conservation Officers spend less time trapping and killing bears in the city
  - **Fewer bears killed**





# Provincial Bear Smart Criteria



1. Prepare a bear hazard assessment
2. Prepare a bear / human conflict management plan designed to address the bear hazards
3. Revise planning and decision-making documents to be consistent with the management plan
4. Implement a continuing education program
5. Develop and maintain a bear-proof municipal solid waste management system
6. Implement "Bear Smart" bylaws

# Why Bear-Resistant Bins?

- **Ratchet straps** can help deter bears from accessing garbage, but they can't stop a determined bear
- Bear-resistant bins have:
  - Extra-durability
  - Steel reinforcement
  - Double-walled components
  - Latch that secures the entire lid



Garbage Truck  
Compatible Stop Bar



Rugged Rim® with Steel  
Reinforcement



Double-walled Locking  
Lid and Latch

Durability to handle **anything** that Mother Nature — or a **bear** — can throw at them.



## BEAR RESISTANT CARTS

Available Sizes:  
32, 64 & 96 Gallon



Double-Walled Locking Lid and  
Latch Keep Your Waste Secure




# They Work!

The Journal of Wildlife Management 82(6):1102–1114; 2018; DOI: 10.1002/jwmg.21472

*Featured Article*

## Assessing Ecological and Social Outcomes of a Bear-Proofing Experiment



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**ABSTRACT** Human-black bear conflicts within urban environments have been increasing throughout North America, becoming a high priority management issue. The main factor influencing these conflicts is black bears foraging on anthropogenic foods within areas of human development, primarily on residential garbage. Wildlife professionals have advocated for increased bear-proofing measures to decrease the accessibility of garbage to bears, but little research has been conducted to empirically test the effectiveness of this approach for reducing conflicts. Between 2011 and 2016, we conducted a before-after-control-impact experiment in Durango, Colorado where we distributed 1,110 bear-resistant trash containers, enhanced education, and increased enforcement to residents in 2 treatment areas, and monitored 2 paired control areas. We examined the ecological and social outcomes of this experiment, assessing whether bear-resistant containers were effective at reducing conflicts; the level of public compliance (i.e., properly locking away garbage) needed to reduce conflicts; whether the effectiveness of bear-resistant containers increased over time; and if the distribution of bear-resistant containers changed residents' attitudes about bear management, support for ordinances that require bear-proofing, or perceptions of their future risk of garbage-related conflicts. After the bear-resistant containers were deployed, trash-related conflicts (i.e., observations of strewn trash) were 60% lower in treatment areas than control areas, resident compliance with local wildlife ordinances (properly locking away trash) was 39% higher in treatment areas than control areas, and the effectiveness of the new containers was immediate. Conflicts declined as resident compliance with wildlife ordinances increased to approximately 60% (by using a bear-resistant container or locking trash in a secure location), with minor additional declines in conflicts at higher levels of compliance. In addition to these ecological benefits, public mail surveys demonstrated that the deployment of bear-resistant containers was associated with increases in the perceived quality of bear management and support for ordinances that require bear-proofing, and declines in the perceived risk of future trash-related conflicts. Our results validate efforts by wildlife professionals and municipalities to reduce black bear access to human foods, and should encourage other entities of the merits of bear-proofing efforts for reducing human-bear conflicts and improving public attitudes about bears and their management. © 2018 The Wildlife Society.

**KEY WORDS** bear-resistant containers, black bear, Colorado, human-black bear conflict, human-wildlife interaction, management, perceived risk, public perceptions, public survey, *Ursus americanus*.

A few examples of success stories (click on links):

- [Binche, BC \(on Stuart Lake\)](#)
- [Kamloops, BC](#)
- [Durango, Colorado](#)
- [Anchorage, Alaska](#)
- [Deland, Florida](#)

A black bear-resistant trash bin with a bear logo on the lid. The bin is positioned on a concrete surface. The lid features a circular embossed logo of a bear's head. The text "2019 Pilot Project" and "300 bear-resistant bins in the Hart" is overlaid in white. A horizontal white line is positioned below the text. The bin has "Debris Pacific" and "Company" printed on the side.

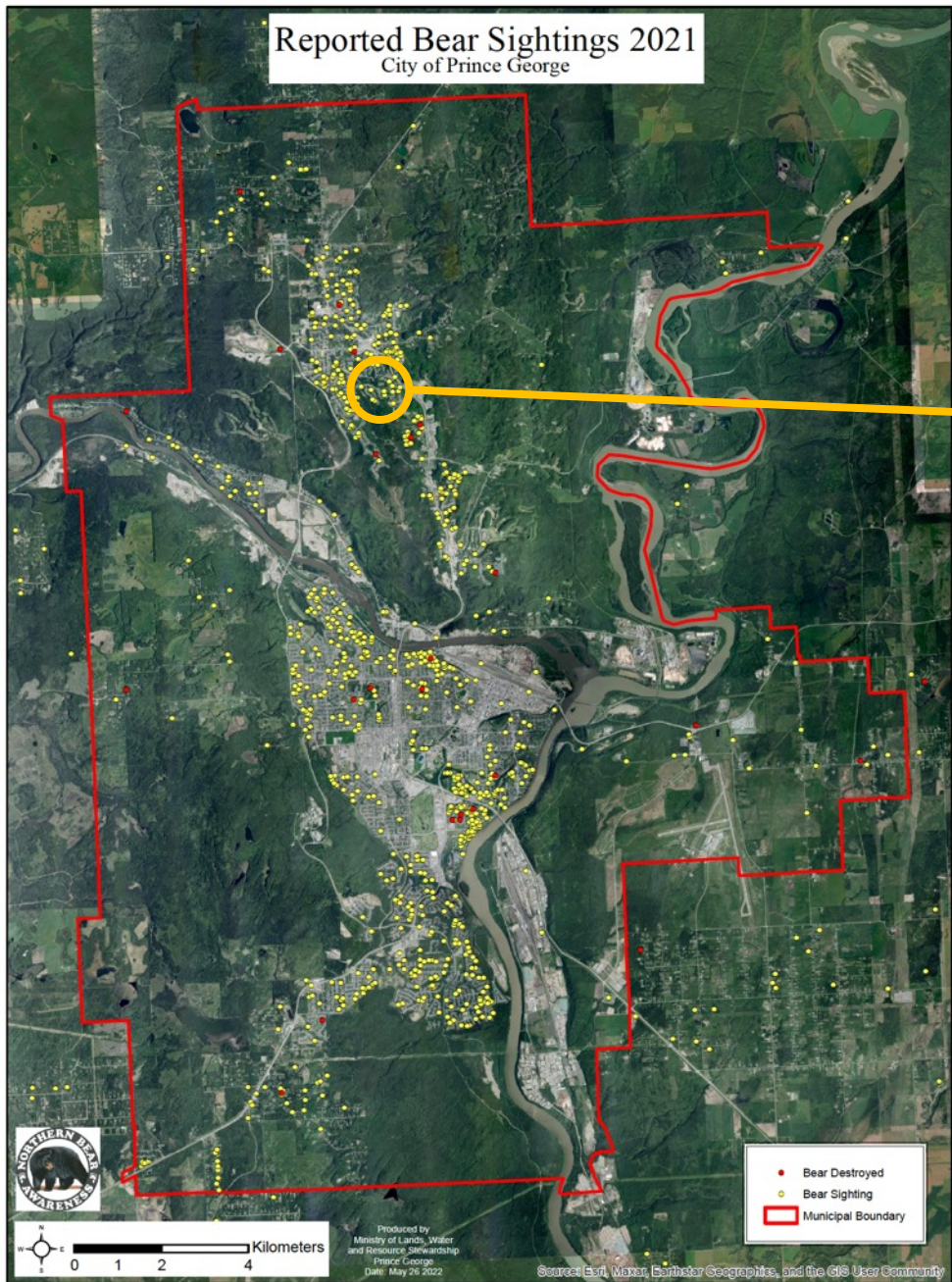
# 2019 Pilot Project

## 300 bear-resistant bins in the Hart

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Initiated in April 2019

Concluded in September 2022



# 2019 Pilot Project – A Failure?

It was concluded that:

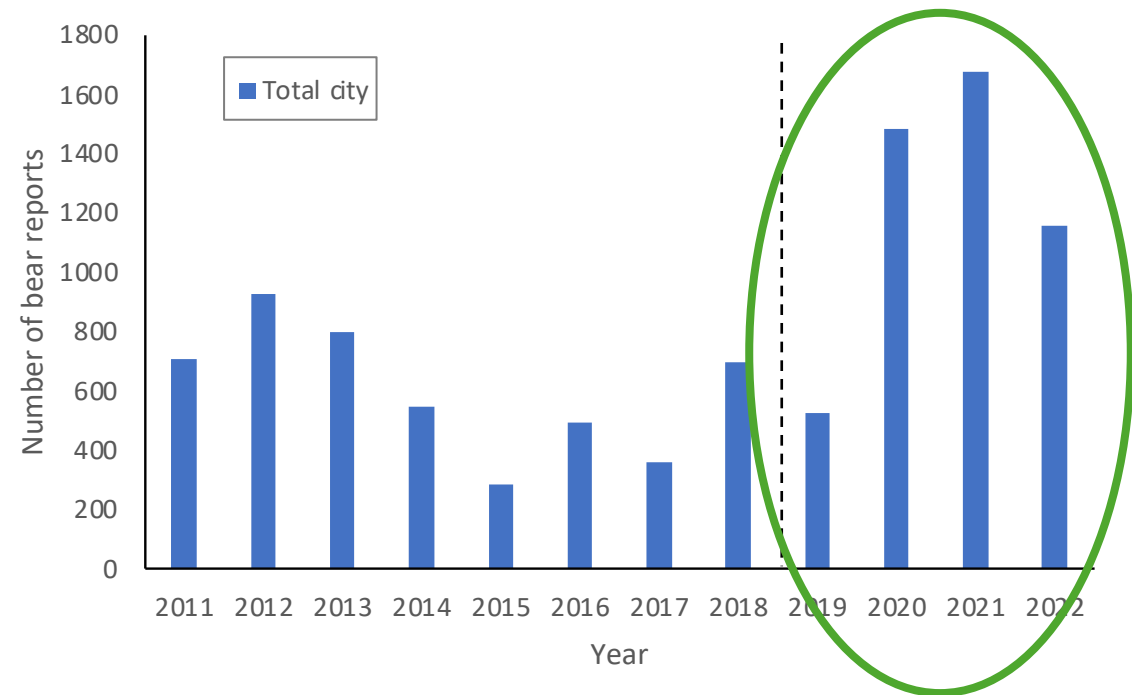
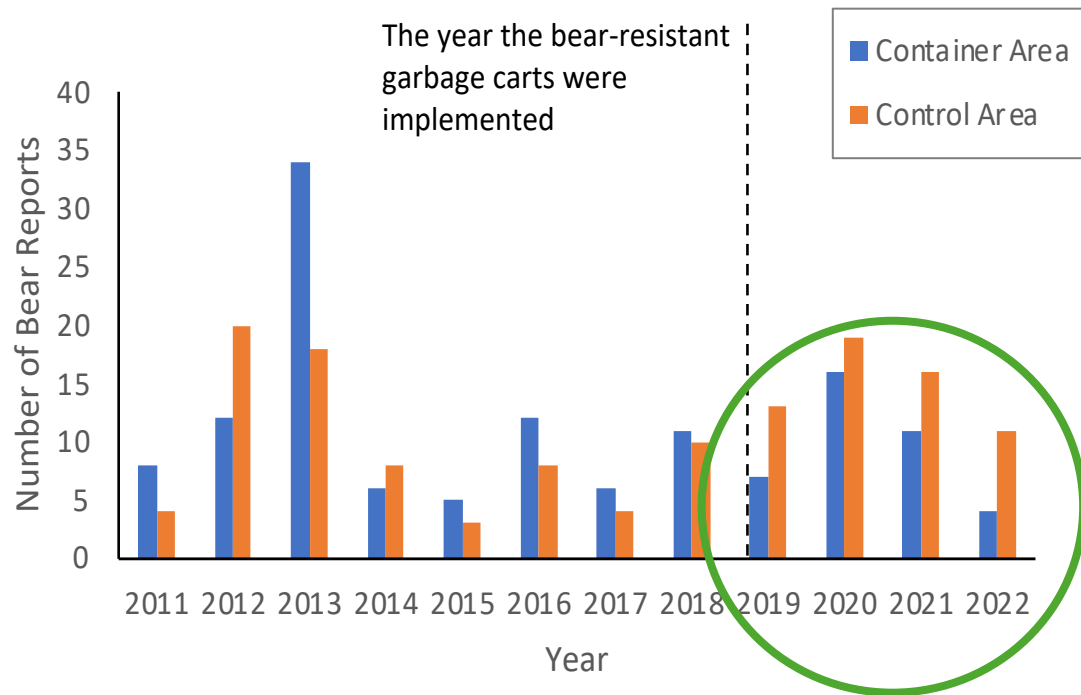
- **The latch** design on the carts was unreliable and problematic **in cold weather**
- It is inefficient for the driver of the automated truck to have to exit the vehicle to manually unlatch malfunctioning carts
- Latches were replaced on 22 of the 300 carts over 3 years



Information taken from the City of Prince George's [website](#) and a 2022 [staff report to council](#).

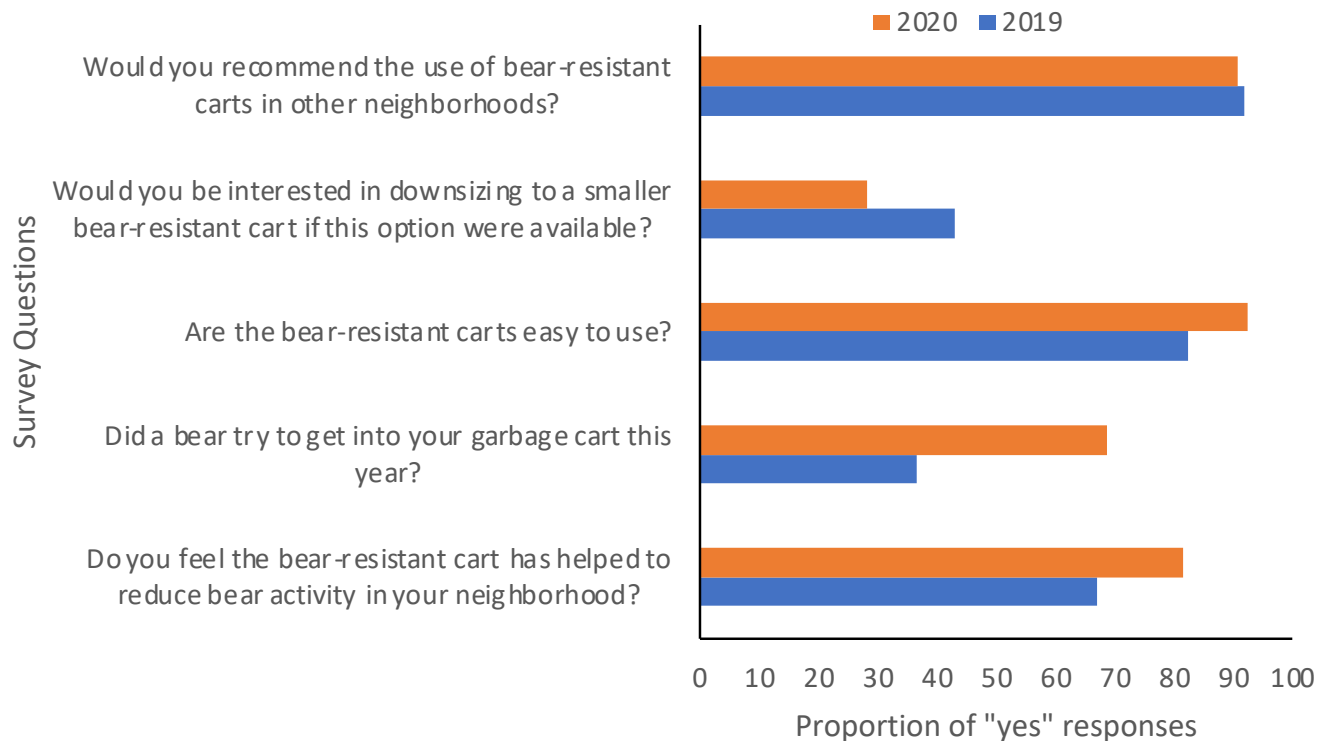
Photo: [www.princegeorgecitizen.com/local-news/be-bear-smart-with-garbage-city-says-3740054](http://www.princegeorgecitizen.com/local-news/be-bear-smart-with-garbage-city-says-3740054)

# 2019 Pilot Project – A Success?



**Calls to the Conservation Officer Service were reduced in the pilot study area, compared to the control area, despite increased calls city-wide.**

# 2019 Pilot Project – A Success?



**Question:** “Did a bear try to get into your garbage cart (e.g., cart tipped over) this year?”

**Participants who voted “yes” commented:**

- “Yes ... but it couldn't.”
- “Only once and did not get to the garbage.”
- “Multiple times but as stated in #1 they were unsuccessful.”
- “Found it turned. One dragged our neighbors can 20 plus feet but couldn’t get in.”
- “Had a bear drag the bear cart down the driveway. When he couldn’t get it open, he ran off.”

**The carts did what they were designed to do!**





# Bear-Resistant Carts

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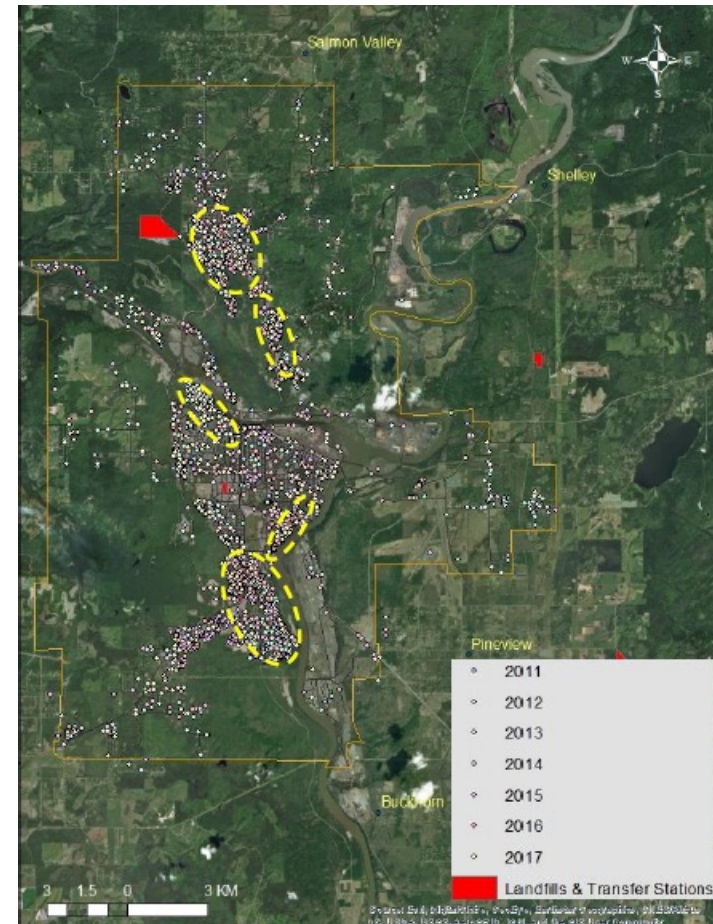
Expensive, but worth it!

# Money Matters

- Not every house needs one!
- Start with key areas:

Cost for every house to have one:

- “The City has approximately 25,000 automated garbage cans. It would cost at least \$7 million to replace them all with bear-resistant cans (that is equal to a 5.8% tax increase).”
  - Quoted from the City of Prince George’s [website](#).



## Rehrig Pacific

- ~\$240 + shipping
- This is the company the City currently uses
- This bin was redesigned since the 2019 Pilot Project



## Toter Bins

- ~\$250 US + \$48 shipping
- Used in Anchorage, Alaska
- Redesigned to prevent water (ice) from getting in
- 64 or 96 gallon sizes
- Two different models
  - One sold at Ace Hardware for \$310



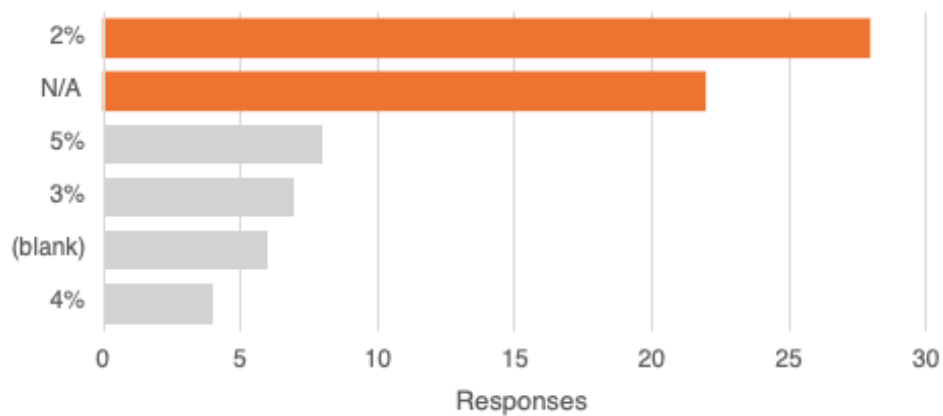
# City Residents Support Bear-Resistant Bins

- Research by UNBC students of ENVS326
- **75 survey respondents** in March of 2024

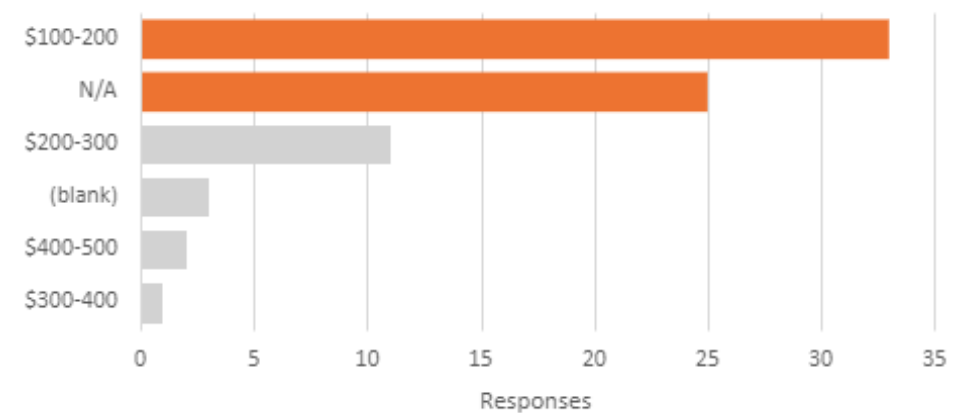
Would you support an increase to your residential utility rate to bring bear resistant garbage bins to Prince George?



What's the largest residential utility rate increase you would support?



If you were to pay for the bin directly, how much would you be willing to pay?



# Conclusion & Recommendations

- **The City of Prince George needs to take proactive steps toward dealing with the human / bear conflict situation**
  - Lots of bears live here
  - Lots of humans live here
  - Humans should not feed bears
- We have gone as far as we can with public education
- **Bear-resistant bins are the best way to make a difference**
  - They're easy for people to use
  - They're proven to successfully prevent bears from getting garbage
- Northern Bear Awareness Society will work with the City of Prince George to choose areas in the city where bear-resistant carts should go