

# Rivercity Innovations Ltd. Case Study

Early Catastrophic Failure Detection

*Enhance your temperature monitoring solution!*

## At a glance

RCI's Cold Chain Temperature Monitoring System reduces food waste, increases operational efficiency, and improves compliance reporting processes. Detect equipment failures before it is too late with our award-winning IoT solution.

## OVERVIEW



Predict Cooler Failures



Prevent Food Spoilage



Minimize Equipment Downtime



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World-Class IoT Solutions



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[www.rivercityinnovations.ca/tundra/](http://www.rivercityinnovations.ca/tundra/)



Saskatoon, SK, Canada

## BUSINESS ISSUE

Outdated temperature monitoring methods are leaving grocers at risk for food spoilage and reporting inaccuracies. Without automation, current methods for reducing food waste and preventing cold chain equipment failures are limited by the time and competence of store employees.

Most food spoilage costs are too small (lower than the deductible) to be covered by insurance. Therefore, nearly every case of food spoilage is incurred as a complete loss of revenue when cold chain equipment fails.

## USE CASE

In March 2021, a Canadian grocery store experienced a massive compressor failure, threatening the quality of 2 large coolers worth of meat and dairy. When a cooler compressor malfunctions, temperatures quickly rise above food-safe requirements, causing all of its contents to become unsafe, and unsellable.





## THE SOLUTION

### RCI's Cold Chain Temperature Monitoring Solution

Thanks to RCI's Cold Chain Temperature Monitoring Solution, the store prevented significant product loss from both coolers. Leading up to the compressor failure, our system deployed **Early Catastrophic Failure Detection (ECFD)**, a feature that detects early signs of freezer and cooler compressor issues, behind the scenes with automated proprietary software.

The Canadian grocery store was notified of the issue before the compressor completely failed, allowing them to schedule repairs and relocate the food before it reached an unsafe temperature. Without this solution the store would not have been able to prevent the spoilage, and the issue would be left unnoticed until the next temperature check was performed manually, the following day.

## OUTCOMES

1

### Early Detection

Received real-time insights alerting them to a potential malfunction.

2

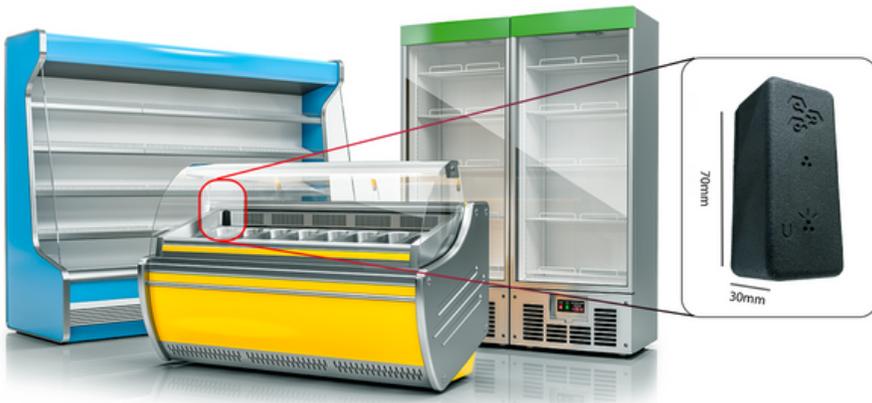
### Saved Time and Money

Prevented food spoilage for both coolers. Booked repairs early, minimizing equipment downtime.

3

### Food Safety

Protected brand reputation and customer safety by maintaining the integrity of their cold chain.



TxH Sensor



Online Dashboard