

# TRAINFO

**LIVE TRAIN CROSSING INFORMATION**



We believe in a world with  
**seamless mobility**  
and  
**no railway crossing fatalities**

Why can't anyone tell me when a railway crossing is blocked



## 1. What is TRAINFO?

Live + historical train crossing information

## 2. How does it work?

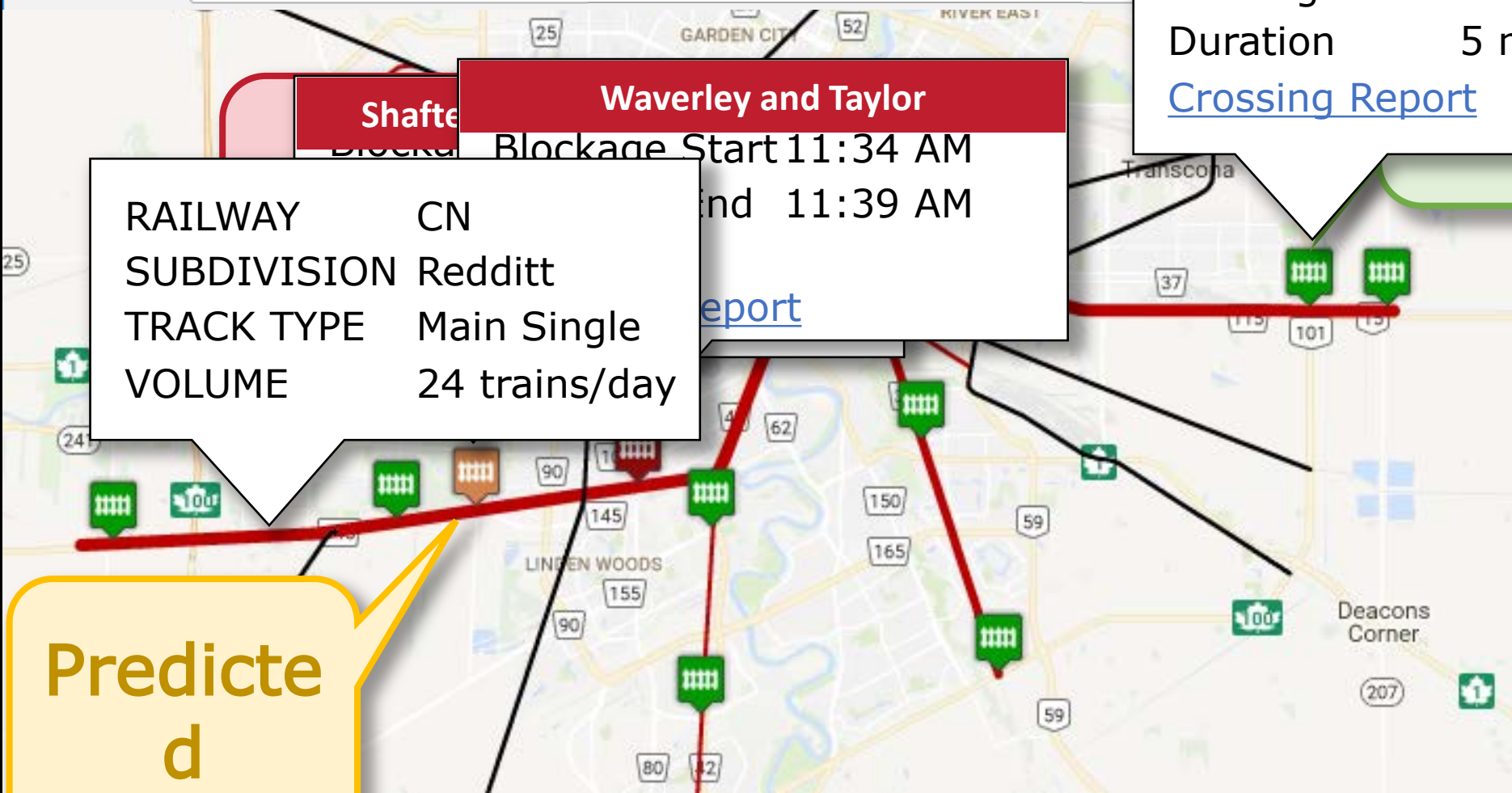
Trackside train detectors

## 3. How can it help me?

Reduce congestion, improve safety, save money

# Live train crossing information

Immediate notification when a crossing is blocked



RAILWAY CN  
SUBDIVISION Redditt  
TRACK TYPE Main Single  
VOLUME 24 trains/day

Shafte  
Waverley and Taylor

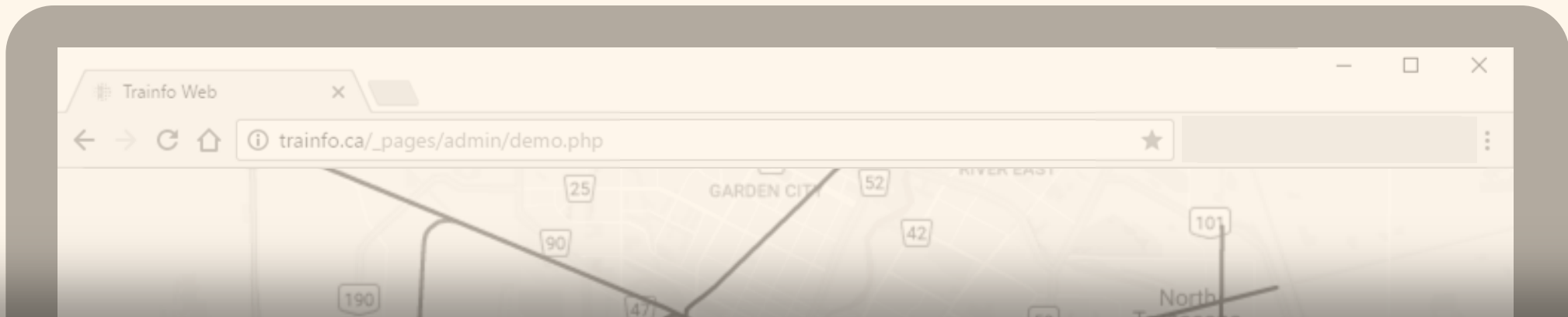
Blockage Start 11:34 AM  
End 11:39 AM

Elmhurst and Wilkes

Blockage Start 10:02 AM  
Duration 5 minutes

[Crossing Report](#)

Predicted



See this map live

Visit [www.TRAINFO.ca](http://www.TRAINFO.ca) and click on "Demo"



# Historical train crossing information

Detailed temporal trends and accurate statistics





# How TRAINFO works

Detect, analyze, share

Analyze

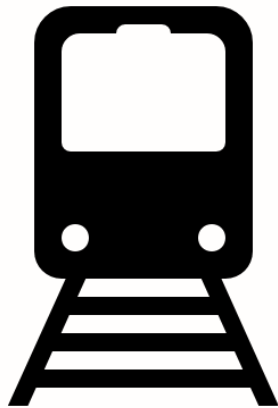


Patented, machine learning algorithms



Share

Detect



Proprietary trackside sensors

<2 seconds



Smartphone, web map, database, TMC



# TRAINFO can help you

Reduce congestion, improve safety, save money

# TRAINFO can help you...



Prioritize  
investments



Select  
improvements



Manage  
traffic



Respond  
to public



Improve  
safety



Support  
public  
services



Support  
ancillary  
services



Future  
preparation

# TRAINFO helps you prioritize investments

## The problem

- Which crossings have the longest traffic delays (*for trucks*)?
- Should these crossings be grade separated?

## The old way

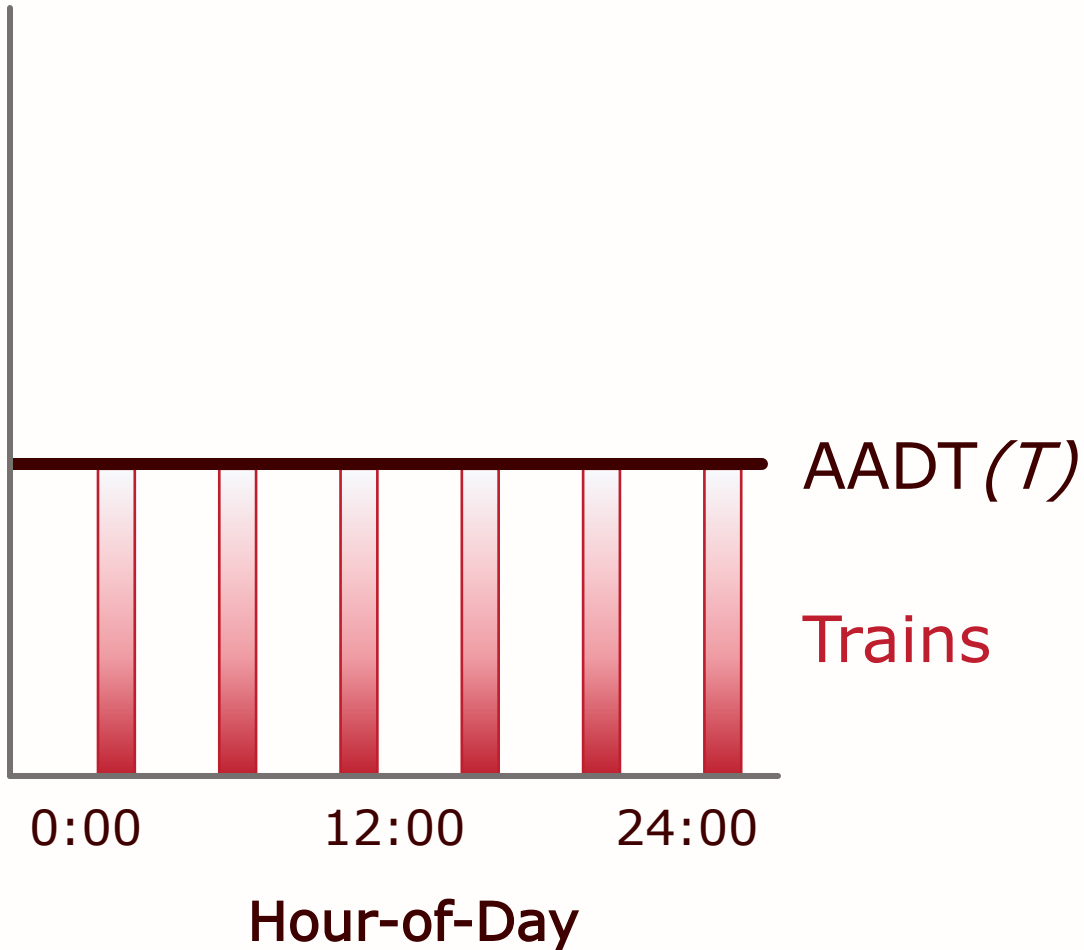
- Calculate delays using questionable data and many assumptions

## A better way

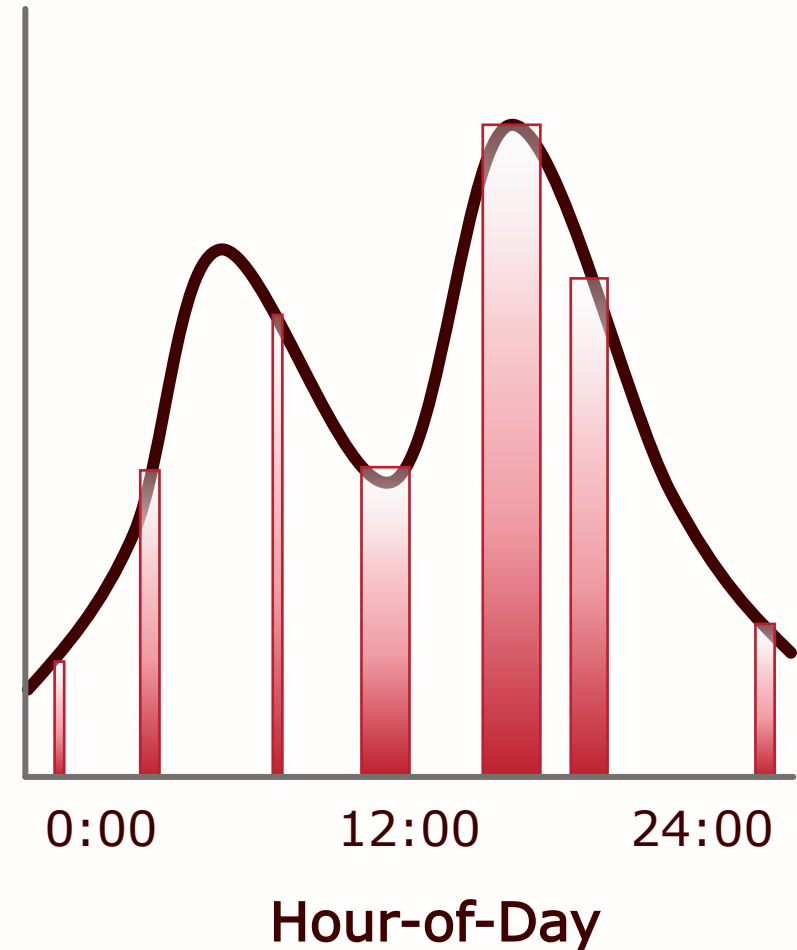
- Measure delays with highly accurate data and few assumptions
- Use TRAINFO, road tubes, and Bluetooth/Wi-Fi sensors

# TRAINFO helps you prioritize investments

Old Way



TRAINFO Way





# TRAINFO helps you prioritize investments

CN @ Waverley St

Metric	Old	TRAINFO	Diff.
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Trucks delayed per day

Hours of delay per day	53.2	286.6	+437%
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# TRAINFO helps you manage traffic

## The problem

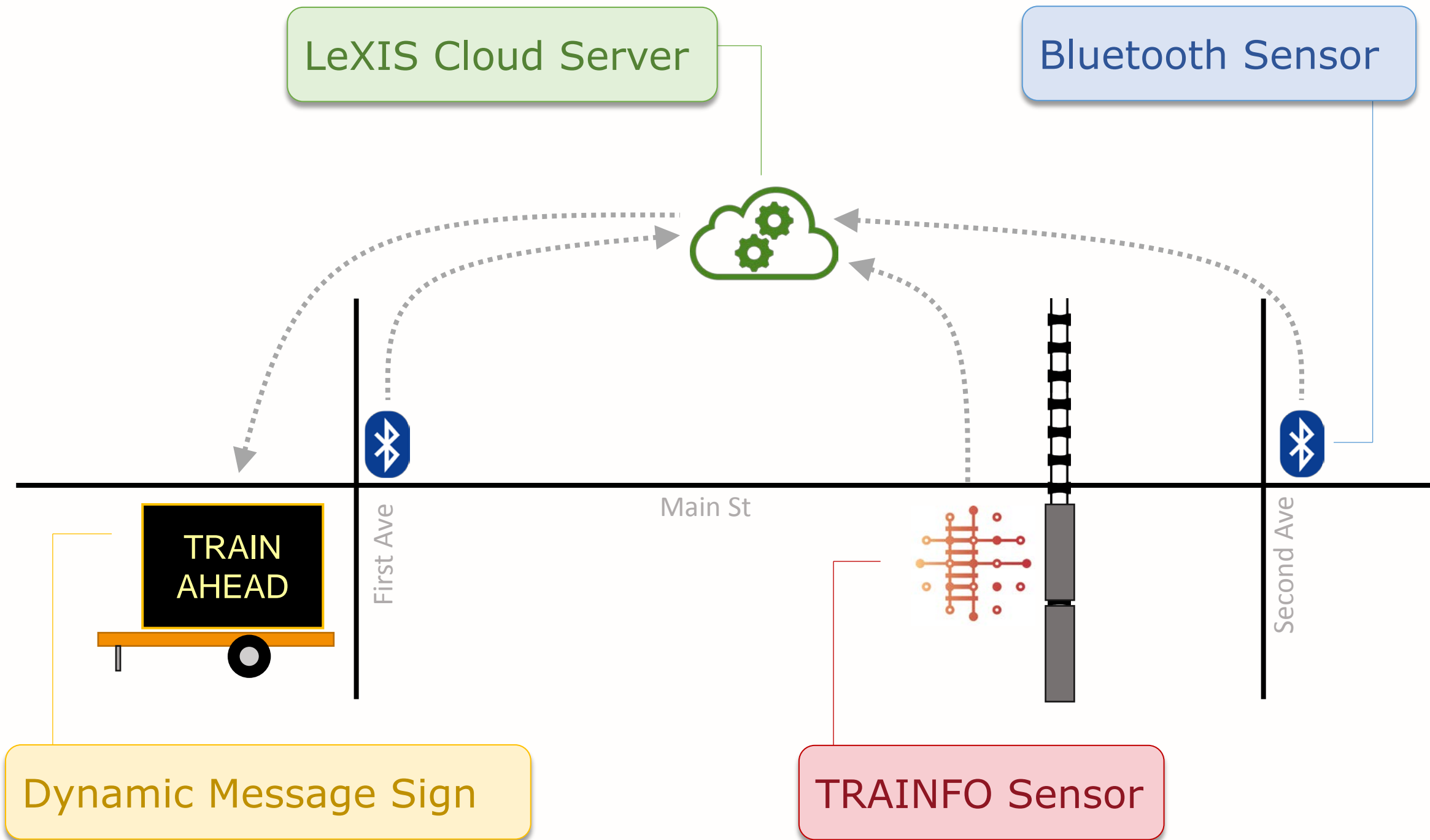
- How can traffic delays at railway crossings be reduced?

## The old way

- Extreme options (e.g., grade separation, rail relocation, or “do nothing”)
- Either high cost, high effectiveness OR no cost, no effectiveness

## Another way

- Consider intermediate options that use ITS
- Install TRAINFO at crossing and DMS on approaches to crossing



LeXIS Cloud Server

Bluetooth Sensor



TRAIN  
AHEAD

Dynamic Message Sign



TRAINFO Sensor

First Ave

Main St

Second Ave

Waverley St



10 MIN  
DELAY



# TRAINFO helps you support public services

## The problem

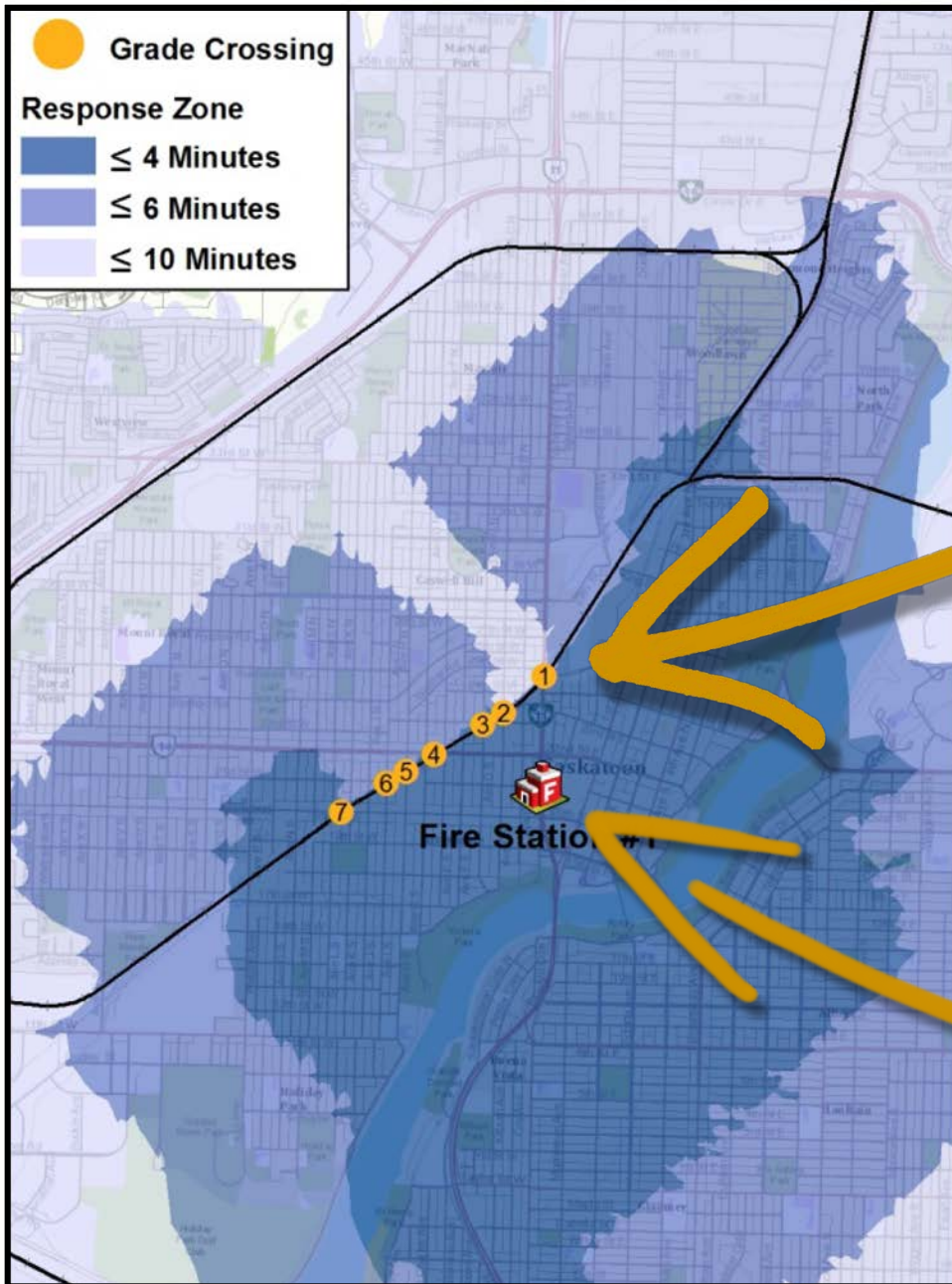
- How to ensure emergency vehicles aren't delayed by train crossings?

## The old way

- Emergency vehicle arrives at blocked crossing
- Tries another route or requests another vehicle to be dispatched

## The new way

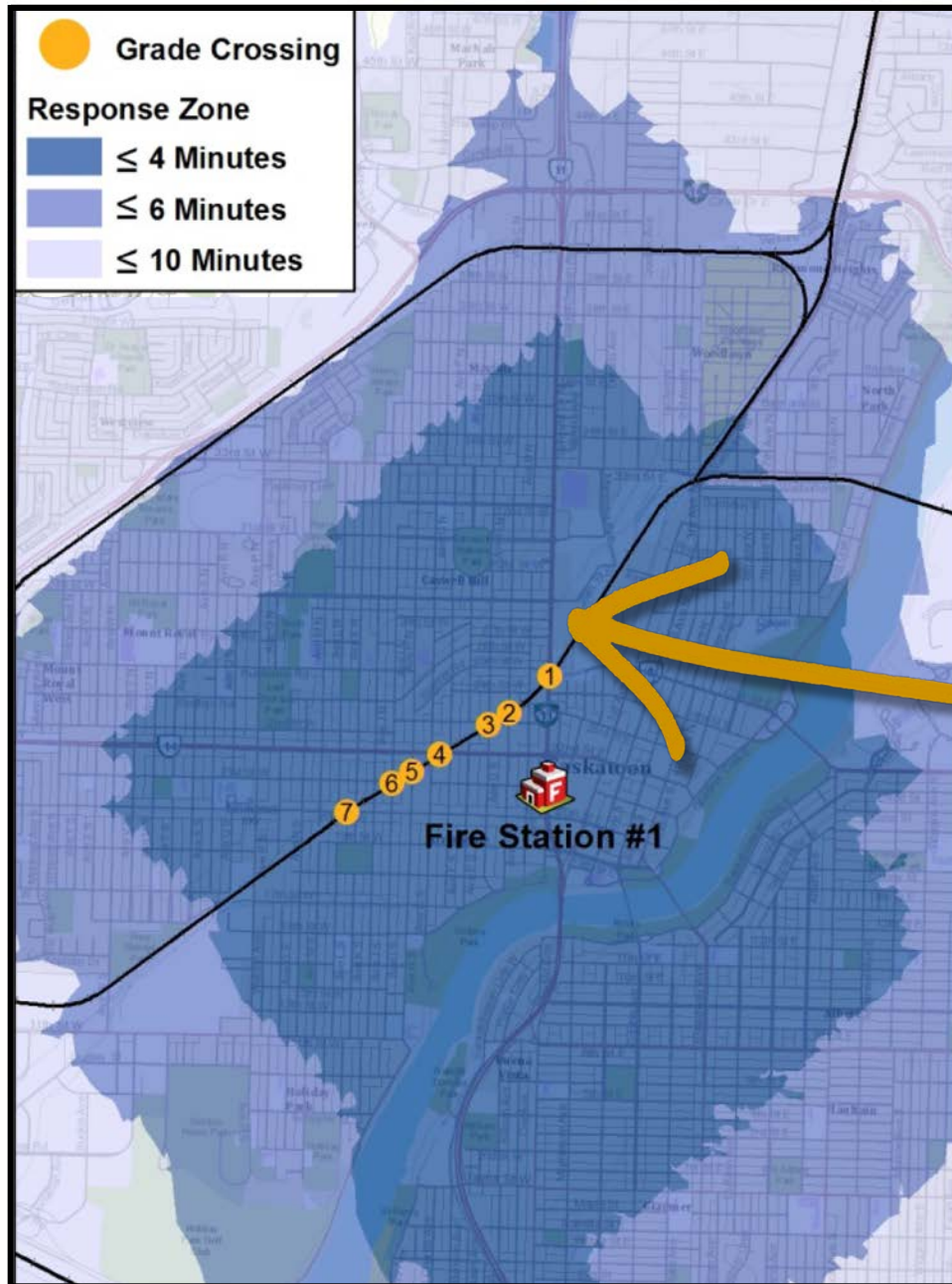
- Inform emergency dispatchers at the time of 9-1-1 call
- Warn emergency vehicle drivers while on-route



# City of Saskatoon Without TRAINFO

7 grade crossings

Fire Station #1



City of Saskatoon  
Without TRAINED INFO

Cardiac arrest survival rate  
decreases 10% per minute\*

90% chance of survival


\*Source: American Heart & Stroke Asso

# Additional applications

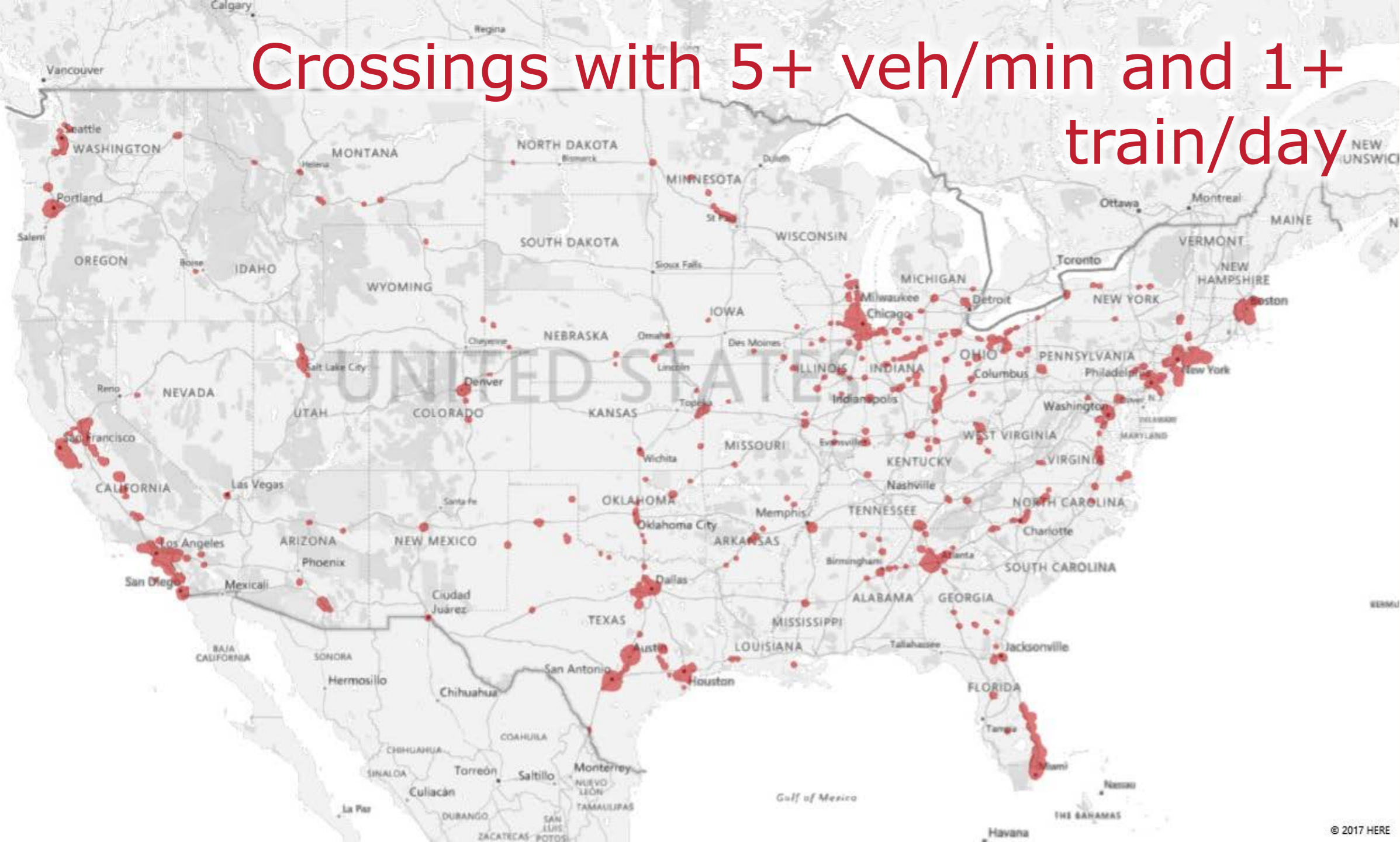
- **Freight Analysis Framework (FAF) integration**
- **FRA Grade Crossing Information System (GCIS) database input**
- **Trend analyses and forecasting (volume, length, speed)**
- **Grade crossing safety analyses and modeling (SPF development)**
- **Others?**

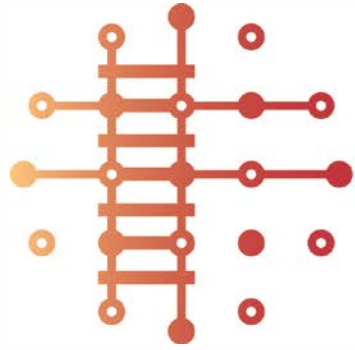


# Limited time offer

- **What you get**
  - Live data for 1 year (minimum)
  - Historical data indefinitely
  - Offer only for crossings with **5+ veh/min AND 1+ train/hr**
- **What you do**
  - Install the sensor (1 hour per sensor)
  - Provide power to the sensor (2 amp-hours @ 3.5 volts)
- **What you pay**
  - Nothing! 

# Crossings with 5+ veh/min and 1+ train/day





# TRAINFO

- Live
- Prop
- Pate
- Help

Join us in creating a world with

**seamless mobility**

and

**no railway crossing fatalities**

system

ave money

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