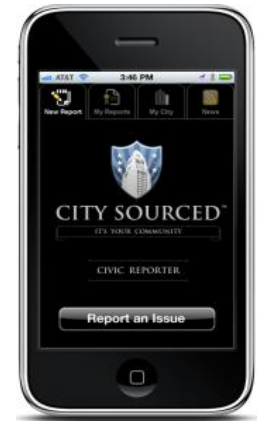
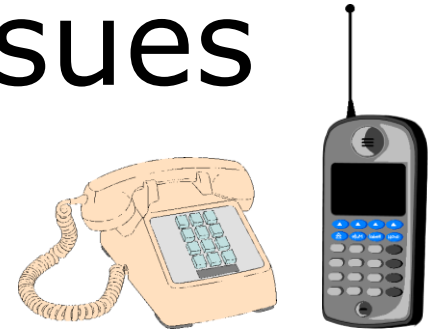


# **Mobilizing Citizens to Report Civic Issues**

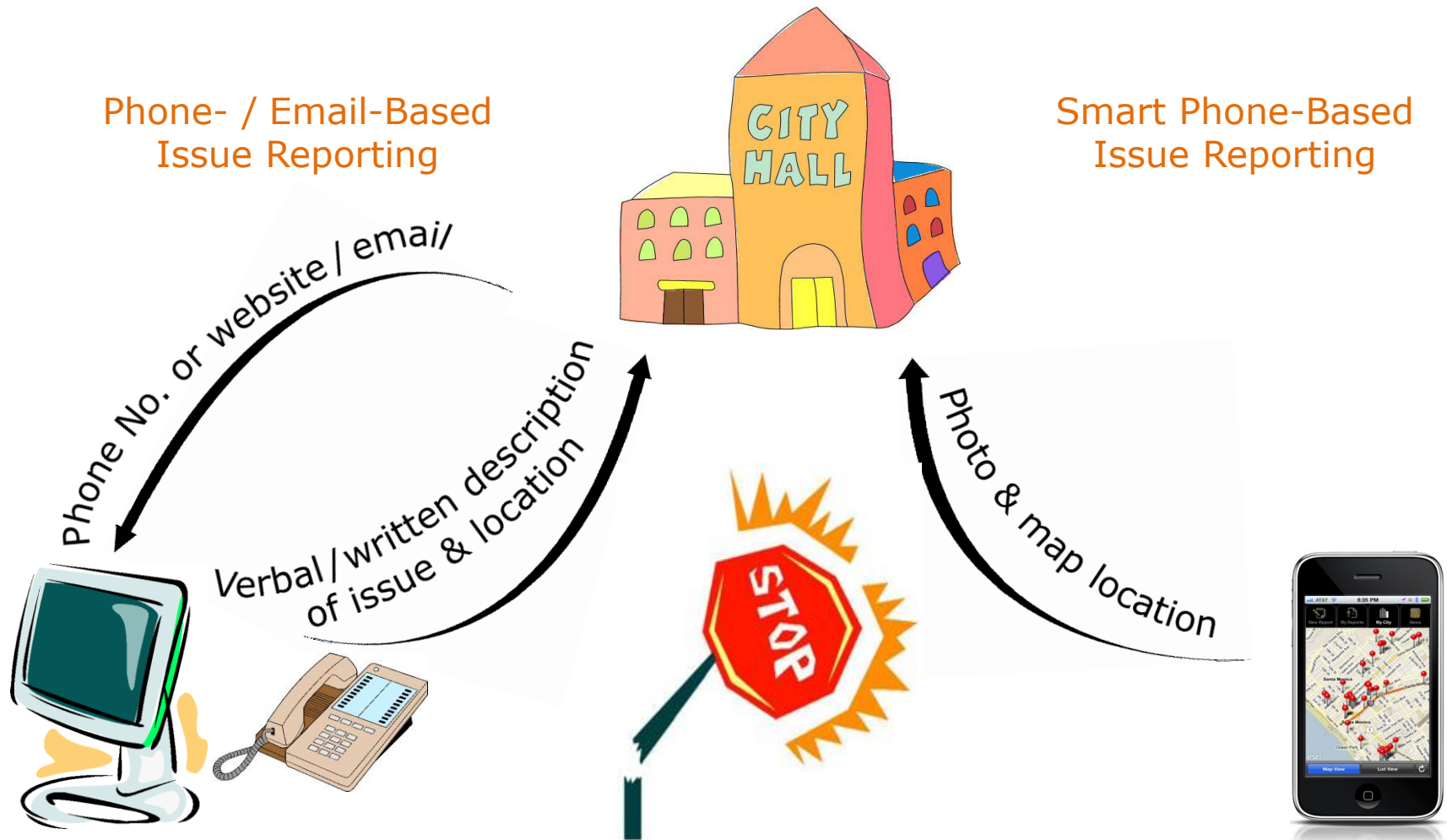
Adam Chadwick  
GIS Manager  
City of Kamloops

# Reporting Civic Issues

- Traditional approach:
  - Citizen sees an issue then phones or emails in the problem
- New approach:
  - App used to report issues in the field
  - Adds smart phone capabilities
    - Photo (or video/audio)
    - Location (GPS/mapping)

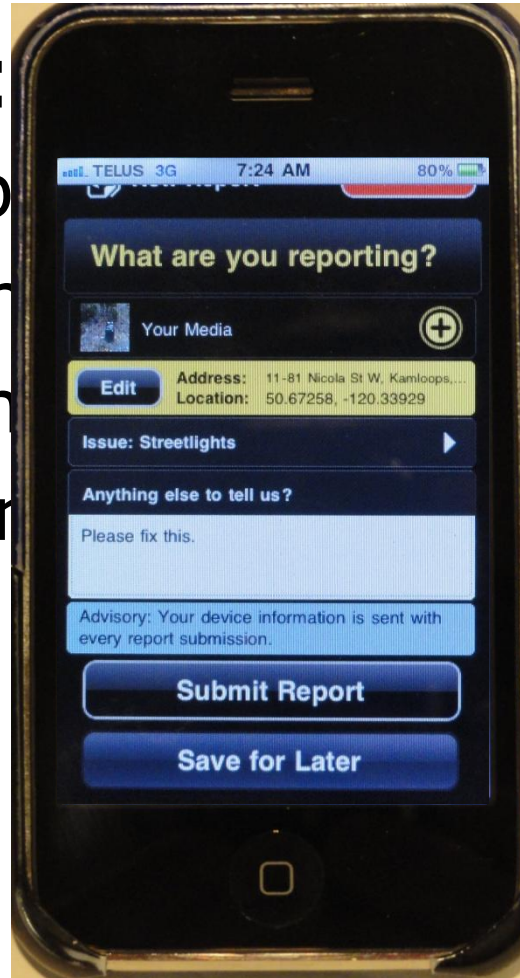


# Citizen Perspective: Issue Reporting Options



# App Approach

- Submitter:
  - Photograph
  - Identify the
  - Classify the
  - Add options
  - Submit.



- Drainage / Flooding
- Fences / Walls
- Graffiti / Vandalism
- Litter Pickup
- Parks – General
- Potholes Signs
- Snow / Ice
- Sidewalks
- Streetlights
- Streets – General
- Trails / Walkways
- Trees
- Utilities / Infrastructure
- Other

# Sample Report

## Parks - General - Issue Reported in Kamloops, BC



Reported On: 05/10/2012 @ 07:34 PM PST

Reported By: Citizen20921

Address: 388 Aberdeen Dr, Kamloops, BC V1S, Canada

Latitude: 50.634827

Longitude: -120.349062

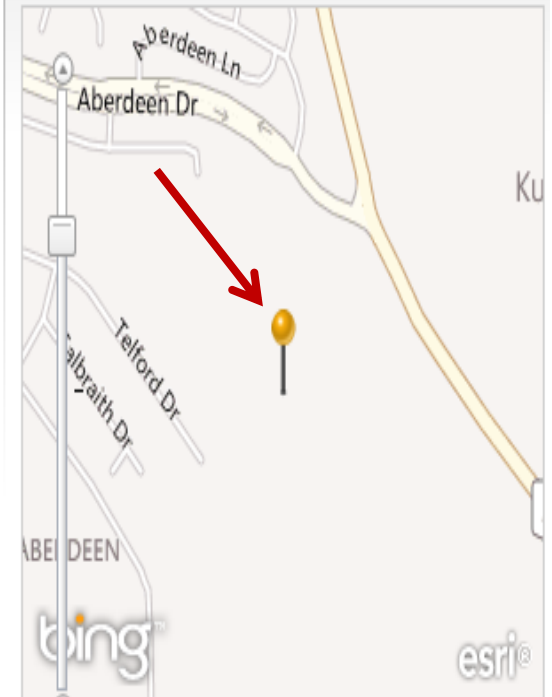
Direction: East

Device: Android Galaxy Nexus

Current Status: **In Process**


Description: Tree down on trail. Braiding occurring as people detour. Off road vehicle tracks also present.

## Where Is This Report?



# Handling Issue Reports

- City staff review submitted reports via a web-based console



You are currently logged in as: [Adam Chadwick](#) [ [City of Kamloops](#) ] [Logout](#)






















Jump to Issue ID#  [Jump!](#)

Search by Ticket ID#  [Search](#)

[Home](#) [Issues](#) [Metrics](#) [Widgets](#) [Boundaries](#) [Notifications](#) [Settings](#)

[View Issues](#) [List](#) [Map](#) Total Issues: 281

[Set Filters:](#) [Download This Data](#)

	Id	Date Created	Report Type	Address	Boundary	Status		
	<a href="#">331</a>	10/24/2012 @ 08:51 AM PST	Litter Pickup	<a href="#">510-526 Strathcona Terrace, Kamloops, BC V2C 1B5, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">330</a>	10/23/2012 @ 07:41 AM PST	Litter Pickup	<a href="#">Uji Way, Kamloops, BC V2C 3K6, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">329</a>	10/17/2012 @ 05:05 PM PST	Litter Pickup	<a href="#">998-1000 Ord Rd, Kamloops, BC V2B 0B6, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">328</a>	10/17/2012 @ 05:04 PM PST	Litter Pickup	<a href="#">988-996 Ord Rd, Kamloops, BC V2B 0B6, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">327</a>	10/16/2012 @ 09:32 AM PST	Potholes	<a href="#">6417 Barnhartvale Rd, Kamloops, BC V2C 6V6, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">326</a>	10/15/2012 @ 05:30 PM PST	Fences / Walls	<a href="#">1572-1596 Hillside Dr, Kamloops, BC V2E 1B4, Canada</a>	Kamloops, BC	InProcess		
	<a href="#">325</a>	10/14/2012 @ 12:11 PM PST	Parks - General	<a href="#">2110 Sifton Ave, Kamloops, BC V1S 1A5, Canada</a>	Kamloops, BC	InProcess		

# Handling Issue Reports

- Depts. review issue description, map location and photo used to ensure appropriate crews, materials, equipment, etc., are assigned
  - Often the photo alone identifies location and scope of the problem
  - In theory, location as indicated by the map can be used to dispatch crews more efficiently

# Reasons Why We're Doing this

- Customer Satisfaction
  - By simplifying the process of reporting issues it's more likely that issues will be reported (and then fixed)
- Efficiency
  - There are many more citizens that can report issues than the City has staff (\* approx. 15,000 smart phones in the City)

\*Pew Research Center, 2011



# Some More Reasons...

- Cost Savings – operations
  - Better issue location (map) and description (photo) enable crews to find issues more easily thereby saving time
  - Fixing an issue sooner is usually less expensive than fixing it later



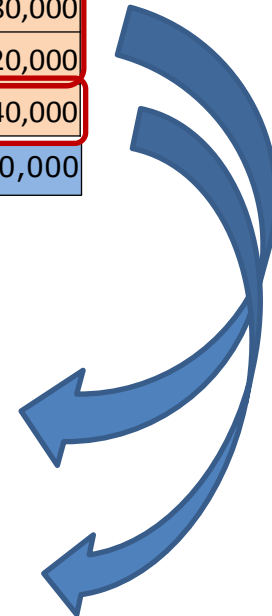
# Some More Reasons...

- Cost Savings - input channel shift

Request for Service Type	Best Handled By:	Call Count
Verbal / high priority	Telephone	80,000
By-law / Development	Telephone	20,000
All others	Email / Self Service	40,000
Total Calls for Service (since 1999): 140,000		

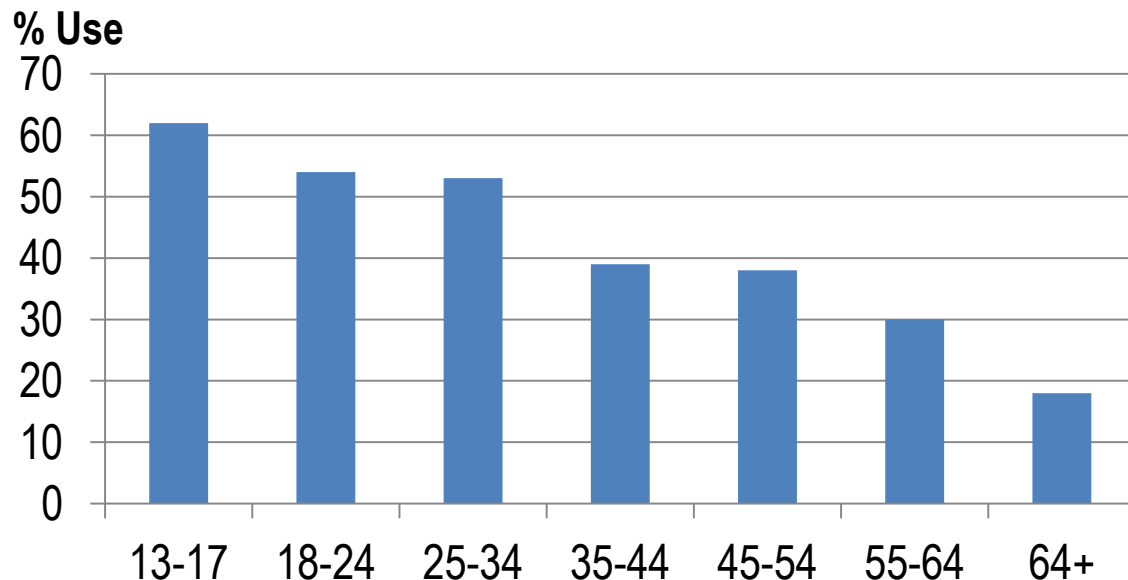
Channel	Cost/ Transaction
Walk-in	\$9.00
Web Chat	\$7:00 - \$7:50
Live Phone Agent	\$4.50 - \$5.30
Email	\$2.50 - \$3.00
Phone - Self Service	\$0.45 - \$1.85
Web - Self Service	\$0.25 - \$0.65

Cost breakdown, Forrester Research report, 2009  
Social media and self serve apps are considered to be equivalent to the Web - Self Service channel



# Some More Reasons...

- Citizen Engagement
  - Makes it easier for citizens to interact with the City regarding civic issues
  - Smart phones predominantly used by younger people\*



\* Neilson, Q3, 2011

# Some More Reasons...

- Service Quality
  - Finding out about issues sooner (through easier reporting) can result in them being fixed sooner resulting in better municipal service provision
- Risk & Liability Reduction
  - For the same reason, resulting in less risk and liability to the City



# And Even More Reasons...

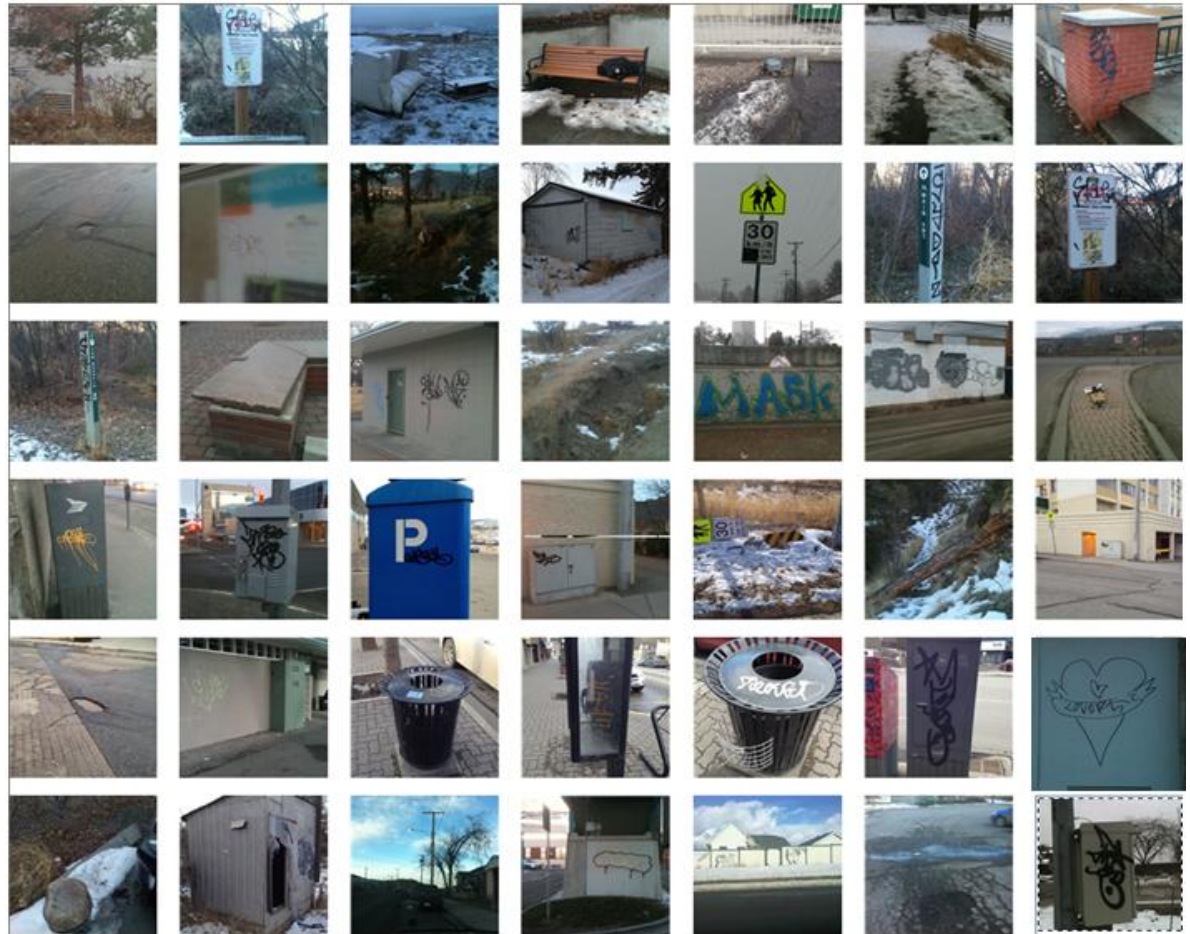
- New ways of working might be discovered...
  - Could an issue report (with a photo of the issue) emailed to a mobile/field worker assist them in responding better?
  - Can the ability to record issues while a field worker is doing a different task save them time afterwards?

# System Interfaces

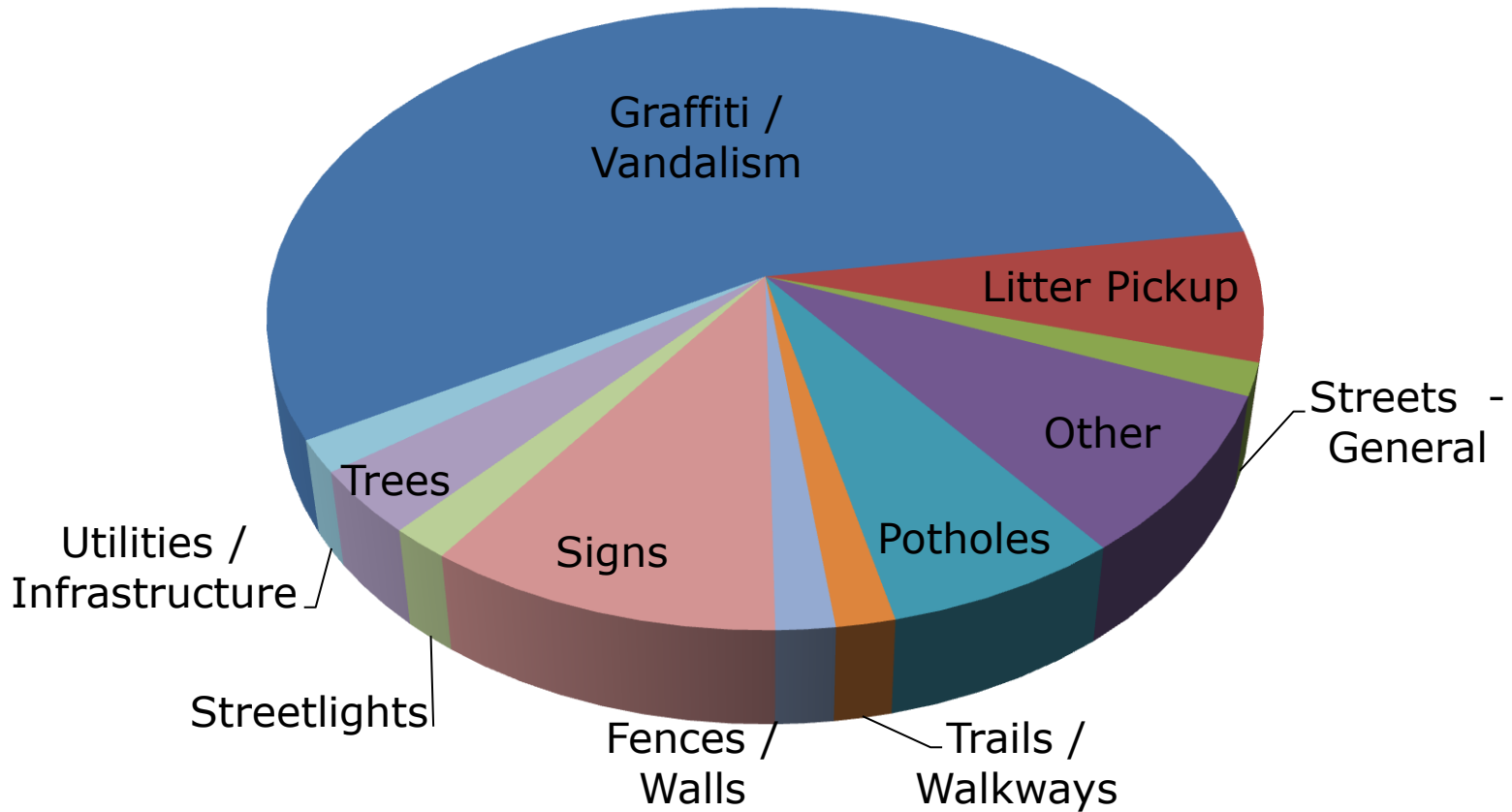
- Current (Tempest) system is the sole repository for recording all issue reports – currently, the mobile app is an additional input channel only therefore no data silo
- Once Cityworks-Service Requests goes live, then mobile app-sourced issues will be received/entered automatically

# Pilot

- 4 month pilot using City staff
- 105 issues submitted
- Training
- Documentation
- Processes
- People issues



# Issues Submitted - Pilot





# Pilot Concerns/Feedback

## 1. Ability to handle increased workload

- Would staff be allowed to extend beyond “48 hrs to respond” service level?
  - Areas of concern:
    - By-Laws (graffiti)
    - Streets (potholes)
    - Parks (litter)

# Pilot Concerns/Feedback

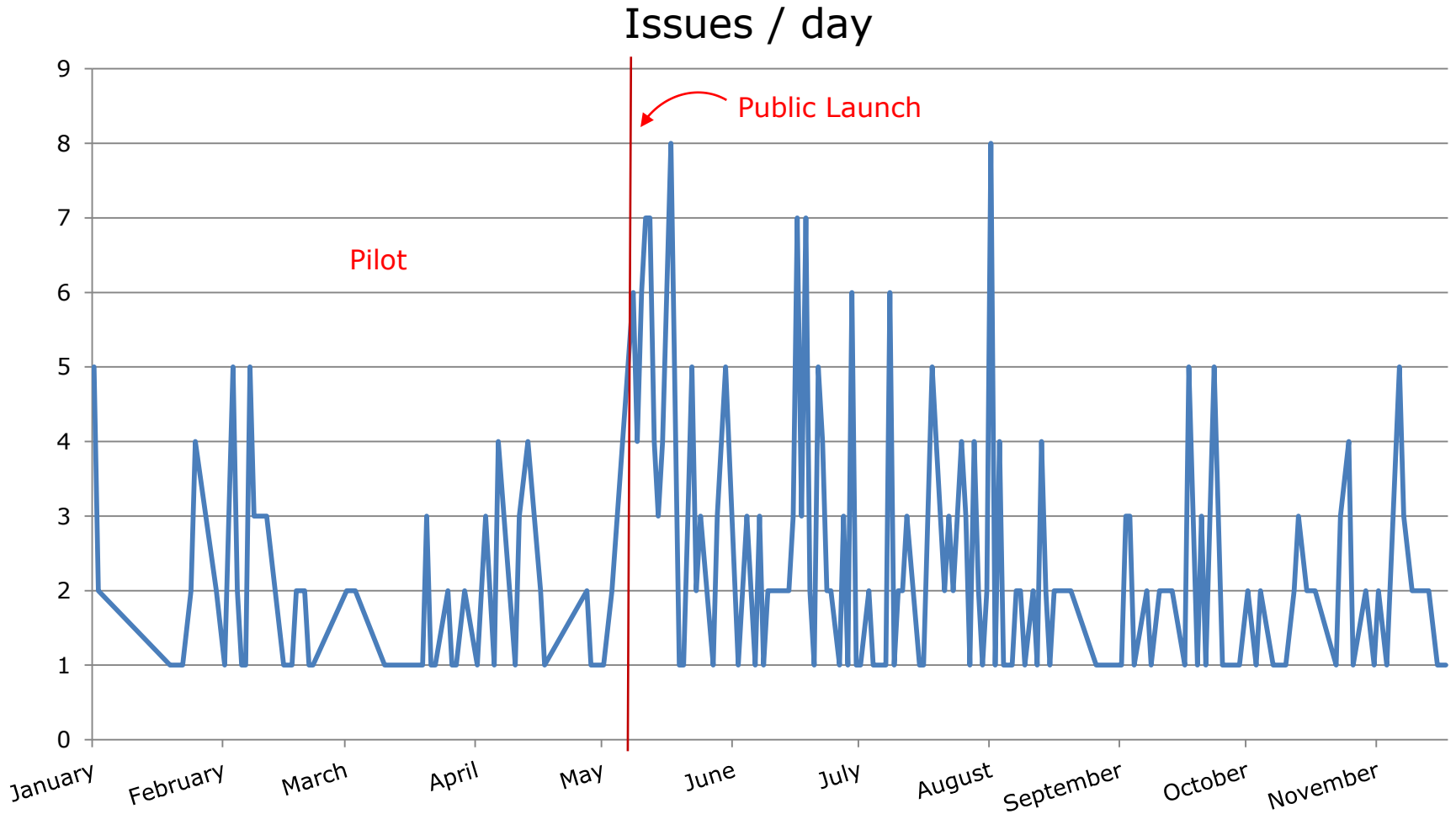
2. Coordination of issue closing (in the system) and issue fixing (in the field)
  - Some departments close issues (in Tempest, and therefore the mobile app) before they're fixed in the field
  - The public would become aware of this due to automatic issue Status change push notifications indicating when an issue is closed
    - Options:
      1. Send manual notification indicating predicted fix date for when issues are closed before they're fixed X
      2. Delay closing of an issue to when an issue is fixed X
      3. Don't notify submitters when an issue is closed ✓

# Public Launch

- Media invite – TV, newspaper, radio
  - Discussion & demonstration of the app
- News release, Twitter, facebook, etc.
- Quarterly utility bill insert
- Parks & Rec brochure
- City calendar distributed to all households
- Great response/public feedback
- 6 months in and all is well

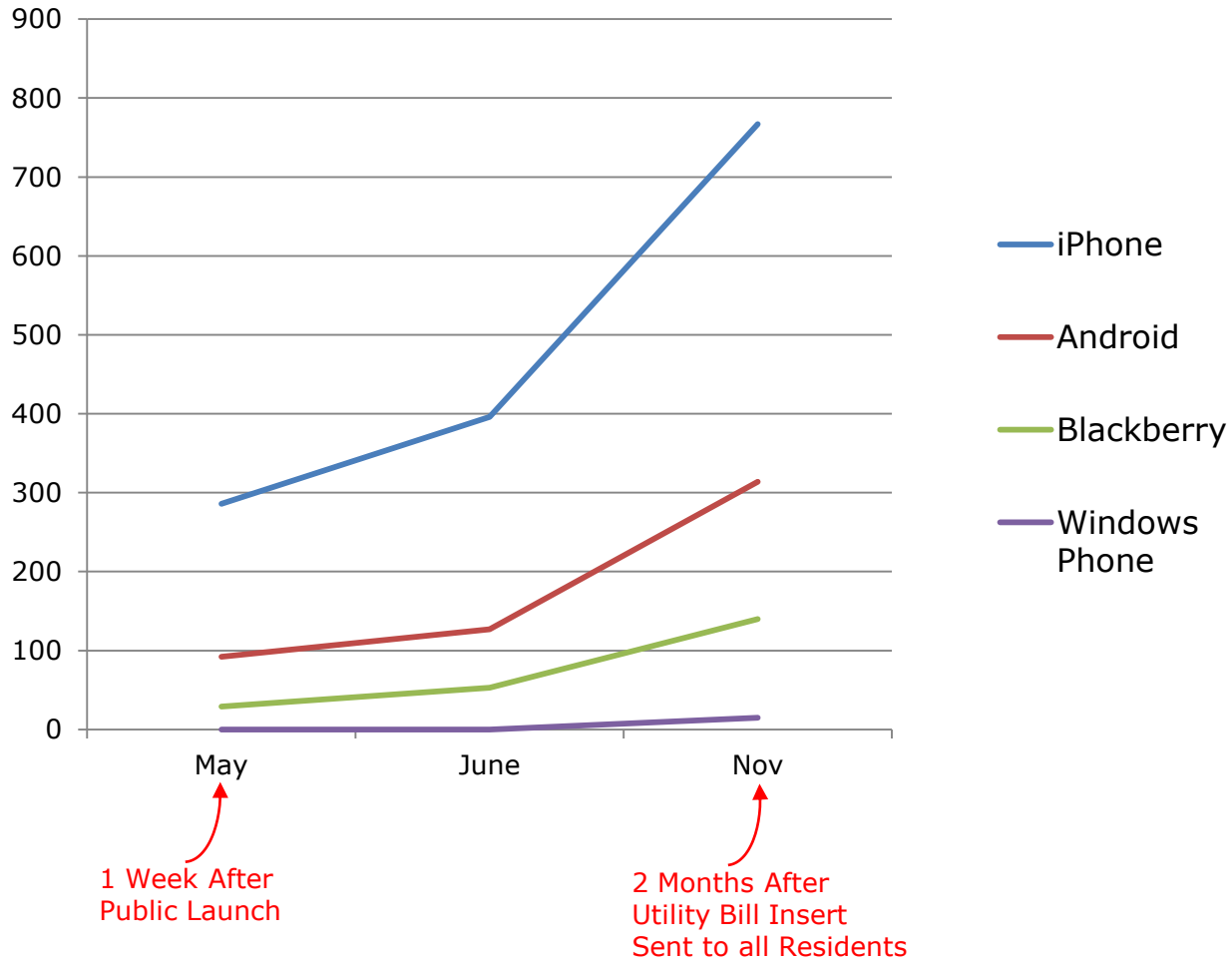


# Issues Submitted



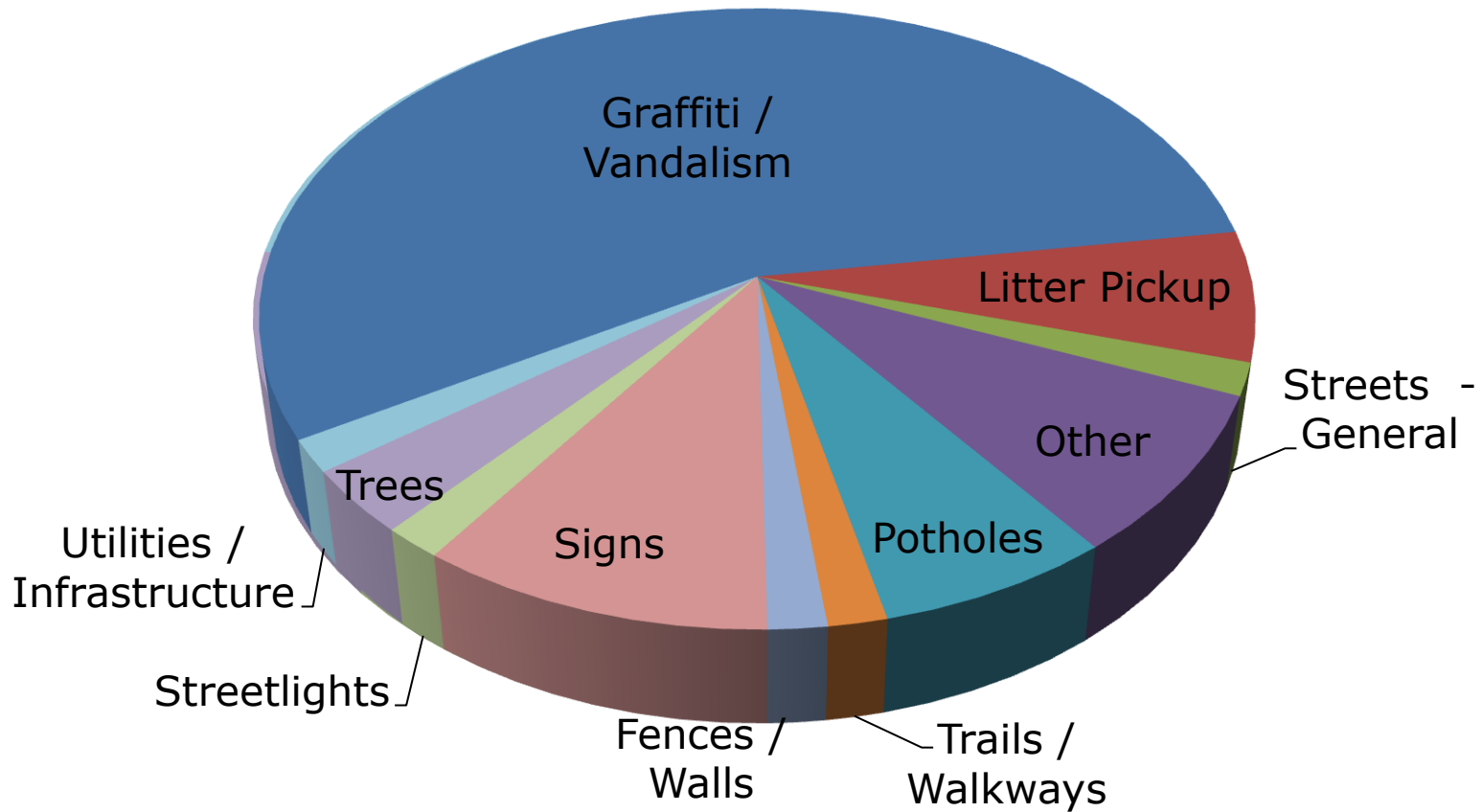
\* Average of 2 issues submitted/day, 7 days/week

# App Download Counts



\* 142 unique submitters/app users

# Issues Submitted – Pilot Production



# Cost/Benefit

- Are there sufficient benefits for the cost?



# To Summarize...

- Helps our citizens by:
  - Simplifying their ability to report issues
- Helps the City by:
  - Improving reportage of civic issues
  - Reducing costs
  - Improving citizen engagement
    - “It's a wicked app. I feel like I control the entire Kamloops staff with the touch of a button.”



# Questions?

