

Story of the **lonely cones**

Simple survey to the complete solution



not →
these
ones



These
ones!



[AT.govt.nz/reuniteourcones](https://at.govt.nz/reuniteourcones)

#ReuniteOurCones



Story of the Lonely Cones

Humble traffic cones are sometimes forgotten, left behind, or separated from their herd.



Poor cones ends up in the locations not intend to be.

Lonely Cones : Drivers

1. Single cones are a **nuisance**
2. In the Auckland region its estimated there is a cone every **1.5km**
3. It is perceived cones are the responsibility of AT resulting in **60 + calls a month** for abandoned cones to be picked up even though they have their owners branding.
4. Lonely cones **lessen the impact** of their working counterparts.
5. Older cones can be **recycled** in NZ

Lonely Cones : Key Questions

Can **lonely** cones be reunited with their friends?

Will the **community** help us locate lonely cones?

How can we (AT) **engage** with the community to report the lonely cones?

The Reunite Our Cones Campaign

AT initiated a “**proof of concept**” project to locate the missing cones.

Based on

Community participation

Where

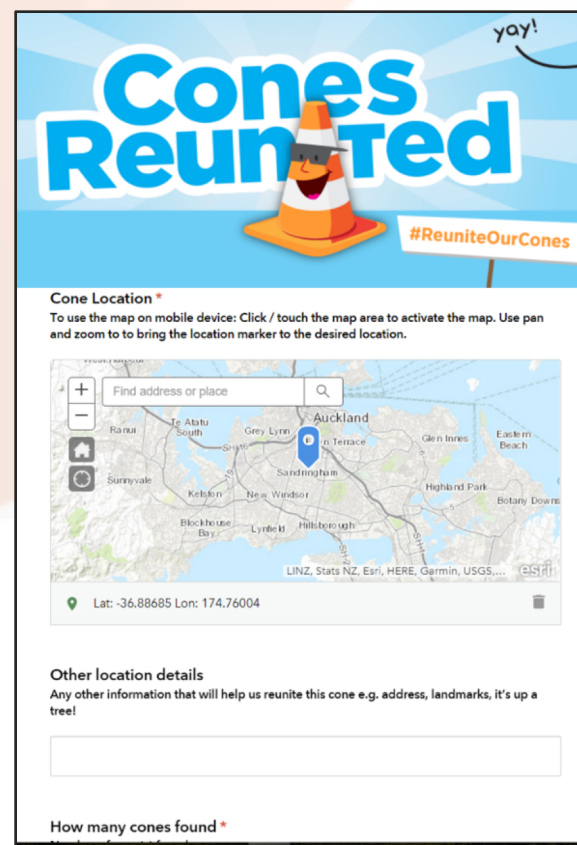
Members of the public will report the misplaced / left behind cones to AT using “**some kind of interface**”

The Reunite Our Cones Campaign

AT-GIS was tasked to provide “some kind of interface” where members of the community can mark lonely cone location(s).

Accepted Solution:

Survey 123



yay!

Cones Reunited

#ReuniteOurCones

Cone Location *
To use the map on mobile device: Click / touch the map area to activate the map. Use pan and zoom to bring the location marker to the desired location.

Find address or place

Auckland

Lat: -36.88685 Lon: 174.76004

Other location details
Any other information that will help us reunite this cone e.g. address, landmarks, it's up a tree!

How many cones found *

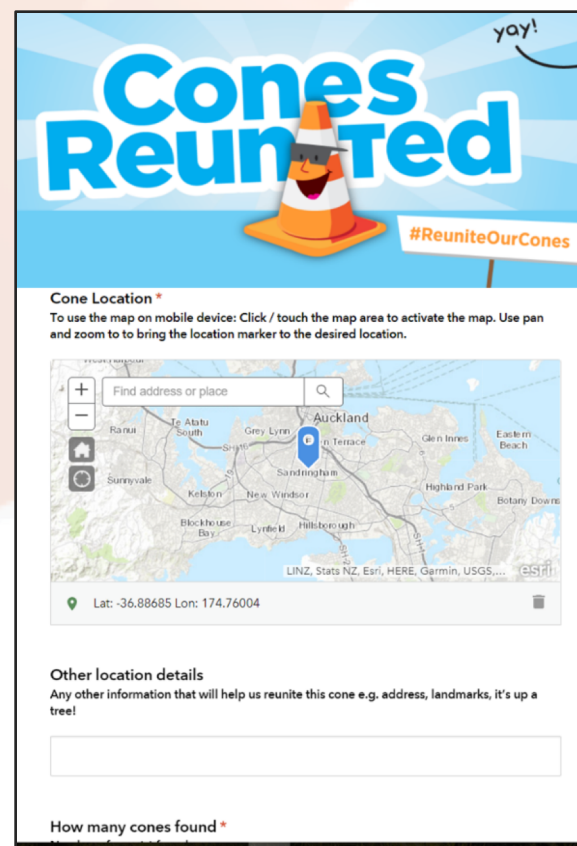
The Survey

ESRI Survey 123: Web Template based survey

A simple 4 point survey to capture;

- location
- count
- Image(s)
- additional notes

The survey was embedded in the AT campaign page.



Cones Reunited yay!

#ReuniteOurCones

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How many cones found *

Use of the **survey data**

AT GIS

“How are you going to use the data collected through the survey?”

Client (AT Internal)

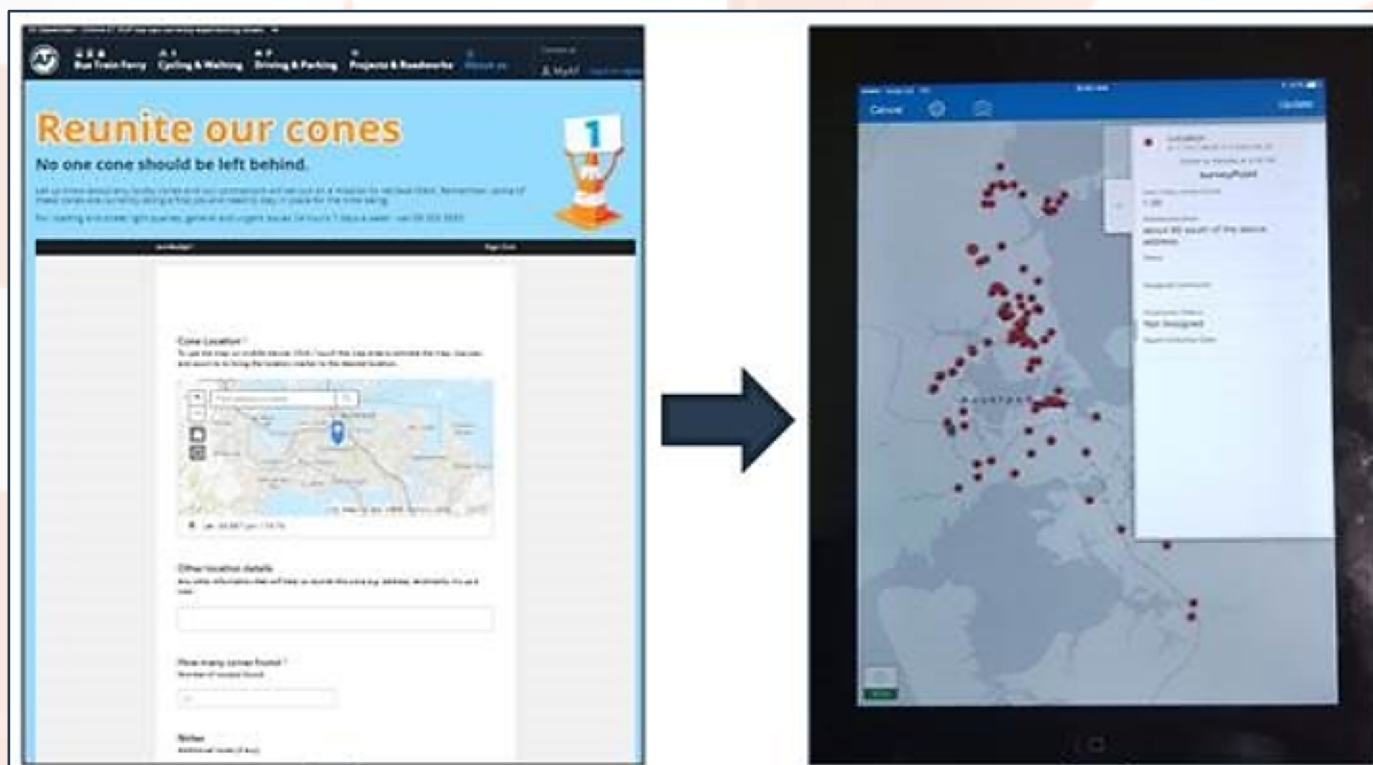
“Ummm! We will download them to CSV and send it to the owners of the cones to collect them.”

AT GIS

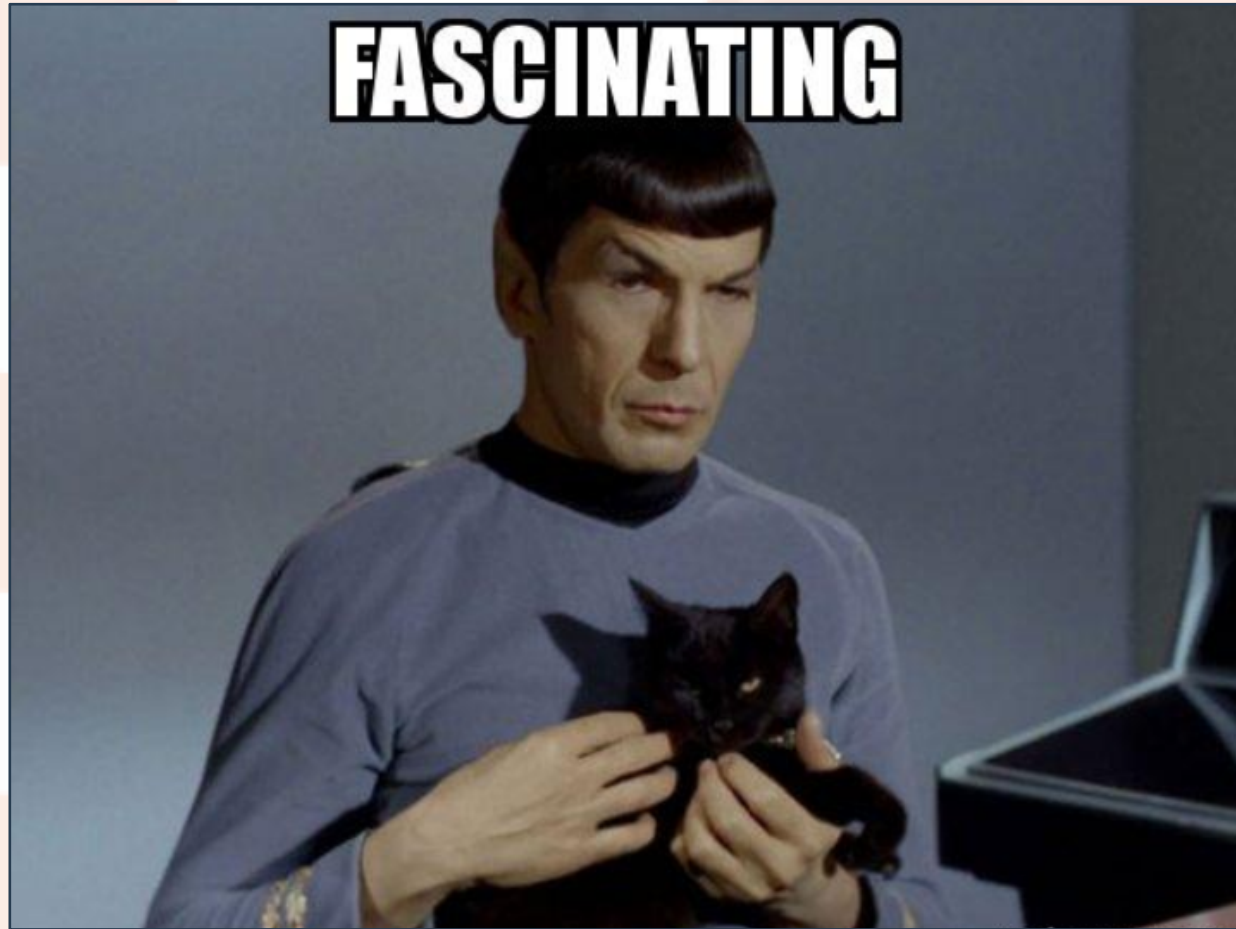


What if...

AT GIS provides a mobile solution where cone owners could find their cones and mark them as 'found'?

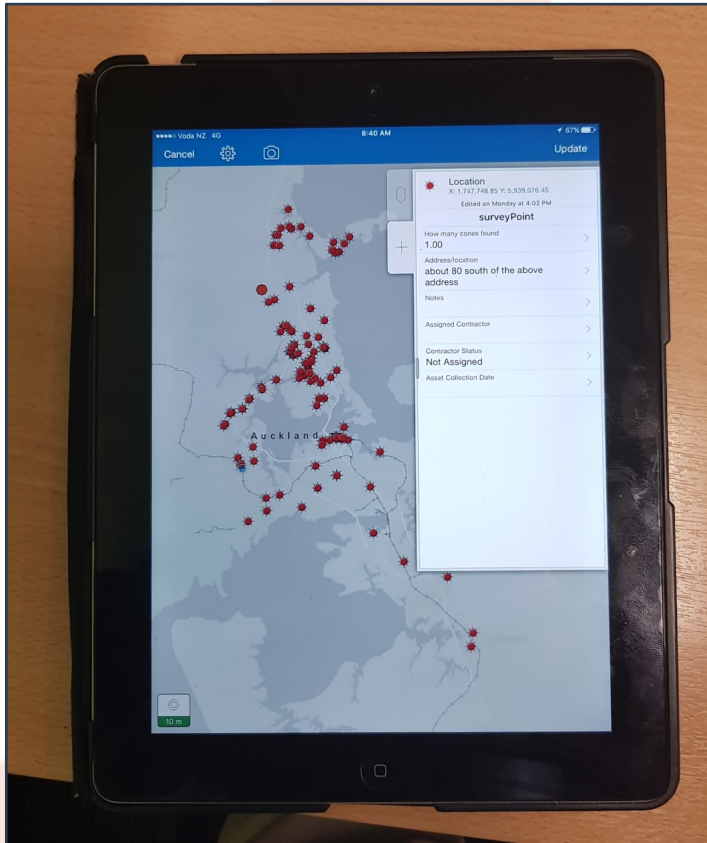


Client



Collector

ESRI's **Collector for ArcGIS** was deployed for AT Staff, consuming the **Survey 123** data.



The feature service was modified to by adding fields and domain values for **cone collection** record keeping.

Note: This operation is only supported via POST

Update Layer Definition:

```
{
  "nullable": true,
  "editable": true,
  "visible": true,
  "domain": {
    "type": "codedValue",
    "name": "Status",
    "codedValues": [
      {
        "name": "Not assigned",
        "code": "1"
      },
      {
        "name": "Assigned",
        "code": "2"
      },
      {
        "name": "Complete",
        "code": "3"
      }
    ]
  },
  "defaultValue": null
}
```

ASync:

☐ True ☒ False

Format:

HTML

Update Layer Definition

AND THEY
Lived Happily
EVER AFTER

Three small butterfly silhouettes are scattered around the text: one in the upper right, one in the middle right, and one in the lower left.

Absolutely **Not** – well not yet

AT GIS

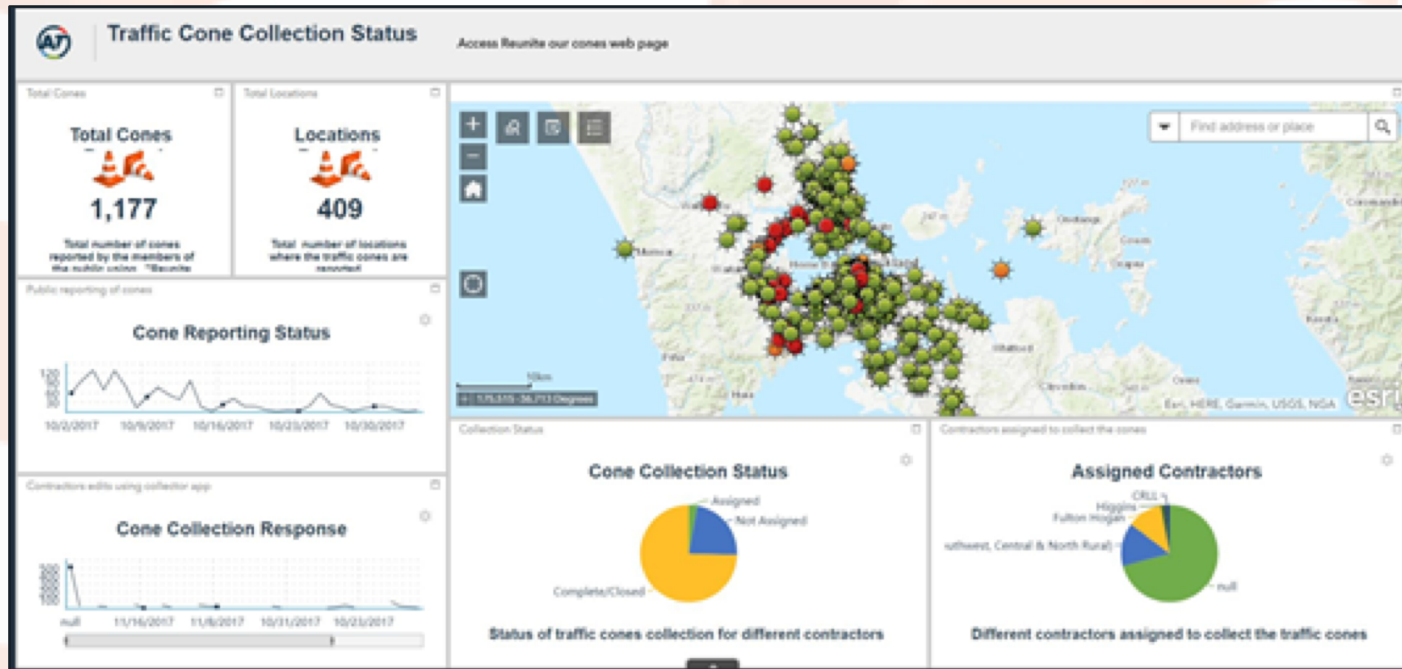
“How will managers view the progress of cone reporting and cone collection progress?”

Client (AT Internal)

“Ummm!... well..
CSVs?”

The Dashboard Viewer

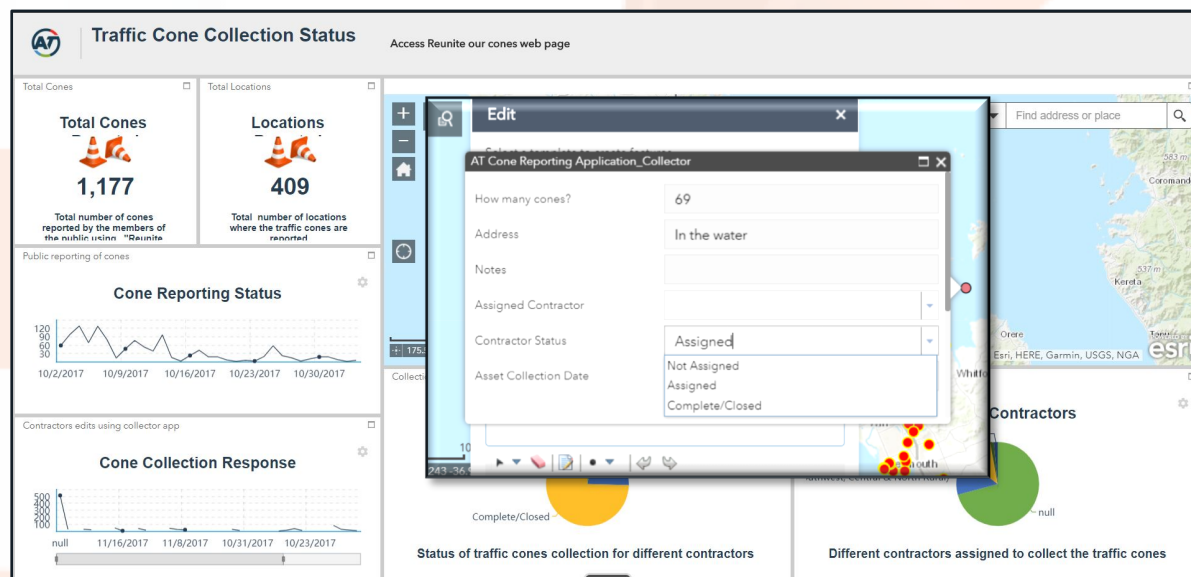
AT GIS proposed a **dashboard** themed viewer



The **ESRI WAB App** was configured to access and display the reported cones and collected cones statistics.

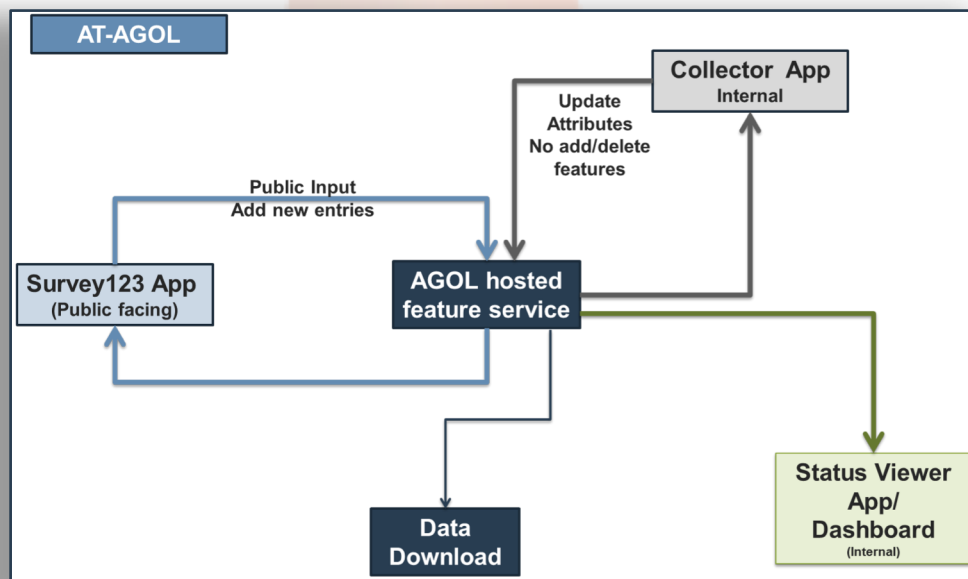
The Dashboard Viewer

Additional edit and query widgets are configured in the app.



AT Managers can access the app, query the data and assign the cones to the associated contractor to pick up.

Implementation Model



Key Components

- ArcGIS online
- Survey123
- Collector for ArcGIS
- ESRI Web App Builder

Road Ahead

- The pilot project ended in December 2017
- The proof of concept raised great lessons, a new project to implement 'Lonely cones – the next generation' is awaiting business case approval... watch this space

Questions

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Thank You