Washington State Department of
Labor & Industries

Dude, Where's my cube?

How Washington's Department of Labor and Industries helps it's employees find rooms, resources, cubicles and employees

About L&I

- Washington's Department of Labor & Industries (L&I) is a diverse state agency dedicated to the safety, health and security of Washington's 2.5 million workers.

- L&I focuses on protecting the health and safety of workers, by ensuring employers and workplaces meet safety and health standards.
  - **Goal #1 – Keep workers and the public safe**

- L&I has **21 office locations** across Washington state
  - **with over 3,200 skilled employees**

Background issues to create LOOC

- **Issue: Where is everything located**
  - How do I find where someone is sitting?
- **Previous "tool" to find rooms/employees**
  - Static; Not intuitive; hard to read
- **Inspiration for the application?**
  - A single static map snowballed
- **What should a solution look like/what functionality?**
  - Intuitive and updatable

- **Data Process**
  - STARS employee info update =>
  - Active Directory update then export to CSV =>
  - Import CSV to SDE and create view =>
  - Create join between employee SDE table and the room/cubicle feature class

- **IUID** – *Individual Unique Identifier*
  - A location ID for each room/cubicle feature for ALL L&I facilities

The old way to find someone….

WILL BE LOOKING FOR YOU KARL

Previous method to find employees at L&I

Address Book: Global Address List

File   Edit   Tools

Search: ● Name only   ○ More columns   **Address Book**

mckenna, w   Go   Global Address List - ████@lni.wa.gov   Advanced Find

Name	Title	Business Phone	Location	Department
McKenna, Winston (LNI)	It Specialist 6	(360)902-4683	L155	Information Technology

LOWER LEVEL FLOOR PLAN
SCALE: NONE

100% or actual size
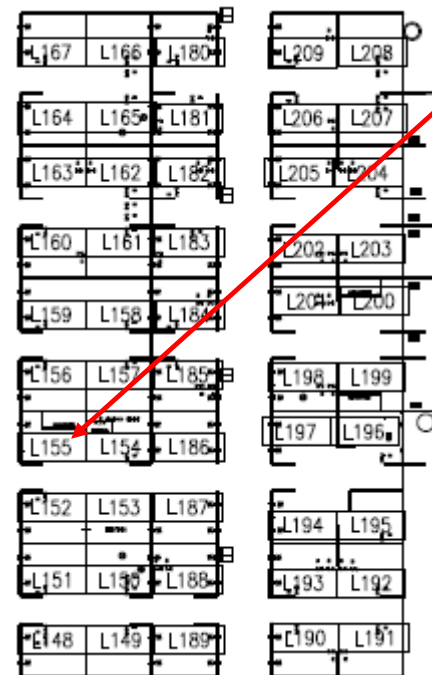
Cubicle: L155
Winston McKenna

There has to be an easier way?!?

- Easiest way to search and contact L&I employees throughout all of the regional offices?

- How to add context to an employee's location?

- Can we make it interactive?
  - Something informative, readable, and easy to use

- How are we going to make a location finder happen?!?!

- Are there any industry examples for such an application?

Modeled from Esri's *Campus Place Locator…*

This item has been moved to **mature support**. Please see What's new for more information.

Overview

Campus Place Locator is a configuration of ArcGIS and a JavaScript application that offers a map-based view of interior and exterior assets on a university or business campus.

Campus Place Locator can be used by employees, students, and visitors to search for a building space or employee by name or to use the map and floor navigator to find an area of interest. When the search function is used, the application presents a list of spaces or employees with similar names, allowing the application user to select the appropriate space or employee. The application will then show the location of the employee or space on the campus map.
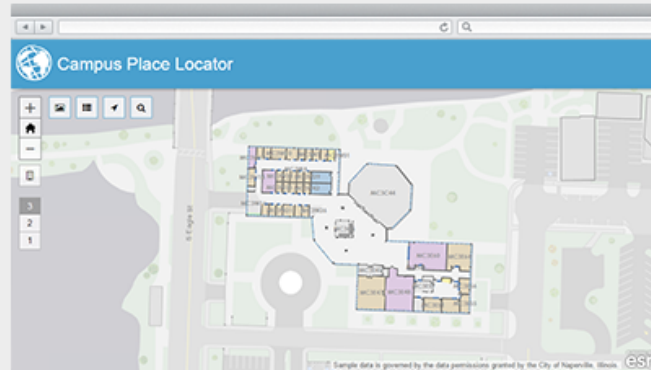
- Which of course is now in mature support by Esri
- Since the application is comprised of a config file, map services and a gdb; the application can be maintained… for-ev-er….!

Our solution:

- **L.O.O.C. – Locate Offices Occupied areas & Cubicles**

  - A **web application** that was viewable only by L&I employees

    - We need a map… Who doesn't like maps?!?

    - Is there employee location data? Where does it live?

    - Merge two different data flows to assemble the desired employee information

    - Collect and convert the AutoCAD data of all the L&I offices

But first, how can we make the Esri COTS solution work for L&I?

- First step – understanding how the data works in the app
- Second step – identifying how our data will work
- Third step – is to be realistic about your capabilities and user needs
- Is time on our side? Maybe…..?!?
- Once reality sets in, it is time to move forward with a plan of action!

Let's marry some data!

We married AutoCAD/GIS data **AND** Active Directory!

Creating a mapping application that updates with some GIS data editing and a data export from Active Directory.

But wait there's more…

- The Active Directory (AD) data needs massaging to produce the data field needed to make the LOOC application function

- An ***IUID*** or Individual Unique Identifier field must be added
  - The IUID combines the office location, building, floor and seat location
    - Tumwater, facility 1, lower level, workstation L155 = **TUM-001-00-L155**
    - Or the "actual" location for Winston McKenna

- The IUID is the magic sauce that ties together the location and employee data
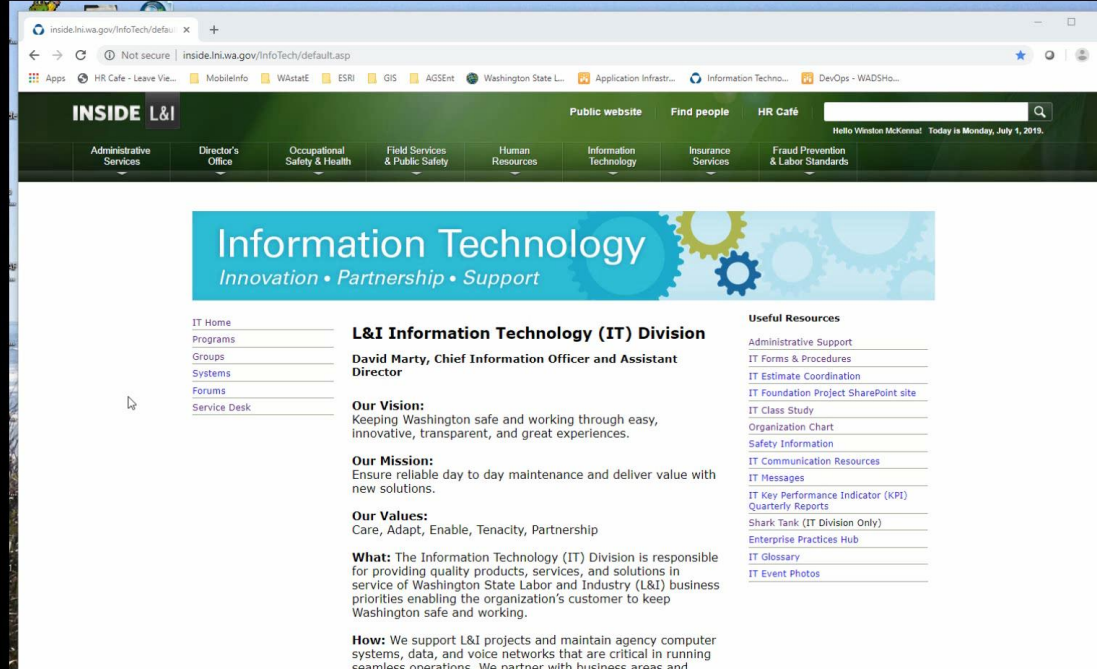
Now you know how the data goes together

- With the data married and our IUID values created…
  - What's next?
- Our map service is published and our config file is updated to consume our service
- The application is then published to IIS as a web application

LOOC Application Process Diagram
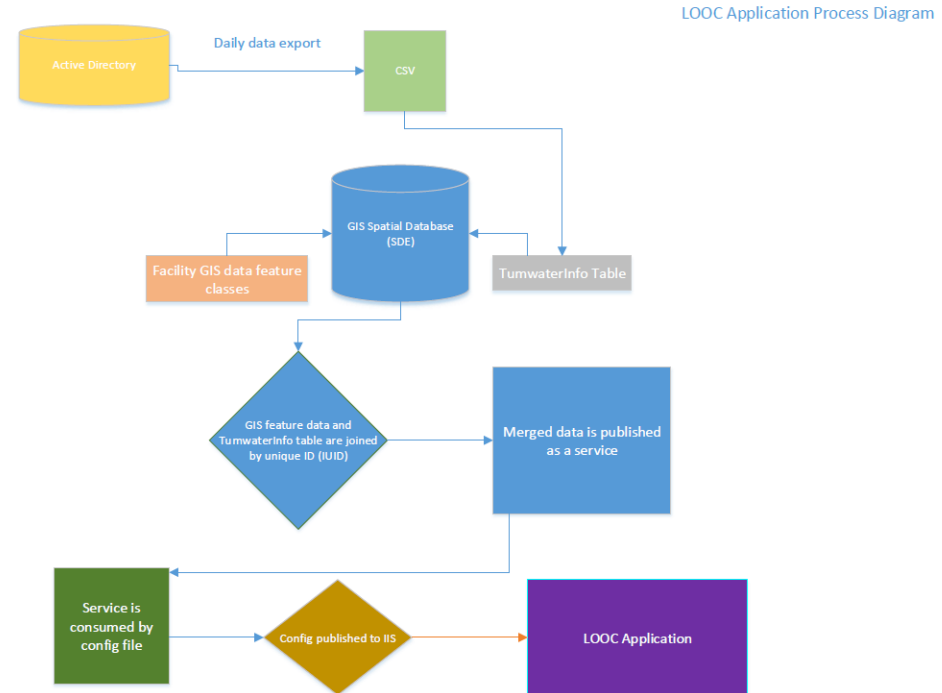
So… What does it *LOOC* like?
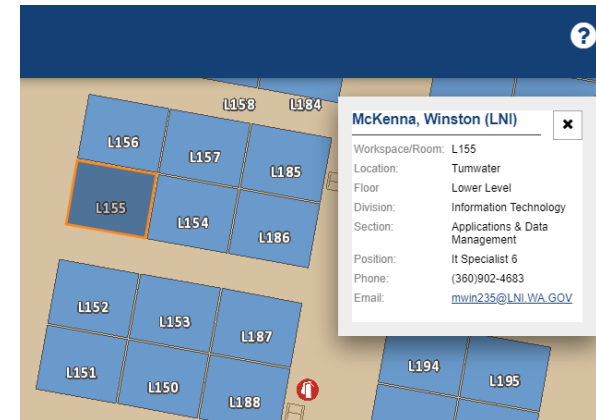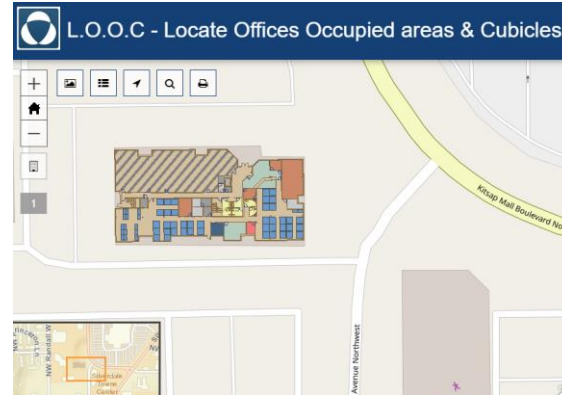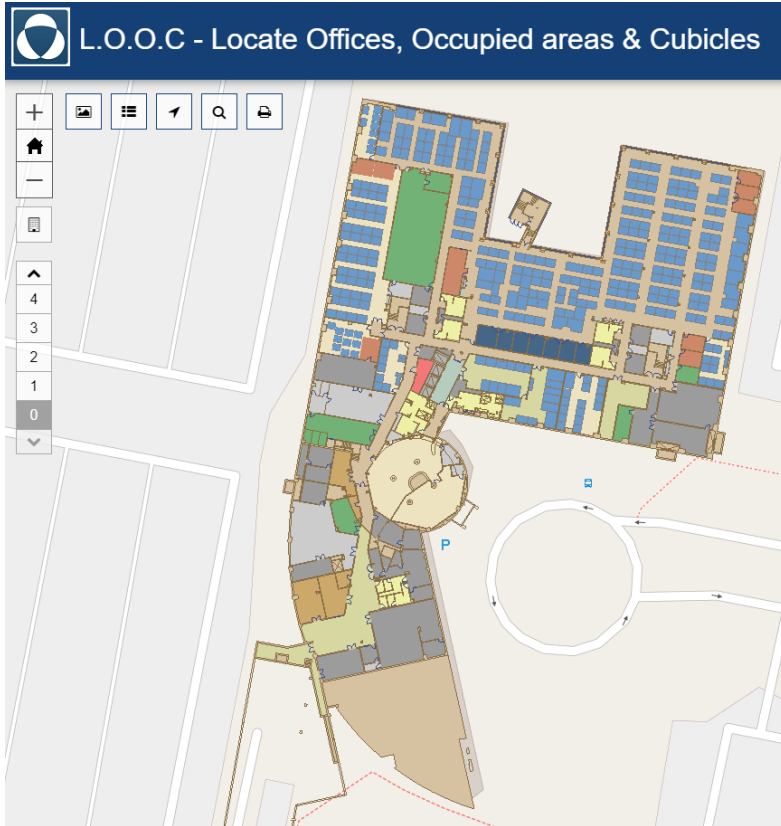
Now a video

What are the benefits of LOOC?

- Saves Time!!
    - Takes **less time** to locate other employees in your office or other facilities
    - Location knowledge **reduces time** walking to another's workspace

- Improves efficiency

- Visual platform for both location and employee information

- Promotes spatial awareness

Here are some cool time and money stats

(That only administrators and managers really care about…)

- **Sm**: Avg WA salary: 65,574/minute
- **AFE**: Avg time across floor to find employee: 6min
- **AFEF**: Avg time between floors to find employee: 12-14min
- **LFE**: LOOC time across floor to find employee: 2.6min
- **LFEF**: LOOC time between floors to find employee: 8-10min

- **Sm**: S/2000 = hr.: $32.8; min= $0.547
- Employees within HQ ~ 2100
- **Sm** * **AFE** = $3.28
- **Sm** * **LFE** = $1.42
- **Sm** * **AFEF** = $6.56 – $7.66
- **Sm** * **LFEF** = $4.38 - $5.47

LOOC saves time; saving time is saving money! Saving money makes people happy!

Thanks to everyone!

Yes I love technology

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- Bryan Huebner
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- L&I GIS team!
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