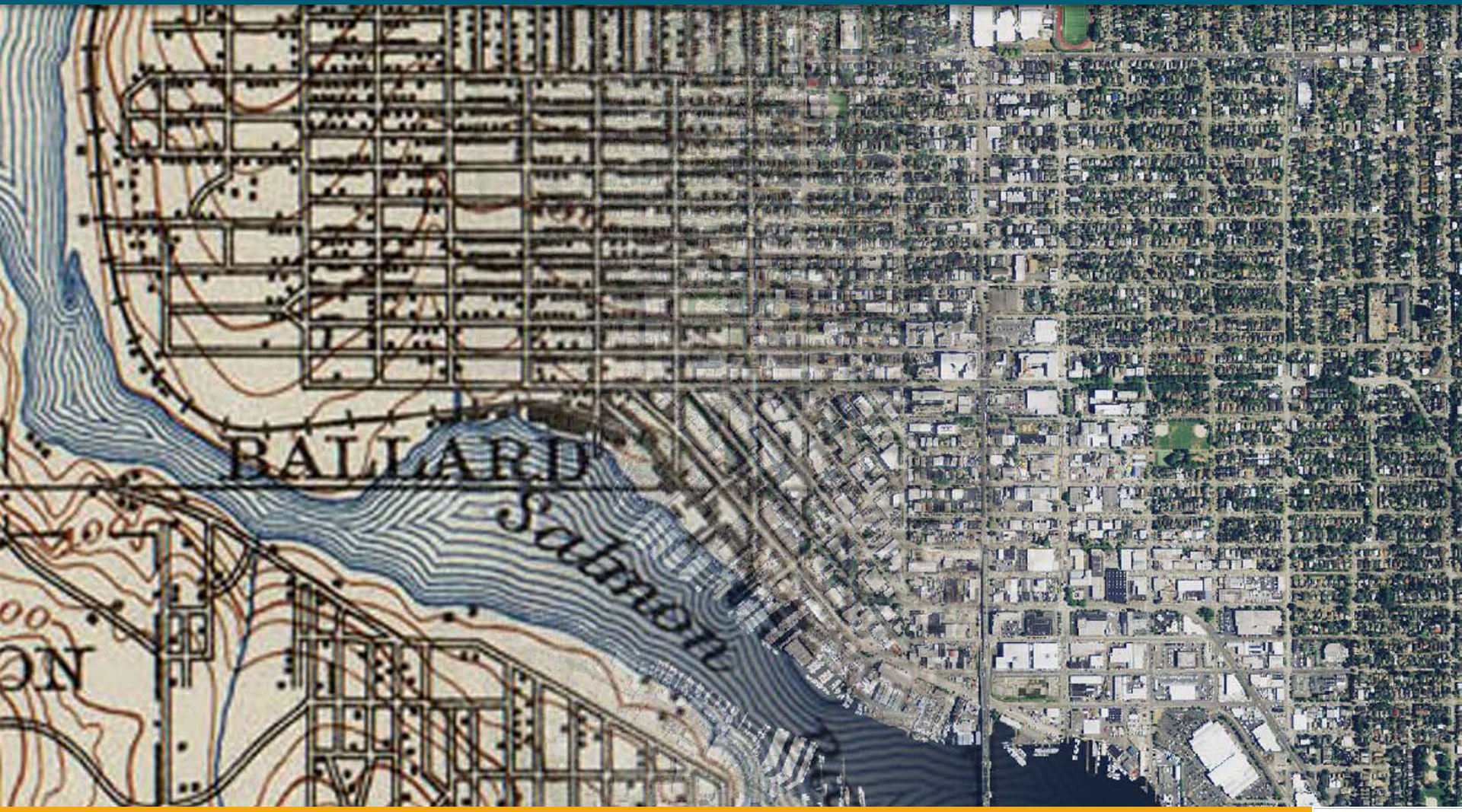
# MAPPING HISTORIC BALLARD

## With Crowd Sourced Mobile Data Collection




PRESENTED BY CORE GIS

MAY 24, 2016

core GIS
COMMUNITY, REGIONAL & ENVIRONMENTAL

# Overview

- Where is Ballard?
- What is a survey of historical buildings?
- Why do this? Who paid for it? Who did the work?
- How was the work done?
- What do the results show, and how will they be used?
- What went well? What could have gone better?

# The Ballard Neighborhood

Mapping Historic Ballard

EAT
the Hi-Life
eat:d:
5425

Salmon Bay
School

BALLARD FIRST LUTHERAN CHURCH
Renewal

3111

# Why do this?

- Ballard is considered one of Seattle's most popular neighborhoods
- New development threatens the area's historic physical fabric that interprets its history.
- We can't understand what we might be losing until we know what we have.
- Not much surveyed in Ballard outside of the historic commercial district
- Past surveys: 1997 and 1937 (as part of the WPA effort)
- Survey data can be used as a tool for urban planning, decision-making, and community building.

Or, more succinctly…
FITNESS

KING
CAUTION CUIDADO CAUTION CUIDADO CAUTION CUIDADO CAUTION CUIDADO

BALLARD

Honey Bucket
PARKING

Northwest Plumbing
Contractors Inc.
(360) 653-7224

BALLARD

# Who did the work?

- Impetus provided by Davidya Kasperzyk
- Executive committee of the Ballard Historical Society
- Two paid consultants (me and Connie Walker Gray from Confluence Environmental Company)
- Lots and lots of volunteers
  - Over 40 volunteers gathering data in the field
  - Over 25 volunteers conducting research and providing other support to the project
- We conducted two 2-hour long training sessions for volunteers gathering data in the field, and a separate training session for researchers, held at Seattle Public Library

# Special Thanks to the Funders

Seattle Department of Neighborhoods

Seattle Neighborhood Matching Fund

Ballard Historical Society

# Goals & Objectives

- Survey every building
- Gather multiple data fields on each building
- Use this data to identify 100 high-integrity historic structures that provide broad representation of the neighborhood:
  - Spatially
  - Temporally
  - Architecturally
- Get it done in two months

# Survey Area

Mapping Historic Ballard

# Survey Area

Mapping Historic Ballard

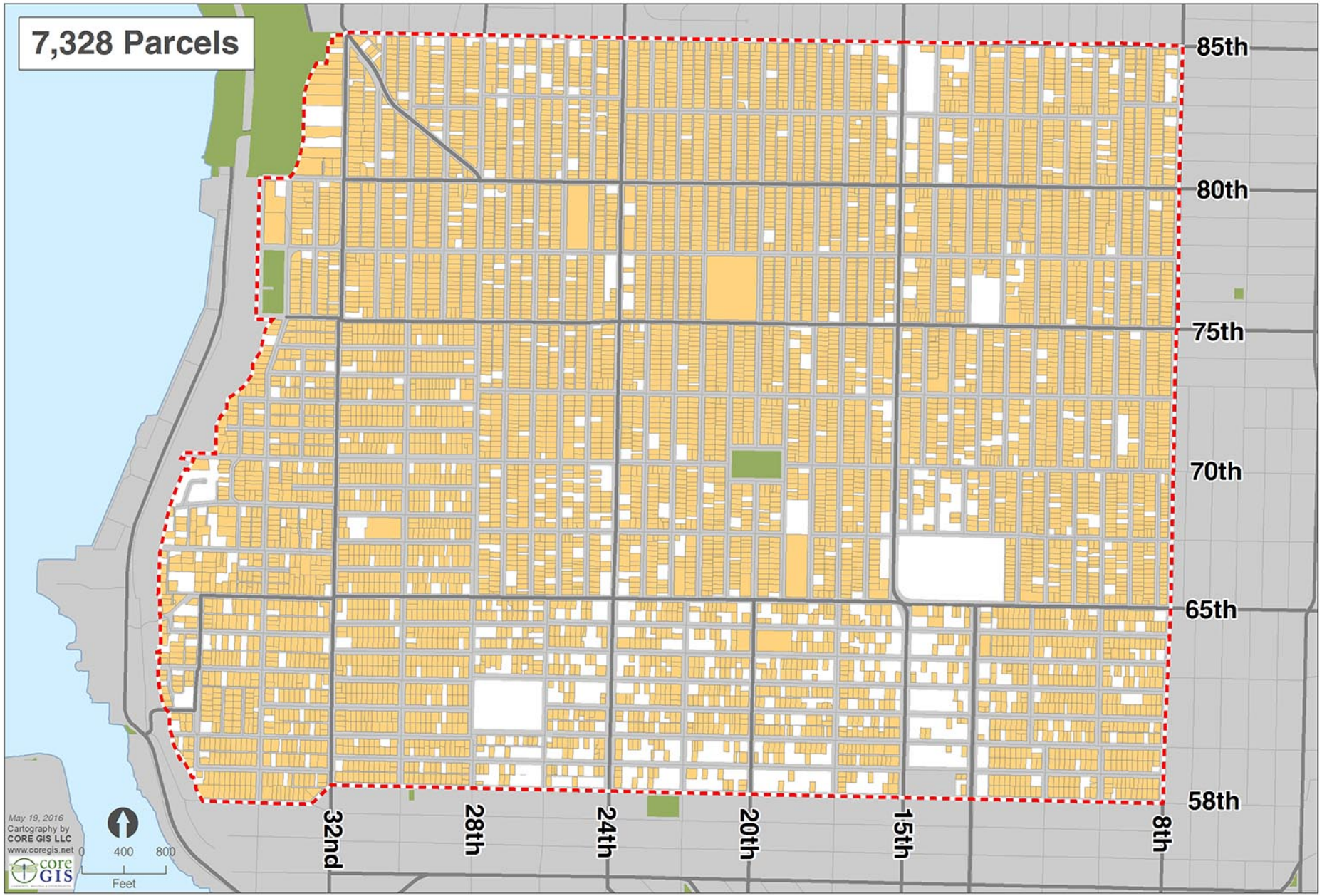
Ballard Historical Society

# Survey Area

Mapping Historic Ballard

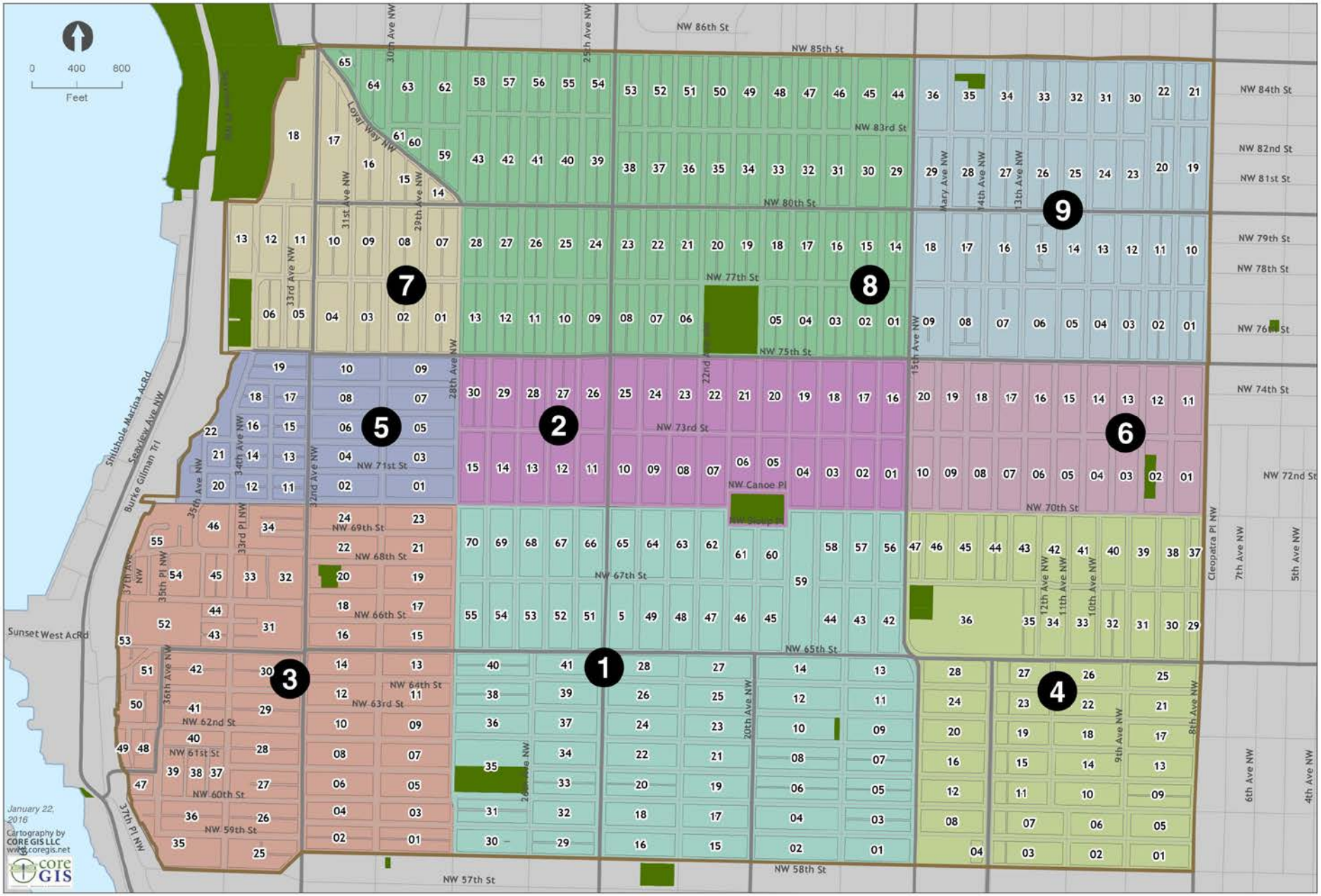
# Survey Parcels--Built 1965 or Earlier

Mapping Historic Ballard



# Sector Prioritization for Volunteer Data Gathering

Mapping Historic Ballard



# Time Requirement

- Approximately 3-4 minutes per building
- ~450-500 hours
- We need help—time to crowd source!

EXIT

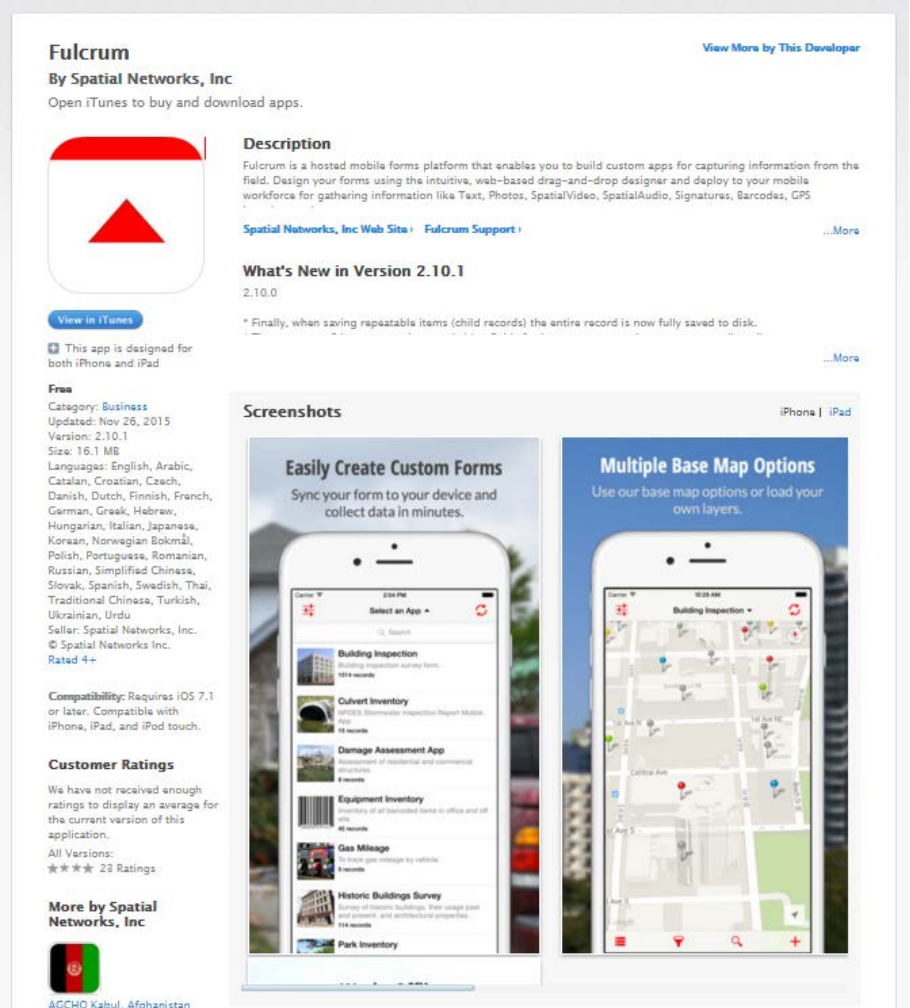
# Mobile Data Collection

- ODK vs Fulcrum
- ODK is FOSS, but Android only
- Fulcrum is proprietary and paid, but works seamlessly with both iOS & Android
- And…

# Download and Install Fulcrum

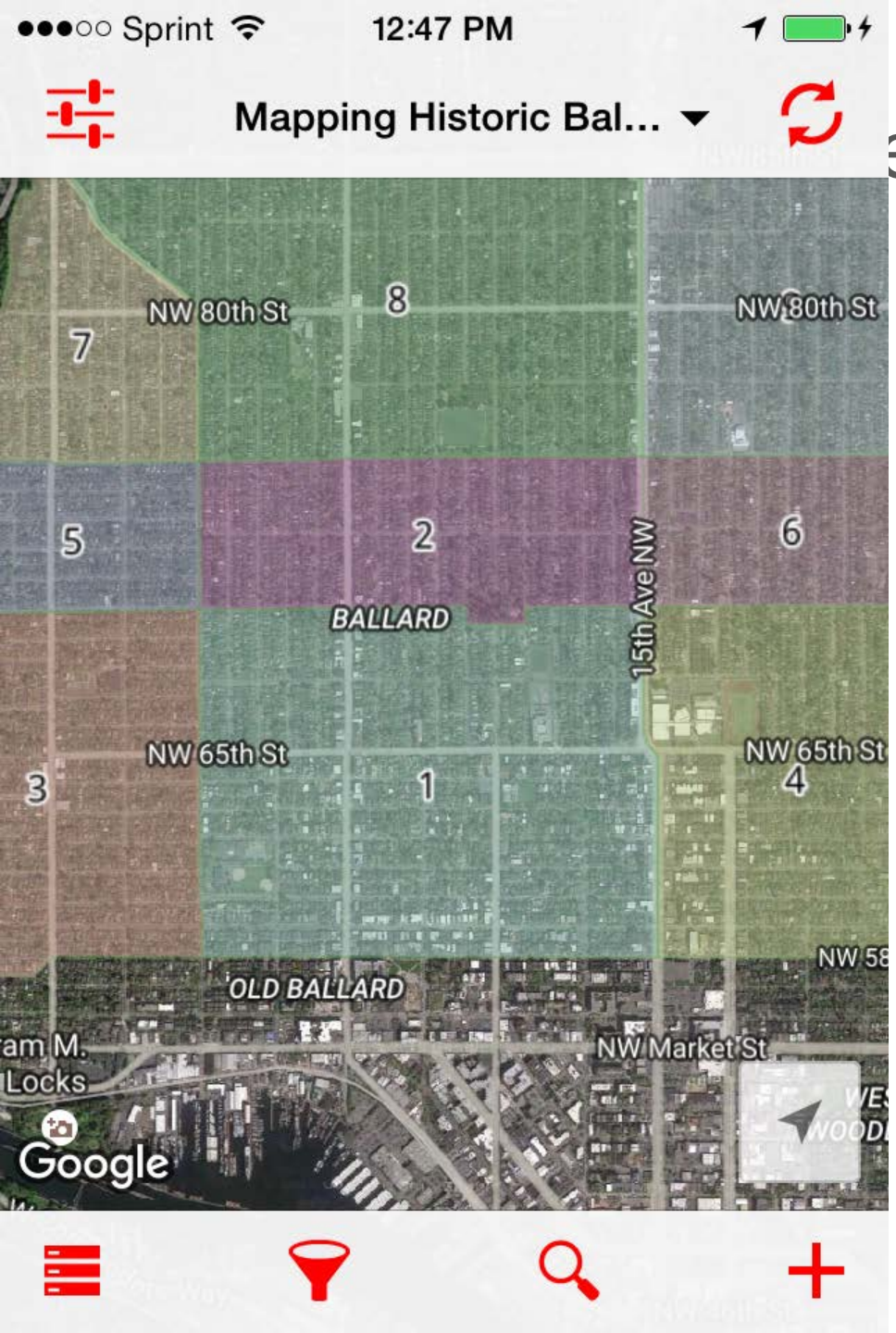
## Android

## iOS

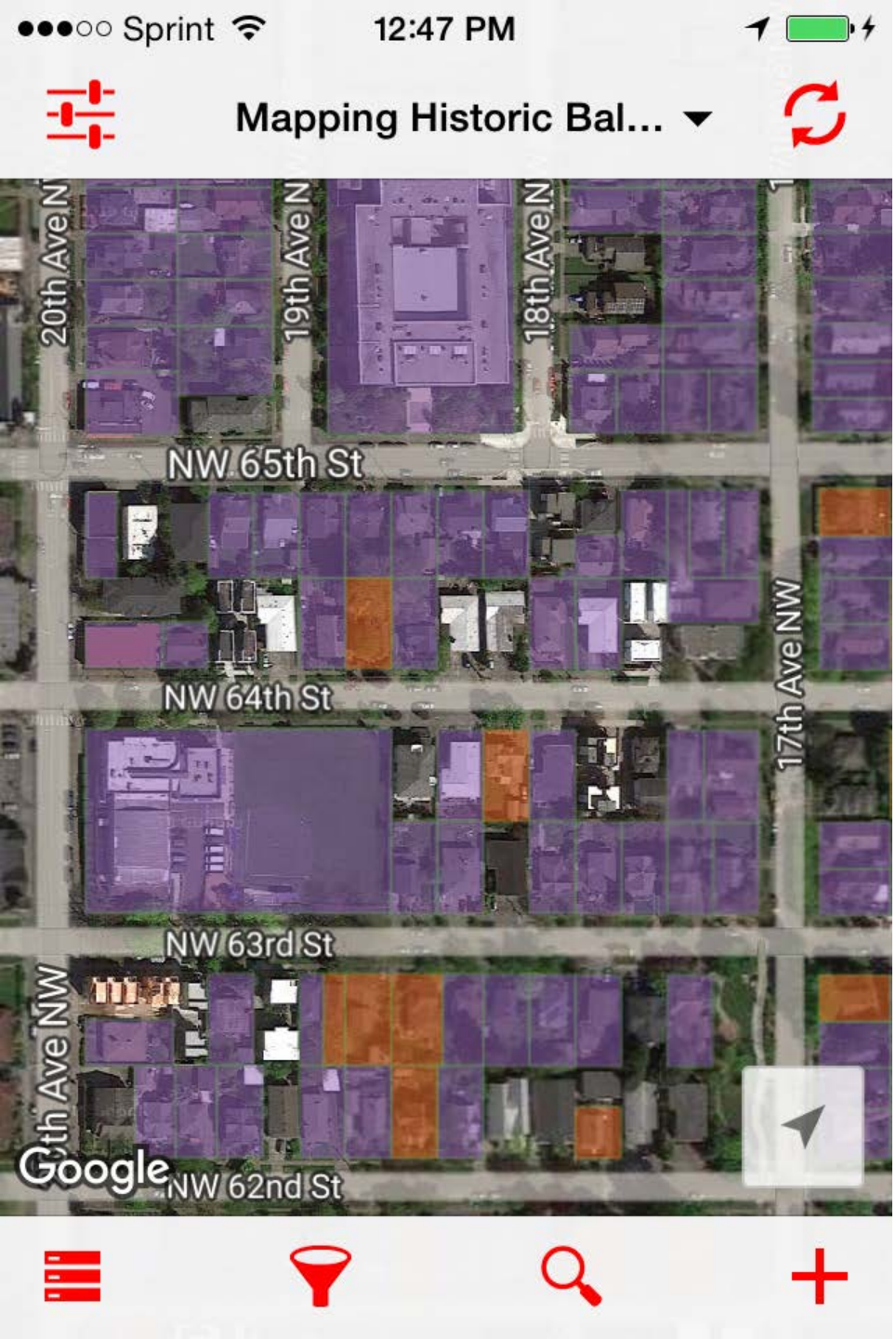


# Data Gathered in Fulcrum

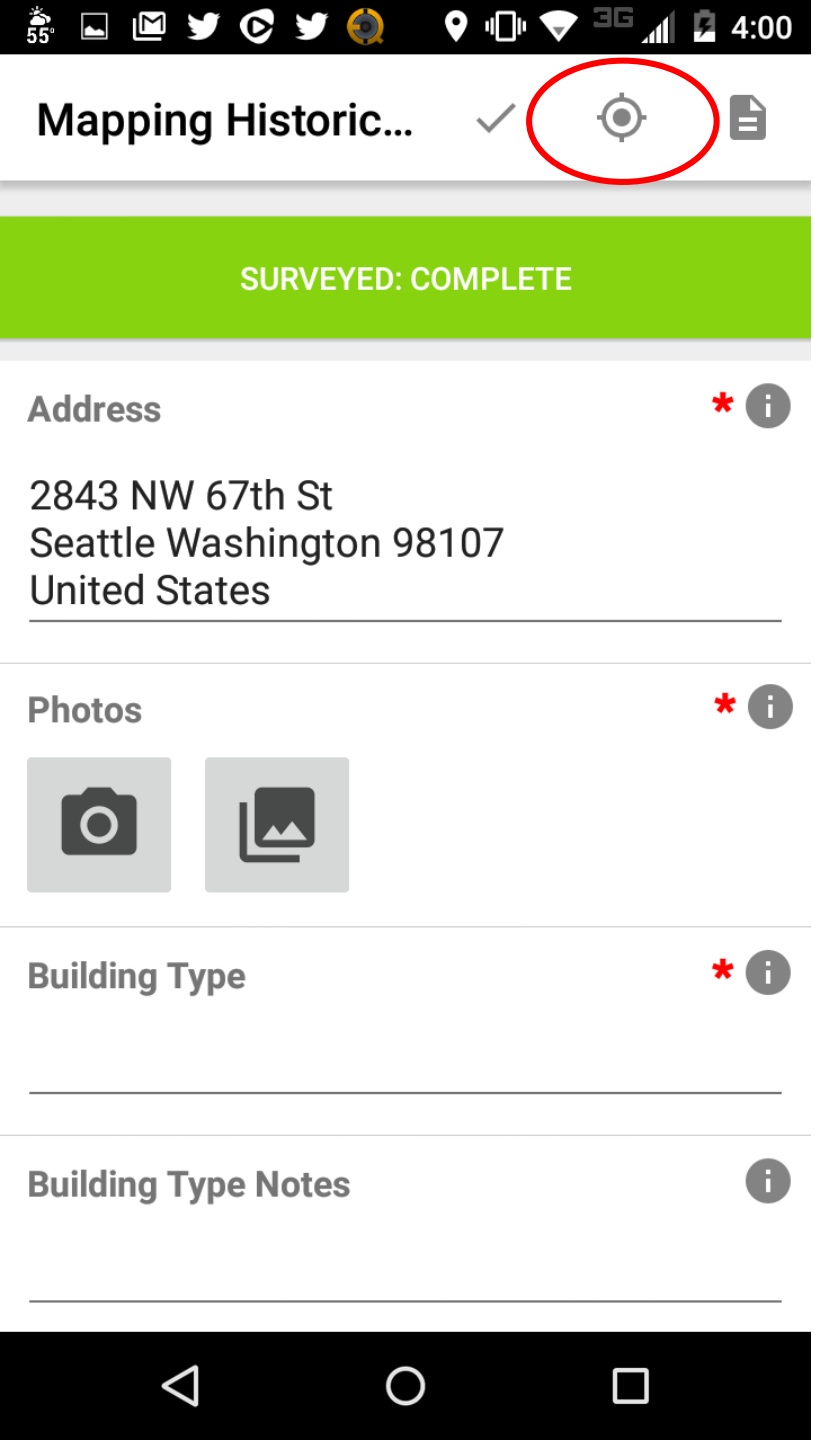
- Address
- 2 Photos
- Building Type
- Number of Stories
- Cladding
- Roof Type
- Roof Material
- Evaluation Category
- Part of a District/Cluster?
- Significant Trees

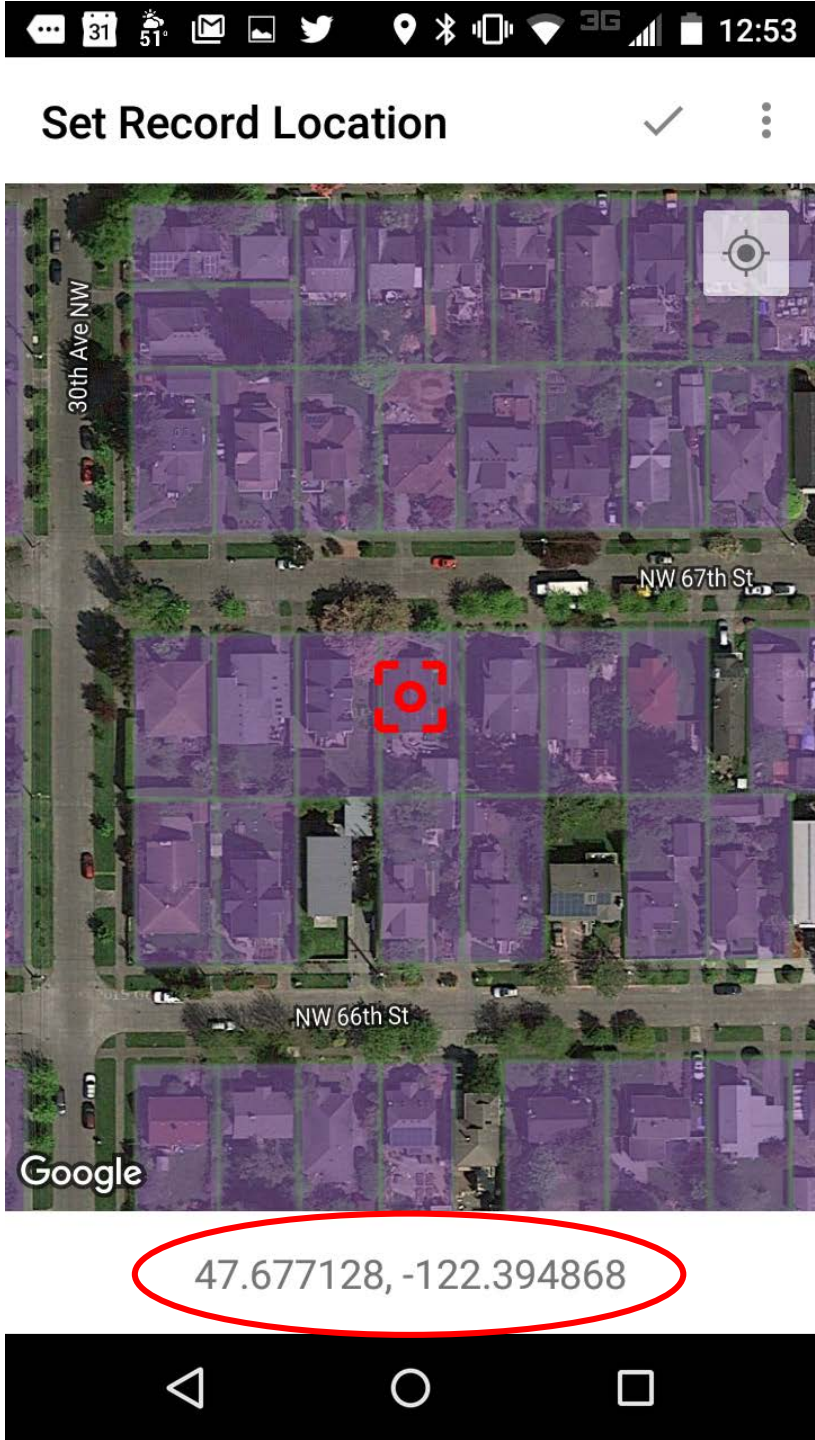

Sprint
12:47 PM
Mapping Historic Bal...
NW 80th St
NW 80th St
8
7
5
2
6
BALLARD
15th Ave NW
NW 65th St
NW 65th St
3
1
4
OLD BALLARD
NW Market St
Google

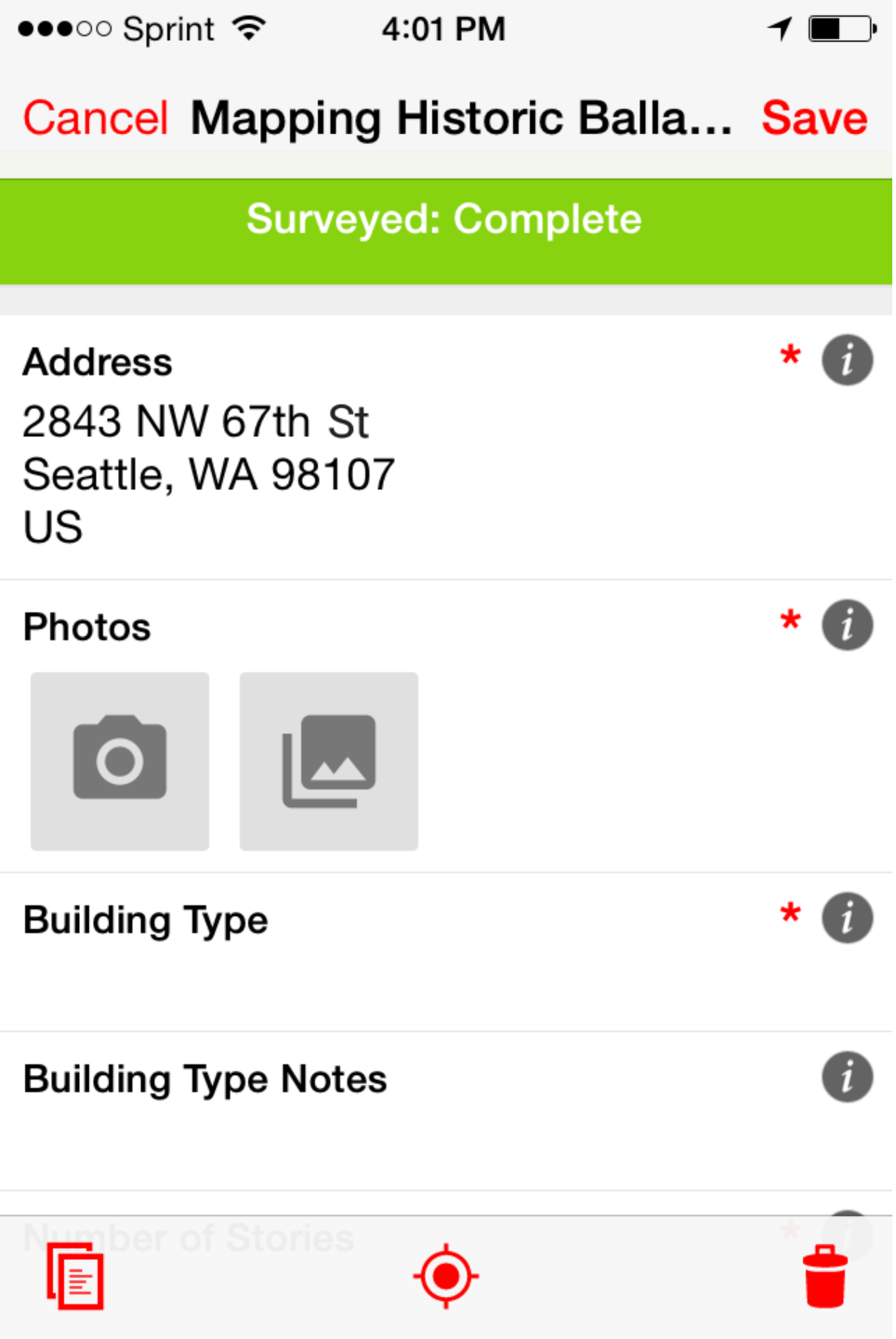
12:51
Mapping Historic Ba...
NW 73rd St
NW 72nd St
30th Ave
NW 71st St
NW 70th St
NW 69th St
NW 68th St
dic Heritage Museum
NW 67th St
28th Ave NW
Earl Ave NW
27th Ave NW
NW 66th St
32nd Ave NW
NW 65th St
NW 64th St
NW 63rd St
26th Ave NW
NW 62nd St
NW 61st St
NW Brygger
NW 59th St
Google

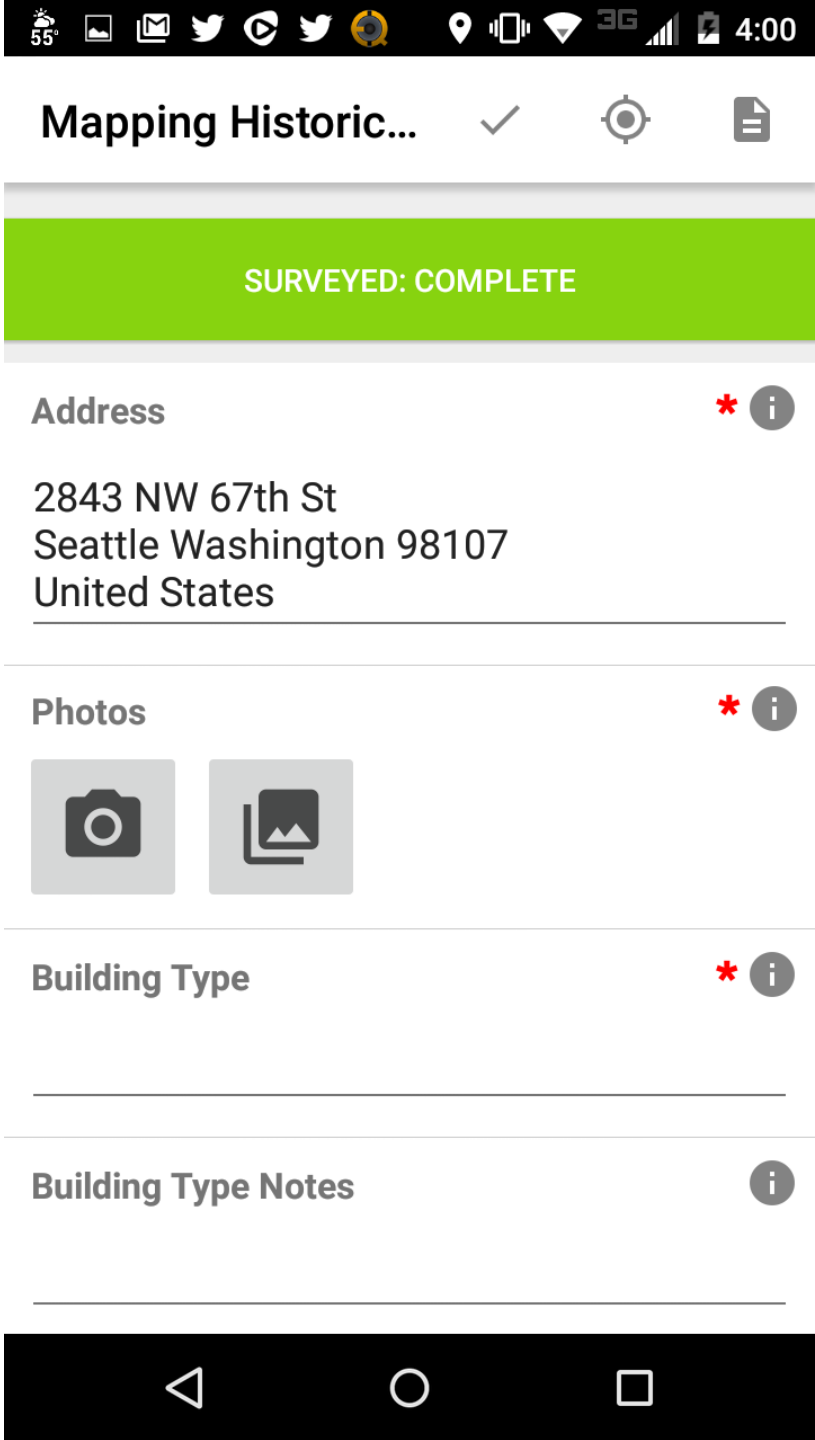

Sprint
12:47 PM
Mapping Historic Bal...
20th Ave N
19th Ave N
18th Ave N
17th Ave NW
NW 65th St
NW 64th St
NW 63rd St
NW 62nd St
6th Ave NW
Google

12:51
Mapping Historic Ba...
NW 67th St
NW 66th St
2856 (1925)
2852 (1910)
2846 (1905)
2842 (1954)
2836 (1926)
2832 (1927)
6614 (1948)
2851 (1965)
2849 (1907)
2843 (1912)
2839 (1913)
2835 (1910)
2825 (1903)
6602 (1964)
2852 (1906)
2842 (1906)
2838 (1910)
2828 (1906)
2855 (1945)
2851 (1927)
2849 (1909)
Free Run
Google


4:00
Mapping Historic...
SURVEYED: COMPLETE
Address
2843 NW 67th St
Seattle Washington 98107
United States
Photos
Building Type
Building Type Notes

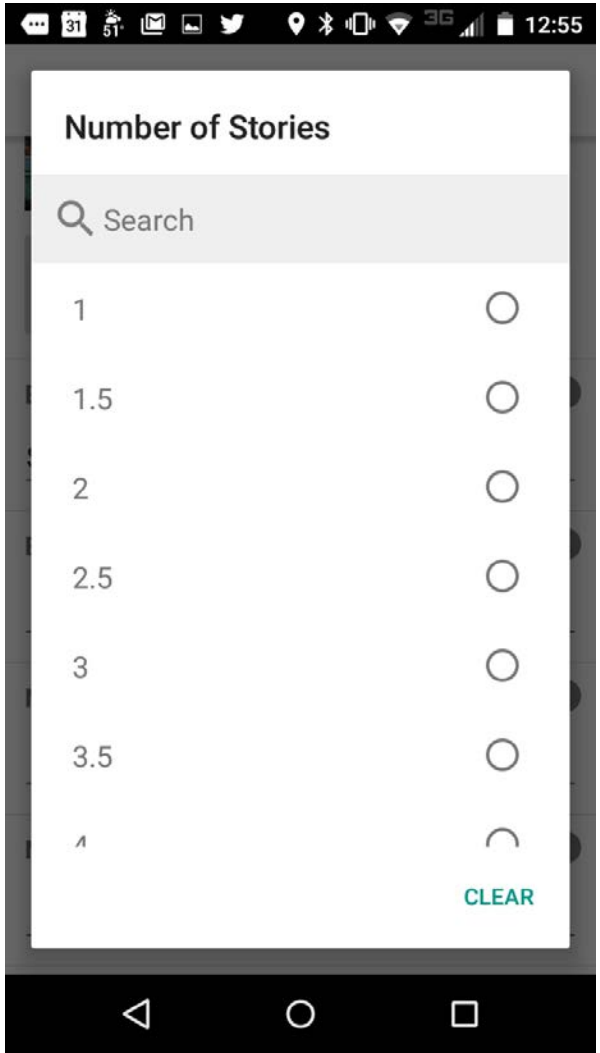

12:53
Set Record Location
30th Ave NW
NW 67th St
NW 66th St
Google
47.677128, -122.394868


Sprint
4:01 PM
Cancel
Mapping Historic Balla...
Save
Surveyed: Complete
Address
2843 NW 67th St
Seattle, WA 98107
US
Photos
Building Type
Building Type Notes

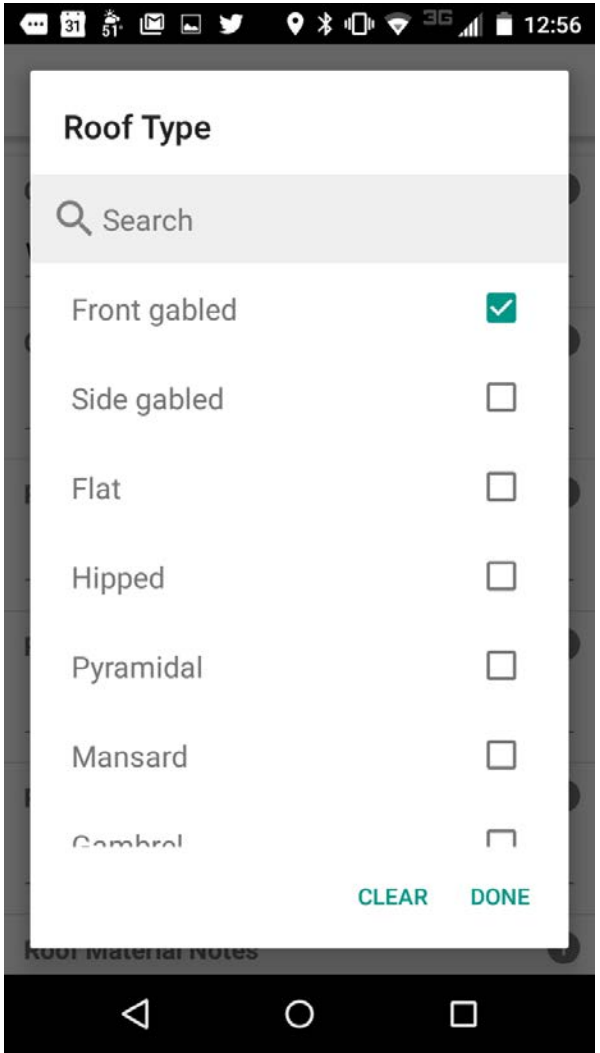

4:00
Mapping Historic...
SURVEYED: COMPLETE
Address
2843 NW 67th St
Seattle Washington 98107
United States
Photos
Building Type
Building Type Notes

# Single Choice vs Multiple Choice

- Circles = Can Choose Only One



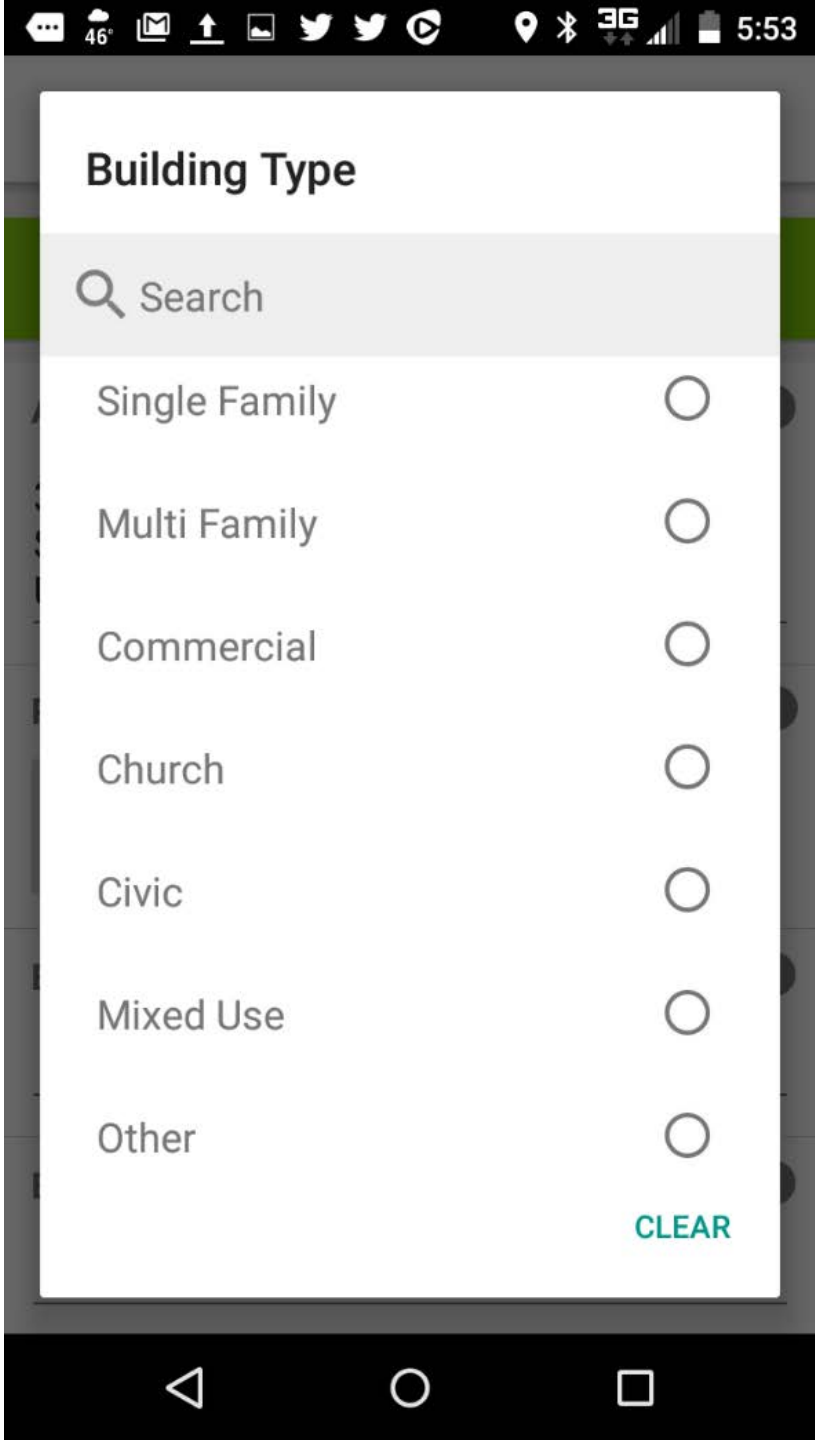

Squares = Can Choose More Than One



# Building Type

Choose the Building Type.
You can choose only one:

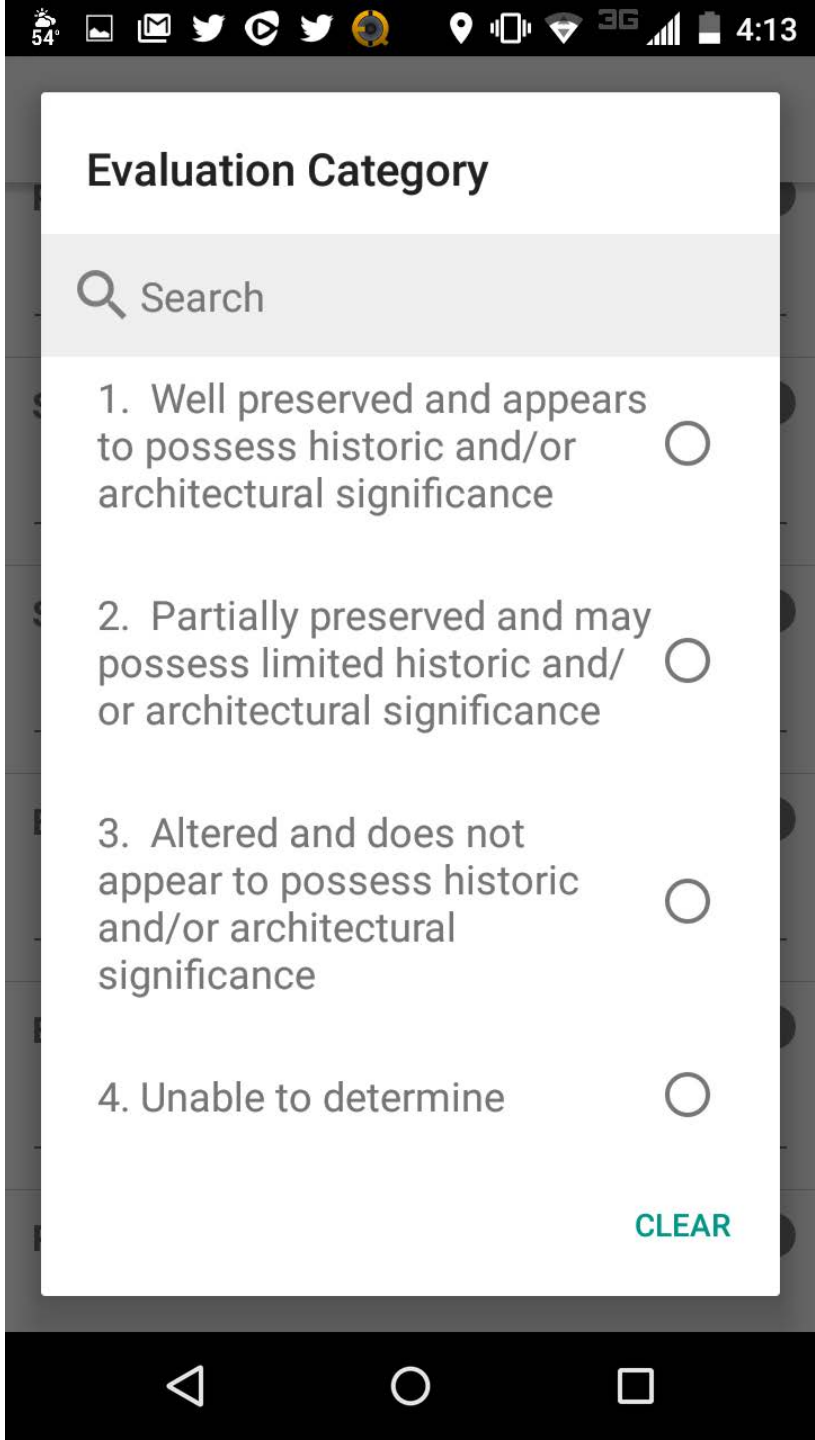
- Single Family
- Multi Family
- Commercial
- Church
- Civic
- Mixed Use
- Other
- Unable to Determine



# Evaluation Criteria

Choose the Evaluation Category. You can choose only one:

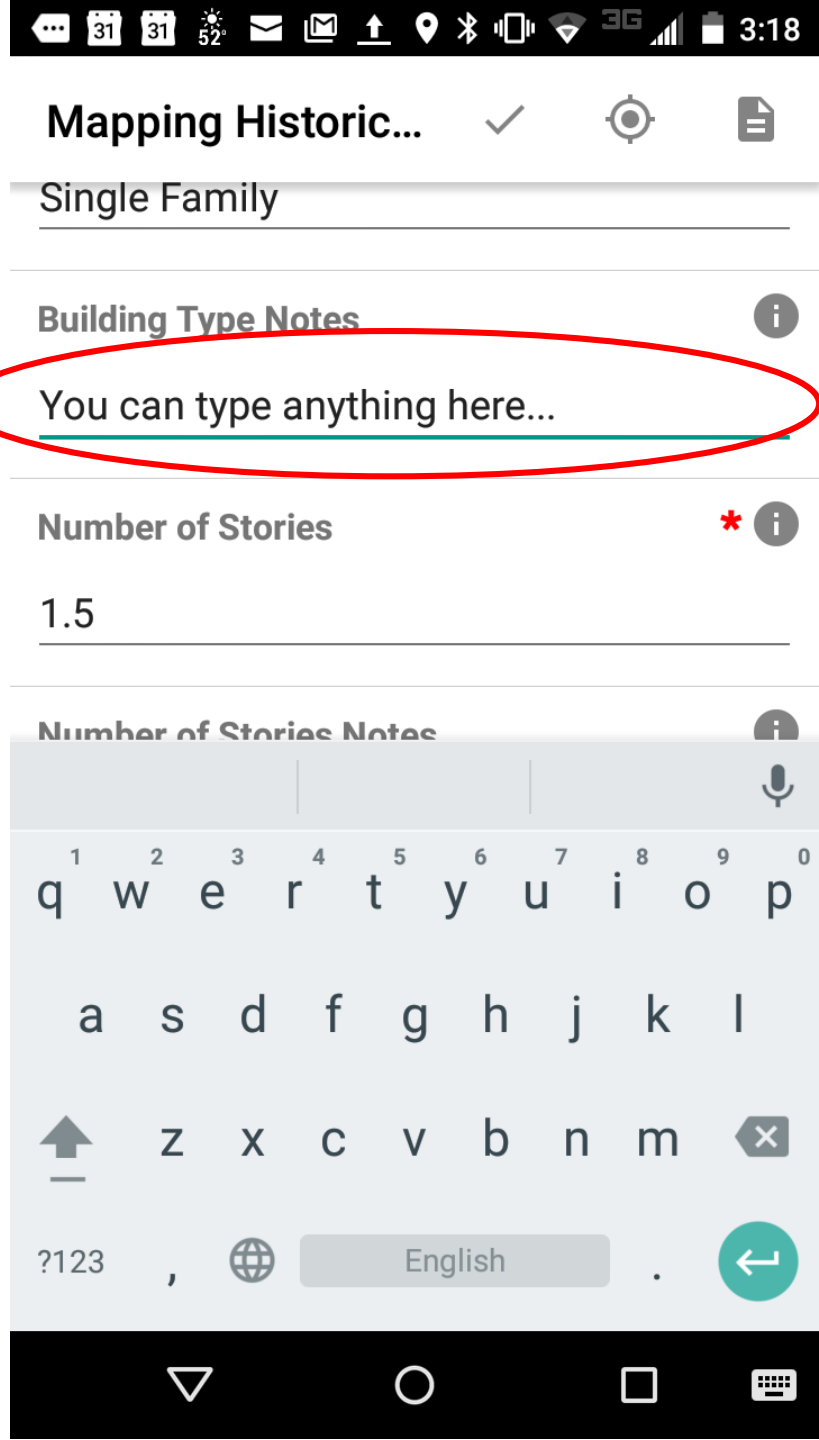
1. Well preserved and appears to possess historic and/or architectural significance
2. Partially preserved and may possess limited historic and/or architectural significance
3. Altered and does not appear to possess historic and/or architectural significance
4. Unable to determine



# Unusual Cases

If you encounter a structure that has extremely unusual characteristics that cannot be captured using the single choice/multiple choice fields, you may enter text into the 'Notes' field that follows each category.

**Please use the notes fields sparingly!**

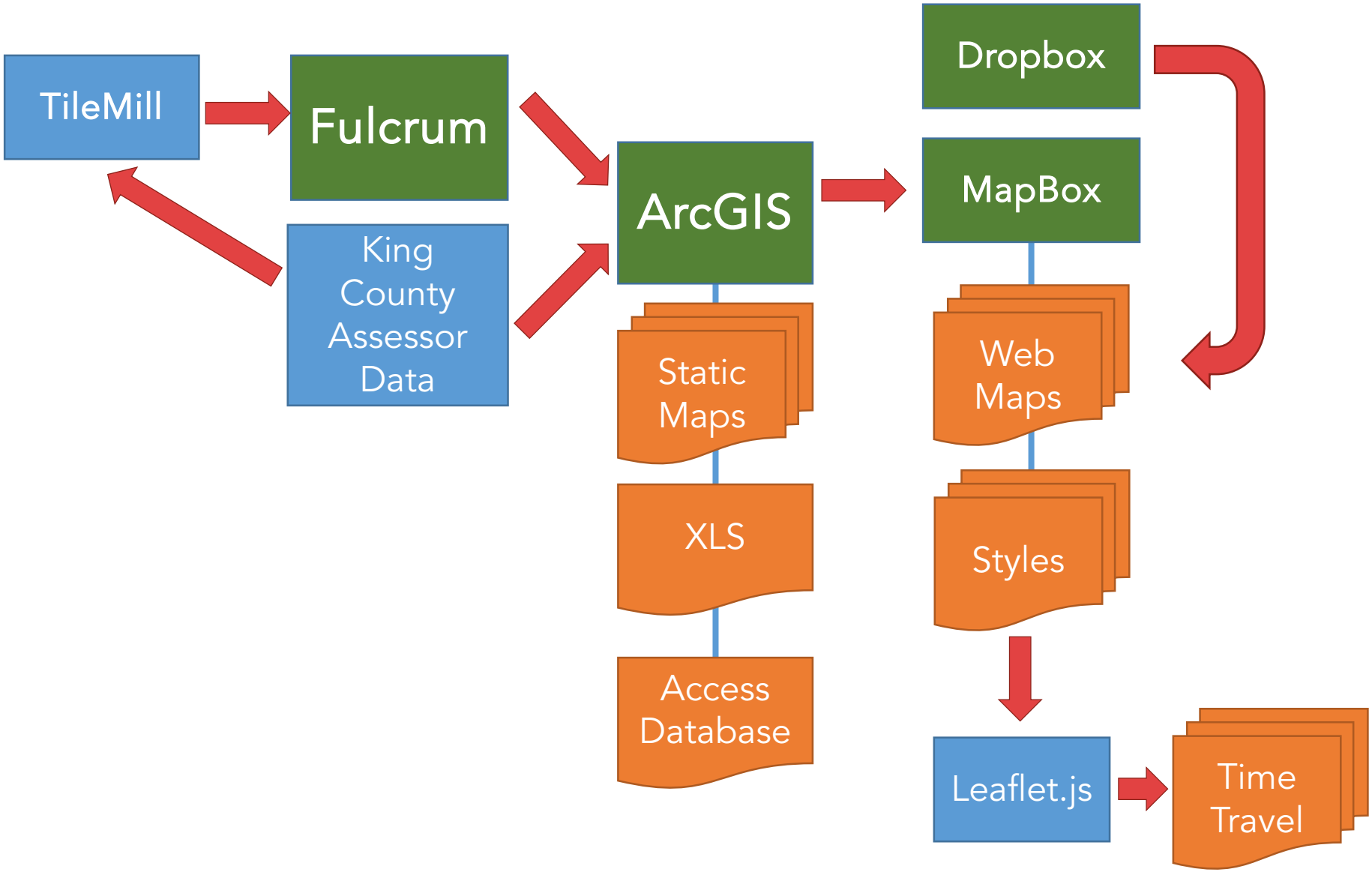


7737

# Monitoring Progress

- Weekly extracts
- Stats/maps distributed via email newsletters, social media
- Two in -person ‘meet ups’ with all volunteers, review results, give feedback, share strategies
- LOTS of tech support

# All the Moving Pieces

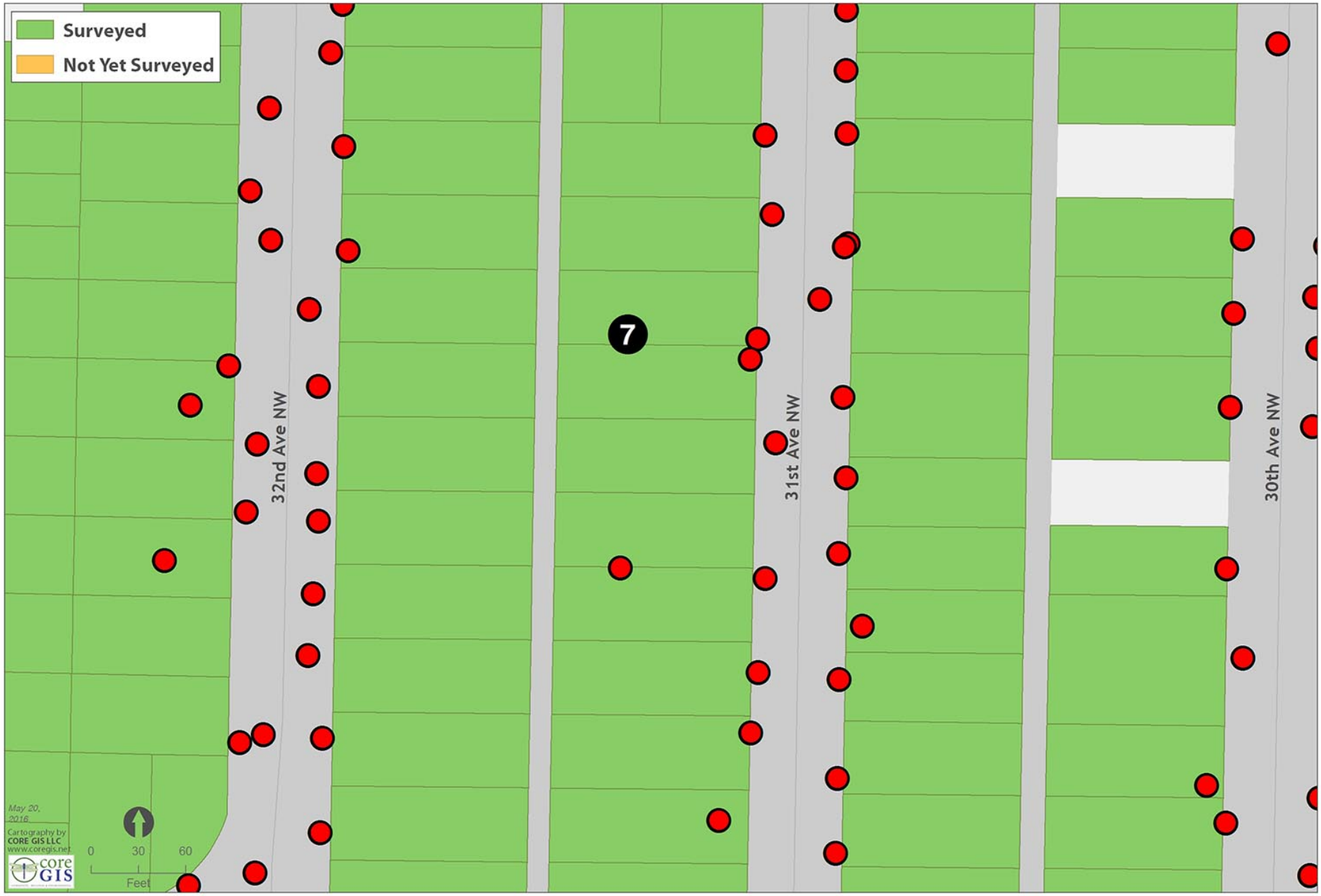


# Processing Fulcrum--Good Registration

Mapping Historic Ballard

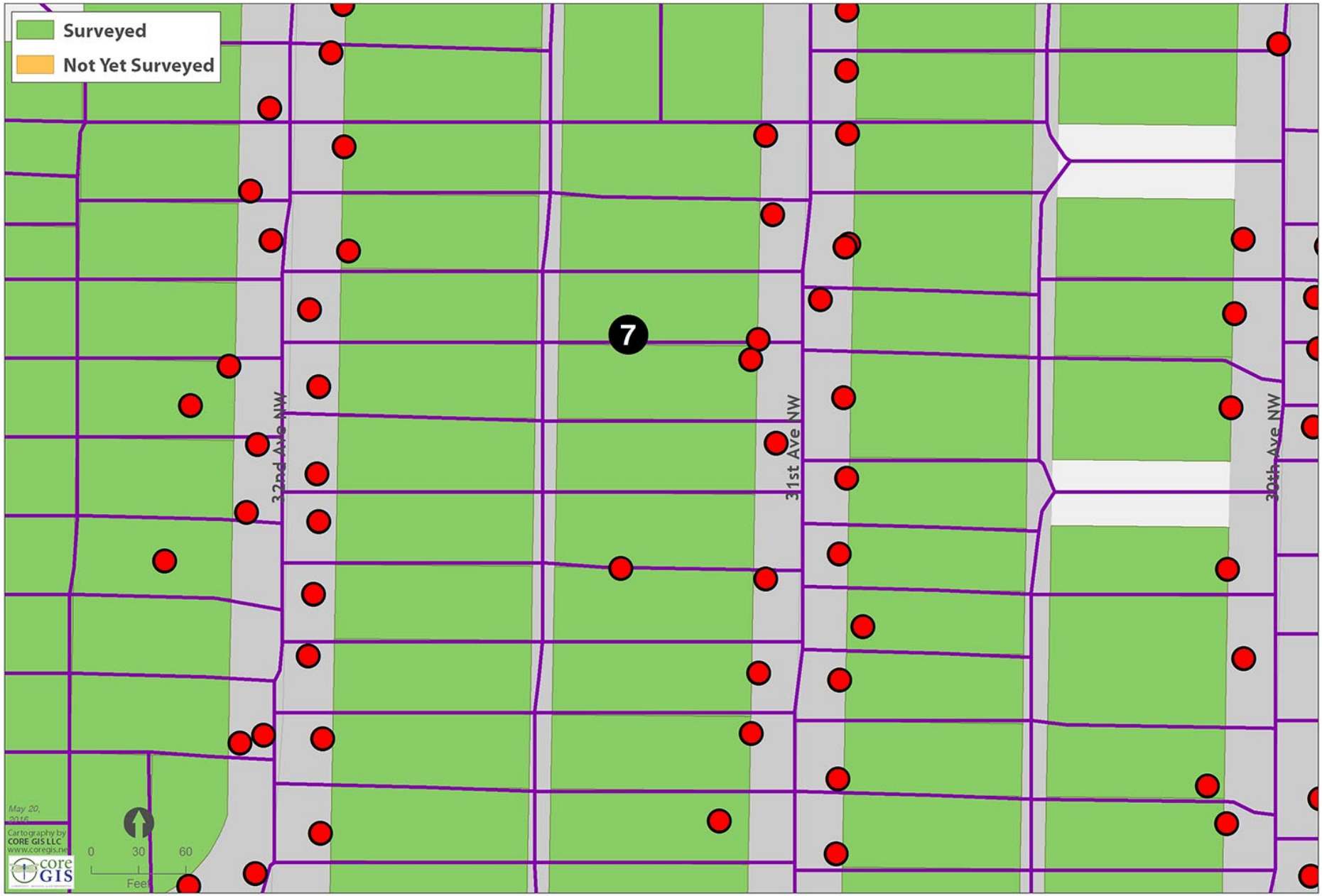
# Processing Fulcrum--Bad Registration

Mapping Historic Ballard



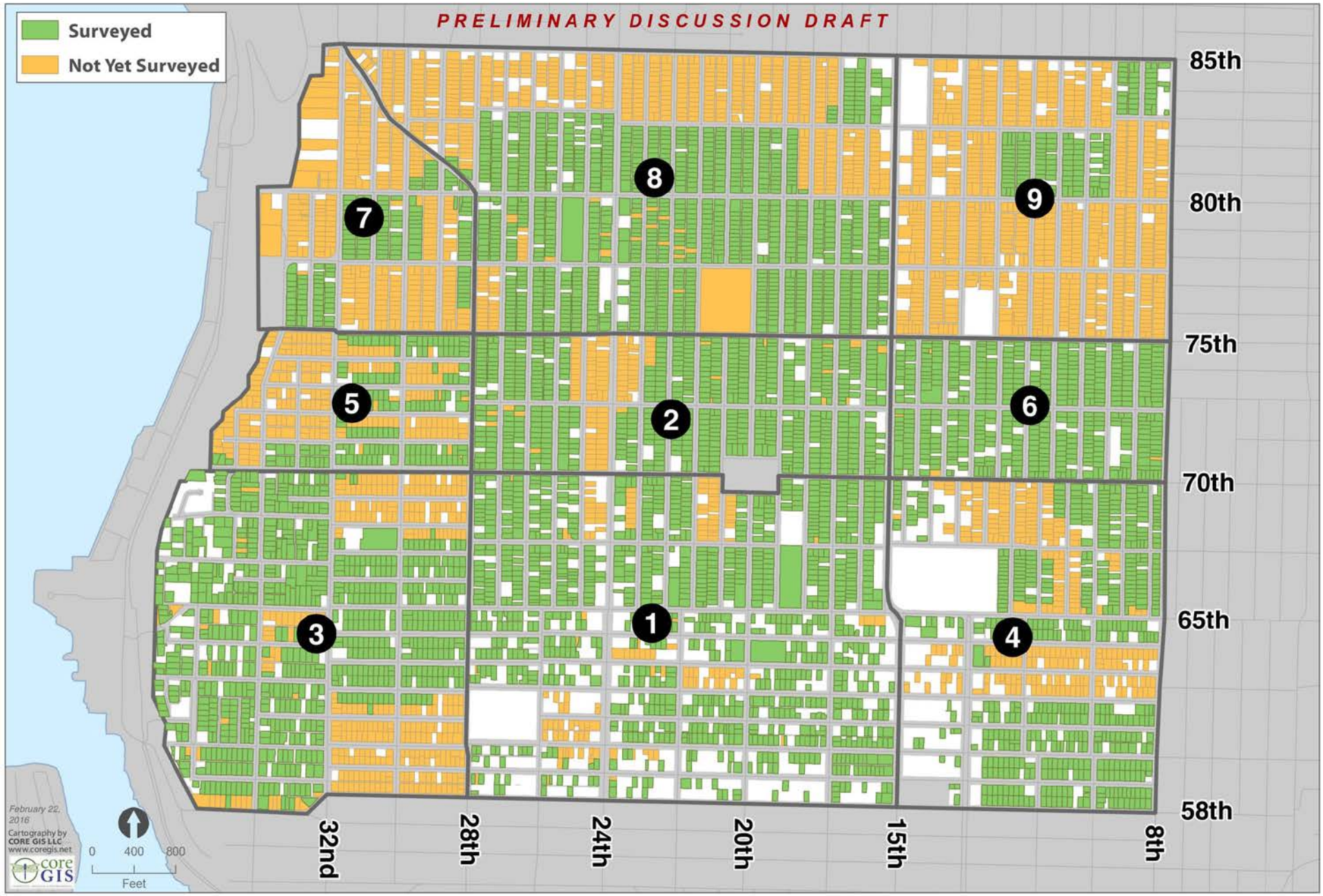
# Processing Fulcrum--Fixing Bad Registration

Mapping Historic Ballard



# Survey Status

Mapping Historic Ballard



# Stats!

| Sector | Total | Surveyed | Not Surveyed | Percent Complete |
|---|---|---|---|---|
| 1 | 1,155 | 1,022 | 133 | 88% |
| 2 | 718 | 610 | 108 | 85% |
| 3 | 1,020 | 715 | 305 | 70% |
| 4 | 787 | 526 | 261 | 67% |
| 5 | 364 | 159 | 205 | 44% |
| 6 | 477 | 473 | 4 | 99% |
| 7 | 397 | 140 | 257 | 35% |
| 8 | 1,560 | 1,009 | 551 | 65% |
| 9 | 850 | 136 | 714 | 16% |
| Total | 7,328 | 4,790 | 2,538 | 65% |

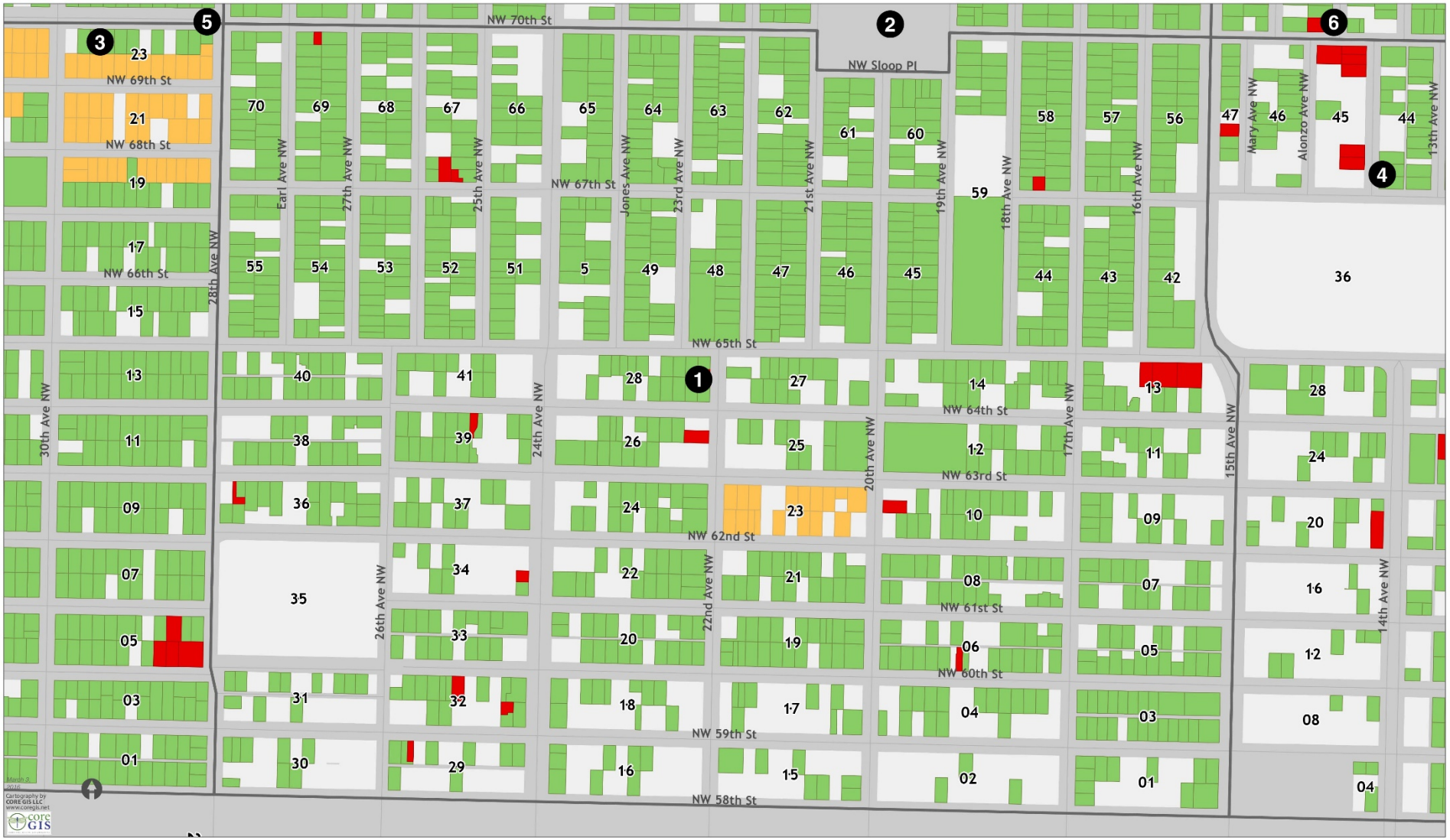
# Finalizing the Survey

- Volunteers are great!
- But life happens
- Sub-set of volunteers were necessary to do ‘mop-up’ work

# Survey Status Sector 1

Mapping Historic Ballard

Surveyed | Unsurveyed Blocks | Unsurveyed Buildings

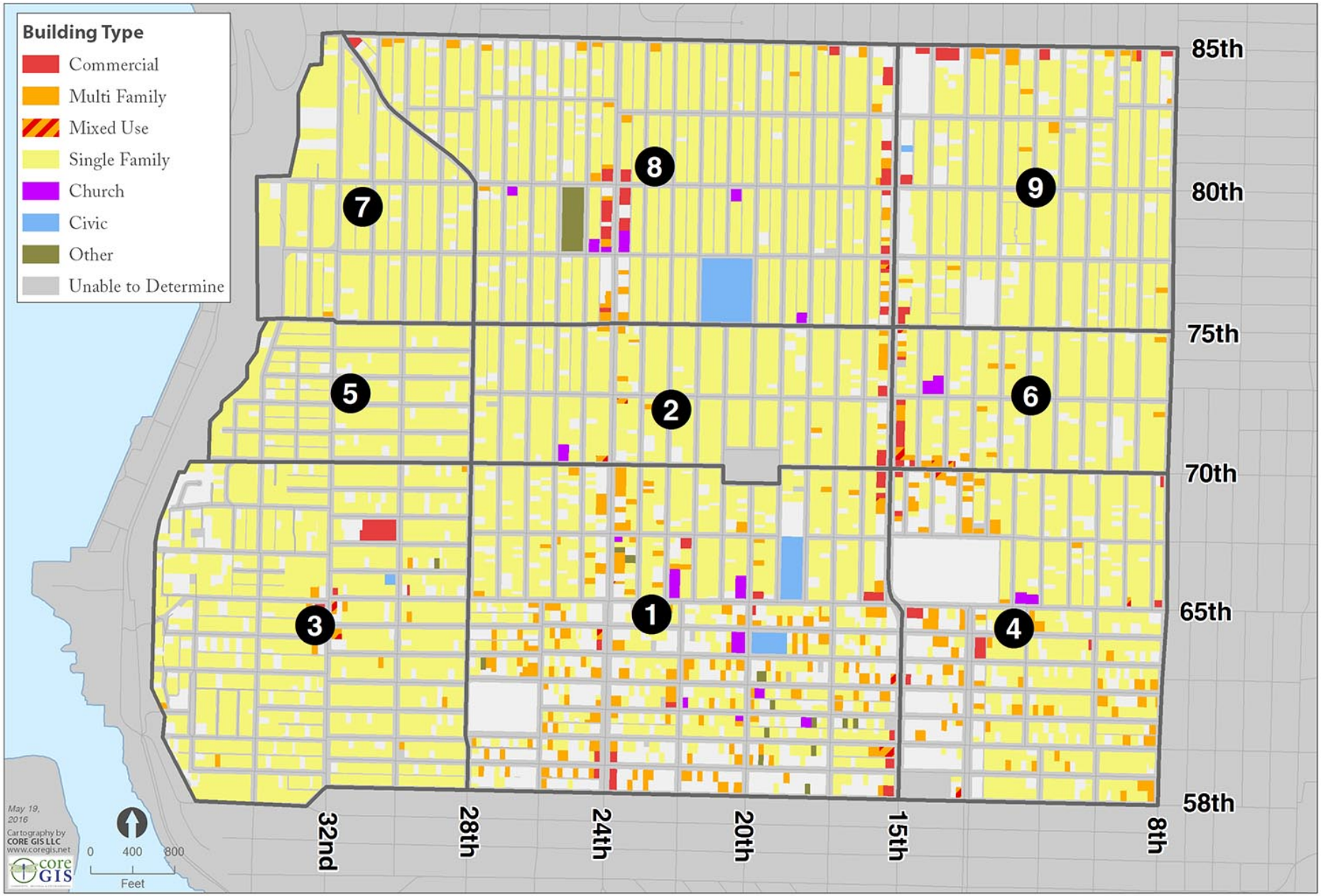


# Survey Completion

- By March 14, all buildings had been surveyed
- We had:
  - 7,328 records
  - 14,276 photos
- Time to start mapping!

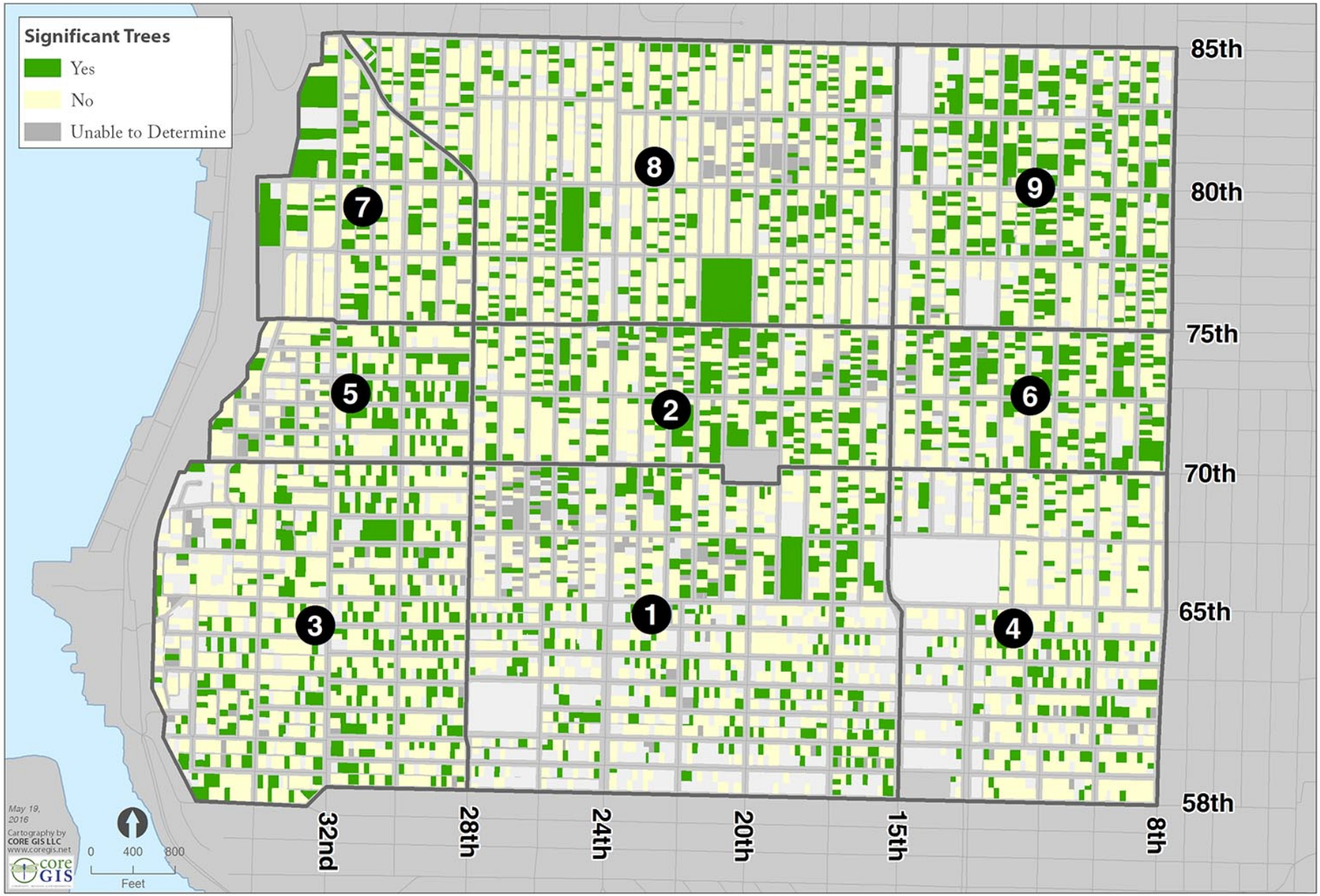
# Building Type

Mapping Historic Ballard



# Significant Trees

Mapping Historic Ballard



# Parcels by Evaluation Category

Mapping Historic Ballard

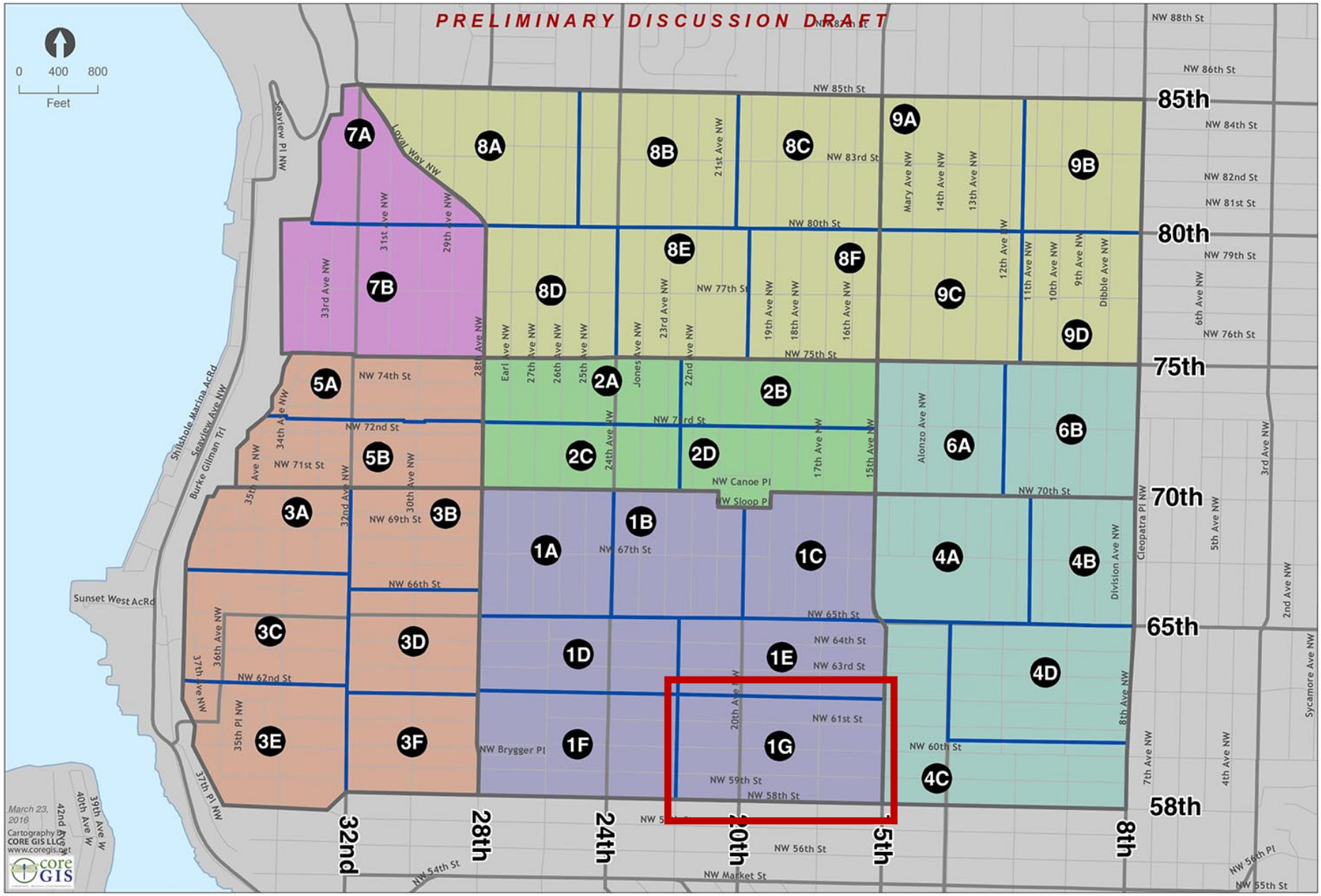
# How to get to 100?

- Re-survey Category 1
- Split sectors into sub-sectors
- Sub-set of volunteers
- *Targeting 500*
- Filter the 500 to 100

Ballard Historical Society

# Select Set Sub-Sectors

Mapping Historic Ballard



# Select Set Evaluation, Sector 1G

Mapping Historic Ballard

Ballard Historical Society

**Evaluation Category**

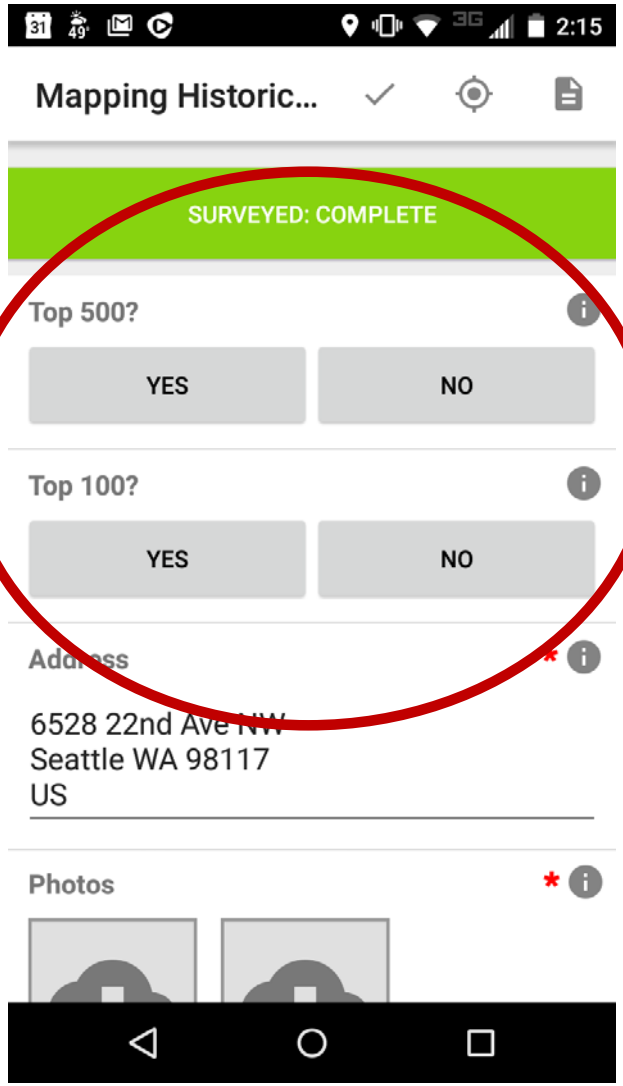
- 1
- 2
- Part of a District or Cluster
- Surveyed in 1997

**1A** = Sub-sector number

6505 = Building Number

**1915 = Year Built**

# Slight Adjustment to App



# Survey Result is 829

- How to get down to 100?
- Create individual report for all 829
- And…

**1725 NW 64TH ST 98107** **Year: 1909** **PIN: 2767601080** **Sector: 1**

### Fulcrum Attributes

**Top 500:** yes

**Top 100:**

**Building Type:** Single Family

**Number of Stories:** 1.5

**Cladding:** Wood/horizontal

**Roof Type:** Hipped,Side gabled

**Roof Material:** Asphalt

**Evaluation Category:** 1

**Significant Trees:** No

**Part of Cluster:** No

**Style:**

### Ballard Research

### Physical Description

Fulcrum ID: 25961663-c937-4762-952c-a280a84587a4

Ballard
Select Set Evaluation, Sector 8
Mapping Historic Ballard
Select Set
Top 100
Top 500
Featured Sector
Other Sectors

20th Ave. NW Historic Neighborhood District
(1890 – 1927)
An Original Ballard Neighborhood North of Market Street.
Ballard Churches marching up 20th Ave. NW with intact period
Fisherman Cottages, Farm and Victorian homes, and Apartment
Townhomes from Ballard's first growth era.
Ballard
HISTORICAL SOCIETY

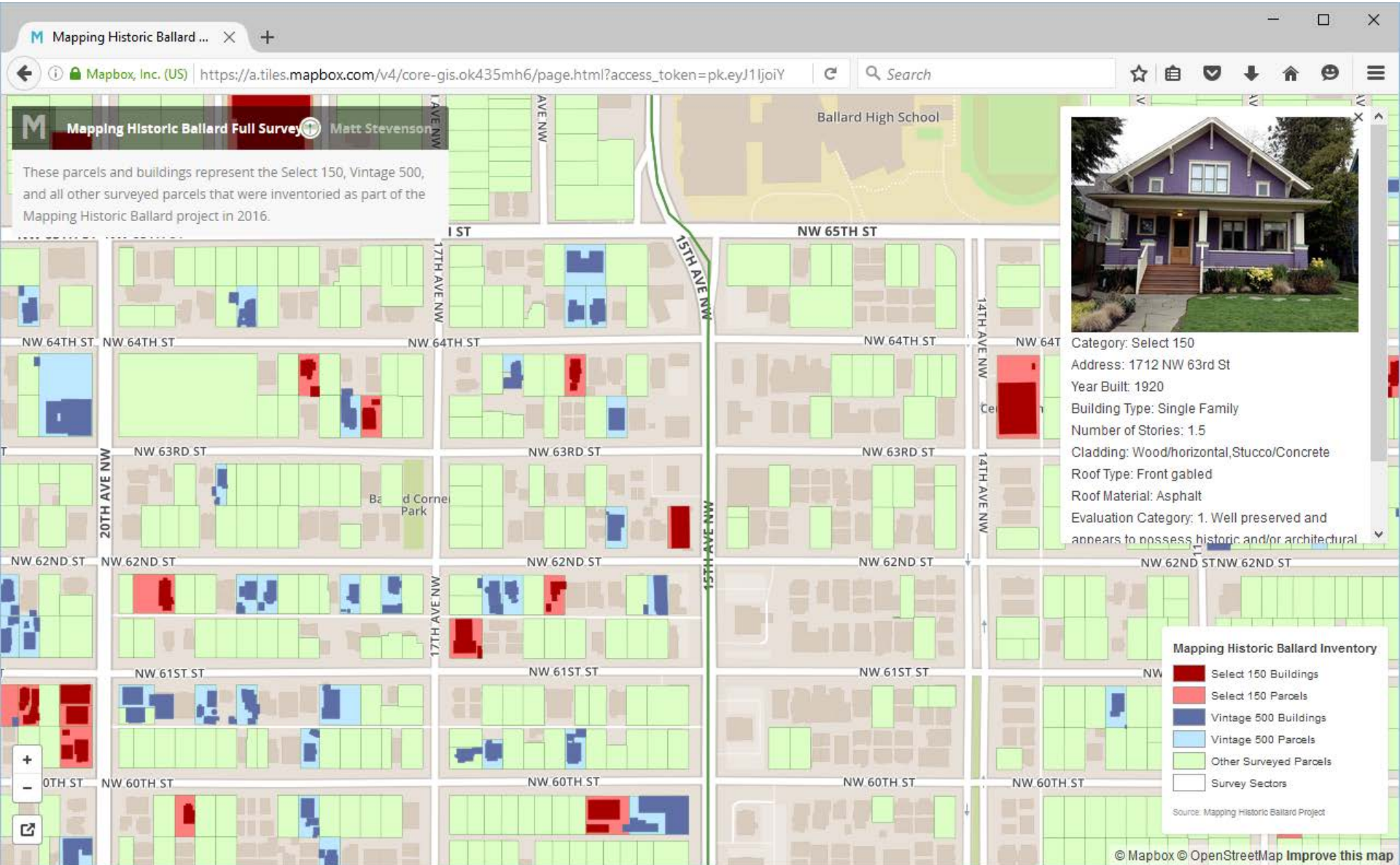
# The Select Set

- 100 high-integrity historic structures that provide broad representation of the neighborhood:
  - Spatially
  - Temporally
  - Architecturally
- Finished with two categories:
  - Select 150
  - Vintage 500

# Select 150 & Vintage 500

Mapping Historic Ballard

# Interactive Web Map



# Swipe Maps

**1904/2015:**
coregis.net/assets/map_swipe_1904_2015_v1.html

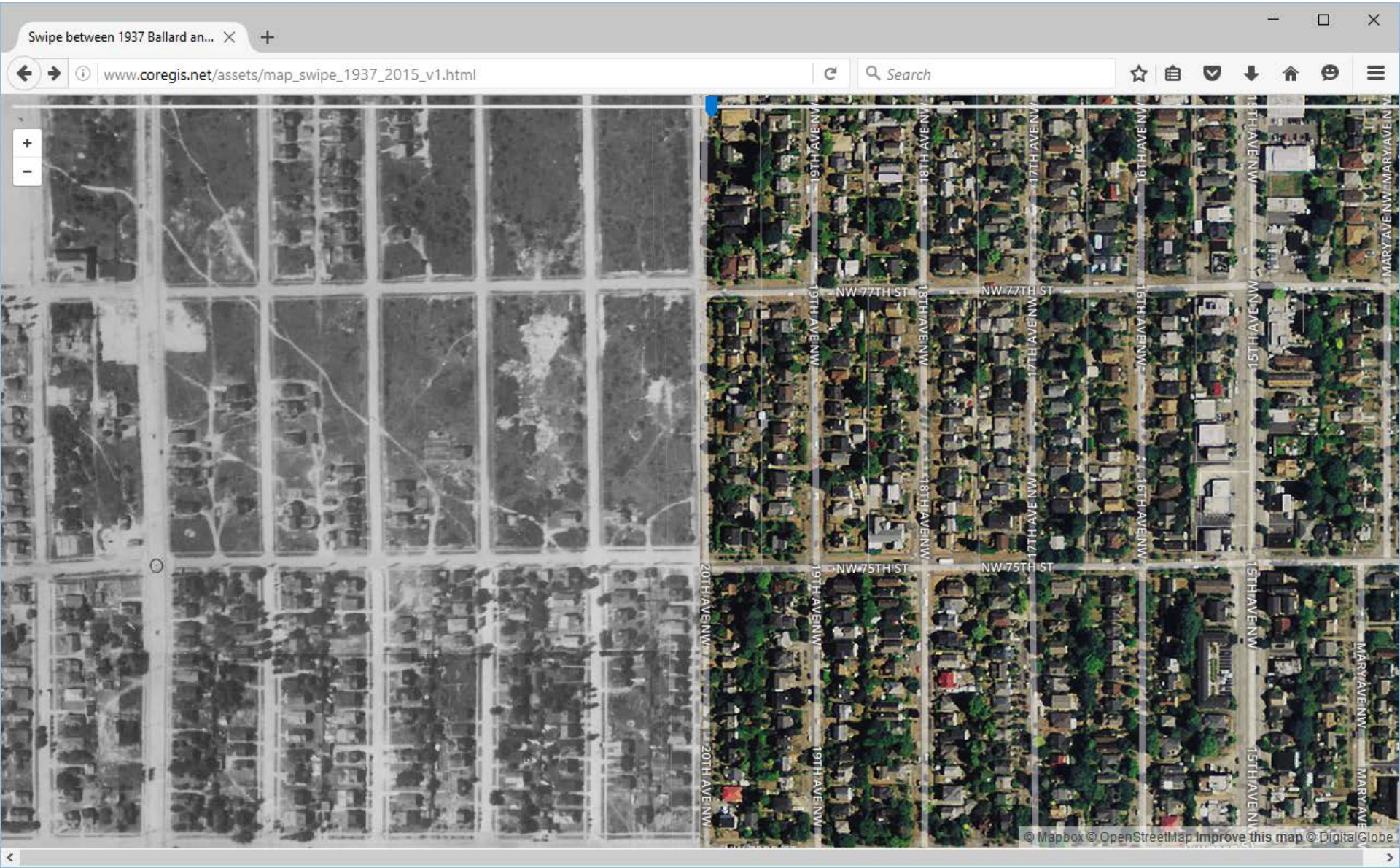
**1937/2015:**
coregis.net/assets/map_swipe_1937_2015_v1.html

*1965/2015*

*Possibly forthcoming*

**1996/2015:**
coregis.net/assets/map_swipe_1996_2015_v1.html

# Example from 1937/2015 Swipe Map



# Lessons Learned

- Using engaged volunteers from the community was a great way to gather a lot of data in a short time
- There is a wide range of technical ability in the general population
- Volunteers don't always follow directions
- It took far more time than anticipated to train, support, trouble-shoot, and process the data
- Doing the survey 3x was also more time consuming than anticipated
- People really, really love Ballard!

# Learn More

http://ballardhistory.org/ballard-overview/

http://ballardhistory.org/ballard-inventory/

http://coregis.net/

http://contours-coregis.blogspot.com/

# Thank You!