

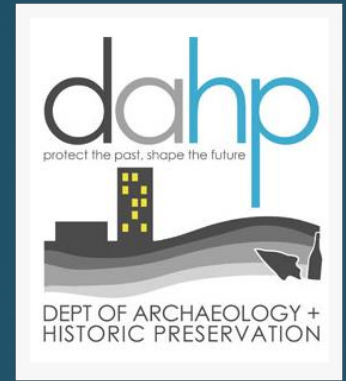
Tacoma Unreinforced Masonry Inventory QA/QC Training

URM WG in Partnership with:

City of Tacoma Planning and Development Services
WA Department of Archeology and Historic Preservation (DAHP)
WA Emergency Management Division (EMD)
Cascadia Region Earthquake Workgroup (CREW)

Other supporting stakeholders:

- City of Tacoma Historic Preservation
- City of Tacoma Emergency Management
- Pierce County Emergency Management



February 27, 2025

Tacoma URM Inventory – QA/QC Training



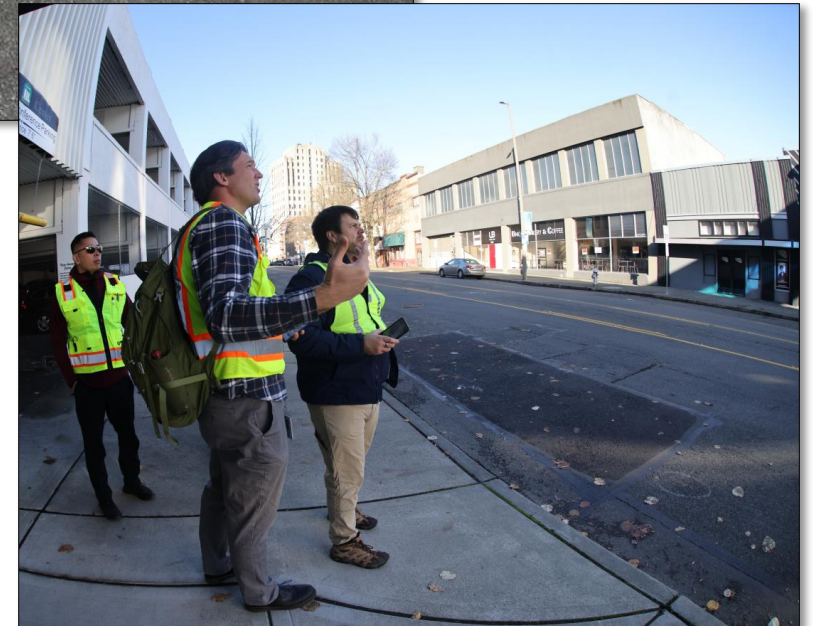
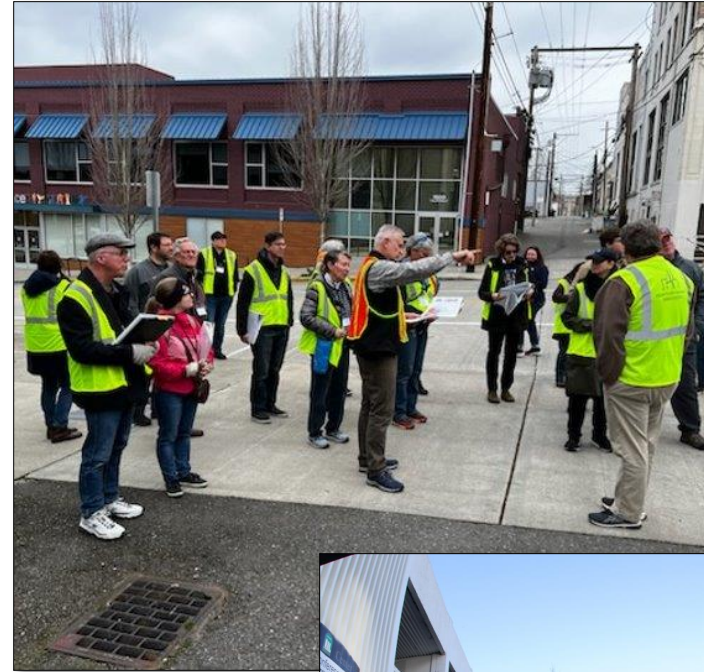
Training Session Agenda

- Welcome & Introduction
- Project Purpose
- November 15th Survey
- Resources
- QA/QC Process Overview
- Login Test
- Demonstration
- Questions

Project Purpose

Broader URM Efforts

- Washington has the **second highest earthquake risk** in the United States. We have **thousands of suspected, high-risk, unreinforced masonry buildings (URMs)**. To reduce the seismic risk from URMs, we need to understand **where** these buildings are, **how** to retrofit them, and **what** funding is available.
- We are **partnering with state and local organizations**, like **City of Tacoma**, to **inventory all URMs in Washington State**. This work began in 2018, and we have a long ways to go to complete it. We are also working with **DAHP** to **create a user portal** for people to access the URM data to **make risk reduction decisions**.
- **Your work** in reviewing Tacoma's survey data **helps ensure** that we are providing **high quality data that communities can trust** and use to support their projects and our **risk reduction goals**.





Project Purpose

The importance of the QA/QC process

Communities need quality, reliable URM data to assess and understand their seismic risk, strategize mitigation actions and develop effective plans.

Our priority is to **gather** this information, **verify** its accuracy, and **store** it in a central database with a user-friendly portal **for folks to access**.

Throughout the review process, if you are unsure of something, don't guess. Document it and ask!

Home » Project Review » WISAARD (Washington Information System for Architectural and Archeological Records Data)

PROJECT REVIEW

- Historic Buildings
- I Need a Letter from the SHPO
- Wisaard System ▾
 - The "Secure Side" of WISAARD
 - Documents Not in WISAARD
- Section 106
- Forest Practices Act
- Shedding Management Act

WISAARD (Washington Information System for Architectural and Archeological Records Data)

WISAARD is the state's digital repository for architectural and archaeological resources and reports. Searching the database and data entry for archaeological sites, historic properties, and cultural survey reports are its main functions.

If you are a member of the public and would like to search for historic buildings or search the National Register database, simply go to wisaard.dahp.wa.gov. There is no need to create an account.

If you need to enter any information into Wisaard, Archaeology or Historic Property inventory forms, or a Survey Report, you will need to create an account. In addition, access to archaeological data and cultural survey reports are redacted from public viewing in accordance with state law. More information about access to this data can be found [here](#).

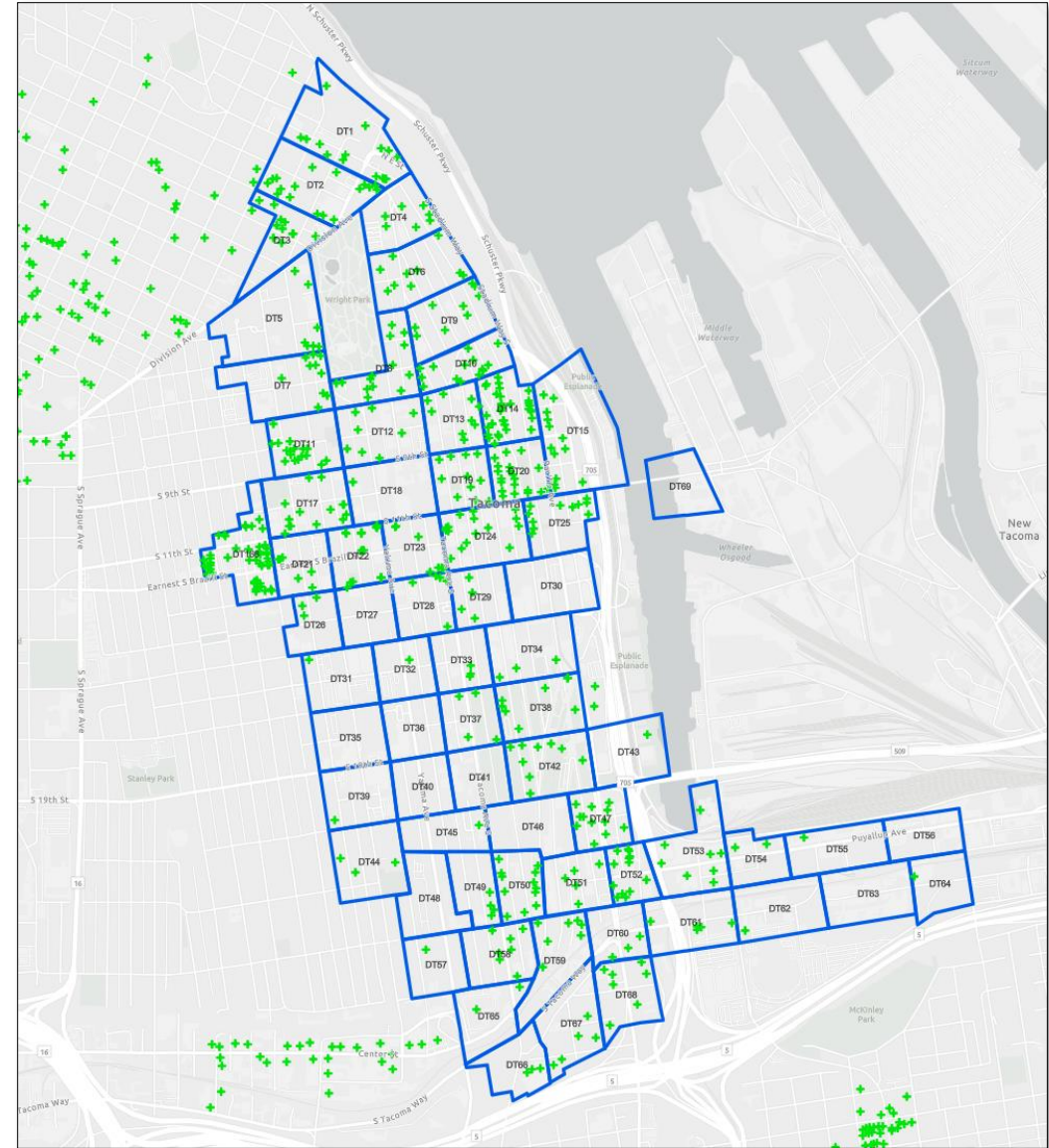
The web address for WISAARD is: wisaard.dahp.wa.gov

The DAHP and EMD are partnering to develop this URM database and portal. Work is in progress.

November 15th Survey

Survey Results

- ➔ 298 buildings surveyed on 11/15
+ = Survey Submitted
- ➔ Around 60 surveyors
 - City staff from Tacoma, City of Seattle, Bainbridge Island
 - Staff support from DAHP, CREW, EMD
- ➔ Over 860 surveys total gathered since 11/15



November 15th Survey

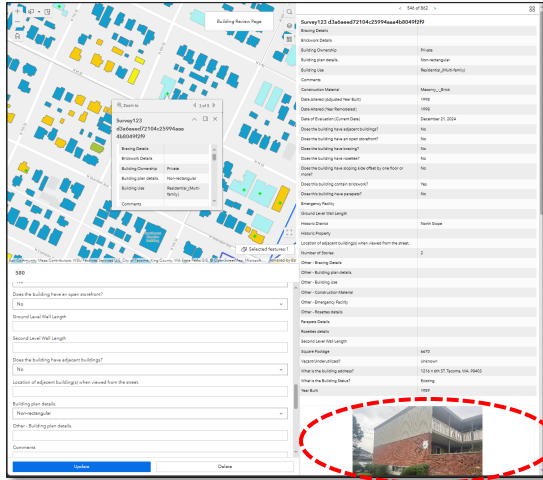
What surveyors looked for

- Brickwork
- Parapets
- Wall Bracing
- Rosettes/Anchor Plates
- Sloping Sites
- Open Storefront
- Adjacent Buildings
- Building Plan

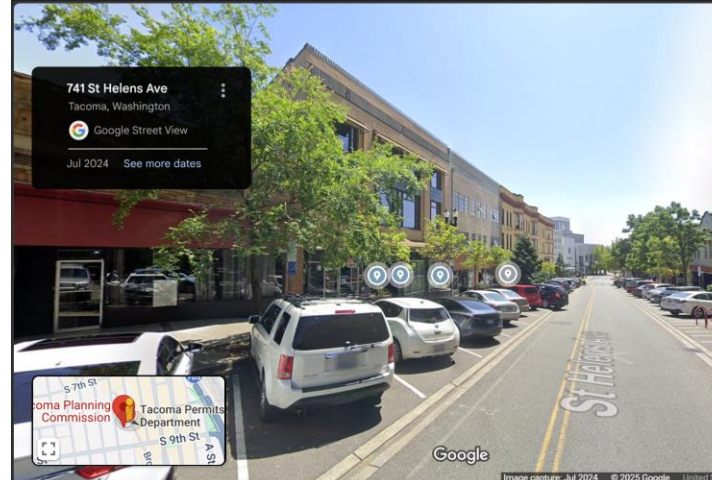


Resources

Information to make determinations



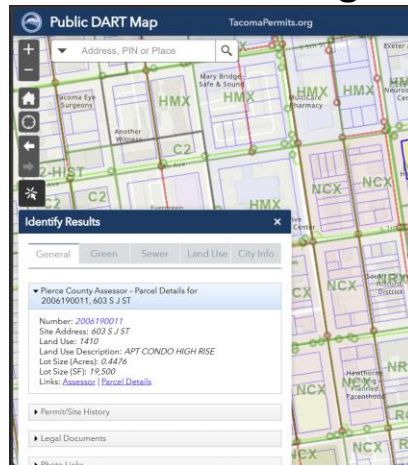
Sidewalk Survey Photos



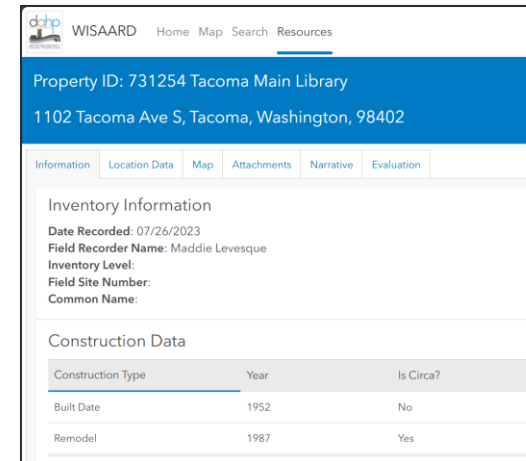
Google Earth Street View & Aerial Imagery

Appendix A1. Data Dictionary Washington URM Inventory			
FIELD NAME	FIELD VALUES	DEFINITION(S)	
BUILDING INFORMATION	URM Status	Identified URM Suspected URM Suspected Not URM Not URM Unknown Not Assessed	A building constructed prior to 1958 with one or more masonry (includes 'Masonry', 'Masonry Brick', 'Masonry Clay Tile', 'Masonry Stone' from the Construction Material field) bearing walls that provide the primary support for vertical loads from floors or roofs. Confirmed not URM based on survey. Assessed - unknown construction type and/or construction date.
	Date Constructed		Original year built
	Dates Altered		Date of significant modification subsequent to construction (not necessarily seismic related)
	Construction Material	Masonry - Brick	Plain clay brick or clay tile masonry construction of one or more bearing walls that provide the primary support for vertical loads from floors or roofs.
		Masonry - Concrete Block (CMU)	Specifically excludes concrete frame buildings with unreinforced masonry infill or foundations, concrete masonry unit (CMU) buildings, and concrete or steel frame buildings with
Masonry - Hollow Clay Tile			
Masonry - Precast Concrete			
	Masonry - Stone		

URM Data Dictionary



Pierce County Assessor-Treasurer Data (via DART Map)



WISAARD (Washington Information System for Architectural and Archeological Records Data)



QA/QC Process Overview

Where are we in the process?

City of Tacoma URM Survey

This survey was developed to assess Unreinforced Masonry Buildings (URM) within WA State by the Department of Archaeology and Historic Preservation in conjunction with the Washington State Military Department's Emergency Management Division and the Inter-Agency WA URM Workgroup.

Date of Evaluation (Current Date)*

11/12/2024

Sidewalk Survey



Building Review Page

Survey123 d3d6e0ed72104

- Building Details
- Brookview Details
- Building Ownership
- Building plan details
- Building Use
- Comments
- Construction Material
- Date Altered (Adjusted Year Built)
- Date Altered (Year Remodeled)
- Date of Evaluation (Current Date)
- Does the building have adjacent buildings?
- Does the building have an open space?
- Does the building have a breezeway?
- Does the building have a canopy?
- Does the building have a covered walkway?
- Does the building have a ramp?
- Does the building have a sign?
- Does the building have a window?
- Emergency Facility
- Ground Level Wall Length
- Historic District
- Historic Property
- Location of adjacent buildings (when adjacent)
- Number of Stories
- Other - Building Details
- Other - Building Use
- Other - Construction Material
- Other - Emergency Facility
- Other - Rooftops details

QA/QC Review



DEPT OF ARCHAEOLOGY + HISTORIC PRESERVATION

Archaeology Historic Preservation

Home » Project Review » WISAARD (Washington Information System for Architectural and Archeological Records Data)

PROJECT REVIEW

Historic Buildings

I Need a Letter from the SHPO

Wisaard System

The "Secure Side" of WISAARD

Documents Not in WISAARD

Section 106

Forest Practices Act

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Data Transfer to DAHP's Database



URM Portal – *in development*

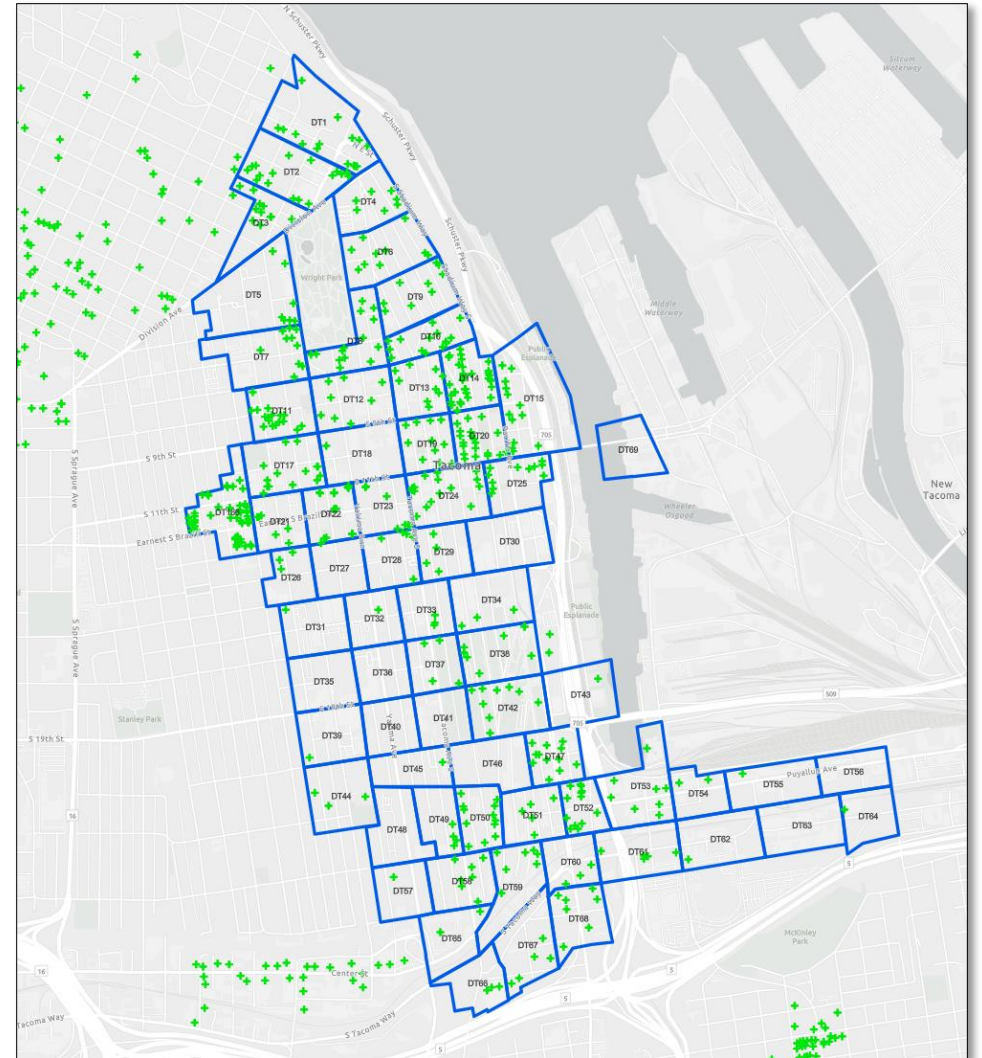
QA/QC Process Overview

Building assignments and next steps

After today's training, we will review all of Tacoma's surveyed data to divide the buildings between the volunteers.

In a few weeks we will have a brief meeting to:

- Hand out your assignments
- Answer questions
- Present any updates to the survey application





QA/QC Process Overview

What you will be reviewing and determining

- Building Address
- Building Status
- Building Use
- Emergency Facility
- Building Ownership
- Date Constructed
- Year of Latest Seismic Upgrade
- Number of Stories
- Square Footage
- Construction Material
- Does this building contain brickwork?
- Brickwork details
- Does this building have parapets?
- Does this building have visible bracing or frames?
- Does the building have rosettes?
- Does the building have sloping side offset by one floor or more?
- Does the building have an open storefront?
- Ground level wall length
- Second level wall length
- Does the building have adjacent buildings?
- Building plan details
- URM Status?
- Party Wall?
- Adjacent Building Floor/Roof Offsets (Discrepancy)
- Open Storefront
- Complex Footprint
- Upgrade Status
- Upgrade Standard/Code

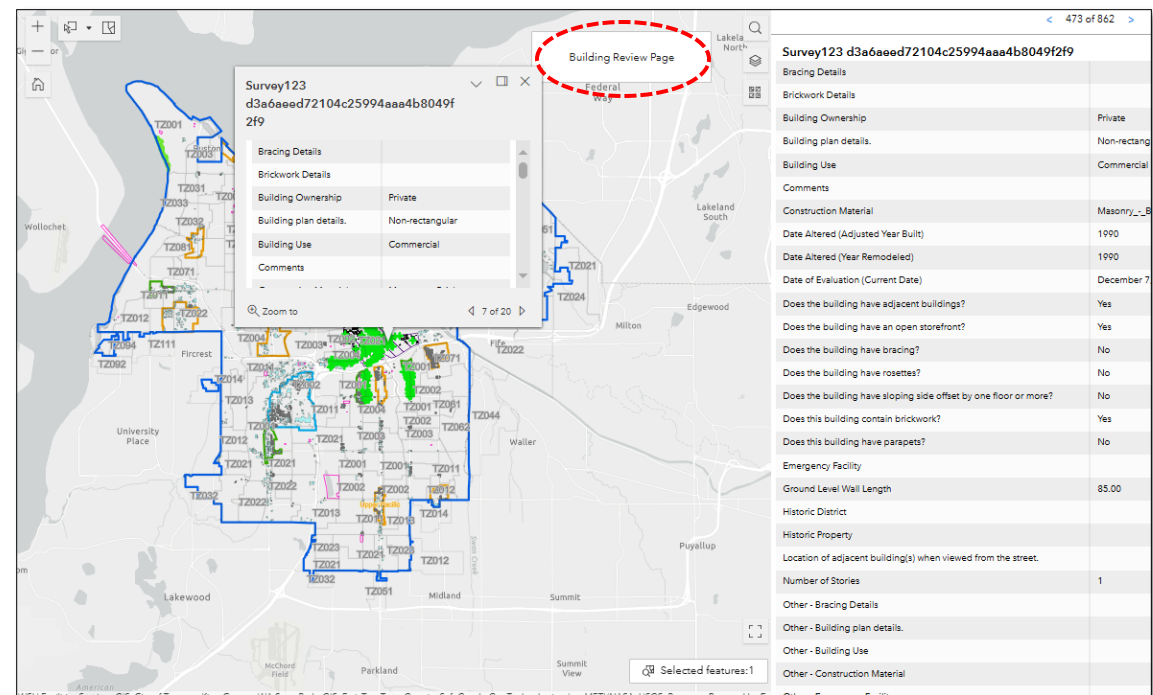
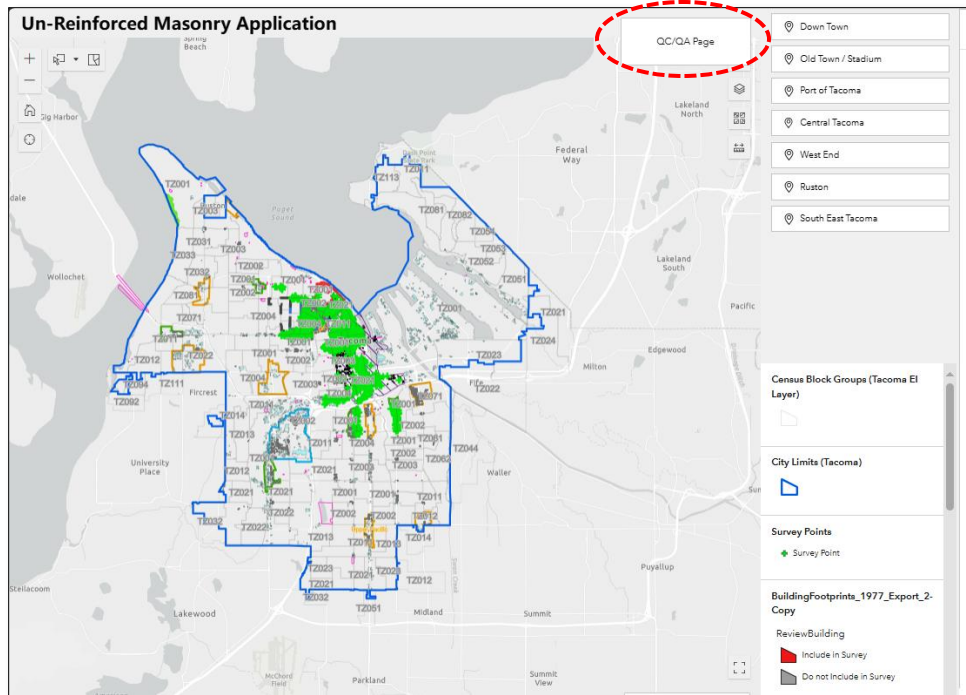
Not Required to Review. Do Not Edit!

- Vacant/Underutilized
- Date Altered (Adjusted Year Built)
- Date Altered (Year Remodeled)
- Historic Property
- Historic District
- FEMA RVS Score

QA/QC Process Overview

Steps for volunteers

- 1 Go to Tacoma's online URM Application and login using the link and account information sent to your email today. For login issues or questions, please email Clint (CLusk@cityoftacoma.org).
- 2 Navigate to the QA/QC Page where you will be reviewing the data.



It will say "Building Review Page" in the box in the upper right corner of the map viewer when you are in the reviewer page. If it says "QC/QA Page," just click the box to toggle to the reviewer page.

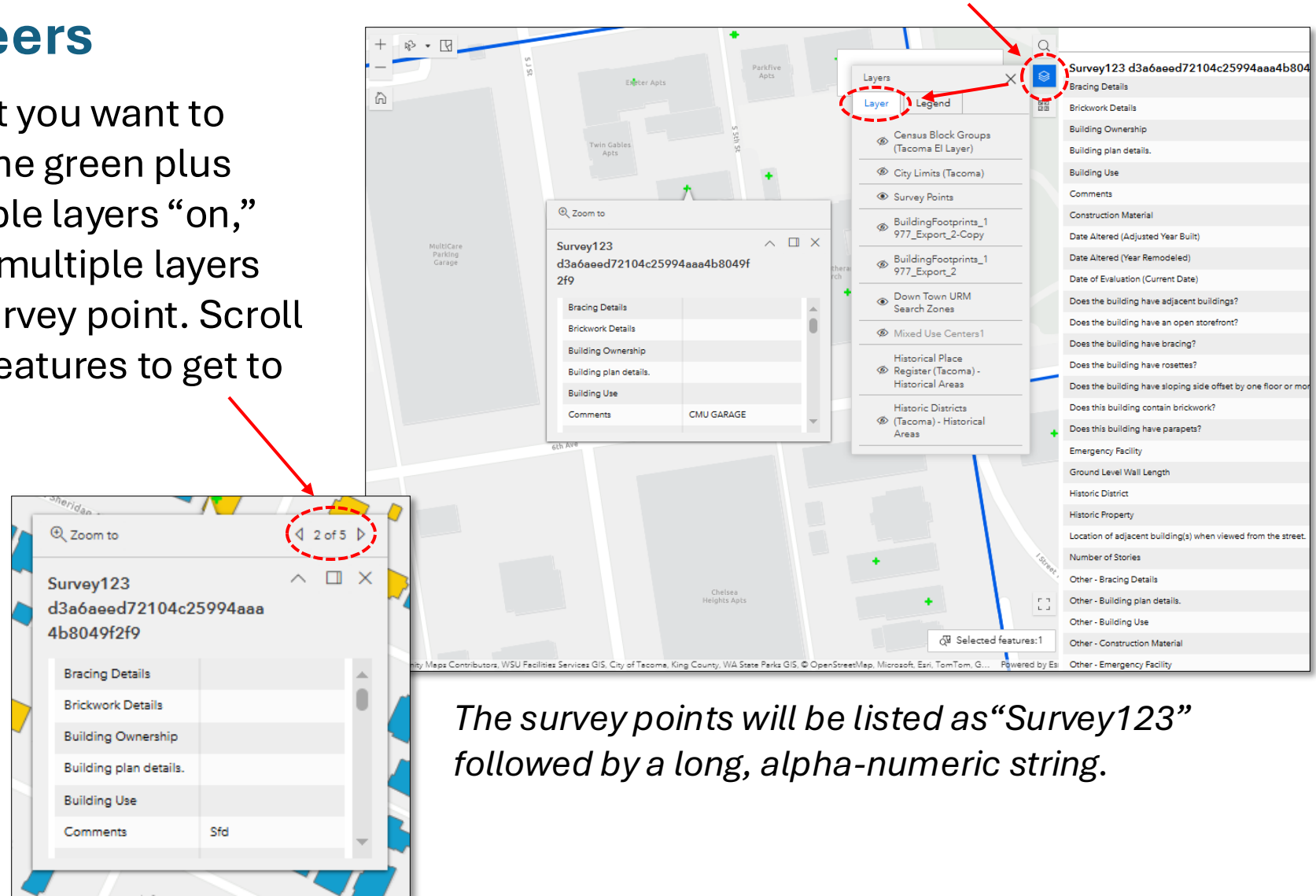
QA/QC Process Overview

Steps for volunteers

3

Select the survey point you want to review by clicking on the green plus sign. If you have multiple layers “on,” the pointer will select multiple layers when you click on a survey point. Scroll through the selected features to get to the survey point.

Open the map layers to adjust turn on/off layers as needed.



The survey points will be listed as “Survey123” followed by a long, alpha-numeric string.

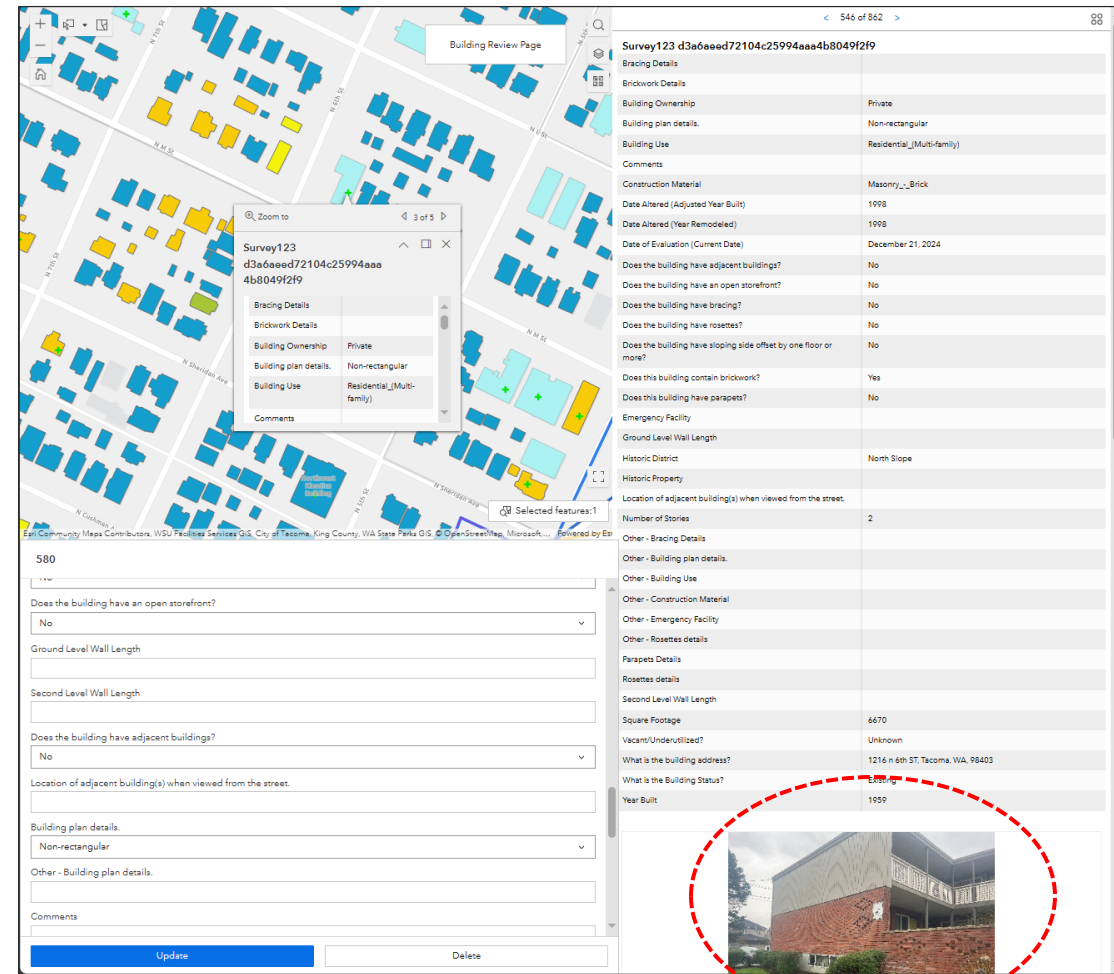
QA/QC Process Overview

Steps for volunteers

- 4 Use the bottom-left pane to review and edit the required survey fields. If a survey point has associated picture uploads, they will populate at the bottom of the right pane. Click on an image to open it in a new tab.

If you are not confident in answering a required field:

- Mark the field(s) as “Unknown” via drop-down or text;
- Make a note of the field(s) and your question(s) in **Reviewer Comments**.



**Throughout the review process, if you are unsure of something, don't guess.
Document it and ask!**

QA/QC Process Overview

Steps for volunteers

5

Review all fields for completeness.

If any required fields are not complete, and require additional review:

- Mark **Review Complete** as “No, requires additional review;”
- And add your initials/name in **Reviewer Initials/Name**.

If all required fields are complete:

- Mark **Review Complete** as “Yes;”
- And add your initials/name in **Reviewer Initials/Name**.

613

Open Storefront

Complex Footprint

Upgrade Status

Upgrade Standard

FEMA RVS Score

Review Complete

Reviewer Initials/Name

Reviewer Comments

Update

Selected features: 1

Number of 3

Other - Brac

Other - Build

Other - Build

Other - Cons

Other - Em

Other - Rose

Parapets Det

Rosettes det

Second Level

Square Foot

Vacant/Unde

What is the b

What is the E

Year Built

Last edited by


Do not hit “Delete!” This deletes the survey point. If you need to clear edits you’ve made, hit this icon to clear your selection and edits.




Login Test

Steps for volunteers

Select the “ArcGIS Login” drop-down arrow and enter your reviewer account login information

Sign in to Tacoma StaffMaps 

City of Tacoma

ArcGIS login 

Username

Password

Keep me signed in

[Forgot password?](#)



Demonstration



Questions

Please reach out to these folks for questions related to:

Overall Tacoma URM Survey

Quyen Thai – qthai@cityoftacoma.org

Building Assessments

Hoyt Jeter - HJeter@cityoftacoma.org

Reviewer Application / Login Issues

Clint Lusk - CLusk@cityoftacoma.org

Overall WA URM Projects

Riley McNabb – riley.mcnabb@mil.wa.gov



CREW
Cascadia Region
Earthquake Workgroup



Thank you for volunteering!