

Transferring Geotagged Photos

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Introduction

There are multiple methods of transferring geotagged photos from a smartphone to a web-based QI tool; it is important to utilize specific methods to avoid losing photo geotag data associated with photos.

Option 1: Capturing and Uploading Photos via Web-Based QI Tools

The first option for taking a photo with intact geolocation data is to use a smartphone or tablet to take the photo inside the web-based QI tool. In other words, the web-based tool will open the smartphone or tablet's camera directly rather than the user opening separate apps. Figure 1 shows an example of this on the [PNNL Quality Install Tool](#), which can be used both online and offline.

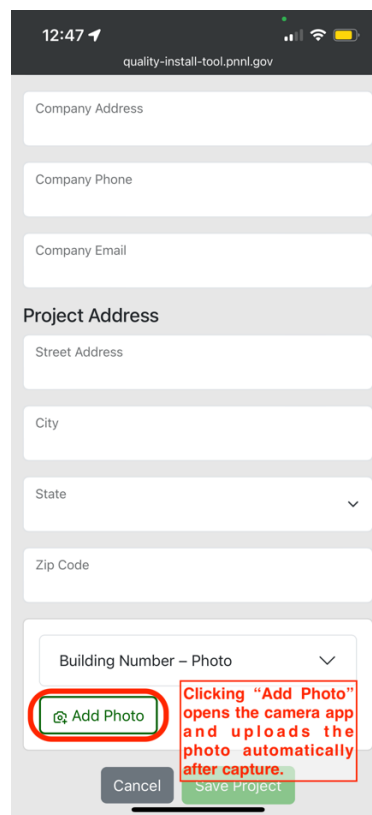


Figure 1. Example of how to capture geotagged photos directly in web-based QI tools (PNNL Quality Install Tool)

In Figure 1, an example of how to capture and upload a geotagged photo within a QI tool is shown highlighted in red. For the PNNL web-based QI tool, clicking this field will open the smartphone or camera app directly and automatically attach the geocoded photo to the PNNL QI tool form. It should be noted that this tool does not provide the option to attach a photo from the device's storage. Android and iOS devices have built-in security settings that remove metadata from photos uploaded via the web browser, so photos uploaded from device storage will lack the required geolocation data.

Option 2: Taking Photos via Smartphone or Tablet and Uploading at a Later Time

In some cases, it may not be preferable for a user to capture and upload photos to web-based QI tools in real-time, so users may prefer to capture photos and upload them later. This method should be avoided when possible, as QI tools are designed to provide photo prompts for sequential steps of measure installs; however, there are extenuating circumstances where contractors may want to limit their time in space (e.g., confined spaces or hot attics), so after-the-fact photo uploads may be preferable. In these cases, photos must be transferred to a computer via specific methods to avoid losing a photo's geolocation metadata. A computer is required since both iOS and Android devices remove metadata from web-based QI tools when photos are uploaded from device memory.

Transferring Geotagged Photos from iOS devices (iPhones and iPads) to a computer:

1. Photos must be captured with location service settings turned on (See Capturing Geotagged Photos with iOS smartphones (iPhone) and iOS tablets (iPads)).
2. Photos must be transferred to a computer as full-sized images. Photos can be transferred via email, AirDrop, cloud-based storage (iCloud, Google Drive, Dropbox, etc.), or USB cable. Note that when emailing photos, iOS devices provide an option to reduce the image's file size. **Images must be set as "Actual Size," as any of the other scaling options removes geolocation metadata from the file.**
3. Once photos are transferred to a computer, files can be uploaded to a user's QI tool of choice.

Transferring Geotagged Photos from Android devices to a computer:

1. Photos must be captured with location service settings turned on (See Capturing Geotagged Photos with Android smartphones and Android tablets).
2. Photos must be transferred to a computer via a USB cable to maintain geolocation metadata. **Due to Android privacy and security settings, any photos transferred from an Android device via email or cloud-based storage (iCloud, Google Drive, Dropbox, etc.) lose their associated geolocation metadata.**
3. Once photos are transferred to a computer, files can be uploaded to a user's QI tool of choice.