

Standard Energy Efficiency Data Platform™



U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



SEED PLATFORM™ 2.13

Updated
February 2022

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Contents: Organizations, API Documentation, Contact, About

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Standard Use Cases

Use Case to Cover

- **Energy Benchmarking**
 - Commercial Buildings

Outcomes

- **Annual Disclosure Report**
 - By Tax Parcel ID
- **List of Building Violations**
 - By Tax Parcel ID
- **Annual Report of Building Stock Performance**
 - By energy (Portfolio Manager data)

Standard Use Cases

Tasks to achieve outcomes:

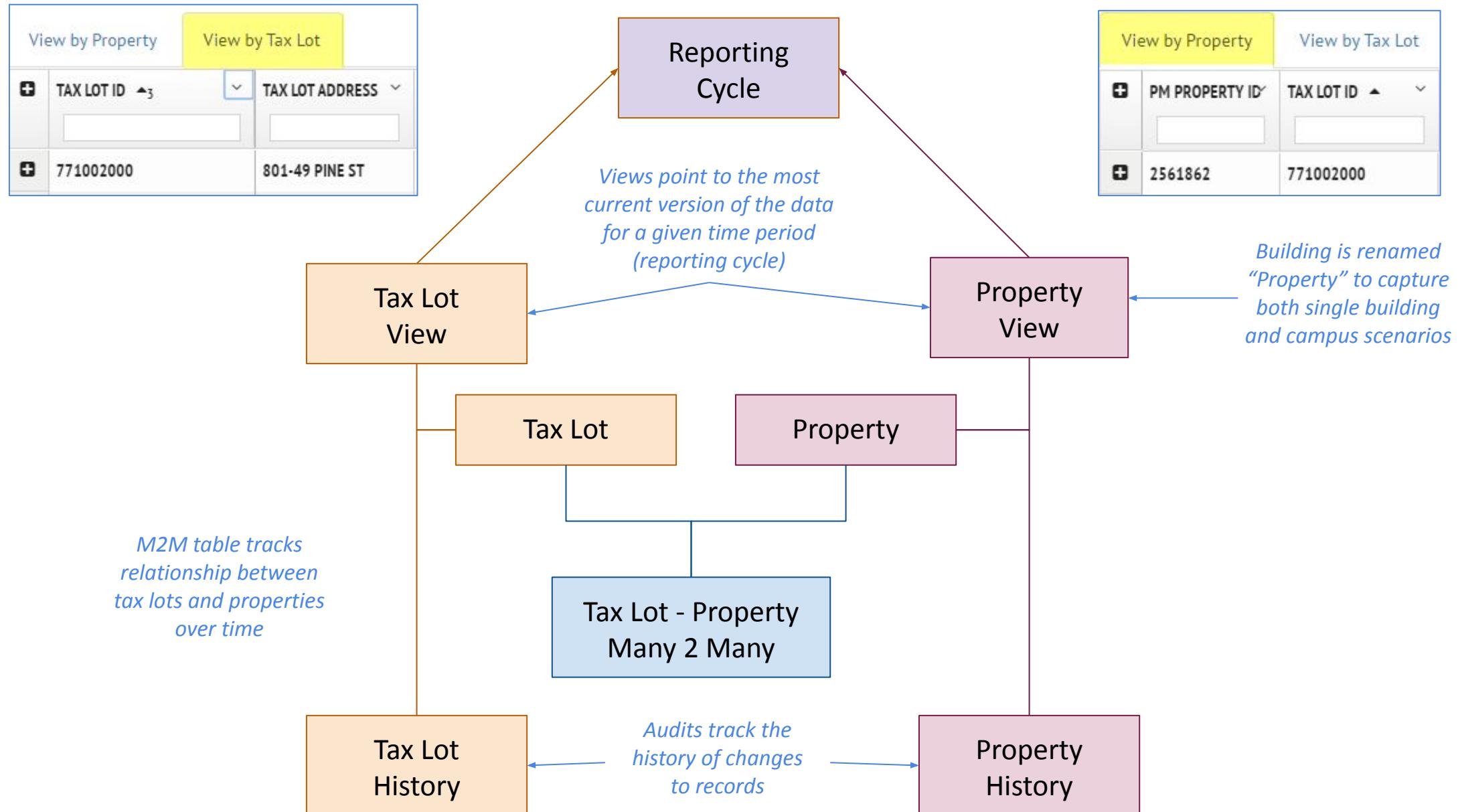
- **Import data from different sources**
 - Tax assessor lists, including GIS information
 - Costar Data
 - Portfolio Manager Data, including meter data
 - GreenButton meter data
- **Match data from different sources**
- **Handle data with different types of relationships**
 - Tax Assessor data defined by Lot/Parcel

VS

- CoStar or Portfolio Manager data defined by buildings
- **Maintain data based on compliance year**

Data Model Schematic

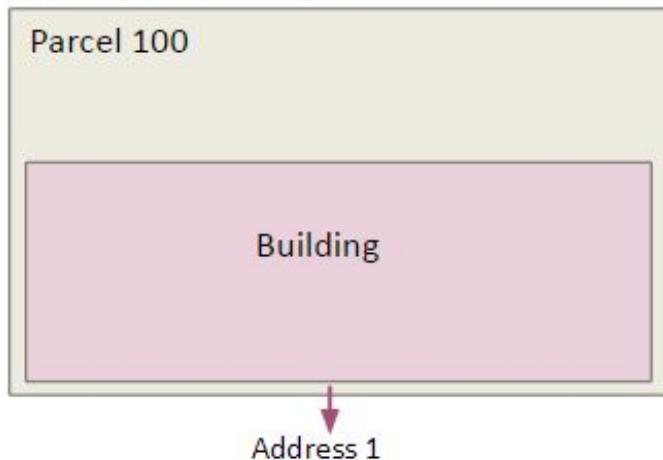
- View different states in time
 - Many to many relationship between Tax Lot data and Building/Portfolio Manager data
 - Viewing Tax Lot and Property data combined / rolled up



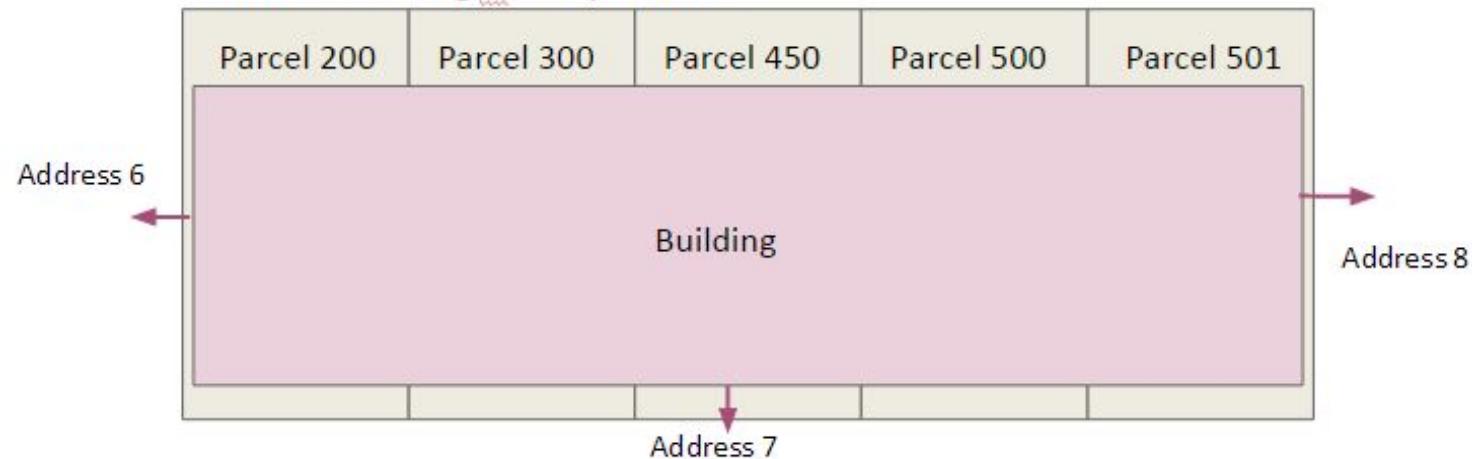
Physical reality of the data

The relationship of Buildings to Parcels/Tax Lots can be complicated

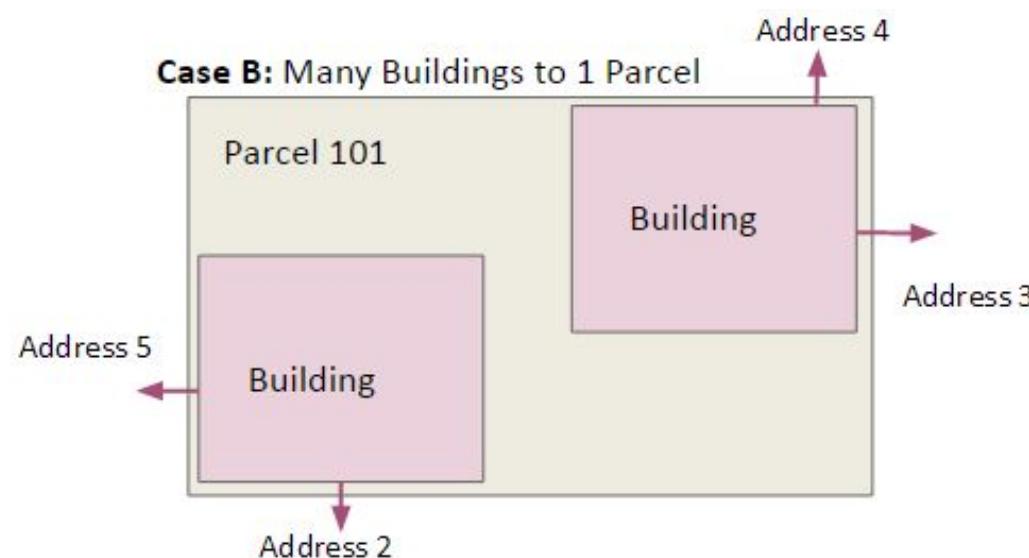
Case A: 1 Building to 1 Parcel



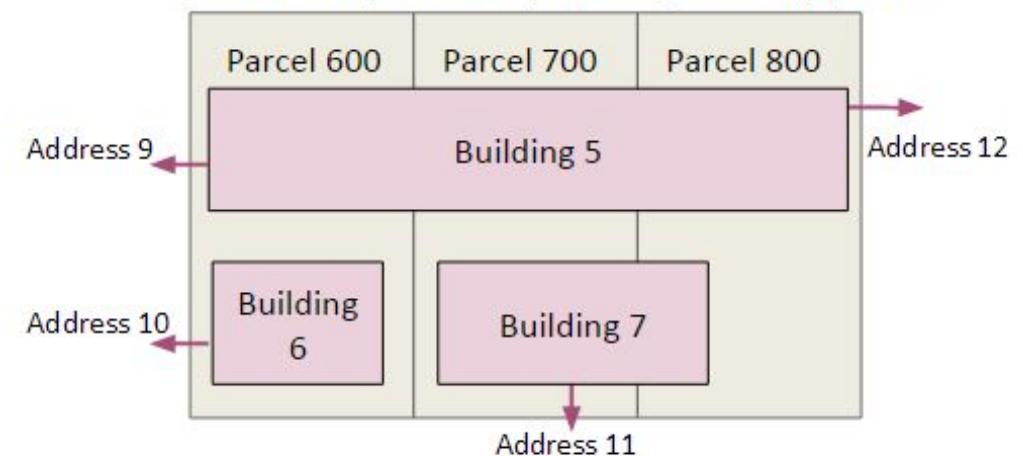
Case C: 1 Building to many Parcels



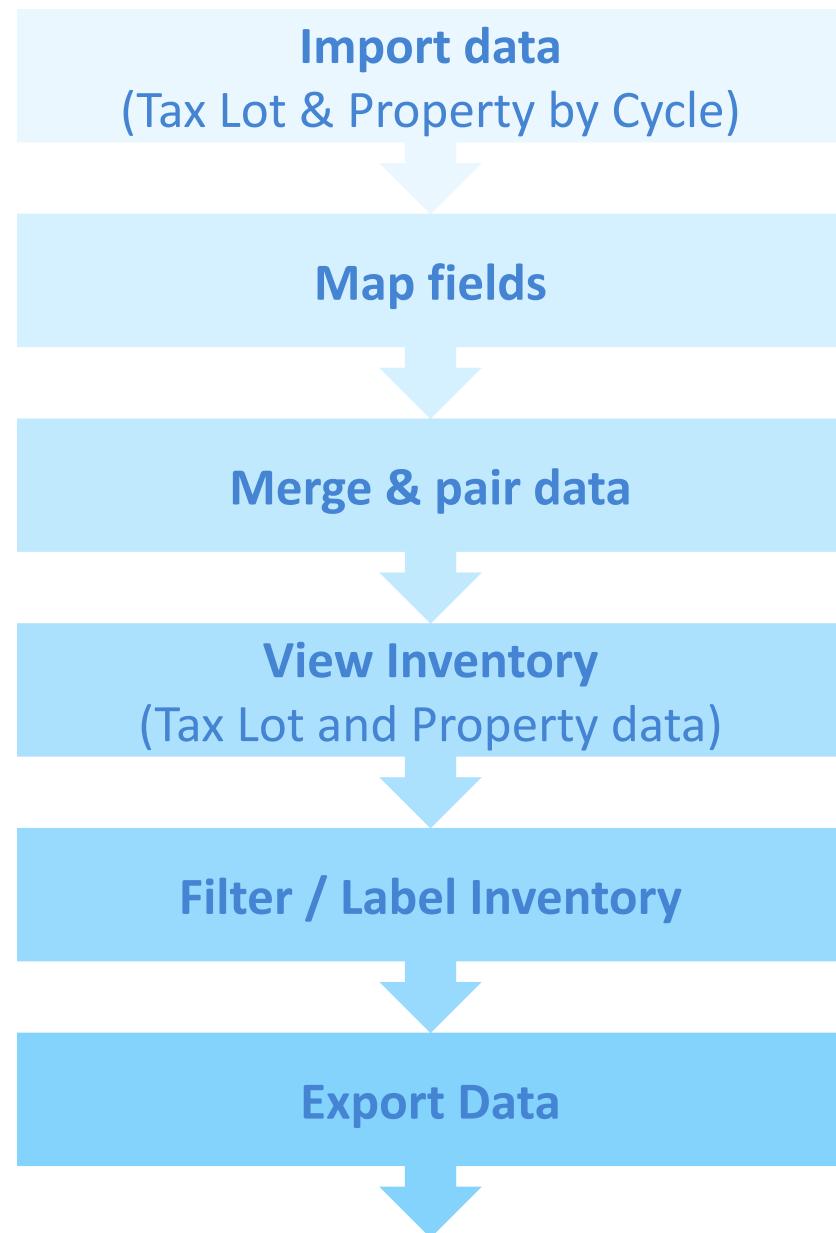
Case B: Many Buildings to 1 Parcel



Case D: Campus -- many buildings to many parcels



SEED Workflow



Home Page

The screenshot shows the homepage of The SEED Platform. A vertical navigation sidebar on the left contains icons for Home, Settings, Buildings, Data, People, Reports, Help, and Logout. The main content area features a large title "The SEED Platform™" and a subtitle explaining its purpose: "The DOE developed the Standard Energy Efficiency Data (SEED) Platform™ as a free software tool that provides a standardized format for collecting, storing, and analyzing energy efficiency data." Below this, there are three main sections: "Upload your data" (with a cloud icon), "Match your data" (with a double arrow icon), and "Manage compliance" (with a checkmark icon). At the bottom, there are four buttons: "Getting Started Guide" (orange), "Download Sample Data" (blue), "Upload your Buildings List" (blue), and "Auto-Populate Sample Data" (green). A red arrow points from the top-left to the "SEED" tab in the sidebar. Another red arrow points from the top-left to the "Match your data" section. A callout box with a red border and white background points to the "Match your data" section with the text "You can also navigate using the tabs at the top." A red arrow points from the bottom-left to the "Getting Started Guide" button with the text "Click this button to download a copy of the guide you are currently viewing (!)". A red callout box with a green border and white background points to the "Download Sample Data" button with the text "You can download a sample data set (seed-sample-data.zip)". A red callout box with a green border and white background points to the "Upload your Buildings List" button with the text "This button opens the dialog box to create a new data set to import data.". A red callout box with a green border and white background points to the "Auto-Populate Sample Data" button with the text "This button will populate your organization with the sample data". In the top right corner, there is a "LBNL Test 200" dropdown menu and a blue "+" button.

You can open the Navigation Side Bar to view different program areas

SEED

The SEED Platform™

The DOE developed the Standard Energy Efficiency Data (SEED) Platform™ as a free software tool that provides a standardized format for collecting, storing, and analyzing energy efficiency data.

You can also navigate using the tabs at the top.

Upload your data

Match your data

Manage compliance

Getting Started

Download Sample Data

Upload your Buildings List

Auto-Populate Sample Data

Click this button to download a copy of the guide you are currently viewing (!)

You can download a sample data set (seed-sample-data.zip)

This button opens the dialog box to create a new data set to import data.

This button will populate your organization with the sample data

LBNL Test 200

10

Navigation

Click to Expand and Contract
the Navigation Side Bar



SEED PLATFORM™

contracted

expanded



ROBIN LBNI 200



INVENTORY



DATA

20



ORGANIZATIONS

1



ANALYSES (BETA)



API DOCUMENTATION



CONTACT



ABOUT



DOCUMENTATION



LOGOUT

User Account Name: Click to view information about the account

Inventory: Click to view of the Tax Lot / Parcel and Property / Building data, by Cycle / Time Period

Data: Click to import data into SEED that will become records in the Inventory

Organizations: Click to view the organizations associated with the user account

Analyses (BETA): Click to see the results of Analyses run from Inventory

API Documentation: Click to view the Swagger API documentation

Contact: Click to view SEED contact info, including a link to user documentation and the User and Developer Forums, and a link to the Github code repository

About: Click to view information about SEED development and funding

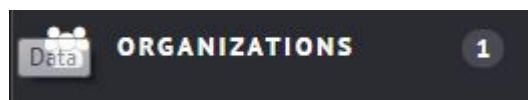
Documentation: Click to see an FAQ page

Log out: Click to log out of the program

Create Cycle in Organizations (before uploading data)

At least one cycle must be defined before importing data.

To define a new cycle, go to the Organizations navigation bar to see the organizations that you manage and belong to.



Click on the Organization that you want to make a cycle for

The program will open up a view of that Organization.

SEED PLATFORM™

LBNL 302

Organizations

Organizations I Manage

ORGANIZATION

LBNL 302

Sub-Organizations

Organizations I Belong To

| ORGANIZATION NAME | NUMBER OF PROPERTIES | NUMBER OF TAX LOTS | YOUR ROLE | ORGANIZATION OWNER(S) |
|-------------------|----------------------|--------------------|-----------|-----------------------|
| LBNL 302 | | | owner | Robin LBNL 302 |

SEED PLATFORM™

LBNL 302

Organizations

Cycles

Members

Reset all passwords – Invite a new member

| MEMBER NAME | MEMBER EMAIL | MEMBER ROLE |
|----------------|------------------------|-------------|
| member name | member email | member role |
| Robin LBNL 302 | rdmitchell+302@lbl.gov | owner |

View, Edit and Create Cycles

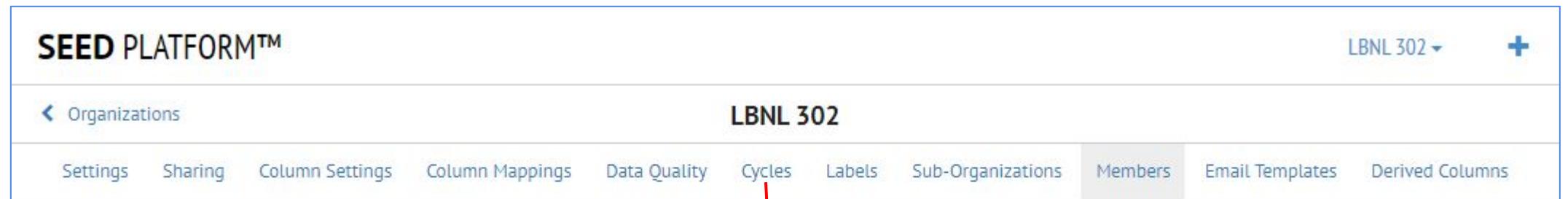
SEED PLATFORM™

LBNL 302

Organizations Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Click on **Cycles** link to view the **Cycles** page

To make a new **Cycle**, enter the **Cycle name, From date and To date**, then click **Create Cycle**



Organizations LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Create new cycle Cycle Name From date: To date: Create Cycle

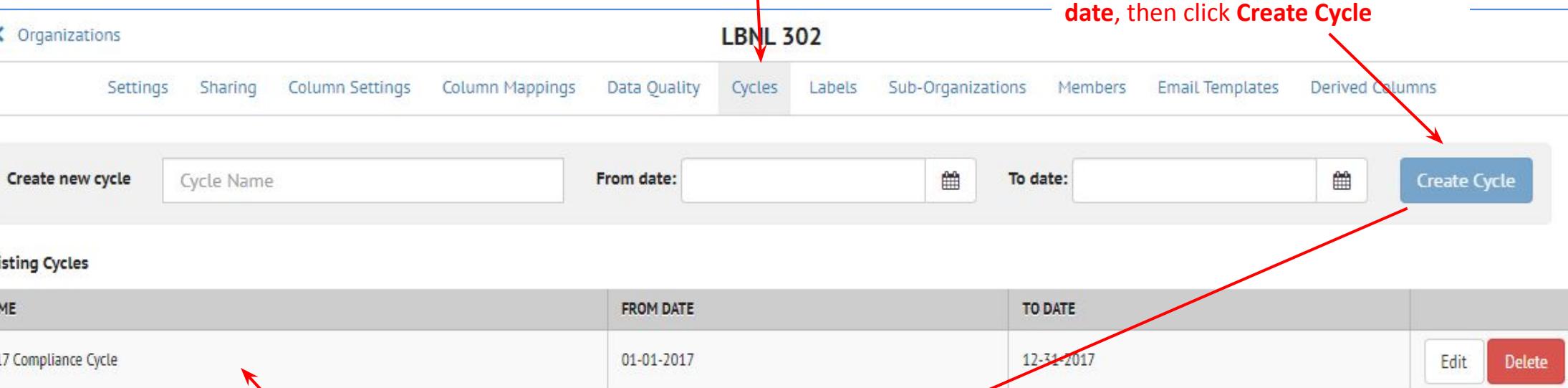
Existing Cycles

| NAME | FROM DATE | TO DATE | Actions |
|-----------------------|------------|------------|-------------|
| 2017 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit Delete |

There is a default Cycle provided by the program called **2017 Calendar Year**

The new **Cycle** is added to the **Existing Cycles** list

Click **Edit** to change the default **Cycle name** if desired



Existing Cycles

| NAME | FROM DATE | TO DATE | Actions |
|-----------------------|------------|------------|-------------|
| 2017 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit Delete |
| 2018 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit Delete |

Existing Cycles

| NAME | FROM DATE | TO DATE | Actions |
|-----------------------|------------|------------|-------------|
| 2017 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit Delete |
| 2018 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit Delete |

Uploading Data - There are many ways to start

The screenshot shows the SEED Platform interface. On the left is a dark sidebar with navigation links: ROBIN LBNL 302, INVENTORY, DATA (0), ORGANIZATIONS (1), ANALYSES (BETA), API DOCUMENTATION, CONTACT, ABOUT, DOCUMENTATION, and LOGOUT. The main content area has a header "SEED PLATFORM™" and a large title "The SEED Platform™". A red box highlights the "DATA" link in the sidebar with the text "Click the Data navigation button to see existing Data Sets or create a new one". Another red box highlights the "Data Set" option in a dropdown menu at the top right with the text "OR click the "+" icon at the and then select "Data Set"". A third red box highlights the "Upload your Buildings List" button in the "Getting Started" section at the bottom with the text "OR click the blue button labeled "Upload your buildings list"".

SEED PLATFORM™

ROBIN LBNL 302

INVENTORY

DATA 0

ORGANIZATIONS 1

ANALYSES (BETA)

API DOCUMENTATION

CONTACT

ABOUT

DOCUMENTATION

LOGOUT

The SEED Platform™

Click the Data navigation button to see existing Data Sets or create a new one

OR click the "+" icon at the and then select "Data Set"

Match your data

Manage compliance

Getting Started

Getting Started Guide

Download Sample Data

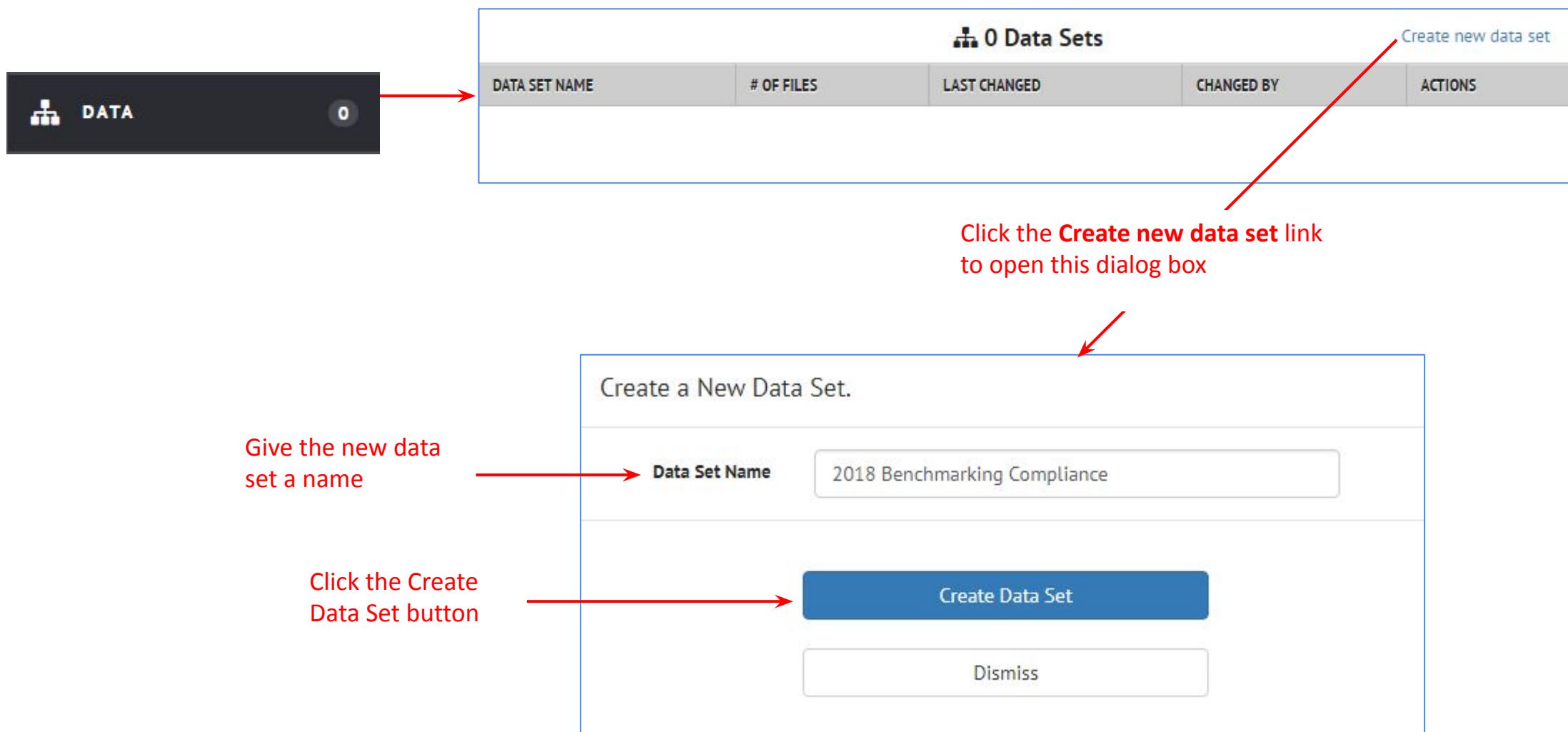
Upload your Buildings List

Auto-Populate Sample Data

OR
click the blue button labeled "Upload your buildings list"

Create a New Data Set

Clicking the Data Navigation option will open the Data Sets view, to display existing Data Sets and create new Data Sets



Add a file to the data set

Select the data file type, either

Upload a Spreadsheet

(CSV, XLS, XLSX)

to import

- Tax / Parcel lists
- Building lists
- Portfolio Manager downloaded spreadsheets

Upload GeoJSON file

- This option allows importing a GeoJSON file

Upload BuildingSync Data

- This option allows importing a BuildingSync (XML format) file, such as produced by Asset Score.

Import Portfolio Manager Data

- Log in to your Portfolio Manager account and import the custom report template directly into SEED

Uploading your data.

Property and Tax Lot Data Meter Data

Cycle: 2018 Compliance Cycle
Manage available cycles

File types supported: .csv, .xls, .xlsx, .xml, .zip, .geojson, and .json.
Note: only the first sheet of multi-sheet Excel files will be imported.

 **Upload a Spreadsheet**

 **Upload a GeoJSON File**

 **Upload BuildingSync Data**

 **Import Portfolio Manager Data**

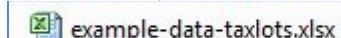
2018 Compliance Cycle
2017 Compliance Cycle
2018 Compliance Cycle

Select a **Cycle** (time period) to associate with the data (except Meter data, which is not associated with Cycles)

Click “**Manage available cycles**” to go to the Cycle definition page

A browser window will open to select a file to upload

In this example, a **Tax Lot / Parcel** data file is uploaded



To upload monthly meter data, click on the Meter Data tab

Uploading your data.

Property and Tax Lot Data Meter Data

File types supported: .csv, .xls, .xlsx, .xml, .zip, .geojson, and .json.
Note: only the first sheet of multi-sheet Excel files will be imported.

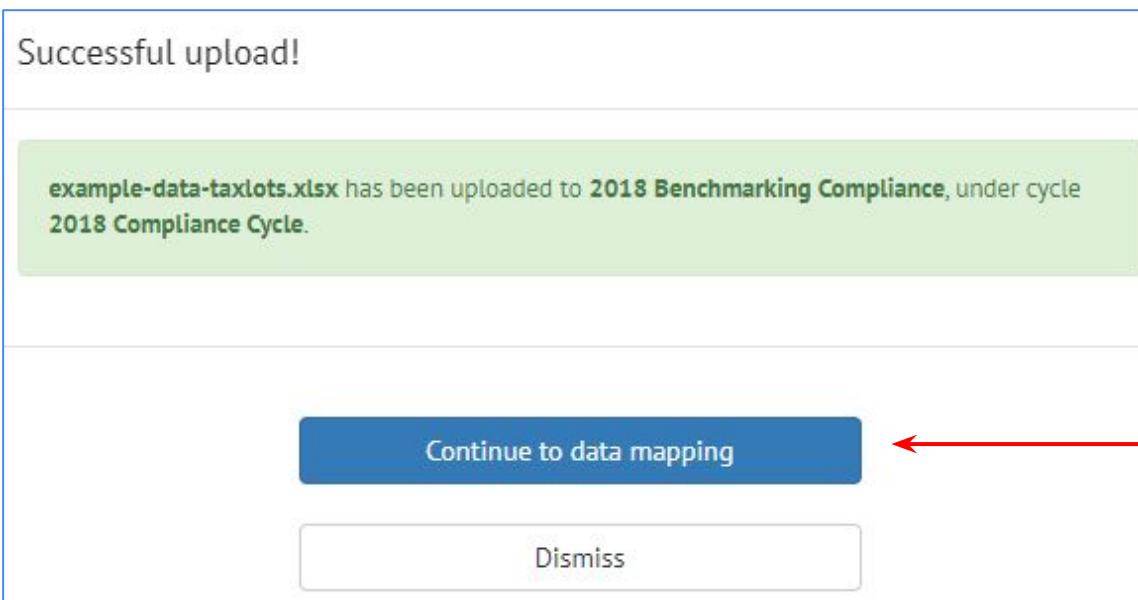
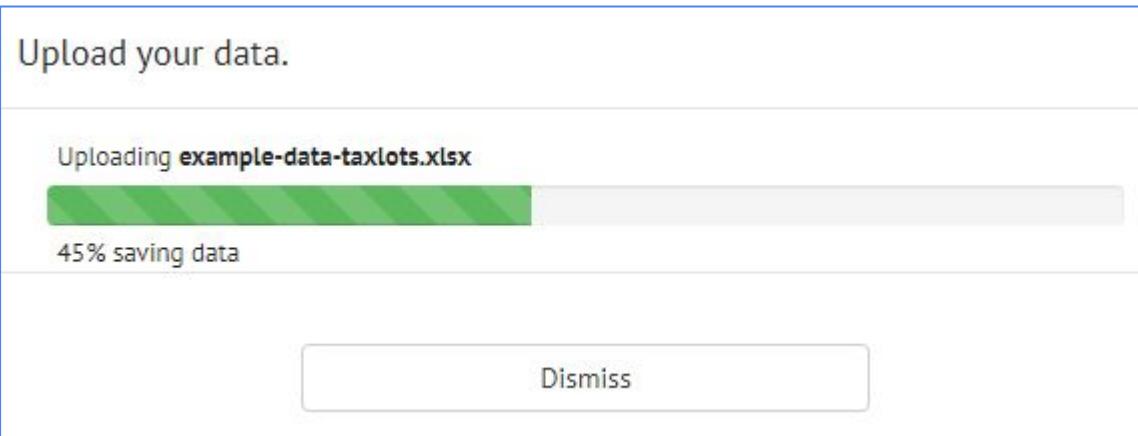
 **Upload Portfolio Manager Meter Usage (XLXS)**

Upload Portfolio Manager Meter Usage (XLXS)

- From Portfolio Manager monthly data spreadsheet

Upload Data

During the data upload, SEED reports the progress and the success of the upload



When the data upload is complete, click the **"Continue to data mapping"** button

After you click the **"Continue to data mapping"** button, you may see a spinning circle if the data file is large

Mapping Fields

Matching Fields:

SEED matches records between files (such as Tax Lot and Building lists and ENERGY STAR Portfolio Manager data) based on the matching fields so it is **very important** to map your data's fields to at least one of these SEED fields.

Pick a field that is common between the files you plan to merge and pair to each other

The **Collapse Tabs** option is useful if you already know all the matching rules and need more room to view the mapped fields

Directions for mapping data are at the top of the Mapping page in the STEP 1 tab.

◀ 2018 Benchmarking Compliance

Data Mapping and Validation (example-data-taxlots.xlsx)

STEP 1: Map Your Data

STEP 2: Review Your Data Mappings

BEDES

Collapse Tabs

MAPPING YOUR DATA TO SEED

It is necessary to map your field names to SEED field names. You can select from the list that appears as you start to type, which is based on the Building Energy Data Exchange Specification (BEDES), or you can type in your own name, as well as typing in the field name from the original datafile.

In addition, you need to specify where the field should be associated with Tax Lot data or Property data. This will affect how the data is matched and merged, as well as how it is displayed in the Inventory view.

Column Mapping Profiles can be used to help you easily and consistently map your data. Note that file header columns defined in the profile must match exactly (spaces, lowercase, uppercase, etc.) in order for the corresponding SEED column information to be used.

Field names for matching Properties: PM Property ID

Field names for matching Tax Lots: Jurisdiction Tax Lot ID

If there are fields in the datafile mapped to these names, the program will attempt to match on the corresponding values in existing records. All of these fields must have the same values between records for the records to match.

Matches within the same cycle will be merged together, while matches in different cycles will be associated for cross-cycle analysis.

When you click the **Map Your Data** button, the program will show a grid with the new field names as the column headings and your data in the rows. In that view, you can still come back to the initial mapping screen and change the field mapping.

Duplicate -- if fields are marked as duplicates they need to be resolved to have different names.

The Matching fields for Property and Tax Lot data are specified in Column Settings under Organization. Those fields are displayed here.

For this example for Property data there is only one matching field:

- **PM Property ID**

The ID from ENERGY STAR Portfolio Manager

For this example for Tax Lot data there is only one matching field:

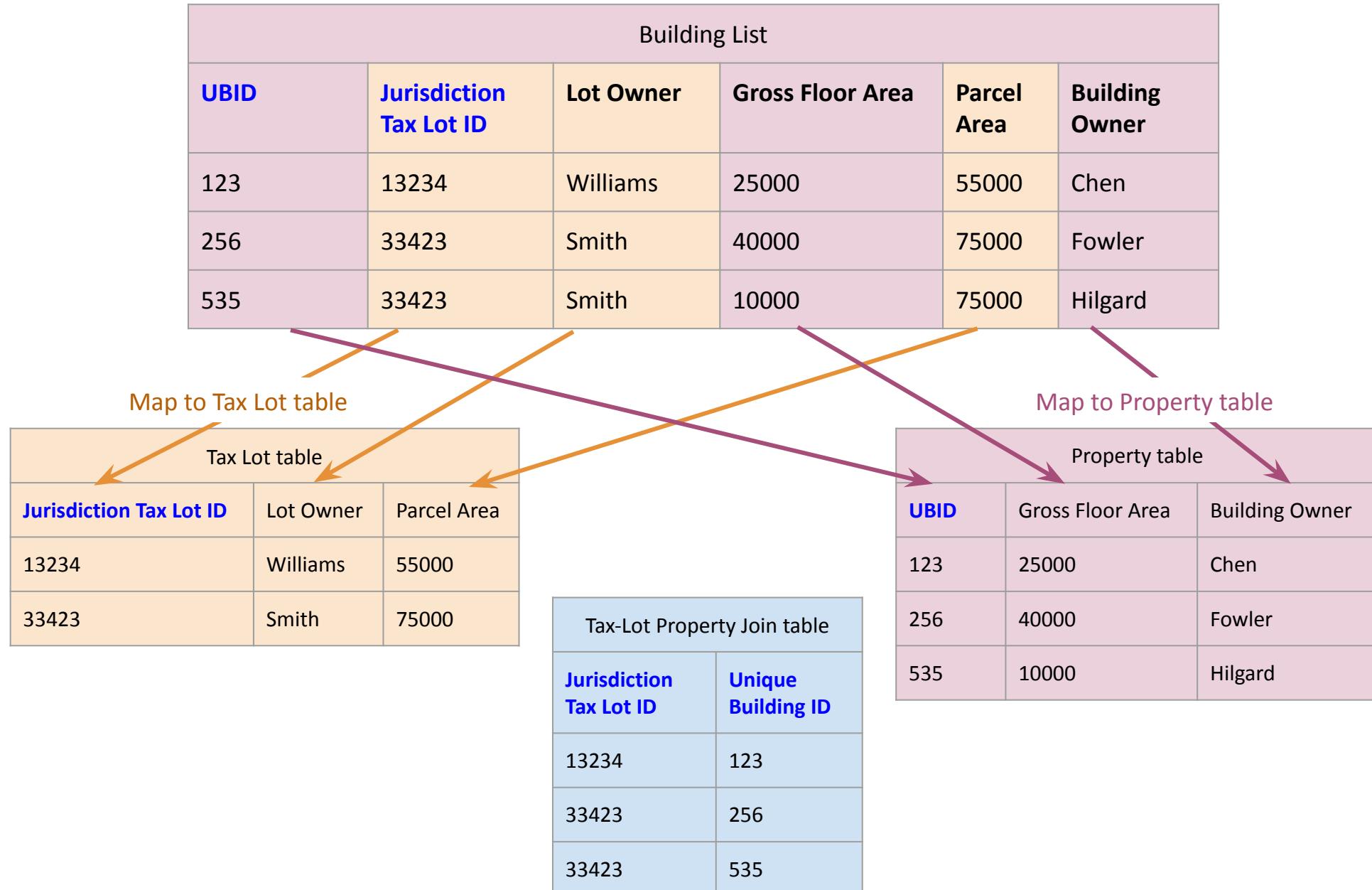
- **Jurisdiction Tax Lot ID**

The Tax Assessor's Tax Parcel ID

Mapping Fields

The fields in a data file can be mapped

- All to the same table (either Tax Lot or Property)
- To different tables
 - In the example below, mapping to both tables defines the relationship between the Property and the Tax Lot data with **matching fields**.



Mapping Fields

You can click on this button to map all the SEED fields to the fields in the imported file and then change them as needed →

This data is all from the Tax Assessor so all the fields are mapped to the Tax Lot table

Start typing in the SEED field input to see a list of fields containing that word

When the SEED Header fields are properly defined, you can make a “Column Mapping Profile” to save those settings by clicking the blue pencil icon. You will give it a name, and then it will appear in the pull down list for future use

The screenshot shows a mapping interface with the following components:

- Top Bar:** Includes buttons for "Copy Data File Headers directly to SEED Headers" and "Map Your Data".
- Header:** Shows "Current Cycle: 2018 Compliance Cycle" and "Current Column Mapping Profile: <None selected>".
- Mapped Fields Grid:** A table titled "example-data-taxlots.xlsx" with columns: INVENTORY TYPE, SEED HEADER, MEASUREMENT UNITS, DATA FILE HEADER, ROW 1, ROW 2, and ROW 3.
- SEED Header List:** A sidebar on the left lists SEED HEADER fields: jurisdiction, Jurisdiction Tax Lot Id, and Jurisdiction Property Id.
- Annotations:**
 - A red arrow points from the "Set all fields to: Tax Lot" dropdown to the "Tax Lot" dropdown in the first column of the grid.
 - A red arrow points from the "jurisdiction" input field in the sidebar to the "Jurisdiction Tax Lot ID" field in the grid.
 - A red arrow points from the "Parcel Number" field in the grid to the "Jurisdiction Tax Lot Id" field in the sidebar.
 - A red arrow points from the "Map Your Data" button to the "Apply Profile" button.
 - A red arrow points from the "Parcel Number" field in the grid to the "Matching" section below.

| INVENTORY TYPE | SEED HEADER | MEASUREMENT UNITS | DATA FILE HEADER | ROW 1 | ROW 2 | ROW 3 |
|----------------|-------------------------|-------------------|------------------------|-------------------|----------------------|-----------------------|
| Tax Lot | Jurisdiction Tax Lot ID | | Parcel Number | 1552813 | 11160509 | 13334485 |
| Tax Lot | Address | | Address | 050 Willow Ave SE | 2655 Welstone Ave NE | 93029 Wellington Blvd |
| Tax Lot | City | | City | Rust | Rust | Rust |
| Tax Lot | Number of Buildings | | Number of Buildings | 1 | 2 | |
| Tax Lot | Taxable SF | | Taxable SF | 292029 | 390289 | 1234560 |
| Tax Lot | Tax Class | | Tax Class | 4 | 4 | 5 |
| Tax Lot | Parcel Owner | | Parcel Owner | U LLC | Hilltop LLC | Lucky University |
| Tax Lot | Parcel Owner Telephone | | Parcel Owner Telephone | 213-852-1238 | 213-546-9755 | 224-587-5603 |

The Parcel Number field was mapped to **the reserved Matching field** name to specify the fields the program will use to match records in files

- Parcel Number ⇒ Jurisdiction Tax Lot ID

Matching

- In this case, the program will match two records if the data in the **Jurisdiction Tax Lot ID** field is the same between them

Mapping Fields

Mapping buildings for **example-data-taxlots.xlsx**

100% Complete

Click **Map Your Data** when all the fields are mapped as desired

Map Your Data

Copy Data File Headers directly to SEED Headers

Current Cycle: **2018 Compliance Cycle** Current Column Mapping Profile: **Tax Lot Default Fields** Tax Lot Default Fields Apply Profile

SEED **example-data-taxlots.xlsx**

Set all fields to: **Tax Lot** Mapped Fields

| INVENTORY TYPE | SEED HEADER | MEASUREMENT UNITS | DATA FILE HEADER | ROW 1 | ROW 2 | ROW 3 |
|----------------|-------------------------|-------------------|------------------------|-------------------|----------------------|-----------------------|
| Tax Lot | Jurisdiction Tax Lot ID | | Parcel Number | 1552813 | 11160509 | 13334485 |
| Tax Lot | Address | | Address | 050 Willow Ave SE | 2655 Welstone Ave NE | 93029 Wellington Blvd |
| Tax Lot | City | | City | Rust | Rust | Rust |
| Tax Lot | Number of Buildings | | Number of Buildings | 1 | 2 | |
| Tax Lot | Taxable SF | | Taxable SF | 292029 | 390289 | 1234560 |
| Tax Lot | Tax Class | | Tax Class | 4 | 4 | 5 |
| Tax Lot | Parcel Owner | | Parcel Owner | U LLC | Hilltop LLC | Lucky University |
| Tax Lot | Parcel Owner Telephone | | Parcel Owner Telephone | 213-852-1238 | 213-546-9755 | 224-587-5603 |

Field Mapping Review

[Map Your Data](#)

View the mapped fields populated with the data

Click **Save Mappings** if the mapping is correct

You can click
Back to Mapping if it is not correct

Click **Data Quality Results** to see data errors (see next page)

Back to Mapping

It is possible to filter and sort the data by field in this view

9 Data Quality Results [Save Mappings](#)

SEED displays the number of records
2018 Compliance Cycle 9 tax lots

| City | Jurisdiction Tax Lot ID | Address | Number of Buildings | Parcel Owner | Parcel Owner Telephone | Tax Class | Taxable SF |
|------|-------------------------|-----------------------|---------------------|------------------|------------------------|-----------|------------|
| Rust | 1552813 | 050 Willow Ave SE | 1 | U LLC | 213-852-1238 | 4 | 292029 |
| Rust | 11160509 | 2655 Welstone Ave NE | 2 | Hilltop LLC | 213-546-9755 | 4 | 390289 |
| Rust | 13334485 | 93029 Wellington Blvd | | Lucky University | 224-587-5603 | 5 | 1234560 |
| Rust | 23810533 | 94000 Wellington Blvd | | Lucky University | 224-587-5603 | 2 | 5312 |
| Rust | 24651456 | 11 Ninth Street | 5 | Lucky University | 224-587-5603 | 2 | 45135 |
| Rust | 33366125 | 525 Elm Street | | Norton Schools | 213-555-4368 | 3 | 954652 |
| Rust | 33366148 | 530 Elm Street | | Norton Schools | 213-555-4368 | 1 | 154623 |
| Rust | 33366555 | 521 Elm Street | | Norton Schools | 213-555-4368 | 9 | 15213 |
| Rust | 55039309 | 39929 Ranch 99 Road | | Ward Thatcher | | 7 | 331235 |

Mapping – Review – Data Cleansing

From the Data Mapping screen, click Data Cleansing Results to see what the program discovered about the data

14 Data Quality Results



Data Quality Results

File Name: example-data-taxlots.xlsx

Date Uploaded: February 8th 2018, 7:26:40 PM -08:00

| ADDRESS LINE 1 | JURISDICTION TAX LOT ID | PM PROPERTY ID | CUSTOM ID | FIELD | ERROR MESSAGE |
|-----------------------|-------------------------|----------------|-----------|---------------------|---|
| Address Line 1 | Jurisdiction Tax Lot ID | PM Property ID | Custom ID | Field | Error Message |
| 93029 Wellington Blvd | 13334485 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |
| 94000 Wellington Blvd | 23810533 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |
| 94000 Wellington Blvd | 23810533 | -- | -- | Taxable Sf | Taxable Sf [5312] < 10000 |
| 525 Elm Street | 33366125 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |
| 530 Elm Street | 33366148 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |
| 521 Elm Street | 33366555 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |
| 39929 Ranch 99 Road | 55039309 | -- | -- | Number Of Buildings | Number Of Buildings is required and is None |

Click Export to export the contents of the Data Cleansing screen to a CSV file

Export

Close

Click Close to return to the Data Mapping Screen

Data Cleansing Results.csv

Mapping – Confirm and Start Matching

Save Mappings

Confirm Save Mappings?

Did you review your mappings? It's a good idea to double check your mappings. Once SEED matches your properties and tax lots you cannot undo or edit these mappings.

Confirm mappings & start matching

Dismiss

You have one more chance to review the mapping

Click **Confirm mappings and start matching** if you are happy with the data mapping

SEED will check to see if any records match within the file (or across other files if they have already been imported)

Finding inventory matches.

Finding inventory matches for example-data-taxlots.xlsx

25% Complete : Geocoding

Sub Progress:

67% Complete : Geocoding

Program checks to see if any records match within the file based on the matching fields set in Mapping, such as Address or Tax Lot ID

The program checks for matching even if there is no data already loaded into the program to match to, in case there are matches within the file being imported

Matching - View Results / Add a File

Matching Results for file example-data-taxlots.xlsx

- Current cycle: 2018 Compliance Cycle
- Total rows in the import file: 9
- Merged tax lots against existing records: 9

[Add another file](#)

[View my properties](#)

Dismiss

Click **View my properties** to see the Inventory list

Cycle: 2018 Compliance Cycle ▾

[View by Property](#)

[View by Tax Lot](#)

9 tax lots

| | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | City (Tax Lot) | Taxable Sf | Tax Class |
|---|-------------------------|--------------------------|----------------|------------|-----------|
| ✓ | 24651456 | 11 Ninth Street | Rust | 45135 | 2 |
| ✓ | 33366148 | 530 Elm Street | Rust | 154623 | 1 |
| ✓ | 23810533 | 94000 Wellington Blvd | Rust | 5312 | 2 |
| ✓ | 33366555 | 521 Elm Street | Rust | 15213 | 9 |
| ✓ | 33366125 | 525 Elm Street | Rust | 954652 | 3 |

The program reports on what was done with the records. In this case, the program imported 9 records and created 9 new records in the Tax Lot table from those imported records

Click **Add another file** to upload another data file, such as ENERGY STAR Portfolio Manager data, which allows you to add more data to match to the records that were just created

Uploading your data.

Property and Tax Lot Data

Meter Data

Cycle

2018 Compliance Cycle

Manage available cycles.

File types supported: .csv, .xls, .xlsx, .xml, .zip, .geojson, and .json.

Upload a Spreadsheet

Note: only the first sheet of multi-sheet Excel files will be imported.

Upload a GeoJSON File

Upload BuildingSync Data

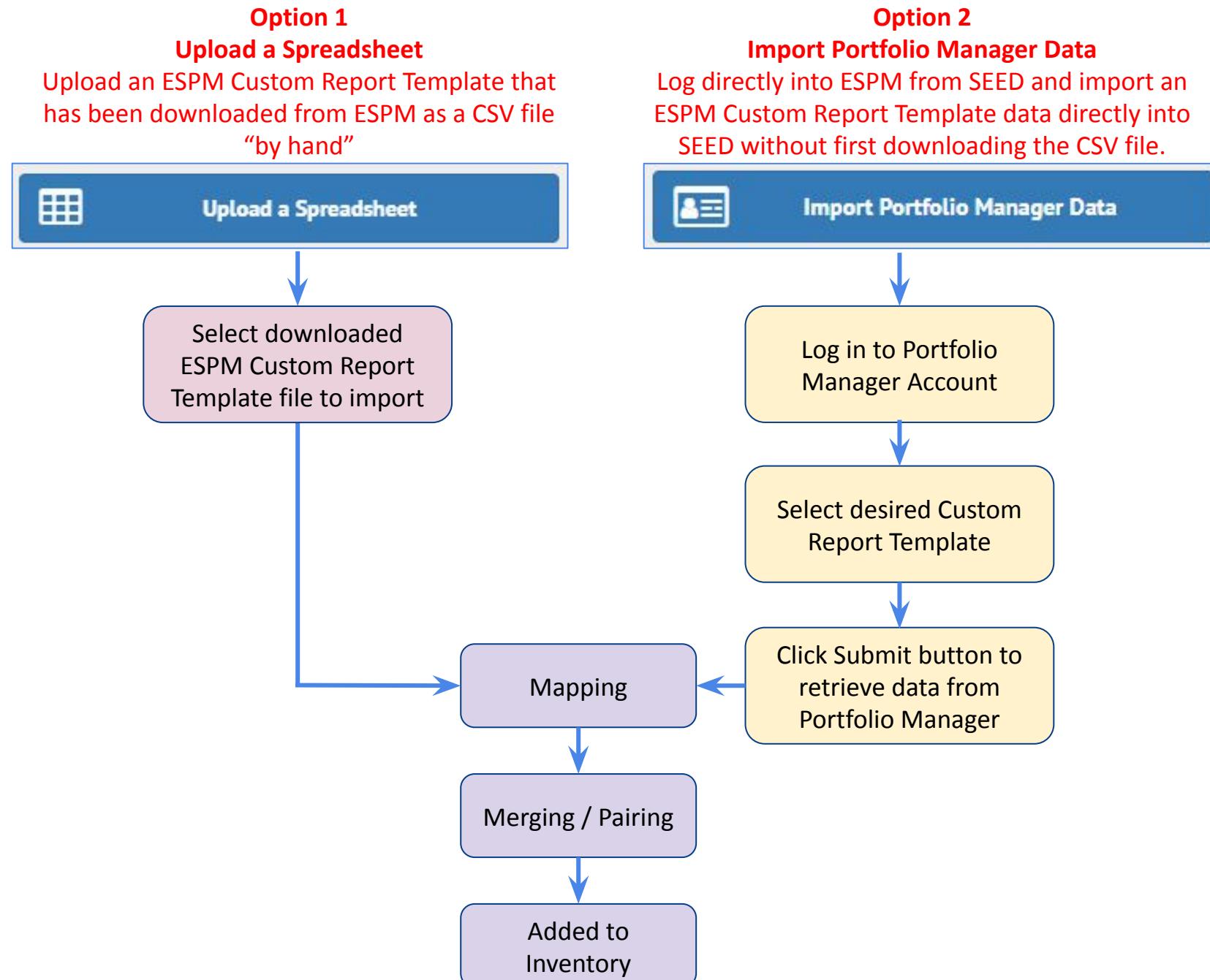
Import Portfolio Manager Data

After a data file has been mapped and matched, the records can be viewed in the Inventory list view.

In this example, **Tax Lot** data was imported, so the data can be viewed in the View by Tax Lot tab, for the appropriate **Cycle**

ENERGY STAR Portfolio Manager (ESPM) Data

Two paths for obtaining ENERGY STAR Portfolio Manager (ESPM) data



ESPM Option 1: Upload Data from ESPM CSV files

This example shows how to upload Portfolio manager data from Custom Report Template files that have been downloaded from Portfolio Manager

Uploading your data.

Property and Tax Lot Data Meter Data

Cycle: 2018 Compliance Cycle
Manage available cycles.

File types supported: .csv, .xls, .xlsx, .xml, .zip, .geojson, and .json.

Note: only the first sheet of multi-sheet Excel files will be imported.

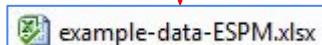
Upload a Spreadsheet

Upload a GeoJSON File

Upload BuildingSync Data

Import Portfolio Manager Data

Browse to the appropriate file to upload to SEED



Upload your data.

Uploading example-data-properties.xlsx

45% saving data

- Select the appropriate Cycle
- Click the **Upload a Spreadsheet** button to upload an ESPM Custom Report Template that has been exported from ESPM

Successful upload!

example-data-taxlots.xlsx has been uploaded to **2018 Benchmarking Compliance**, under cycle **2018 Compliance Cycle**.

Continue to data mapping

Dismiss

Click
Continue to data mapping
(See Mapping Portfolio Manager Data)

ESPM Option 2: Import Data Directly from ESPM

This example shows how to import Portfolio manager data from Custom Report Template directly by logging into a Portfolio Manager account from SEED

1 - Select the appropriate Cycle

Upload your data.

Time Period Manage available cycles.

2 - Click the Upload Portfolio Manager Data button to upload an ESPM Custom Report Template that has been exported from ESPM as a CSV file

3 - Enter Portfolio Manager Username and Password

Portfolio Manager Username
 Portfolio Manager Password

 Report Template Name

4 - Click Get Report Templates button

Portfolio Manager Username
 Portfolio Manager Password

 Report Template Name (14)
 Data Request:Abc
 Data Request:SEED City Test Report June 5 2018
 Data Request:opentech
 Portfolio Plus Meters
 Report with Meters
 SEED City Benchmarking Report
 SEED City Test Report
 - Data Request:SEED City Test Report April 24 2018
 - Data Request:SEED City Test Report June 5 2018
 - Data Request:SEED City Test Report April 24 - Test 2

Portfolio Manager Username
 Portfolio Manager Password

 Report Template Name (14)

5 - Select the desired Report Template

6 - Click Submit to continue to data Mapping

Mapping Portfolio Manager Data

SEED field mapping for a Portfolio Manager file

Map all the fields to the Property Table except if there is a Tax Lot / Parcel ID -- map that to the Tax Lot table

UBID

- **Matching field - Property table**
- Use for a Unique Building ID, if that field is in the ESPM data

PM Property ID

- **Matching field - Property table**
- Map to Property ID in PM file

PM Parent Property ID

- Map to Parent Property ID in PM file to define the campus relationship

Address Line 1

- **Matching field - Property table**
 - If you want to match on Address, map to Address Line 1.
 - If you don't want to match on Address, use the ESPM field name of "Address 1"

Jurisdiction Tax Lot ID

- **Matching Field - Tax Lot table**
- If there is a Tax Lot ID field in the Portfolio Manager data that can be used to set up the relationship between Tax Lot and Property, map it to Jurisdiction Tax Lot ID
- Set the field to the **Tax Lot** table

| SEED | | 1 - example-data-ESPM-UBID-NoAlerts.xlsx | | |
|----------------|-------------------------|--|--------------------|--|
| INVENTORY TYPE | SEED HEADER | MEASUREMENT UNITS | DATA FILE HEADER | ROW 1 |
| Property ▼ | Building ID | | Building ID | 100 |
| Property ▼ | UBID | | UBID | SRIY2TX6+2NR-SRIY2TX6+DS6-SRIY2TX6+F5Q |
| Property ▼ | PM Property ID | | Property ID | 2264 |
| Property ▼ | PM Parent Property ID | | Parent Property ID | |
| Property ▼ | Property Name | | Property Name | University Inn |
| Property ▼ | Address 1 | | Address 1 | 50 Willow Ave SE |
| Property ▼ | City | | City | Rust |
| Tax Lot ▼ | Jurisdiction Tax Lot ID | | Rust Parcel ID | 1552813 |
| Property ▼ | Property Type | | Property Type | Hotel |
| Property ▼ | Gross Floor Area | square feet ▼ | Gross Floor Area | 12555 |

Gross Floor Area

- **Matching field - Property table**
- If you are mapping to a field called "**Gross Floor Area**" make sure to set the "**Measurement Units**". If this field is left blank, there will be problems later with the data.

Mapping Review - Portfolio Manager

[Back to Mapping](#)

The fields mapped to **Property** are shown under the **Property tab**

Click **Data Quality results** button to view the errors or warnings.

42 Data Quality Results

[Save Mappings](#)

| City | ENERGY STAR Score | PM Generation Date | Gross Floor Area (ft ²) | PM Parent Property ID | PM Property I... | Property Name | Property Type |
|------|-------------------|---------------------|-------------------------------------|-----------------------|------------------|------------------------|-------------------------|
| Rust | 75 | 2015-06-25 12:00 AM | 12,555.00 | | 2264 | University Inn | Hotel |
| Rust | | 2015-06-25 12:00 AM | 2,000.00 | | 2266 | University Inn Parking | Hotel |
| Rust | 63 | 2015-03-02 12:00 AM | 23,543.00 | | 1154623 | Hilltop Retail | Retail |
| Rust | 1 | 2015-03-09 12:00 AM | 513,852.00 | | 3020139 | Hilltop Condos | Multifamily Housing |
| Rust | | 2015-03-10 12:00 AM | 55,121.00 | | 4828379 | Hilltop Offices | Office |
| Rust | 55 | 2015-03-11 12:00 AM | 200,000.00 | | 5233255 | Montessori Day School | K-12 School |
| Rust | | 2015-03-03 12:00 AM | | 1311523 | 1311523 | Lucky University | College/University |
| Rust | 77 | 2015-03-04 12:00 AM | 124,523.00 | 1311523 | 1311524 | Grange Hall | Performing Arts |
| Rust | 43 | 2015-03-05 12:00 AM | 421,351.00 | 1311523 | 1311525 | Biology Hall | Laboratory |
| Rust | 59 | 2015-03-06 12:00 AM | 1,234.00 | 1311523 | 1311526 | Rowling Gym | Fitness Center/Health . |

[View by Tax Lot](#)

The fields mapped to **Tax Lot** are shown under the **Tax Lot tab**

2018 Compliance Cycle 16 tax lots

Jurisdiction Tax Lot ID

1552813

1552813

11160509

11160509

11160509

In this case only one field, Jurisdiction Tax Lot ID, was mapped to the Tax Lot table in the Mapping

In the final Tax Lot table, this Tax Lot ID will be one record and there will be 3 property records associated with it.

Confirm Mapping and Start Matching

Confirm Save Mappings?

Did you review your mappings? It's a good idea to double check your mappings. Once SEED matches your properties and tax lots you cannot undo or edit these mappings.

You have one more chance to review the mapping →

Confirm mappings & start matching

Dismiss

Click **Confirm mappings and start matching** if you are happy with the data mapping

SEED will check to see if any records match (based on the Matching fields defined in Mapping) within the file (or across other files if they have already been imported)

Program checks to see if any records match within the file (such as Address Line 1 or Tax Lot ID)

In this example, using the Sample data, the **matching field** that is common between the two data files, Tax Lot data and the Portfolio Manager data is **Address Line 1**.

Finding inventory matches.

Finding inventory matches for 1 - example-data-ESPM-UBID-NoAlerts.xlsx

50% Complete : Matching data

Sub Progress:

75% Complete : Matching Data (1/6): Filtering Duplicate States

Matching Results for file 1 - example-data-ESPM-UBID-NoAlerts.xlsx

- Current cycle: 2018 Compliance Cycle
- Total rows in the import file: 14
- New properties: 1
- Merged properties against existing records: 13
- Merged tax lots against existing records: 9
- Ignored tax lot duplicates within the import file: 7

The program reports the results of the matching.

Add another file takes you back to the **Upload Your Data** dialog box.

View my properties takes you **Inventory List view**

Add another file

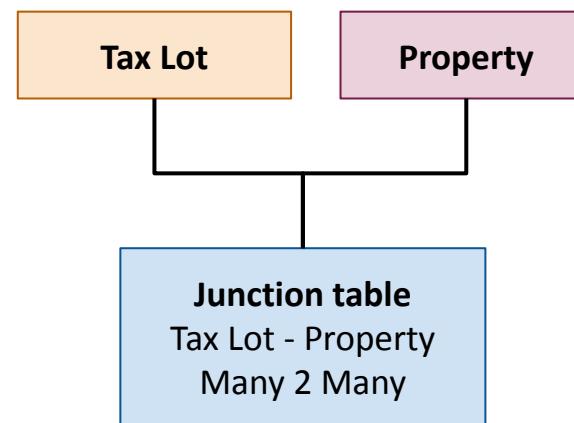
View my properties

Dismiss

Hand Pairing Tax Lot and Property records

Pairing records between Tax Lot and Property tables

- Records are “paired” between Tax Lot and Property tables in the Junction table based on matching fields



Viewing and changing the data pairing is in the Data Import view

A screenshot of a web-based application interface titled "2018 Compliance Year (2017 Data)". The page shows a table with the following columns: DATA FILES, DATE IMPORTED, # OF RECORDS, CYCLE, DATA MAPPING, and DATA PAIRING. A red arrow points from the text above to the "DATA PAIRING" button in the last column of the table row.

| DATA FILES | DATE IMPORTED | # OF RECORDS | CYCLE | DATA MAPPING | DATA PAIRING |
|----------------------------|------------------------|--------------|----------------------------------|------------------------------|------------------------------|
| example-building-List.xlsx | 02/02/2018 04:38:06 PM | 11 | 2018 Compliance Year (2017 Data) | Data Mapping | Data Pairing |

Hand Pairing Tax Lot and Property records

In the Data Sets view, for any imported file, click the Data Pairing button to view the automatic pairing or changing the pairing (pair or unpair records) by hand

Data Pairing

Select the Cycle for the desired data

View options

- Show All
- Show Paired
- Show Unpaired

Select table to view on the left hand side; the other table will display on the right hand side

Property

| ADDRESS LINE 1 (PROPERTY) | PM PROPERTY ID | PAIRED |
|---------------------------|----------------|--------|
| 20 Tenth Street | 1311525 | 1 |
| 2660 Welstone Ave NE | 4828379 | 1 |
| 521 Elm Street | 5233255 | 3 |
| 295444 Moser Lane | 6798444 | |
| 2700 Welstone Ave NE | 1154623 | 1 |
| 93029 Wellington Blvd | 1311527 | 2 |
| 93031 Wellington Blvd | 1311528 | 2 |
| 12 Ninth Street | 1311524 | |
| 35 Tenth Street | 1311526 | 1 |
| 11 Ninth Street | 1311523 | 1 |
| 50 Willow Ave SE | 2264 | 1 |
| 295302 Moser Lane | 6798215 | |
| 2655 Welstone Ave NE | 3020139 | 1 |

Showing 13 Properties (3 unpaired)

Tax Lot

| ADDRESS LINE 1 (TAX LOT) | JURISDICTION TAX LOT ID |
|--------------------------|-------------------------|
| 11 Ninth Street | 24651456 |
| 35 Tenth Street | 1311526 |
| 11 Ninth Street | 1311523 |
| 530 Elm Street | 33366148 |
| 521 Elm Street | 5233255 |
| 94000 Wellington Blvd | 23810533 |
| 93029 Wellington Blvd | 1311527 |
| 93031 Wellington Blvd | 1311528 |
| 521 Elm Street | 33366555 |
| 521 Elm Street | 5233255 |
| 525 Elm Street | 33366125 |
| 521 Elm Street | 5233255 |
| 050 Willow Ave SE | 1552813 |
| 50 Willow Ave SE | 2264 |
| 93029 Wellington Blvd | 13334485 |
| 93029 Wellington Blvd | 1311527 |
| 93031 Wellington Blvd | 1311528 |
| 39929 Ranch 99 Road | 55039309 |

Drag Property here to pair with this Tax Lot

Unpaired property records

Unpaired Tax Lot record

Tax Lot record

Property records paired to the Tax Lot record

Click Pairing Settings to select the fields to display for both tables

Uncheck this X to unpair the records

Showing 11 Tax Lots (2 unpaired)

Hand Pairing Tax Lot and Property records

The Pairing Settings view allows you to select the fields from each table (Property and Tax Lot) to view in the Pairing screen

Check the fields to view for each table

Only the fields mapped to the specific table will be shown for each table

Pairing Settings

Properties

| Column Name |
|---------------------------|
| Address Line 1 (Property) |
| PM Property ID |
| Custom ID 1 (Property) |
| PM Parent Property ID |
| Jurisdiction Property ID |
| UBID |
| Address Line 2 (Property) |
| City (Property) |
| State (Property) |
| Postal Code (Property) |

Tax Lots

| Column Name |
|--------------------------|
| Address Line 1 (Tax Lot) |
| Jurisdiction Tax Lot ID |
| Custom ID 1 (Tax Lot) |
| Address Line 2 (Tax Lot) |
| City (Tax Lot) |

Main Screen - List Views

- Cycle: Select the **Cycle** data is associated with
- Tabs: **View by Property** and **View by Tax Lot**

SEED PLATFORM™ Organization LBNL 302 +

Select Actions to act on records

Select the Cycle

Properties

Properties List List Settings Reports

Actions ▾ Filter by label: Add a label AND OR EXCLUDE Clear Labels Clear Filters

Cycle: 2018 Compliance Cycle

Two tabs • Property • Tax Lots

List Settings Profile: Property List View

Number of Property records for this cycle 13 properties

View by Property View by Tax Lot

PM Property ID Jurisdiction Tax Lot ID Address Line 1 Property Name Property Type Gross Floor Area ENERGY STAR Score

| | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 | Property Name | Property Type | Gross Floor Area | ENERGY STAR Score |
|---|----------------|-------------------------|-----------------------|-----------------------|---------------------------|------------------|-------------------|
| + | 1311527 | 13334485; 23810533 | 93029 Wellington Blvd | East Computing Hall | College/University | 45324 | 34 |
| + | 1311523 | 24651456 | 11 Ninth Street | Lucky University | College/University | | |
| + | 1311526 | 24651456 | 35 Tenth Street | Rowling Gym | Fitness Center/Health ... | 1234 | 59 |
| + | 2264 | 1552813 | 50 Willow Ave SE | University Inn | Hotel | 12555 | 75 |
| + | 5233255 | 33366125; 33366148; ... | 521 Elm Street | Montessori Day School | K-12 School | 200000 | 55 |

Click + to see related records from the other tab

Click on i to go to Detailed record view

Toggle checkmark on and off to select records for Actions

This icon will link to Notes for the record

Property & Tax Lots - List View

View by Property

“Collapsed” view shows all associated records from the tax lot table separated by semicolons

| Cycle: | 2018 Compliance Cycle | Address from the Property table | | | | | | Address from the Tax Lot table | |
|---|-----------------------|---------------------------------------|-------------------------------------|----------------|-------------------------|---------------------------|---------------------------|--------------------------------|-------------------|
| | | View by Property | View by Tax Lot | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Property) | Address Line 1 (Tax Lot) | Property Type | ENERGY STAR Score |
| Select the Cycle for the data to view | 2018 Compliance Cycle | | | | | | | | |
| PM Property ID can be pinned to the left side of the grid | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 5233255 | 33366125; 33366148; ... | 521 Elm Street | 521 Elm Street; 525 El... | K-12 School | 55 |
| Click the + icon to “expand” the view to show data from the associated Tax Lots | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 6798215 | | 295302 Moser Lane | | Library | 88 |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 33366148 | | 530 Elm Street | | |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 33366555 | | 521 Elm Street | | |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 33366125 | | 525 Elm Street | | |

View by Tax Lot

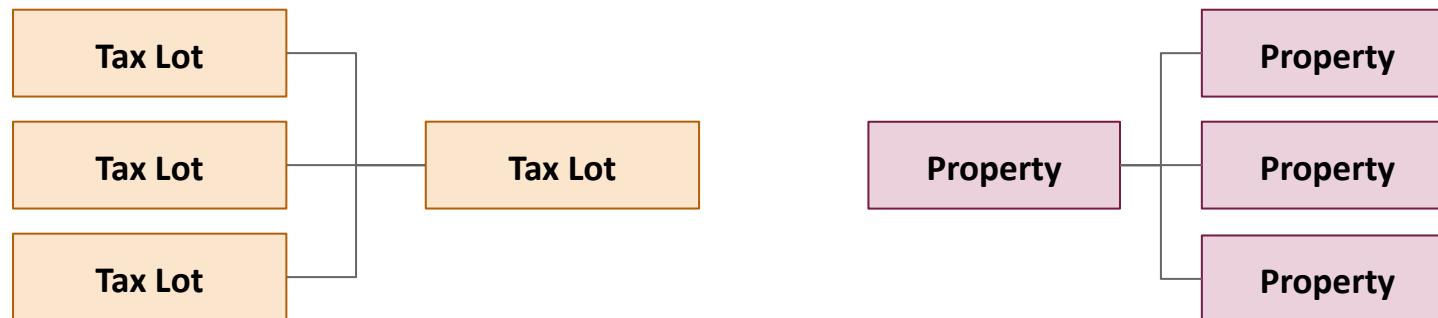
“Collapsed” view shows all associated records from the property table separated by semicolons

| Cycle: | 2018 Compliance Cycle | Address from the Tax Lot table | | | | | | Address from the Property table | |
|--|-----------------------|---------------------------------------|-------------------------------------|-------------------------|-------------------------|--------------------------|--------------------------------|---------------------------------|-----------|
| | | View by Property | View by Tax Lot | Jurisdiction Tax Lot ID | PM Property ID | Address Line 1 (Tax Lot) | Address Line 1 (Property) | Taxable Sf | Tax Class |
| Select the Cycle for the data to view | 2018 Compliance Cycle | | | | | | | | |
| Jurisdiction Tax lot ID can be pinned to the left side of the grid | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 24651455 | 1311525 | | 20 Tenth Street | | |
| Click the + icon to “expand” the view to show data from the associated Property (in this case Portfolio Manager) records | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 24651456 | 1311523; 1311524; 13... | 11 Ninth Street | 11 Ninth Street; 12 Ninth S... | 45135 | 2 |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 1311523 | | 11 Ninth Street | | |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 1311526 | | 35 Tenth Street | | |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | 1311524 | | 12 Ninth Street | | |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 33366125 | 5233255 | 525 Elm Street | 521 Elm Street | 954652 | 3 |
| | | + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 33366148 | 5233255 | 530 Elm Street | 521 Elm Street | 154623 | 1 |

Hand Merging / Pairing Records

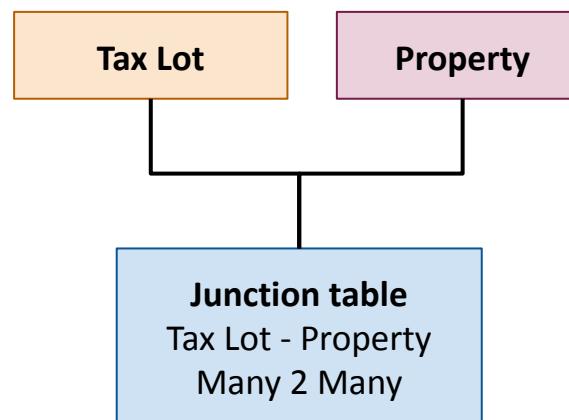
Merging (matching):

- Records are merged within the same table (Tax Lot or Property) based on matching fields



Pairing:

- Records are “paired” between Tax Lot and Property tables in the Junction table based on matching fields



Hand Merging Records

Merging

The hand merging functionality is in the **Inventory List** view

It is possible to merge two records together if the program didn't automatically merge them

Merge Multiple Properties

Resulting Merge

| Address Line 1 | City | ENERGY STAR Score | Gross Floor Area | Owner |
|-----------------|------|-------------------|------------------|------------------|
| 12 Ninth Street | Rust | 77 | 124523 | Lucky University |

Records will be merged together from bottom to top, with the top record having the highest priority. Drag to reorder.

| Address Line 1 | City | ENERGY STAR Score | Gross Floor Area | Owner |
|-----------------|------|-------------------|------------------|------------------|
| 12 Ninth Street | Rust | 77 | 124523 | Lucky University |
| 11 Ninth Street | Rust | | | Lucky University |

Step 3:

Reorder the records if needed for final merge result

Cancel

Merge

Actions ▾ Filter by label: Add a label

- Merge Selected
- Delete Selected
- Export Selected
- Add/Remove Labels
- Data Quality Check
- Email
- Run Analysis (beta)
- Geocode Selected
- Decode UBID/ULID for Selected
- Only Show Populated Columns

| Property ID | Address Line 1 |
|-------------|-----------------------|
| 1311525 | 2660 Welstone Ave NE |
| 1311524 | 2655 Welstone Ave NE |
| 1311523 | 93031 Wellington Blvd |
| | 93029 Wellington Blvd |
| | 35 Tenth Street |
| | 20 Tenth Street |
| | 12 Ninth Street |
| | 11 Ninth Street |

Step 2:

Select the **Merge Selected** Action

Step 1:

In Inventory List view
Select records to hand merge (by clicking on the checkmark to the left of the record)

Step 4:

You will now see only the one Main record in the Inventory List view

View by Property View by Tax Lot

| PM Property ID | Address Line 1 |
|----------------|------------------|
| 1311524 | 12 Ninth Street |
| 1311525 | 20 Tenth Street |
| 1311526 | 35 Tenth Street |
| 2264 | 50 Willow Ave SE |

Hand Un-Merging Records

Merged records can be viewed in the Inventory Detail view

It is possible to un-merge records (one at a time) in the **Inventory Detail view**

The screenshot shows the 'Property Detail' view for a property named 'Unknown'. The 'Actions' dropdown menu is open, and the 'Unmerge Last' option is highlighted. A modal dialog titled 'Unmerge Properties' asks if the user is sure they want to unmerge the properties. The 'Confirm' button is highlighted.

These two records were merged automatically by the program into one Main record

| | Main | Rust | Rust | Rust |
|-----------------------------|------|---------------------|---------------------|------|
| Detail Fields | | | | |
| Update with BuildingSync | | | | |
| Export BuildingSync | | | | |
| Export BuildingSync (Excel) | | | | |
| Add/Remove Labels | | | | |
| Run Analysis (beta) | | | | |
| Unmerge Last | | | | |
| Merge and Link Matches | | | | |
| Only Show Populated Columns | | | | |
| ENERGY STAR Score | 77 | 77 | 77 | 77 |
| 0 AM | | 2015-03-04 12:00 AM | 2015-03-03 12:00 AM | |
| 124,523.00 | | | | |

Unmerging will make these records into two separate records in the Inventory List view

The screenshot shows the 'View by Property' section of the inventory list. It displays two separate records for PM Property ID 1311523 and 1311524, each associated with a different address and jurisdiction tax lot ID.

| PM Property ID | Address Line 1 | Jurisdiction Tax Lot ID |
|----------------|-----------------|-------------------------|
| 1311523 | 11 Ninth Street | 24651456 |
| 1311524 | 12 Ninth Street | 24651456 |

Data Quality: Run from Inventory List

Step 2: Click the Data Quality Check option in Actions

Step 1: Check the records to run the Data Qualit check on

Properties

Properties List Properties List (beta) Column List Profiles

Actions ▾ Filter by label: Add a label

| JURISDICTION TAX LOT ID | PM PROPERTY ID | CUSTOM ID | FIELD | ERROR MESSAGE |
|-------------------------|----------------|-----------|--------------------------|---|
| 24651455 | -- | -- | Address Line 1 (Tax Lot) | Address Line 1 (Tax Lot) is null |
| -- | 1154623 | -- | Site EUI | Site EUI [1202.0] > 1000.0 |
| -- | 3020139 | -- | ENERGY STAR Score | ENERGY STAR Score [1] < 10 |
| -- | 3020139 | -- | Gross Floor Area | Gross Floor Area [513852.0] > 50000.0 |
| -- | 4828379 | -- | ENERGY STAR Score | ENERGY STAR Score is required and is None |
| -- | 4828379 | -- | Gross Floor Area | Gross Floor Area [55121.0] > 50000.0 |
| -- | 4828379 | -- | Site EUI | Site EUI is required and is None |
| -- | 5233255 | -- | Gross Floor Area | Gross Floor Area [200000.0] > 50000.0 |
| -- | 5233255 | -- | Site EUI | Site EUI [1358.0] > 1000.0 |
| -- | 1311523 | -- | ENERGY STAR Score | ENERGY STAR Score is required and is None |

Export Close

Lvd Rust 34

The Data Quality Results can be exported to a CSV file

Labels are automatically added to the problem records. If those records are fixed and reimported, and the DQ check is rerun, the labels will be automatically removed if the program doesn't detect the data problem

Step 3: The Data Quality Results screen is displayed

Filter by label: Add a label

Cycle: 2018 Compliance Cycle

View by Property View by Address

PM Property

1311525 24651455 20 Tenth St

DQ: Alert: No meters
DQ: ENERGY STAR Score < 10, > 100
DQ: Gross Floor Area < 50000
DQ: Site EUI < 10, > 1000

| A | B | C | D | E | F | G |
|-----------------|----------------------|----------------|------------|--------------------------|---|----------|
| 1 Table | Address Line 1 | PM Property ID | Tax Lot ID | Field | Error Message | Severity |
| 2 TaxLotState | | | 24651455 | Address Line 1 (Tax Lot) | Address Line 1 (Tax Lot) is null | error |
| 3 PropertyState | 2700 Welstone Ave NE | 1154623 | | Site EUI | Site EUI [1202.0] > 1000.0 | error |
| 4 PropertyState | 2655 Welstone Ave NE | 3020139 | | ENERGY STAR Score | ENERGY STAR Score [1] < 10 | error |
| 5 PropertyState | 2655 Welstone Ave NE | 3020139 | | Gross Floor Area | Gross Floor Area [513852.0] > 50000.0 | error |
| 6 PropertyState | 2660 Welstone Ave NE | 4828379 | | ENERGY STAR Score | ENERGY STAR Score is required and is None | error |
| 7 PropertyState | 2660 Welstone Ave NE | 4828379 | | Gross Floor Area | Gross Floor Area [55121.0] > 50000.0 | error |
| 8 PropertyState | 2660 Welstone Ave NE | 4828379 | | Site EUI | Site EUI is required and is None | error |

List Grid Functionality

The grid used in the Inventory List view has many features
(explained in detail on the following pages)

- **Filter** -- enter filter criteria in the blank box under the column name
- **Sort** -- click in the middle of the column header to see the small up and down arrows to sort ascending and descending; alternatively select the right menu arrow in the column to see the Sort Ascending, Sort Descending and Remove Sort options
- **Select fields to view** -- click on the right menu arrow in an individual field to turn it on or off, or click on List Settings to see a list of columns to display or hide
- **Field order by dragging columns** -- click in the middle of a column header, hold the left mouse button down, and drag it right or left to place it the desired order
- **Pin columns** -- click on the right menu arrow in an individual column to see the Pin Left, Pin Right and Unpin options for that column
- **Resize columns** - click on the right hand side of the column header, hold the left mouse button down, and drag the column edge right and left to the desired width
- **Fixed column headers** -- the column headers are fixed, so scrolling down keeps the column headers visible.
- **Single page with all the data** -- All the records for a view are loaded at once -- there is no data view “pagination

Filter

Filter by Label shows only labels that are applied to records

Properties

Properties List Properties List (beta) Column List Profiles Reports Cross-Cycles Map

Actions ▾ Filter by label Add a label

AND OR EXCLUDE Clear Labels Clear Filters

Cycle: 2018 Compliance Cycle DQ: Low / No ENERGY STAR Score

Column List Profile: Property List View

DQ: Low / No Site EUI

Can do AND, OR or EXCLUDE filters by label

View by Property

View by Tax Lot

14 properties

| | PM Property ID | Address 1 | City | ENERGY STAR Score | PM Generation Date | Gross Floor Area (ft ²) | Jurisdiction Tax Lot ID | Assess |
|---|----------------|-------------------|------|-------------------|---------------------|-------------------------------------|-------------------------|--------|
| ✓ | 6798444 | 295444 Moser Lane | Rust | 72 | 2015-03-12 12:00 AM | 15,533.00 | | |
| ✓ | 6798215 | 295302 Moser Lane | Rust | 88 | 2015-03-12 12:00 AM | 24,523.00 | | |

Numeric fields can have expressions

| Gross Floor Area |
|------------------|
| >=25000,<100000 |
| 51764 |
| 51843 |
| 59188 |
| 61650 |
| 64123 |
| 67425 |
| 68177 |
| 71068 |
| 73993 |

Text columns can be filtered

| Address Line 1 (Property) |
|-------------------------------|
| buchanan |
| 30326 W Buchanan Lane |
| 31553 S Buchanan Road |
| 50518 SW Buchanan Lane |
| 112019 S Buchanan Court |
| 137291 SW Buchanan Highway |
| 000023255 NW Buchanan Highway |
| 000059001 NE Buchanan Way |
| 0000224905 E Buchanan Loop |

Enter values into the input boxes at the top of the field in order to filter the data by those values

The program will then only display the records with values based on the filter criteria

The filter feature supports multiple filters separated by commas.

| Building Address | Building Floor Area |
|-----------------------|--|
| | >10000,<200000 × |
| 39929 Ranch 99 Road | 23543 |
| 521 Elm Street | 24523 |
| 93029 Wellington Blvd | 45324 |
| 525 Elm Street | 55121 |
| 050 Willow Ave SE | 124523 |

Date strings can be either

- a year (2016)
- a year and a month (2016-05)
- a full date with no time (2016-05-31)

| | |
|--|--|
| Text/Numeric Case-Insensitive Contains | abc 5 |
| Text/Numeric Exact Match | "" "abc" = 5 |
| Text/Numeric Not Exact Match | != "" != "abc" != 5 |
| Numeric Range | > 5 >= 5 < 5 <= 5 |
| Text/Numeric Combination | 123, street |
| Date Equality | 2016 2016-05 2016-05-31 = 2016 = 2016-05 |
| Date Inequality | != 2015 != 2016-10-01 |
| Date Range | >= 2016 < 2016-05 |
| Date Combination | 2016, >= 2016-10-01 >= 2015, < 2017 |

Filter

Most of the lists in SEED (Mapping, Matching, Inventory) allow you to sort and filter on the data in the columns by entering the filter values in the input box below the field (column name)

SEED supports filtering using “expressions” for both text and numeric data

- “” double quotes for null (empty) string
- !”” for non-null (non-empty) string
- Enter a value to show all records that contain that value:
typing **condo** will show results for **CONDO** and **COMMERCIAL CONDO**
- Enter a value surrounded by double quotes (“”) for an exact match (including case):
typing “**CONDO**” will show results for only uppercase **CONDO**
- Operators: =, !=, <, <=, >, >=
 - **>100** is greater than 100
 - **!0** is not equal to 0
- Multiple expressions should be separated by commas.
■ **>1984,<1990** is greater than 1984 and less than 1990

| Use Description |
|------------------|
| CONDO |
| CONDO |
| COMMERCIAL CONDO |
| COMMERCIAL CONDO |
| CONDO |

| Use Description |
|-----------------|
| "CONDO" |
| CONDO |
| CONDO |
| CONDO |
| CONDO |

| ENERGY STAR Score | Site EUI |
|------------------------|---------------|
| >=50,<=75 | >20 |
| 75 | 51.5 |
| 59 | 74.4 |
| 61 | 78.9 |
| 75 | 78.9 |
| 50 | 88.1 |
| 71 | 91.2 |

Add as many filters as needed, in this case the filter is show only records with ENERGY STAR Score data between 50 and 75, and with a Site EUI greater than 20

Filter Using Labels

Multiple labels can be applied to the filter box and filter operators (AND, OR, and EXCLUDE) can be applied to the filter

- Filter Operators
 - AND == When filtering on multiple labels, displays records that have all the labels selected in the Filter by Label box
 - OR == When filtering on multiple labels, displays records that have at least one of the labels selected in the Filter by Label box
 - EXCLUDE == Displays all records that DO NOT have the label or labels in the Filter by Label box

Actions ▾ Filter by label: DQ: Low / No ENERGY STAR Score × Add a label AND OR EXCLUDE Clear Labels Clear Filters

Cycle: 2018 Compliance Cycle Column List Profile: Property List View

| View by Property | | View by Tax Lot | | | | | | | | |
|------------------|--|-----------------|----------------------|------|-------------------|---------------------|-------------------------------------|-----------------------------|------|--|
| | | PM Property ID | Address 1 | City | ENERGY STAR Score | PM Generation Date | Gross Floor Area (ft ²) | Jurisdiction Tax Lot ID (…) | Ass | |
| | | 3020139 | 2655 Welstone Ave NE | Rust | 1 | 2015-03-09 12:00 AM | 513,852.00 | 11160509 | 1116 | |

 Clicking on the “information” icon displays the Detail view which shows all the labels associated with that record.

Property : 93031 Wellington Blvd

Add/Remove Labels Labels: DQ: Low or No ENERGY STAR Score

| FIELD | MASTER |
|---------------------------|-----------------------|
| PM Property ID | 1311528 |
| Address Line 1 (Property) | 93031 Wellington Blvd |
| Use Description | Residence |
| ENERGY STAR Score | 1 |

Filter Using Labels: AND / OR

Filter Operator == **AND**: Shows records that have all of the labels in the Filter by Label box

In this case, it shows the one record that has both no value for ENERGY STAR Score and Use Description set to College/University

The screenshot shows the 'Filter by label' section with two selected filters: 'DQ: Low or No ENERGY STAR Score' and 'College/University'. The 'AND' button is highlighted with a red arrow pointing to it. The results table shows one row where both criteria are met: PM Property ID 1311523, Address Line 1 11 Ninth Street, ENERGY STAR Score is empty, and Use Description is 'College/University'.

| PM Property ID | Address Line 1 (Property) | Site EUI | ENERGY STAR Score | Use Description | Address Line 1 (Tax Lot) | Property Name |
|----------------|---------------------------|----------|-------------------|--------------------|--------------------------|------------------|
| 1311523 | 11 Ninth Street | | | College/University | 11 Ninth Street | Lucky University |

Filter Operator == **OR**: Shows records that have at least one of the labels in the Filter by Label box

In this case, it shows the 2 records that have Use Description set to College/University and the 4 records that have low or no ENERGY STAR Score, including the 1 record that fits both criteria

The screenshot shows the 'Filter by label' section with the same two filters selected. The 'OR' button is highlighted with a red arrow pointing to it. The results table shows five rows where either the Use Description is 'College/University' or the ENERGY STAR Score is empty: Row 1 (PM Property ID 1311527, Score 34), Row 2 (PM Property ID 1311523, Score 45), Row 3 (PM Property ID 3020139, Score 652.3), Row 4 (PM Property ID 4828379, Score 1), and Row 5 (PM Property ID 1311528, Score empty).

| PM Property ID | Address Line 1 (Property) | Site EUI | ENERGY STAR Score | Use Description | Address Line 1 (Tax Lot) | Property Name |
|----------------|---------------------------|----------|-------------------|---------------------|--------------------------|---------------------|
| 1311527 | 93029 Wellington Blvd | 45 | 34 | College/University | 93029 Wellington Blvd... | East Computing Hall |
| 1311523 | 11 Ninth Street | | | College/University | 11 Ninth Street | Lucky University |
| 3020139 | 2655 Welstone Ave NE | 652.3 | 1 | Multifamily Housing | 2655 Welstone Ave NE | Hilltop Condos |
| 4828379 | 2660 Welstone Ave NE | | | Office | 2655 Welstone Ave NE | Hilltop Offices |
| 1311528 | 93031 Wellington Blvd | | | Residence | 93029 Wellington Blvd... | International House |

Filter Using Labels: EXCLUDE

Filter Operator == EXCLUDE: Shows records that have **NONE** of the labels in the Filter by Label box

Actions ▾ Filter by label: DQ: Low or No ENERGY STAR Score × College/University × Add a label AND OR EXCLUDE Clear Labels Clear Filters

Cycle: 2018 Compliance Cycle ▾ Column List Profile: Property List View

View by Property View by Tax Lot

7 properties

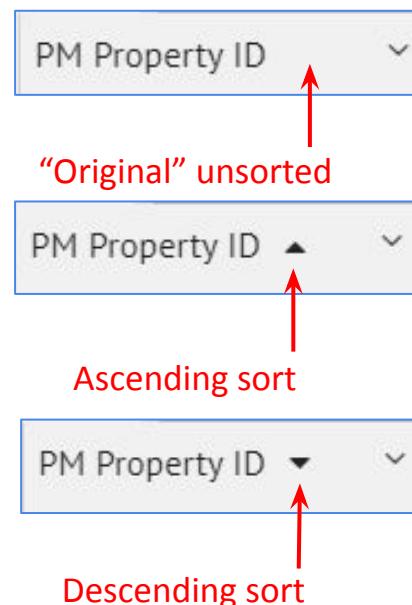
| | PM Property ID | Address Line 1 (Property) | Site EUI | ENERGY STAR Score | Use Description | Address Line 1 (Tax Lot) | Property Name |
|-------|----------------|---------------------------|----------|-------------------|---------------------------|---------------------------|-----------------------|
| + ✓ ⓘ | 1311526 | 35 Tenth Street | 72 | 59 | Fitness Center/Health ... | 11 Ninth Street | Rowling Gym |
| + ✓ ⓘ | 2264 | 50 Willow Ave SE | 125 | 75 | Hotel | 050 Willow Ave SE | University Inn |
| + ✓ ⓘ | 5233255 | 521 Elm Street | 1358 | 55 | K-12 School | 521 Elm Street; 525 EL... | Montessori Day School |
| + ✓ ⓘ | 1311525 | 20 Tenth Street | 84 | 43 | Laboratory | 11 Ninth Street | Biology Hall |
| ✓ ⓘ | 6798215 | 295302 Moser Lane | 942 | 88 | Library | | City Library |
| + ✓ ⓘ | 1311524 | 12 Ninth Street | 219 | 77 | Performing Arts | 11 Ninth Street | Grange Hall |
| + ✓ ⓘ | 1154623 | 2700 Welstone Ave NE | 1202 | 63 | Retail | 2655 Welstone Ave NE | Hilltop Retail |

You can sort in two different ways

- Up/down arrow
- Column menu on right

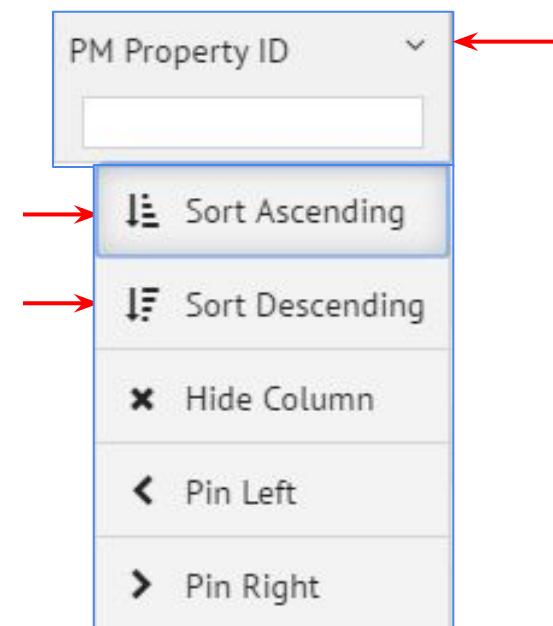
If you click to the right of the field name, you can toggle between

- Ascending
- Descending
- “original” unsorted



The down arrow to the right of the field shows a menu of sort options, including Remove sort

Using this Sort option allows hierarchical sorting



Pin Columns

Pinning columns left and right

- Individual columns can be pinned either to the right or the left
- Multiple columns can be pinned

If a column is already pinned, click on the field right hand pulldown to select the **Unpin** option

The down arrow to the right of the field name shows a menu of sort options, including **Hide Column**

List Settings also has feature to pin columns to the right side

Save Column List Profile

Column List Profiles, where fields are selected for display, can be saved by “name”, which enables the creation of combinations of fields that are useful to view for specific data review cases.

There are a few different options for doing this.

- **List View / Actions option**

There is now an option in the Actions pulldown list to “**Only Show Populated Columns**”. This is good way to get started when creating a specifically named List Setting

- **List Settings pages**

In all the List views (for both List and Detail view), there is a new option called “Column List Profile” which allows the currently highlighted fields to be saved to a name, which then appears in a pulldown list in both the List Settings view as well as the Inventory List views.

It is possible to save separate (and multiple) list settings to names for each of these cases:

- View by Property List View
- View by Property Detail View
- View by Tax Lot List View
- View by Tax Lot Detail View

Saved List Settings Profiles are available across Cycles, but can also be made for specific cycles (by naming them appropriately)

The following pages illustrate the way that these options work.

List View - Only Show Populated Columns

List View / Actions option

The “Only Show Populated Columns” option in the Inventory List / Actions pulldown is a good way to get started when defining saved List Settings.

Select the “Only Show Populated Columns” in either the View by Property or View by Tax Lot tabs

Create Settings Profile

| | |
|---|----------------------------|
| Profile Name | Property Default List View |
| <input type="button" value="Cancel"/> <input type="button" value="Create Profile"/> | |

Only Show Populated Columns

This will reset your visible columns and column order to only columns that contain data. Are you sure you want to continue?

| |
|--|
| <input type="button" value="Cancel"/> <input type="button" value="Start"/> |
|--|

Only Show Populated Columns

Found 20 populated columns

| |
|--|
| <input type="button" value="Refresh"/> |
|--|

| Cycle: | 2016 Compliance | List Settings Profile: | Property Default List View |
|-------------------------------------|-------------------------------------|------------------------|----------------------------|
| | | View by Property | View by Tax Lot |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Address Line 1 | Campus |
| | | <input type="text"/> | <input type="text"/> |
| | | Analysis State | City |
| | | <input type="text"/> | <input type="text"/> |
| | | Not Started | false |
| | | Rust | |
| | | 11 Ninth Street | |
| | | Not Started | false |
| | | Rust | |
| | | 12 Ninth Street | |

Properties

| | |
|--|---|
| <input type="button" value="Properties List"/> <input type="button" value="List Setting"/> | |
| <input type="button" value="Actions"/> | <input type="button" value="Filter by label: Add a label"/> |
| <input type="button" value="Merge Selected"/> <input type="button" value="Delete Selected"/> <input type="button" value="Export Selected"/> <input type="button" value="Add/Remove Labels"/> <input type="button" value="Data Quality Check"/> | |
| <input type="button" value="Only Show Populated Columns"/> | |
| <input type="button" value="Energy Star Score"/> <input type="button" value="Site EUI"/> | |

A dialog box appears asking for a name for this new **Settings Profile**. Type in any name that is appropriate. You will be able to refine the fields and change the name later in the List Settings view if needed. Click the **Create Profile** button to save this set of fields under the **Profile Name**

This causes a dialog box to appears which warns that the columns displayed will be reset. Click the **Start** button to continue or the **Cancel** button to return to the List view without starting the action.

When the program has finished determining the populated columns, the number of columns found is displayed.

Click the Refresh button to refresh the browser and see the new fields

These fields are now what is displayed in the List View with the name entered for the **List Settings Profile**.

It will still probably be necessary to refine the fields to be displayed in **List Settings**, but this is a good way to start the process

List View - Column List Profiles

- Displays all possible fields for both Tax Lot and Property
- Tax Lot and Property Column List Profiles can be different
- Tags fields that are in table NOT being viewed
- Changes made here are reflected in the View by Tax Lot tab, and vice versa
- Field display and order are on one screen
- Changes are saved to a Column List Profile (see next page)

Properties

| Properties List | Properties List (beta) | Column List Profiles | Reports | Cross-Cycles | Map |
|-----------------|------------------------|----------------------|---------|--------------|-----|
| | | | | | |

Tax Lots

| Tax Lots List | Tax Lots List (beta) | Column List Profiles | Reports | Cross-Cycles | Map |
|---------------|----------------------|----------------------|---------|--------------|-----|
| | | | | | |

Column Order/Visibility

Column List Profile: Tax Lot Detail Fields

Add Shared Tax Lots

Include in your Tax Lot List all tax lots shared with you.

There are 82 columns of data available to you.

NOTE: ordering of all derived column (%) rows is currently ignored; they will all appear at the end of the list when viewed.

Select columns from the list below to make them appear in your Tax Lot List table. Drag the rows to change the order in which they appear. Pin the rows for them to be left-pinned in the list view.

Enter values to search the list of fields

Shows which fields are pinned left

Can set more fields to be pinned left

Tags fields that are in the **Property** table when in Tax Lot settings, and vice versa

| | Column Name |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Jurisdiction Tax Lot ID |
| <input checked="" type="checkbox"/> | PM Property ID (Property) property |
| <input checked="" type="checkbox"/> | Address Line 1 |
| <input checked="" type="checkbox"/> | Use Description (Property) property |
| <input checked="" type="checkbox"/> | Property Name (Property) property |
| <input checked="" type="checkbox"/> | City |
| <input checked="" type="checkbox"/> | Parcel Owner |
| <input checked="" type="checkbox"/> | Taxable SF |
| <input checked="" type="checkbox"/> | Tax Class |

Column List Profiles

- **List Settings pages**

In all the List Setting views (for both List and Detail view), there is a new option called “List Settings Profile” which allows the currently highlighted fields to be saved to a name, which then appears in a pulldown list in both the List Settings view as well as the Inventory List views.

The screenshot shows the 'Properties' section of the 'Column List Profiles' settings page. At the top, there's a navigation bar with tabs: 'Properties List', 'Properties List (beta)', 'Column List Profiles' (which is highlighted with a red box), 'Reports', 'Cross-Cycles', and 'Map'. Below the navigation is a toolbar with 'Rename', 'New', 'Save' (with a checkmark icon), 'Delete' (with a trash can icon), and 'Map' buttons. A dropdown menu labeled 'Column List Profile:' is set to 'Property List View'. On the left, there's a 'Column Order/Visibility' section with a checkbox for 'Include in your Properties List all properties shared with you.' and a note that 82 columns are available. The main area contains a table of columns with checkboxes and icons for pinning. Red annotations provide instructions: a red arrow points from the 'Column List Profiles' link in the 'Properties' section to the 'Column List Profiles' tab; another red arrow points to the 'Save' button; a third red arrow points to the 'New' button; a fourth red arrow points to the 'Address 1' column in the table; and a fifth red arrow points to the text 'Check new fields you want to add to the List Settings Profile'.

Properties

Column List Profiles

To edit an existing Column List Profile, or to make a new one, click the Column List Profiles link on either the Properties or Tax Lot List View

Properties

Properties List Properties List (beta) Column List Profiles Reports Cross-Cycles Map

Column Order/Visibility

Column List Profile: Property List View

Rename New

Save Delete

Add Shared Properties

Include in your Properties List all properties shared with you.

There are 82 columns of data available to you.

NOTE: ordering of all derived column (⌚) rows is currently ignored; they will all appear at the end of the list when viewed.

Select columns from the list below to make them appear in your Property List table. Drag the rows to change the order in which they appear. Pin the rows for them to be left-pinned in the list view.

| | Column Name |
|---|-------------------|
| ✓ | PM Property ID |
| ✓ | Address 1 |
| ✓ | City |
| ✓ | ENERGY STAR Score |

Check new fields you want to add to the List Settings Profile
Uncheck fields you want to remove from the List Settings Profile

Click **Save** to save the changes to the current **List Setting Profile**

Click **New** to save the newly selected fields to a new **List Settings Profile**

List View – List Settings – Reorder Columns

| <input checked="" type="checkbox"/> | Column Name |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | PM Property ID |
| <input checked="" type="checkbox"/> | Jurisdiction Tax Lot ID tax lot |
| <input checked="" type="checkbox"/> | Address Line 1 (Property) |
| <input checked="" type="checkbox"/> | Property Name |
| <input checked="" type="checkbox"/> | Gross Floor Area |
| <input checked="" type="checkbox"/> | ENERGY STAR Score |
| <input checked="" type="checkbox"/> | City (Property) |

Click and hold down the left mouse button, and drag the Column Names around to change the order

| <input checked="" type="checkbox"/> | Column Name |
|-------------------------------------|--|
| | address |
| <input checked="" type="checkbox"/> | Address Line 1 (Property) |
| <input checked="" type="checkbox"/> | Address Line 2 (Property) |
| <input checked="" type="checkbox"/> | Owner Address |
| <input checked="" type="checkbox"/> | Address Line 2 (Tax Lot) tax lot |
| <input checked="" type="checkbox"/> | Address Line 1 (Tax Lot) tax lot |

Type into the input box to filter the list of fields

Adding a checkmark to an unchecked field adds it to the end of the checked fields. It can then be dragged to the desired position

| <input checked="" type="checkbox"/> | Column Name |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Site EUI |
| <input checked="" type="checkbox"/> | Property Type |
| <input checked="" type="checkbox"/> | Year Ending |
| <input checked="" type="checkbox"/> | Custom ID 1 |
| <input checked="" type="checkbox"/> | Address Line 1 (Tax Lot) tax lot |
| <input checked="" type="checkbox"/> | PM Release Date |

List View – Reports Overview

Properties

Properties List Properties List (beta) Column List Profiles Reports Cross-Cycles Map

From either the **Properties** or **Tax Lots Inventory List** view click on **Reports**

Select criteria to graph

Date ranges for reporting based on Cycles

From first date of: 2012 Compliance Year Until last date of: 2012 Compliance Year

X Axis (Energy data)

Y Axis (Building Characteristic)

Click **Update Charts**

The pulldown list shows the Cycles for the organization

X Axis: Site EUI

- Site EUI
- Source EUI
- Weather Norm. Site EUI
- Weather Norm. Source EUI
- Energy Star Score

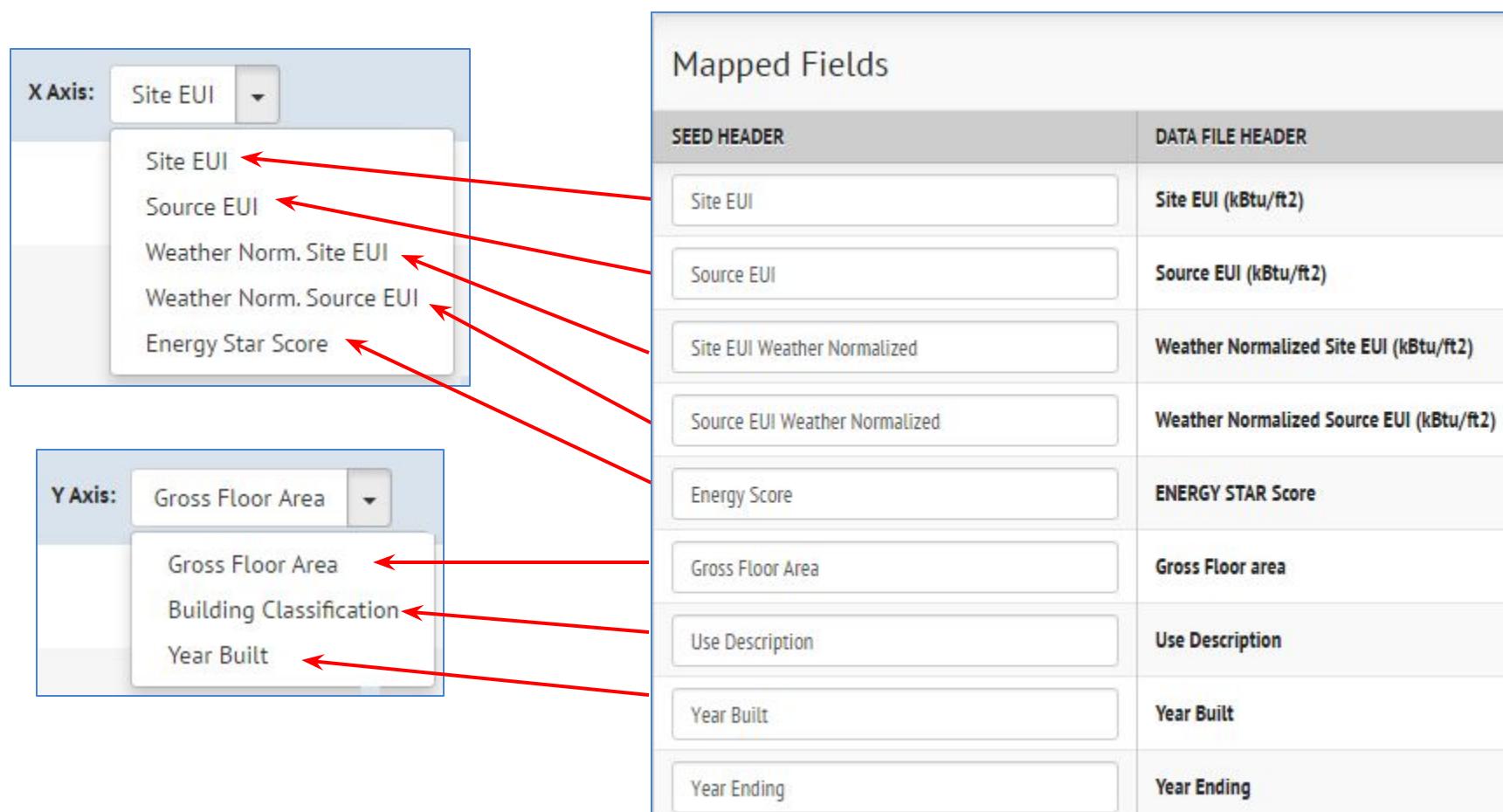
Y Axis: Gross Floor Area

- Gross Floor Area
- Building Classification
- Year Built

These field names must have been used when Mapping data in order to show data in the reports (see the next page for details)

List View – Reports – Field Mapping

You need to map the following fields in order for the reports to work
(Future work will include the ability to select fields that you want to plot so the mapping will not be as critical)



List View – Reports

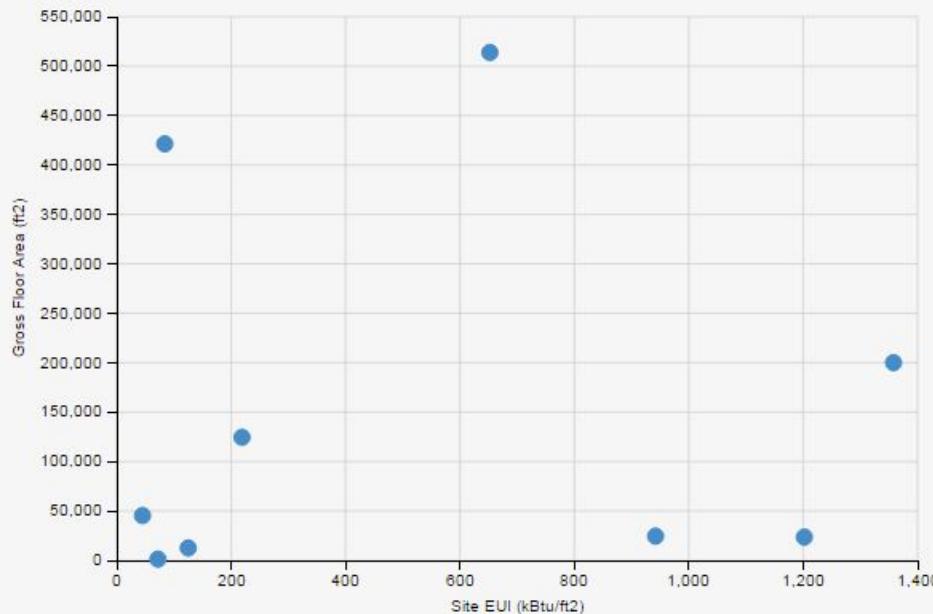
Scatter Plot with all buildings

Bar Graph with Median Values

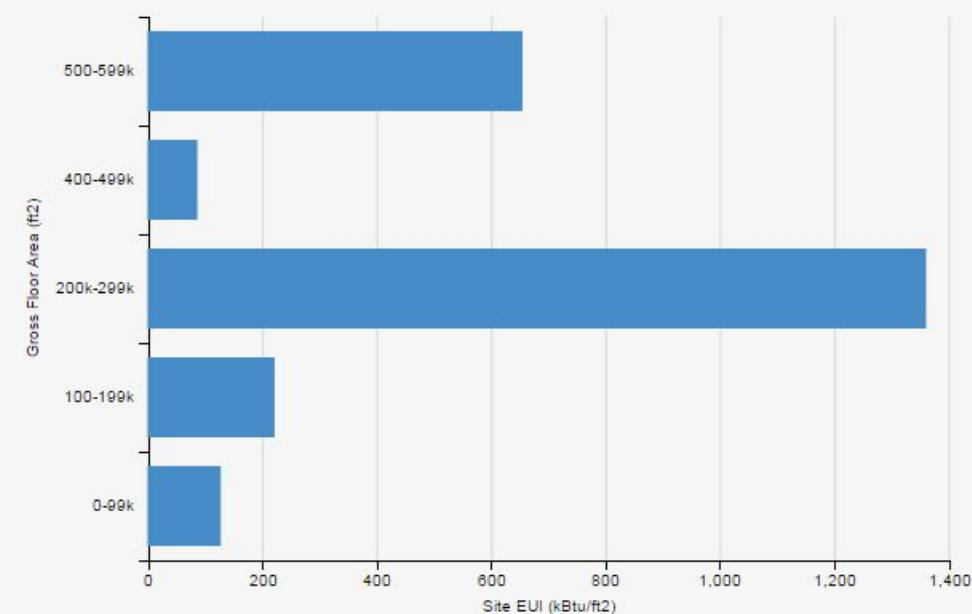
Property Reports

From first date of: 2017 Compliance Until last date of: 2017 Compliance X Axis: Site EUI Y Axis: Gross Floor Area Update Charts

Site Energy Use Intensity vs. Gross Floor Area



Site Energy Use Intensity vs. Gross Floor Area (Aggregated)



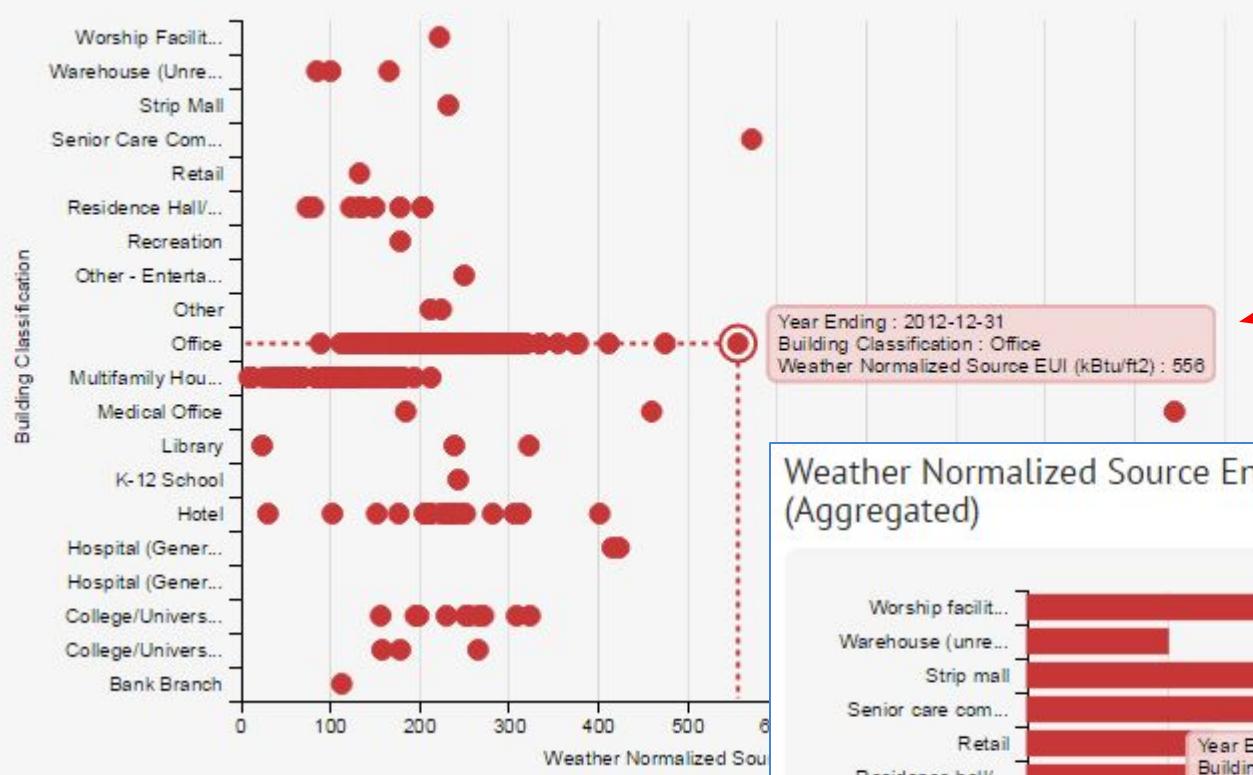
| Year Ending | Properties with Data | Total Properties |
|-------------|----------------------|------------------|
| 2017 | 9 | 12 |

Program reports # data points
actually used for graphs

| Year Ending | Properties with Data | Total Properties |
|-------------|----------------------|------------------|
| 2017 | 9 | 12 |

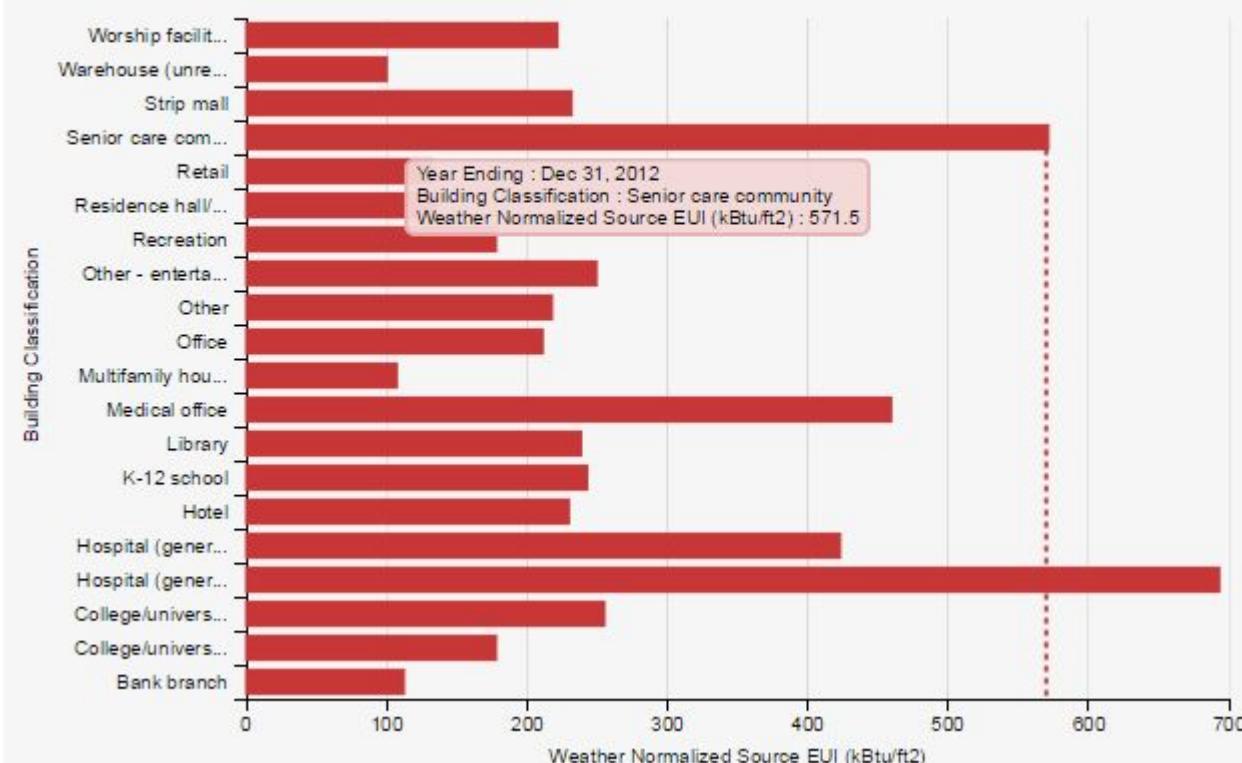
List View – Reports

Weather Normalized Source Energy Use Intensity vs. Building Classification



Mouse over point to display exact data for that point

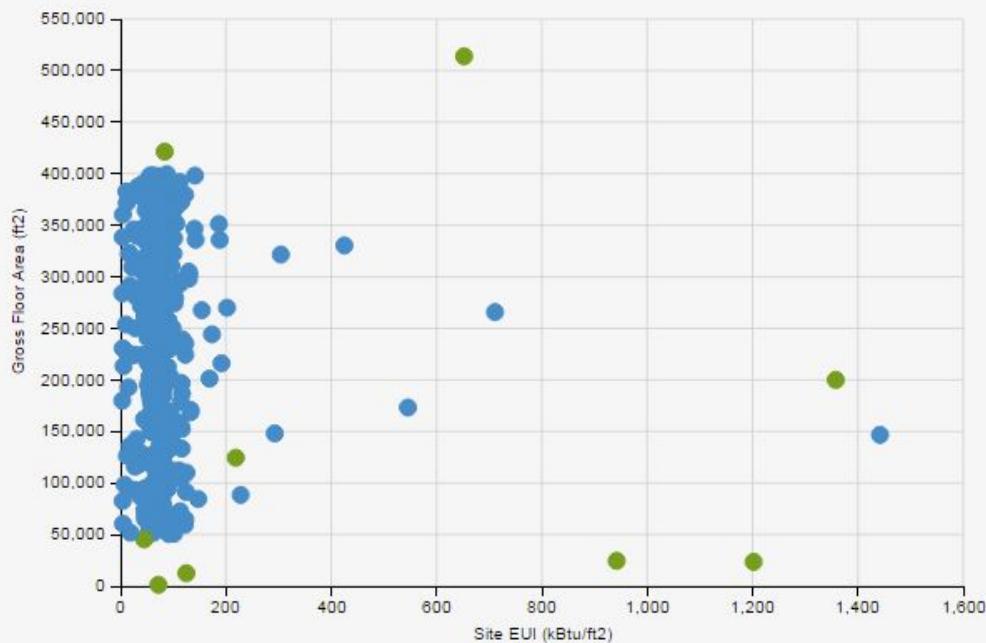
Weather Normalized Source Energy Use Intensity vs. Building Classification (Aggregated)



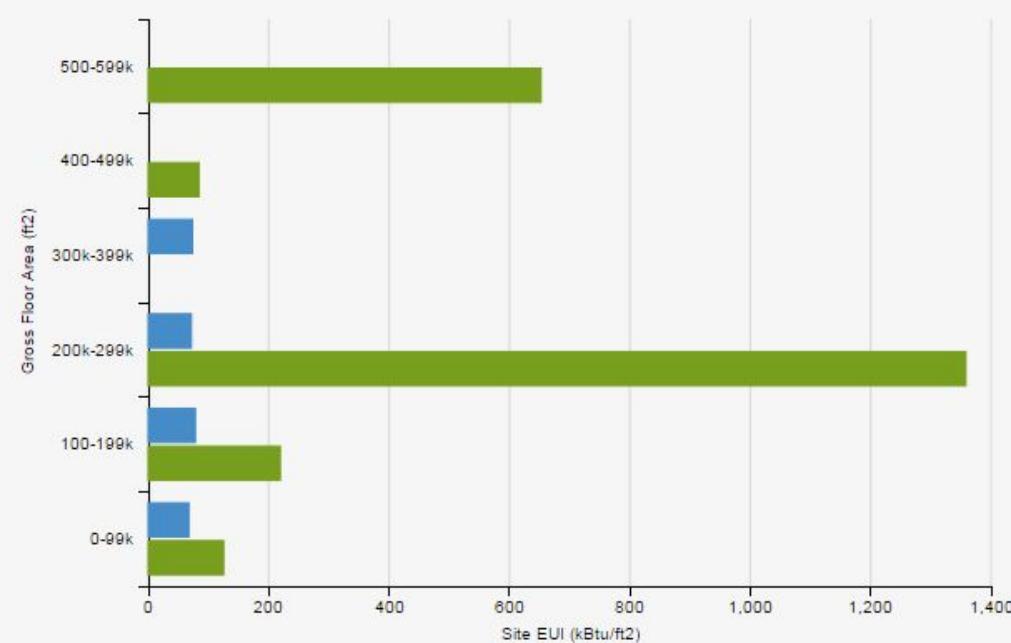
List View – Reports - Multiple Years of Data

**Multiple years of data
(based on Cycles)**

Site Energy Use Intensity vs. Gross Floor Area



Site Energy Use Intensity vs. Gross Floor Area (Aggregated)



Labels - List View

You can add pre-defined labels to records in the Inventory List view using the Actions pulldown list

2 - From the Actions pulldown list, select Add/Remove Labels

| Properties List | | | | |
|---------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------|
| Actions ▾ | | Filter by label: | Add a label | |
| Merge Selected | | | | |
| Delete Selected | | | | |
| Export Selected | | | | |
| Add/Remove Labels | | | | |
| Data Quality Check | | | | |
| Email | | | | |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1154623 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311523 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311524 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311525 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311526 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311527 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1311528 |
| + <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 3020139 |

3 - The Add/Remove Labels dialog box appears. Click the Add button for the label(s) to add

Add/Remove Labels

Create new label gray ▾ **Create label**

Add or remove labels from 2 selected properties

Low or No ENERGY STAR Score **Add**

Missing Data **Add**

Non-Residential **Add**

QC: Number of Buildings missing **Add**

Questionable Report **Add**

Residential **Add**

Update Bldg Info **Add**

**...
A 'Remove' button is shown for tags that are already applied to one or more properties in the current selection**

Done **Cancel**

4 - Click the Done button and that label (or labels) will be added to the selected records

Labels - Adding Labels “on the fly”

You can also define labels “on the fly” from the Inventory List view

In the Property or Tax Lot tab

1. Filter a field or fields -- in this example we are filtering on the **Property Type** field for any value with **college** in the name
2. Select all the records by click the checkbox to the left of the column names
3. Click the **Actions** pulldown list
4. Select the **Add/Remove Labels** choice
5. The **Add/Remove Labels** dialog box appears
6. Type the name of the new label in the **Create new label** box and select the color
7. Click the **Create Label** button
8. The new label is added to the list of Labels
9. Click the **Add** button for the label you just created
10. Click the **Done** button to apply the label to the selected records

The label will be added to all the selected records

You can view the labels for each record in the Building Detail view (*see next page*)

1. Filter by label: Add a label
Property Type: college

2. Actions
Merge Selected
Delete Selected
Export Selected
Add/Remove Labels
Data Quality Check
Email

3. Address Line 1: 11 Ninth Street, 93029 Wellington Blvd
Property Type: College/University
1311527

4. Add/Remove Labels

5. Create new label: College/University
Color: green
Buttons: Create label, Add

6. Add or remove labels from 2 selected
Labels: College/University, Call, Change of Ownership, Compliant

7. Add or remove labels from 2 selected properties
Labels: College/University, Call

8. Done

Detail View - Property & Tax Lot

From the Inventory List view, click the “Information” icon for a record to access the Inventory Detail view.

The screenshot shows the 'View by Property' section of the Inventory List. It displays a table with columns for 'PM Property ID' and other fields. A blue box highlights the 'Information' icon (an info sign) next to the PM Property ID '5233255'. Below the table is a sidebar with various actions: 'Update with BuildingSync', 'Export BuildingSync', 'Export BuildingSync (Excel)', 'Add/Remove Labels', 'Run Analysis (beta)', 'Merge and Link Matches', and 'Only Show Populated Columns'.

The **Property Detail** view will only show fields and data mapped to the Property table

The **Tax Lot Detail** view will only show fields and data mapped to the Tax Lot table

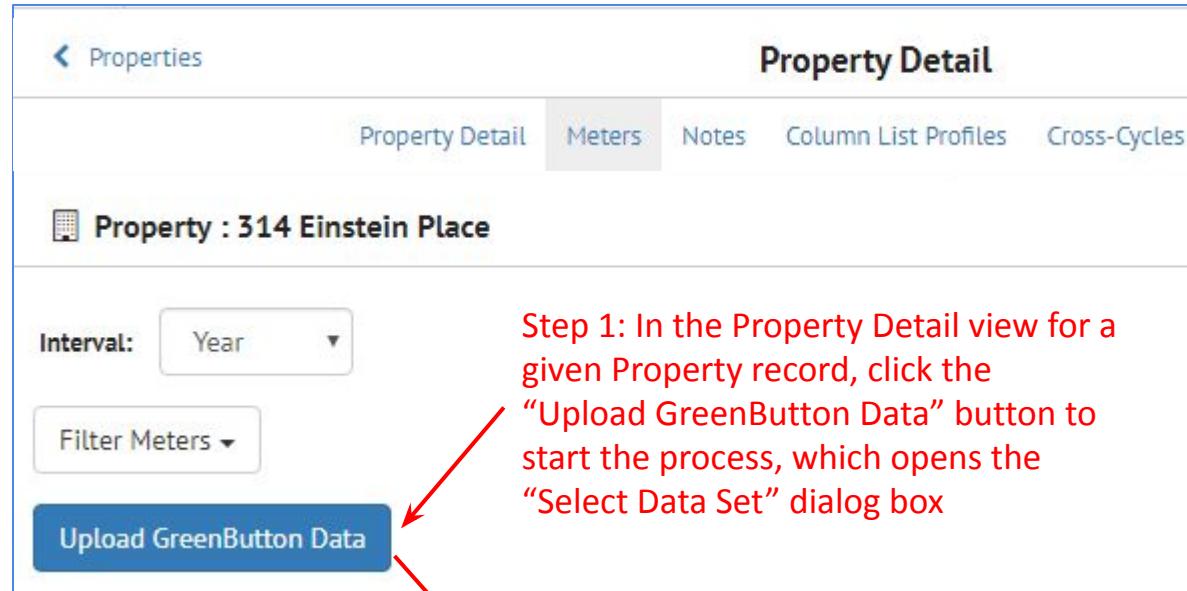
Links to access associated (paired) Tax Lot record detail views

The screenshot shows the 'Property Detail' view. At the top, it displays the property number 'Property : Unknown', the cycle 'Cycle: 2018 Compliance Cycle', and labels 'DQ: Low / No Site EUI'. It also shows the 'Detail Column List Profile: Property Detail Fields'. The main area lists property details: PM Property ID (5233255), Property Name (Montessori Day School), Address 1 (521 Elm Street), Property Type (K-12 School), ENERGY STAR Score (55), Gross Floor Area (ft²) (200,000.00), and Site EUI (kBtu/ft²/year) (1,358.00). Below this is a 'Paired Tax Lots' section with three entries: TAX LOT ID 33366555, ADDRESS LINE 1 (no address 1), and a 'UNPAIR' link. The same information is repeated for TAX LOT ID 33366125 and 33366148.

Associated records can be unpaired

Detail View - Meters: Import GreenButton Data

From the Property Detail view for a record, click the “Upload GreenButton Data” button



Property Detail

Property : 314 Einstein Place

Interval: Year

Filter Meters

Upload GreenButton Data

Step 1: In the Property Detail view for a given Property record, click the “Upload GreenButton Data” button to start the process, which opens the “Select Data Set” dialog box

Select Data Set

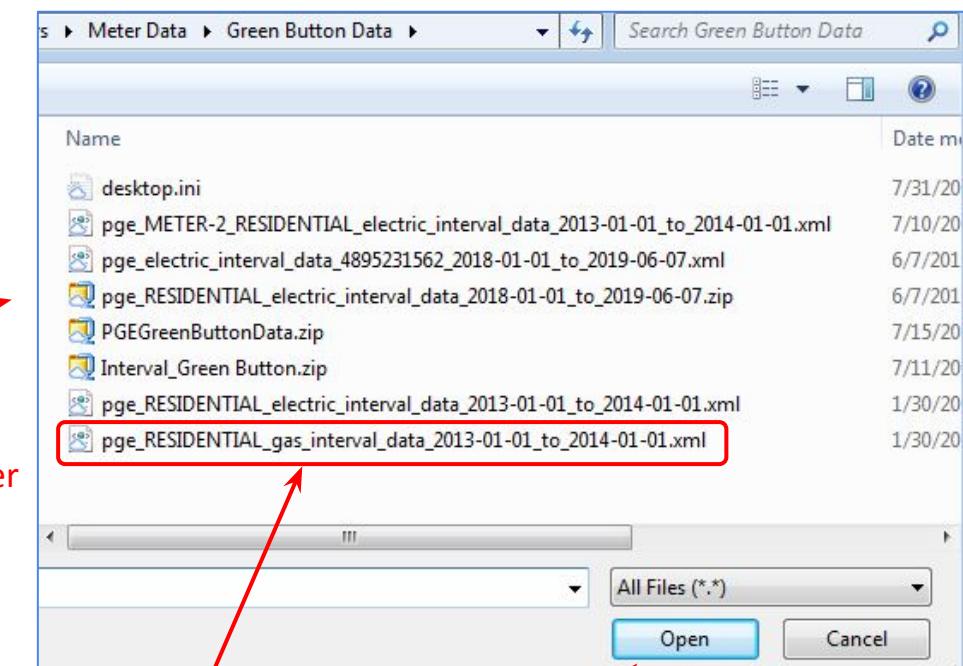
Name: ESPM Meter Data Testing

Upload File

Dismiss

Step 2: Select the appropriate Dataset name

Step 3: Click “Upload File” to open a Browser window to select the GreenButton XML file to upload.



Detail View - Meters: Import GreenButton Data

From the Property Detail view for a record, click the “Upload GreenButton Data” button

Confirm GreenButton File Contents

| Meter Reading Counts | | |
|------------------------|-------------|----------|
| GreenButton UsagePoint | Type | Incoming |
| 4864658 | Natural Gas | 365 |

| Parsed Energy Types and Units | |
|-------------------------------|-------------|
| Parsed Type | Parsed Unit |
| Natural Gas | therms |

Confirm

Dismiss

Step 5: SEED displays a dialog box with a summary of the GreenButton data. Review this summary

- Click “Confirm” if you want to continue the upload.
- Click “Dismiss” if you want to cancel the upload.

Uploading File

Uploading pge_RESIDENTIAL_gas_interval_data_2013-01-01_to_2014-01-01.xml

0% Complete

Dismiss

Step 7: Results of upload are displayed

Upload Complete

| Meter Reading Counts | | | |
|----------------------|-------------|----------|------------------------|
| GreenButton Usage... | Type | Incoming | Successfully Import... |
| 4864658 | Natural Gas | 365 | 365 |

Complete and Refresh Page

Dismiss

Step 8: Click the Complete and Refresh Page button

Step 9: The data is added to the Meter view in Property Detail

Property Detail Meters Notes Settings

Filter Meters ▾

| |
|---|
| <input checked="" type="checkbox"/> Natural Gas - GB - 4864658 |
| <input checked="" type="checkbox"/> Cost - PM - 46643762 |
| <input checked="" type="checkbox"/> Electric - Grid - PM - 46643762 |
| <input checked="" type="checkbox"/> Cost - PM - 46643764 |
| <input checked="" type="checkbox"/> Natural Gas - PM - 46643764 |

Step 10: Change the units if needed in Organizations/Settings

Settings Sharing

Meter energy display units (change one at a time)

----Choose energy type----

----Change display unit----

Detail View - Meters

To see the imported meter data:

Go to the **Inventory** view, **View by Property** tab, select the appropriate **Cycle**, click the **Info icon** to get to the **Property Detail** view, click the **Meters** link

Click on the “i” (Info) button for the record that has meter data

| | | Cycle: | 2019 Compliance Cycle |
|--|--|-------------------------|-----------------------------|
| | | View by Property | View by Tax Lot |
| | | PM Property ID | Property Type - Self-SelM.. |
| | | Property Name | |
| | | 4544232 | Office |
| | | 4553585 | Office |
| | | 4868144 | College/University |
| | | | Campus Building 1 |

Property Detail Meters Notes Column List Profiles Cross-Cycles

Property : 6455438

Interval: Exact

Filter Meters

Upload GreenButton Data

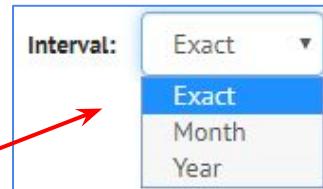
| Start Time ▲ | End Time ▼ | Natural Gas - PM - 46643726 (kBtu (thousand Btu)) ▼ | Electric - Grid - PM - 46643731 (kWh (thousand Watt-hours)) ▼ | Cost - PM - 46643731 (US Dollars) |
|---------------------|---------------------|---|---|-----------------------------------|
| 2014-12-12 00:00:00 | 2015-01-11 00:00:00 | | 160,627.60 | 12,047.07 |
| 2015-01-01 00:00:00 | 2015-01-31 00:00:00 | 544,000.00 | | |
| 2015-01-11 00:00:00 | 2015-02-10 00:00:00 | | 163,273.20 | 12,245.49 |
| 2015-02-01 00:00:00 | 2015-02-28 00:00:00 | 464,000.00 | | |
| 2015-02-10 00:00:00 | 2015-03-12 00:00:00 | | 169,400.90 | 12,705.07 |
| 2015-03-01 00:00:00 | 2015-03-31 00:00:00 | 368,000.00 | | |

Detail View - Meters

Property : 314 Einstein Place

Interval: Year

Filter Meters ▾



| Filter Meters ▾ | | |
|-----------------|------|-------------|
| Natural Gas | GB | 4864658 |
| Cost | PM | 46643762 |
| Electric | Grid | PM 46643762 |
| Cost | PM | 46643764 |
| Natural Gas | PM | 46643764 |

The program will aggregate data based on the Interval selected.

- **Exact:** Shows the actual data as it was imported from the original source
- **Month:** Aggregates the data by month. If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01) is an acceptable end time for an entry contained within the month of July.
- **Year:** Aggregates the data across each year of data. Similar to monthly aggregation, yearly aggregation accepts data with an end time of January 1 00:00:00 as part of the previous year.

It is possible to import multiple meters for a building. In this case, the “Filter Meters” option allows the data for each meter to be selected or not.

- GB is added as a prefix to the meter number for meters associated with GreenButton data
- PM is added as a prefix to the meter number for meters associated with ENERGY STAR Portfolio manager data

Detail View - Meters

In this case, the monthly data spans more than one month, i.e., 1-11-2014 to 2-10-2015 is defined as one month.

This is shown by setting Interval == Exact

| Interval: | Exact | Start Time ▲▼ | End Time ▲▼ | Electric - Grid - PM - 46643762 (kWh (thousand Watt-hours)) ▲▼ | Cost - PM - 46643762 (US Dollars) |
|-----------|-------|---------------------|---------------------|--|-----------------------------------|
| | | 2015-01-11 00:00:00 | 2015-02-10 00:00:00 | 116,431.70 | 8,732.38 |
| | | 2015-02-10 00:00:00 | 2015-03-12 00:00:00 | 122,951.50 | 9,221.36 |
| | | 2015-03-12 00:00:00 | 2015-04-15 00:00:00 | 122,491.00 | 9,186.83 |

Therefore, choosing Interval=Month results in no data being displayed

| Interval: | Month | No Data |
|-----------|-------|---------|
|-----------|-------|---------|

Exception:

If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01 is an acceptable end time for an entry contained within the month of July).

When Interval == Year, the program aggregates the data for each year

| Year ▾ | Electric - Grid - PM - 46643762 (kWh (thousand Watt-hours)) ▾ | Cost - PM - 46643762 (US Dollars) |
|--------|---|-----------------------------------|
| 2014 | 1,449,570.80 | 108,717.82 |
| 2015 | 1,427,786.70 | 107,084.02 |
| 2016 | 1,397,457.80 | 104,809.37 |
| 2017 | 381,000.00 | 29,390.00 |

Detail View - Meters

In this case, the monthly data is fully contained within one month

Interval = Exact

All the data is displayed

Interval: Exact

| Start Time | End Time | Natural Gas - PM - 46643764 (kBtu (thousand Btu)) | Cost - PM - 46643764 (US Dollars) |
|---------------------|---------------------|---|-----------------------------------|
| 2014-01-01 00:00:00 | 2014-01-31 00:00:00 | 406,140.00 | 3,533.42 |
| 2015-01-01 00:00:00 | 2015-01-31 00:00:00 | 383,580.00 | 3,337.15 |
| 2015-02-01 00:00:00 | 2015-02-28 00:00:00 | 541,520.00 | 4,711.22 |
| 2015-03-01 00:00:00 | 2015-03-31 00:00:00 | 372,300.00 | 3,239.01 |

Interval = Month

Data is aggregated by month

Interval: Month

| Month | Natural Gas - PM - 46643764 (kBtu (thousand Btu)) | Cost - PM - 46643764 (US Dollars) |
|---------------|---|-----------------------------------|
| January 2014 | 406,140.00 | 3,533.42 |
| February 2014 | 564,090.00 | 4,907.58 |
| March 2014 | 394,860.00 | 3,435.28 |
| April 2014 | 180,510.00 | 1,570.44 |
| May 2014 | 5,640.00 | 49.07 |

Exception:

If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01) is an acceptable end time for an entry contained within the month of July.

Interval = Year

Data is aggregated by year

Interval: Year

| Year | Natural Gas - PM - 46643764 (kBtu (thousand Btu)) | Cost - PM - 46643764 (US Dollars) |
|------|---|-----------------------------------|
| 2014 | 2,309,610.00 | 20,093.62 |
| 2015 | 2,031,110.00 | 17,670.66 |
| 2016 | 1,965,360.00 | 17,098.63 |
| 2017 | 1,090,000.00 | 8,910.00 |

Detail View - Notes

Property Detail Notes

| Created | Type | Name | Text |
|------------------------|------|------------------|--|
| 02/13/2022 06:37:28 PM | Note | Manually Created | Need to contact owner that the account is not complete |

Add New Note

Note: Contact is Joyce Wise: 511-293-3929

Property and Tax Lot details each have their own notes

New Note

Cancel **Add Note**

Icon indicates Notes (Inventory List)

| PM Property ID |
|----------------|
| 1311527 |
| 1311528 |

When unmerging a record that contains notes, the notes are duplicated to each new record with the original timestamps preserved.

When merging records that contain notes, the notes are combined into the new record with the original timestamps preserved. If exact note duplicates exist (for instance, from unmerging a record prior to re-merging) the exact duplicates are de-duplicated.

Detail View - Column List Profiles

Click Column List Profiles from either **Property** or **Tax Lot Detail view** to set the visibility and order properties for fields.

Tax Lot Detail Settings will only contain fields and data from the **Tax Lot** table

Property Detail Settings will only contain fields and data from the **Property** table

Enter values to search the list of fields, then “check” the ones you want to display

| | Column Name |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | city |
| <input checked="" type="checkbox"/> | City (Property) |
| <input checked="" type="checkbox"/> | City (Tax Lot) tax lot |
| <input checked="" type="checkbox"/> | Owner City/State |

Check the fields to display, uncheck them to prevent them from displaying, in the Detail view

Drag fields up and down to set the order

Property Detail

Properties Property Detail Meters Notes **Column List Profiles** Cross-Cycles Analyses (beta)

Column Order/Visibility Detail Column List Profile: **Property Detail Fields** ✓ ✖ ✖ ✎

There are 57 columns of data available to you.
 NOTE: ordering of all derived column (%) rows is currently ignored; they will all appear at the end of the list when viewed.

Select columns from the list below to make them appear in your Properties Detail table. Drag the rows to change the order in which they appear.

| | Column Name |
|-------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> | PM Property ID |
| <input checked="" type="checkbox"/> | Property Name |
| <input checked="" type="checkbox"/> | Address 1 |
| <input checked="" type="checkbox"/> | Property Type |
| <input checked="" type="checkbox"/> | ENERGY STAR Score |
| <input checked="" type="checkbox"/> | Gross Floor Area (ft ²) |
| <input checked="" type="checkbox"/> | Site EUI (kBtu/ft ² /year) |
| <input checked="" type="checkbox"/> | Address Line 1 |

Detail View - Column List Profiles

In all the Detail View (for both Property and Tax Lot views) the “Column List Profiles” allows the currently highlighted fields to be saved to a name, which then appears in a pulldown list. This allows different sets of fields to be saved to different profiles.

To edit an existing Detail Settings Profile, or to make a new one, click the Settings link on either the Property or Tax Lot Detail View

The screenshot shows the 'Property Detail' settings page. At the top, there's a navigation bar with tabs: 'Properties', 'Property Detail' (selected), 'Meters', 'Notes', 'Column List Profiles' (highlighted in blue), 'Cross-Cycles', and 'Analyses (beta)'. Below the tabs, there's a section titled 'Column Order/Visibility' with a dropdown 'Detail Column List Profile:' set to 'Property Detail Fields'. To the right of this dropdown are four buttons: a green checkmark, a blue 'Rename' button, a red 'New' button, and a blue pencil icon. Further down, a message says 'There are 57 columns of data available to you.' and a note about derived columns. A large table below lists columns with checkboxes. The first column has a checkbox and the header 'Column Name'. The second column lists fields: 'PM Property ID' (checked), 'Property Name' (unchecked), 'Address 1' (checked), and 'Property Type' (checked). Red arrows point from the text 'Check new fields you want to add to the List Settings Profile' to the checked boxes of 'Property Name', 'Address 1', and 'Property Type'. Another red arrow points from the text 'Uncheck fields you want to remove from the List Settings Profile' to the unchecked box of 'Property Name'.

Click **Save** to save the changes to the current List Setting Profile

Click **New** to save the newly selected fields to a new List Settings Profile

Detail View - Edit the Main Record

From the **Inventory List** view, click the “**Information**” icon for a record to access the **Inventory Detail** view.

[Properties](#)

Property Detail

[Property Detail](#) [Meters](#) [Notes](#) [Column List Profiles](#) [Cross-Cycles](#) [Analyses \(beta\)](#)

Step 1: Click **Edit** to change the information in the **Master** record.



This will put you in “Edit” mode

[Actions ▾](#)

Cycle: 2018 Compliance Cycle

Labels: College/University

Detail Column List Profile: Property Di

Field **Main** **1 - example-data-ESPM-UBID-NoAlerts.xlsx**

| | | |
|---------------------------------------|----------------------|----------------------|
| PM Property ID | 4828379 | 4828379 |
| Property Name | Hilltop Offices | Hilltop Offices |
| Address 1 | 2660 Welstone Ave NE | 2660 Welstone Ave NE |
| Property Type | Office | Office |
| ENERGY STAR Score | | |
| Gross Floor Area (ft ²) | 55122 | 55,122.00 |
| Site EUI (kBtu/ft ² /year) | | |

Step 3: Click the **Save Changes** button in the upper right of the view when you have finished editing the **Master** record

Step 2: To Edit Data:
Click on the data in the **Master Record** and edit it directly

Save Changes **Cancel**

Field **Main**

| | |
|-------------------------------------|----------------------|
| PM Property ID | 4828379 |
| Property Name | Hilltop Offices |
| Address 1 | 2660 Welstone Ave NE |
| Property Type | Office |
| ENERGY STAR Score | |
| Gross Floor Area (ft ²) | 55,122.00 |

Step 4: The **Master record** is now updated with the changes

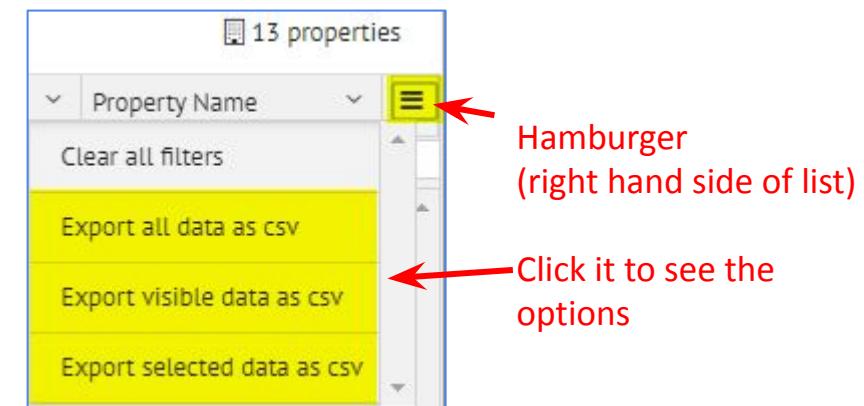
Export Data -- 2 Options

Option 1: Export options from the “Hamburger” menu

(this is probably the preferred option for most export needs)

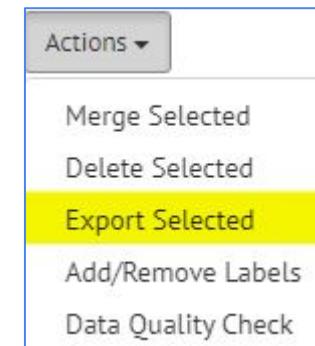
- 3 choices
 - **1a:** Export all data as CSV
 - **1b:** Export visible data as CSV
 - **1c:** Export selected data as CSV

This option only appears if you have checked some or all of the records
- Pros
 - Multiple values for matching fields will be exported (which will not using Option 2)
 - You can export the data as
 - “collapsed” (one line per record) or
 - “expanded” (includes separate lines for associated data)
- Cons
 - You do not have control over the export filename
 - Then name defaults to
 - <Organization Name> <Property/Tax Lot> Data.csv
 - Such as:
LBNL 302 Property Data.csv
 - Multiple exports result in filenames with sequential numbers after them (they are not overwritten)
 - LBNL 302 Property Data (1).csv
 - You do not have control over the location of the export file -- it will always be exported to your “Downloads” folder



Option 2: Export Selected from the Actions pulldown

- Pros
 - You can specify the filename and download location
- Cons
 - There is a **bug** that doesn't export multiple values in associated data fields
 - Only exports “collapsed” no matter what the Inventory view is



The following pages show examples using each of these options

Export Data -- Option 1a

Option 1a: Export all data as csv

- Exported data is “expanded” whether Inventory List is in “collapsed” or “expanded” view
- All records exported
- All fields set in List Settings exported

The screenshot shows a grid of property data with columns for PM Property ID, Jurisdiction Tax Lot ID, Address Line 1 (Tax Lot), Address Line 1 (Property), Property Name, Property Type, and Gross F. A context menu is open at the bottom right of the grid, containing options like 'Clear all filters' and 'Export all data as csv'. A red arrow points from the text below to this menu.

| View by Property | | View by Tax Lot | | | | | 13 properties |
|--------------------------|-------------------------------------|-----------------|-------------------------|---------------------------|---------------------------|-----------------------|---------------------|
| | | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Address Line 1 (Property) | Property Name | Property Type |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1311525 | 24651455 | | 20 Tenth Street | Biology Hall | Lab |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4828379 | 11160509 | 2655 Welstone Ave NE | 2660 Welstone Ave NE | Hilltop Offices | Offi |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5233255 | 33366125; 33366148; ... | 521 Elm Street; 525 EL... | 521 Elm Street | Montessori Day School | K-1 |
| | <input checked="" type="checkbox"/> | 6798444 | | | 295444 Moser Lane | Senior Center | Social Meeting Hall |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1154623 | 11160509 | 2655 Welstone Ave NE | 2700 Welstone Ave NE | Hilltop Retail | Retail |

The Inventory List can be in “collapsed” or “expanded” view

The export will always be “expanded”, i.e., showing all the records including the associated records from the other table (Tax Lot or Property)



| A | B | C | D | E | F |
|------------------|------------------------------|--|---------------------------|-----------------------|---------------------|
| 1 PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Address Line 1 (Property) | Property Name | Property Type |
| 2 1311525 | 24651455 | | 20 Tenth Street | Biology Hall | Laboratory |
| 3 | 24651455 | | | | |
| 4 4828379 | 11160509 | 2655 Welstone Ave NE | 2660 Welstone Ave NE | Hilltop Offices | Office |
| 5 | 11160509 | 2655 Welstone Ave NE | | | |
| 6 5233255 | 33366125; 33366148; 33366555 | 521 Elm Street; 525 Elm Street; 530 Elm Street | 521 Elm Street | Montessori Day School | K-12 School |
| 7 | 33366555 | 521 Elm Street | | | |
| 8 | 33366148 | 530 Elm Street | | | |
| 9 | 33366125 | 525 Elm Street | | | |
| 10 6798444 | | | 295444 Moser Lane | Senior Center | Social Meeting Hall |
| 11 1154623 | 11160509 | 2655 Welstone Ave NE | 2700 Welstone Ave NE | Hilltop Retail | Retail |
| 12 | 11160509 | 2655 Welstone Ave NE | | | |

Export Data -- Option 1b -- collapsed

Option 1b: Export visible data as csv

- Exported data is in same form as Inventory List (in the example below, both are “collapsed”)
- All records exported
- All fields set in List Settings exported

| | | View by Property | | View by Tax Lot | | | | | | |
|--------------------------|-------------------------------------|------------------|------------------------------|--|-----------------------|---------------------------|---------------------|----------|---|--|
| | | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type | Gross Fl | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type | Gross Fl | <input type="button" value="Clear all filters"/> | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1311525 | 24651455 | | Biology Hall | 20 Tenth Street | Laboratory | | <input type="button" value="Export all data as csv"/> | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4828379 | 11160509 | 2655 Welstone Ave NE | Hilltop Offices | 2660 Welstone Ave NE | Office | | <input type="button" value="Export visible data as csv"/> | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5233255 | 33366125; 33366148; 33366555 | 521 Elm Street; 525 Elm Street; 530 Elm Street | Montessori Day School | 521 Elm Street | K-12 School | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6798444 | | | Senior Center | 295444 Moser Lane | Social Meeting Hall | 15533 | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1154623 | 11160509 | 2655 Welstone Ave NE | Hilltop Retail | 2700 Welstone Ave NE | Retail | | | |



Collapsed view in Inventory List (13 Property records)

Collapsed records in export (13 records)

| | A | B | C | D | E | F |
|----|----------------|------------------------------|--|-----------------------|---------------------------|----------------------------|
| 1 | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type |
| 2 | 1311525 | 24651455 | | Biology Hall | 20 Tenth Street | Laboratory |
| 3 | 4828379 | 11160509 | 2655 Welstone Ave NE | Hilltop Offices | 2660 Welstone Ave NE | Office |
| 4 | 5233255 | 33366125; 33366148; 33366555 | 521 Elm Street; 525 Elm Street; 530 Elm Street | Montessori Day School | 521 Elm Street | K-12 School |
| 5 | 6798444 | | | Senior Center | 295444 Moser Lane | Social Meeting Hall |
| 6 | 1154623 | 11160509 | 2655 Welstone Ave NE | Hilltop Retail | 2700 Welstone Ave NE | Retail |
| 7 | 1311527 | 13334485; 23810533 | 93029 Wellington Blvd; 94000 Wellington Blvd | East Computing Hall | 93029 Wellington Blvd | College/University |
| 8 | 1311528 | 13334485; 23810533 | 93029 Wellington Blvd; 94000 Wellington Blvd | International House | 93031 Wellington Blvd | Residence |
| 9 | 1311524 | 24651456 | 11 Ninth Street | Grange Hall | 12 Ninth Street | Performing Arts |
| 10 | 1311526 | 24651456 | 11 Ninth Street | Rowling Gym | 35 Tenth Street | Fitness Center/Health Club |
| 11 | 1311523 | 24651456 | 11 Ninth Street | Lucky University | 11 Ninth Street | College/University |
| 12 | 2264 | 1552813 | 050 Willow Ave SE | University Inn | 50 Willow Ave SE | Hotel |
| 13 | 6798215 | | | City Library | 295302 Moser Lane | Library |
| 14 | 3020139 | 11160509 | 2655 Welstone Ave NE | Hilltop Condos | 2655 Welstone Ave NE | Multifamily Housing |

Export Data -- Option 1b -- expanded

Option 1b: Export visible data as csv

- Exported data is in same form as Inventory List (in the example below, both are “expanded”)
- All records exported
- All fields set in List Settings exported

The screenshot shows a SharePoint list titled "View by Property". The columns include PM Property ID, Jurisdiction Tax Lot ID, Address Line 1 (Tax Lot), Address Line 1 (Property), Property Name, Property Type, and Gross F. A context menu is open on the far right, showing options like "Clear all filters", "Export all data as csv", and "Export visible data as csv". The "Export visible data as csv" option is highlighted.

| | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Address Line 1 (Property) | Property Name | Property Type | Gross F |
|---|----------------|-------------------------|--|---------------------------|---------------------|--------------------|--|
| 1 | 1311527 | 13334485; 23810533 | 93029 Wellington Blvd; 94000 Wellington Blvd | 93029 Wellington Blvd | East Computing Hall | College | Clear all filters |
| 2 | | 13334485 | 93029 Wellington Blvd | | | | Export all data as csv |
| 3 | | 23810533 | 94000 Wellington Blvd | | | | Export visible data as csv |
| 4 | 1311523 | 24651456 | 11 Ninth Street | 11 Ninth Street | Lucky University | College/University | |
| 5 | | 24651456 | 11 Ninth Street | | | | |

Expanded view in Inventory List
Expanded records in export

All records are exported with their associated records;
in this case, all 13 Property records are exported with
separate lines for their associated Tax Lot records

The screenshot shows an Excel spreadsheet titled "LBNL 302 Property Data.csv - Microsoft Excel". The data is organized into columns A through F. The first row contains column headers: PM Property ID, Jurisdiction Tax Lot ID, Address Line 1 (Tax Lot), Property Name, Address Line 1 (Property), and Property Type. The subsequent rows show the data for each property, including its associated tax lots and addresses.

| | A | B | C | D | E | F |
|---|----------------|-------------------------|--|---------------------|---------------------------|--------------------|
| 1 | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type |
| 2 | 1311527 | 13334485; 23810533 | 93029 Wellington Blvd; 94000 Wellington Blvd | East Computing Hall | 93029 Wellington Blvd | College/University |
| 3 | | 13334485 | 93029 Wellington Blvd | | | |
| 4 | | 23810533 | 94000 Wellington Blvd | | | |
| 5 | 1311523 | 24651456 | 11 Ninth Street | Lucky University | 11 Ninth Street | College/University |
| 6 | | 24651456 | 11 Ninth Street | | | |

Export Data -- Option 1c

Option 1c: Export selected data as csv

- Exported data is “collapsed” whether Inventory List is in “collapsed” or “expanded” view
- Selected (checked) records are exported
- All fields set in the Inventory List view List Settings are exported

The screenshot shows the 'View by Property' tab of the Inventory List. A context menu is open at the top right, listing '13 properties'. The menu includes 'Clear all filters', 'Export all data as csv', 'Export visible data as csv', and 'Export selected data as csv' (which is highlighted in green). The list contains five rows of property data, with the first three rows having the 'selected' checkbox checked.

| PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Address Line 1 (Property) | Property Name | Property Type | Gross F... |
|----------------|-------------------------|----------------------------|---------------------------|-----------------------|---------------|------------|
| 1311525 | 24651455 | | 20 Tenth Street | Biology Hall | Laboratory | 421351 |
| 4828379 | 11160509 | 2655 Welstone Ave NE | 2660 Welstone Ave NE | Hilltop Offices | Office | 55121 |
| 5233255 | 33366125; 33366148; ... | 521 Elm Street; 525 Elm... | 521 Elm Street | Montessori Day School | K-12 School | 200000 |
| 6798444 | | | 295444 Moser Lane | Senior Center | Social C... | 5 |

All selected (checked) records
are exported (3 in this example)

Multiple values in matching fields are included
(in this case the Jurisdiction Tax Lot ID and Address Line 1 Tax Lot fields)

The screenshot shows an Excel spreadsheet titled 'LBNL 302 Property Data.csv - Microsoft Excel'. The data is organized into columns A through H, corresponding to the fields in the Inventory List view. The first four rows of data are highlighted in yellow, indicating the selected records. Red arrows point from the 'selected' checkboxes in the Inventory List to the highlighted rows in the Excel spreadsheet.

| A | B | C | D | E | F | G | H |
|----------------|------------------------------|--|-----------------------|---------------------------|---------------|------------------|------|
| PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type | Gross Floor Area | UBID |
| 1311525 | 24651455 | | Biology Hall | 20 Tenth Street | Laboratory | 421351 | 11 |
| 4828379 | 11160509 | 2655 Welstone Ave NE | Hilltop Offices | 2660 Welstone Ave NE | Office | 55121 | 3 |
| 5233255 | 33366125; 33366148; 33366555 | 521 Elm Street; 525 Elm Street; 530 Elm Street | Montessori Day School | 521 Elm Street | K-12 School | 200000 | 5 |

All fields set in List Settings (and visible in the
Inventory List view) are exported

Export Data -- Option 2

Option 2: Export Selected

- Exported data is “collapsed” whether Inventory List is in “collapsed” or “expanded” view
- Selected (checked) records are exported
- All fields set in the Inventory List view List Settings are exported
- Pro
 - You can specify the name and location of the exported file
- Con
 - **BUG:** If there are multiple associated values in any matching fields (such as Jurisdiction Tax Lot ID, UBID, etc) only one value will be exported (*this will be fixed in future versions*)
 - If you don’t have multiple values in a matching field or you don’t want to export those fields, you can use this option

Records with single values in the matching fields (in this case Jurisdiction Tax Lot ID and Address Line 1 Tax Lot) are exported properly

Records with multiple values in the matching fields (in this case Jurisdiction Tax Lot ID and Address Line 1 Tax Lot) are **NOT** exported properly -- only one of the values is exported

| | B | C | D | E | F | G | H | I | |
|---|----------------|----------------------------|--------------------------|-----------------------|---------------------------|---------------|---------------------|------|--------------|
| 1 | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type | Gross Floor Area | UBID | Property Lab |
| 2 | 1311525 | 24651455 | | Biology Hall | 20 Tenth Street | Laboratory | 421351 | 11 | > 50,000 SF |
| 3 | 4828379 | 11160509 | 2655 Welstone Ave NE | Hilltop Offices | 2660 Welstone Ave NE | Office | 55121 | 3 | > 50,000 SF |
| 4 | 5233255 | 33366555 | 521 Elm Street | Montessori Day School | 521 Elm Street | K-12 School | 200000 | 5 | > 50,000 SF |

| | B | C | D | E | F | G | H | I | |
|---|----------------|----------------------------|--------------------------|-----------------------|---------------------------|---------------|---------------------|------|--------------|
| 1 | PM Property ID | Jurisdiction Tax Lot ID | Address Line 1 (Tax Lot) | Property Name | Address Line 1 (Property) | Property Type | Gross Floor Area | UBID | Property Lab |
| 2 | 1311525 | 24651455 | | Biology Hall | 20 Tenth Street | Laboratory | 421351 | 11 | > 50,000 SF |
| 3 | 4828379 | 11160509 | 2655 Welstone Ave NE | Hilltop Offices | 2660 Welstone Ave NE | Office | 55121 | 3 | > 50,000 SF |
| 4 | 5233255 | 33366555 | 521 Elm Street | Montessori Day School | 521 Elm Street | K-12 School | 200000 | 5 | > 50,000 SF |

Overview

- Every account holder belongs to an Organization
- Most SEED users will only have a Parent Organization

| Organizations | | | | |
|---------------------------|----------------------|---------------------|-----------|--|
| Organizations I Manage | | | | |
| ORGANIZATION | | | | |
| LBNL 20 | | | | Number of records for Properties and Tax Lots for each Cycle , by Organization |
| Sub-Organizations | | | | |
| ◀ | | | | |
| Organizations I Belong To | | | | |
| ORGANIZATION NAME | NUMBER OF PROPERTIES | NUMBER OF TAX LOTS | YOUR ROLE | ORGANIZATION OWNER(S) |
| LBNL 20 | 2017 Compliance: 12 | 2017 Compliance: 10 | owner | Robin LBNL 20 |

- SEED is structured to allow a Parent Organization to have Sub-Organizations

| Organizations | | | | |
|------------------------|--|--|--|--------------------------------|
| Organizations I Manage | | | | |
| ORGANIZATION | | | | |
| lbnl | | | | There is a Parent Organization |
| Sub-Organizations | | | | |
| LBL 1 | | | | |
| LBL 2 | | | | |
| LBL 3 | | | | |
| LBL 4 | | | | |

Role can be:

- Owner
- Member
- Viewer

Organizations I Manage

ORGANIZATION

LBNL 302

Sub-Organizations

Organizations I Belong To

ORGANIZATION NAME

LBNL 302

◀ Organizations

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations **Members** Email Templates Derived Columns

Organization Name

LBNL 302

- Click on an organization in either
 - Organizations I Manage
 - Or
 - Organizations I Belong To
 - The view for that organization will be displayed
- The links from this view are
 - **Settings:** The Admin screen for organization settings
 - **Sharing:** The Admin screen for managing how data is shared
 - **Column Settings:** Change the names of the fields in the existing data
 - **Column Mappings:** Manage the mappings for new fields being imported
 - **Data Quality:** The Admin screen for managing Data Quality settings
 - **Cycles:** The Admin screen for managing Cycles
 - **Labels:** The Admin screen for managing Labels
 - **Sub-Organizations:** A list of all sub-organizations related to this organization
 - **Members:** A list of all members of this organization
 - **Email Templates:** Allows setup of an email template
 - **Derived Columns:** Allows definition of a new column derived from existing columns

Settings: Options

Click on the **Settings** link

Click on the **Options** tab

Organization Name
LBNL 302 You can change the organization name

MapQuest API Key
If you have obtained a MapQuest API key to enable GIS functionality, you can enter it here

Enable Geocoding
 Check this to enable automatic geocoding

Enable ComStock Functionality
 Check this to enable ComStock Functionality

BETTER Analysis API Key
Please refer to the BETTER documentation to learn how to get an API key. Note, do not prefix the token with "Token ", only include the token itself.

You can add a BETTER Analysis API key to allow BETTER analysis from SEED

Save Changes

Settings: Units

Click on the **Settings** link

◀ Organizations

LBNL 302

Settings

Sharing

Column Settings

Column Mappings

Data Quality

Cycles

Labels

Sub-Organizations

Members

Email Templates

⚙️ **Settings**

Click on the **Options** tab

Options

Units

Default Display Fields

Email

Maintenance

Measurement unit display for energy use intensities (EUI)

kBtu/sq. ft./year

You can change the Units for EUI

kBtu/sq. ft./year

GJ/m²/year

MJ/m²/year

kWh/m²/year

kBtu/m²/year

Meter energy display units (change one at a time)

----Choose energy type----

You can change the Units used in the display of
the Meter Data
(Property Detail View / Meters)
See the next page for more details

Measurement unit display for areas

square feet

You can change the
Units for area (SI/IP)

square feet

square metres

Number of decimal places to display

2 (e.g. 0.12)

You can change the
number of decimal
places displayed

0
0.1
0.02
0.003
0.0004

Thermal Conversion Assumption

US

You can change the thermal
conversion assumption
between the US and Canada

US
Canada

Save Changes

Settings: Units

< Organizations

LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Settings

Options

Units

Default Display Fields

Email

Maintenance

Step 2:
Select the “display unit” if you want to change it, in this case from kBtu to therms

Measurement unit display for energy use intensities (EUI)

kBtu/sq. ft./year

Meter energy display units (change one at a time)

Natural Gas | kBtu (thousand Bt

kBtu (thousand Btu)

Measurement unit display for areas

square feet

Number of decimal places to display

2 (e.g. 0.12)

Thermal Conversion Assumption

US

Meter energy display units (change one at a time)

Natural Gas | kBtu (thousand Btu)

----Choose energy type----

Coke | kBtu (thousand Btu)

Wood | kBtu (thousand Btu)

Diesel | kBtu (thousand Btu)

Other: | kBtu (thousand Btu)

Propane | kBtu (thousand Btu)

Kerosene | kBtu (thousand Btu)

Natural Gas | kBtu (thousand Btu)

District Steam | kBtu (thousand Btu)

Electric - Grid | kWh (thousand Watt-hours)

kBtu (thousand Btu)

----Change display unit----

ccf (hundred cubic feet)

cf (cubic feet)

cm (cubic meters)

GJ

kBtu (thousand Btu)

kcf (thousand cubic feet)

MBtu/MMBtu (million Btu)

Mcf (million cubic feet)

therms

Start Time

2014-01-01 00:00:00

2013-12-31 00:00:00

End Time

2014-01-02 00:00:00

2014-01-01 00:00:00

Natural Gas - GB - 4864658 (therms)

0.00

2.08

Step 3: Click the
Save Changes button

Save Changes

Step 1:

- Select the Fuel from the first pulldown list
- It will have a default set of units displayed

Step 4: In Property Details /
Meters, the Natural Gas data
is now displayed in therms

Settings: Default Display Fields

◀ Organizations **LBNL 405**

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations

Settings

Options
Units
Default Display Fields
Email
Maintenance

Property Display Field
Determines which column field is used when displaying and identifying a property. Defaults to "Address Line 1".
Property Name

Taxlot Display Field
Determines which column field is used when displaying and identifying a taxlot. Defaults to "Address Line 1".
Address Line 1

The default Property Display Field was changed from Address Line 1 to Property Name

Save Changes

◀ Properties **Property Detail**

Property Detail Meters Notes Column List Profiles

Property : 37-I1 East County Regional Center



The Property Name now displays in the Property Detail view

Sharing

[← Organizations](#)

LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Sharing Your Data [Save Changes](#)

Selecting Fields to Share

As the admin of your SEED instance you can control what data is shared throughout your organization and between your sub-organizations as well as what data is shared externally with the public-at-large. The subset of data you choose to share with the public can be different than the subset shared between your sub-organizations.

From the list below, select the fields that you want to: 1) share internally within your organization, and 2) share publicly with users outside your organization.

| SHARE DATA WITH | | |
|--------------------------|-------------------|-------------------------------------|
| PUBLIC | TABLE NAME | FIELD NAME |
| <input type="checkbox"/> | Search table name | Search field name |
| <input type="checkbox"/> | PropertyState | City |
| <input type="checkbox"/> | PropertyState | ENERGY STAR Score |
| <input type="checkbox"/> | PropertyState | PM Generation Date |
| <input type="checkbox"/> | PropertyState | Gross Floor Area (ft ²) |
| <input type="checkbox"/> | TaxLotState | Jurisdiction Tax Lot ID (Tax Lot) |
| <input type="checkbox"/> | PropertyState | Owner |
| <input type="checkbox"/> | PropertyState | Owner Email |
| <input type="checkbox"/> | PropertyState | Owner Telephone |
| <input type="checkbox"/> | PropertyState | PM Parent Property ID |
| <input type="checkbox"/> | PropertyState | PM Property ID |
| <input type="checkbox"/> | PropertyState | Property Name |
| <input type="checkbox"/> | PropertyState | Property Notes |

Set a Query Threshold

Enter the minimum threshold count of buildings that can be returned in a shared query. The building count threshold is important for allowing other organizations to perform statistical analysis on your data without revealing information about individual buildings.

Count #

The owner of a Parent Organization can select fields to view between Sub-Organizations.

The owner of a Parent Organization can set the query threshold for viewing records between Sub-Organizations.

Column Settings

This screen shows the mappings for the data in the database. Changes to the mappings here affect the existing data.

For example, if the Display Name is changed, it will affect the field “display” name that is shown in the Inventory List and Detail screens for existing data. It does not affect the way that future fields will be mapped, so if field mappings are changed, they should probably also be changed in the Column Mappings screen. This screen also allows fields to be protected from being overwritten when new data is imported.

LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Column Settings

Save Changes

Collapse Help

Modifying Column Settings

From the table below, you may modify the columns in the following ways:

| | |
|-------------------------|---|
| Display Name | <ul style="list-style-type: none">Change the display name (that appears throughout the program) of a column. This is user-defined and can be any value (?) |
| Column Name | <ul style="list-style-type: none">Specifies the underlying field name represented by the Display Name. These field names are not user defined, but are generated from imported user files as well as program-defined fields.Note, geocoding requires at least 1 column is used and populated to construct full addresses. |
| Geocoding Order | <ul style="list-style-type: none">Check the appropriate fields, as well as their order for the program to concatenate a full address, which SEED will use to generate latitude and longitude values for each recordNote, geocoding requires at least 1 column is used and populated to construct full addresses. |
| Rename | <ul style="list-style-type: none">Rename allows users to change the name of the underlying field shown in Column Name / Field Name. Renaming a field means that field will be changed in all the data for the organization. |
| Data Type | <ul style="list-style-type: none">For “extra data” fields, this allows the user to set the type, such as Text, Number, Date, etc. |
| Merge Protection | <ul style="list-style-type: none">Normally when an imported record is merged into another record the newest value overwrites an older one. Merge protection prevents this, and is particularly useful for columns where you have manually edited values that you want to persist even after importing and merging new data. |
| Recognize Empty | <ul style="list-style-type: none">Checking this box for a field will affect how empty or blank values are treated during merges. Specifically, empty values will be able to replace non-empty values per the “Merge Protection” setting.Warning: When this is checked for a field and that field is not mapped during import, the incoming records will be read as having an empty values for that field. Any resulting merges will have empty values for this field. |
| Match Criteria | <ul style="list-style-type: none">Checking this box for a field will allow it to be used as a matching field.Warning: If matching criteria changes are proposed, a preview will be loaded. The load times for this preview depend on how many records belong to this organization and how many of those records would be merged together given the new matching criteria. |
| Delete | <ul style="list-style-type: none">Permanently delete extra_data columns and all associated data |

Column Settings

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Column Settings

Save Changes

Expand Help

Internal database field name

The checked fields are used for Geocoding

The checked fields will not be changed during record merging

The checked fields determine the record matching

| DISPLAY NAME ↑ | COLUMN NAME ↑ | GEOCODING ORDER ↑ | RENAME | DATA TYPE | MERGE PROTECTION | RECOGNIZE EMPTY ↑ | MATCH CRITERIA ↑ | DELETE |
|----------------|-----------------------|---------------------------------------|--------|-----------|--------------------------|--------------------------|-------------------------------------|--------|
| Search display | Search column name | | | | | | | |
| PM Property | pm_property_id | <input type="checkbox"/> 1 | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Address Line | address_line_1 | <input checked="" type="checkbox"/> 1 | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| City | city | <input checked="" type="checkbox"/> 3 | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| UBID | ubid | <input type="checkbox"/> | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| PM Parent Pr | pm_parent_property_id | <input type="checkbox"/> | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Property Nam | property_name | <input type="checkbox"/> | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Property Typ | property_type | <input type="checkbox"/> | Rename | Text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| ENERGY STA | energy_score | <input type="checkbox"/> | Rename | Integer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Site EUI | site_eui | <input type="checkbox"/> | Rename | EUI | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| PM Release I | release_date | <input type="checkbox"/> | Rename | Datetime | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Column Mappings

Column Mappings Help screen at the top of the page

Settings Sharing Column Settings **Column Mappings** Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Column Mappings

Click on the **Column Mappings** link

Column Mapping Profile:

Portfolio Manager Defaults



Column mapping profiles can help you standardize and simplify your file import mapping process.

Create mappings to specific Data File header values - mapping SEED headers, Inventory Types, and if applicable, Measurement Units.

SEED header values can be manually typed. As you type, a list of suggestions will appear if the value is similar to a column that SEED already recognizes.

Also, you can copy Data File header values directly over to SEED headers via the button below.

Alternatively, you can get SEED header suggestions based on existing column names using the other button below.

You can create mapping rows for a profile by adding them individually or by copying Data File header values in a comma-delimited list by using the input box on the right.

When using a profile for an incoming file, Data File header values must match exactly in order for the mappings to be prepopulated.

Duplicate -- if fields are marked as duplicates they need to be resolved to have different names.

<File Column 1>,<File Column 2>,<File Column 3>,...

It is possible to define the field names and order by hand in this box

Copy into Data File Headers

Column Mappings

This screen shows the stored default mappings for files that have been previously imported, which is the **default** mapping for these fields when new files are imported in the future. If problems are found in the mappings here, the bad mappings should be deleted so that when new files with these fields are imported, those same mapping mistakes will not be made again. Changing the mappings here does not affect existing data, it only affects the default mapping settings for data that will be imported in the future.

Cancel
Save

[Copy Data File Headers directly to SEED Headers](#)

[Populate SEED Headers with best known matches](#)

[Delete All Mappings](#)

SEED
Portfolio Manager Defaults
Click the “Delete All Mappings” button to delete the existing mappings

| INVENTORY TYPE | SEED HEADER ↑↓ | MEASUREMENT UNITS | DATA FILE HEADER ↑↓ | Delete All Mappings |
|----------------|-----------------------|-------------------|---------------------|------------------------------------|
| Property | Building ID | | Building ID | × |
| Property | UBID | | UBID | × |
| Property | PM Property ID | | Property ID | × |
| Property | PM Parent Property ID | | Parent Property ID | × |
| Property | Property Name | | Property Name | × |
| Property | Address 1 | | Address 1 | × |
| Property | City | | City | × |

Data Quality: Overview

Manage Data Quality Rules

- Create Data Quality rules
- Data Quality rules are run automatically by the program in the Mapping Review step
- Data Quality rules can be run “by hand” any time from the Actions menu in the Inventory List view

[← Organizations](#) **LBNL 302**

Settings Sharing Column Settings Column Mappings **Data Quality** Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Data Quality [Reset All Rules](#) [Save Changes](#)

Click on the Data Quality link

Modifying Data Quality Rules

From the table below, select the rules that you want to: 1) enable/disable within your organization, 2) modify the minimum/maximum values to validate against on file upload, and 3) optionally assign or remove a label if the condition is not met.

Reset All Rules: delete all rules and reinitialize the default set of rules.

[Create a new rule](#)

Separate rules are defined for Property and Tax Lot fields

| | CONDITION CHECK | FIELD | DATA TYPE | MINIMUM | MAXIMUM | UNITS | SEVERITY LEVEL | LABEL | DELETE |
|-------------------------------------|-----------------|---------------------------------------|-----------|----------|----------|-------|----------------|--------------------------------|--------|
| <input type="checkbox"/> | Not Null | Address Line 1 | Text | | | | Error | DQ: Missing Address | |
| <input checked="" type="checkbox"/> | Range | ENERGY STAR Score | Number | 10 | 100 | | Error | DQ: Low / No ENERGY STAR Score | |
| <input checked="" type="checkbox"/> | Not Null | ENERGY STAR Score | Number | (no min) | (no max) | | Error | DQ: Low / No ENERGY STAR Score | |
| <input checked="" type="checkbox"/> | Range | Gross Floor Area (ft ²) | Number | 100 | 70000 | | Error | DQ: Low / No Gross Floor Area | |
| <input checked="" type="checkbox"/> | Not Null | Gross Floor Area (ft ²) | Number | (no min) | (no max) | | Error | DQ: Low / No Gross Floor Area | |
| <input checked="" type="checkbox"/> | Range | Site EUI (kBtu/ft ² /year) | Number | 10 | 1000 | | Error | DQ: Low / No Site EUI | |
| <input checked="" type="checkbox"/> | Not Null | Site EUI (kBtu/ft ² /year) | Number | (no min) | (no max) | | Error | DQ: Low / No Site EUI | |

[View by Property](#) [View by Tax Lot](#)

[Reset All Rules](#)

Data Quality: Create a new rule

Create a new rule Click the Create a new rule button

| CONDITION CHECK | FIELD | DATA TYPE |
|--|-------------------------------------|-----------|
| <input checked="" type="checkbox"/> Not Null | Address 1 | Text |
| <input checked="" type="checkbox"/> Range | ENERGY STAR Score | Number |
| <input checked="" type="checkbox"/> Not Null | Gross Floor Area (ft ²) | |
| <input checked="" type="checkbox"/> Must Contain | Owner | |
| <input checked="" type="checkbox"/> Must Not Contain | | |

Required
Not Null
Range
Must Contain
Must Not Contain

View by Property 8 Select the desired field from the pulldown list

View by Tax Lot 2

Set the Data Type

Enter Min/Max or Text to check if applicable

Units If applicable

Set to Error or Warning

Click + to add a label

Click the red X button to delete the rule

Address Missing Add

View by Property 7

View by Tax Lot 2

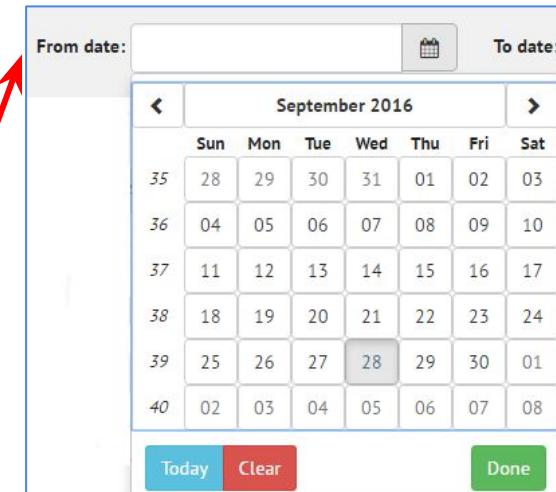
| CONDITION CHECK | FIELD | DATA TYPE | MINIMUM | MAXIMUM | UNITS | SEVERITY LEVEL | LABEL | DELETE |
|--|-------------------|-----------|---------|---------|-------|----------------|--------------------------------|--|
| <input checked="" type="checkbox"/> Required | Address 1 | Text | | | | Error | | + X |
| <input checked="" type="checkbox"/> Range | ENERGY STAR Score | Number | 10 | 100 | | Error | DQ: Low / No ENERGY STAR Score | X |

Click the Save Changes button → Save Changes

Manage Cycles

- Create Date “cycles” such as Compliance cycles
- Assigned on data import
- Used to filter data views

Set the **From date** and **To date**



Type a name to create a new cycle

Click on the **Cycles** link

Settings Sharing Column Settings Column Mappings Data Quality **Cycles** Labels Sub-Organizations Members Email Templates Derived Columns

Create new cycle

Cycle Name

From date:



To date:



Create Cycle

Existing Cycles

| NAME | FROM DATE | TO DATE | | |
|-----------------------|------------|------------|------|--------|
| 2017 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit | Delete |
| 2018 Compliance Cycle | 01-01-2017 | 12-31-2017 | Edit | Delete |

Labels

< Organizations

LBNL 302

[Settings](#) [Sharing](#) [Column Settings](#) [Column Mappings](#) [Data Quality](#) [Cycles](#) [Labels](#) [Sub-Organizations](#) [Members](#) [Email Templates](#) [Derived Columns](#)[Create new label](#)

Label Name

gray ▾

Create label

Click on the **Labels** link

You can create new labels

Existing Labels

NAME

< 10,000 SF

- Labels can be defined in this Admin page
- They can also be defined “on the fly” in the Inventory List and Detail view as needed

edit X

> 10,000 < 50,000 SF

edit X

> 50,000 SF

edit X

Address Missing

edit X

Call

edit X

Change of Ownership

edit X

College/University

edit X

Compliant

edit X

DQ: Low / No ENERGY STAR Score

You can
Edit
or
Delete
existing labels

DQ: Low / No Gross Floor Area

edit X

DQ: Low / No Site EUI

edit X

In this screen you can define as many labels as you need

- A set of default labels are automatically generated (dark blue)
- The default labels can be edited or deleted

Sub-Organizations

← Organizations Parent Organization → LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations Members Email Templates Derived Columns

Sub-Organizations Click on the **Sub-Organizations** link Create a new sub-organization

| SUB-ORGANIZATION NAME | OWNER NAME | OWNER EMAIL |
|-----------------------|---------------|----------------------|
| LBNL 20 | Robin LBNL 20 | rdmitchell+20@lblgov |

The owner of a Parent Organization can create Sub-Organizations

Create a New Sub-Organization

Sub-Org Name:

Invite an Owner:

Note: Parent organization members are not automatically made members of sub-organizations.

The owner being invited to a Sub-Organization has to already be a member of the Parent Organization (and can be deleted from the Parent later)

Parent / Sub-Organization Roles

The permissions for each Role in a Parent Organization and a Sub-Organization

| | Parent | Sub Organization | | |
|--|---|-----------------------|---------------------|---------------------|
| | | Owner | Member | Viewer |
| Set fields for display between Sub-Org | X | | | |
| Create Sub Orgs | X | | | |
| Add Members | X To parent or at Sub org setup | X To own Suborg | | |
| Remove Members | X In parent | X From own Sub org | | |
| View Members | X In parent Owner(s) of suborg | X In own Sub org | | |
| Change Settings • Rename Suborg • Change member role | X In parent | X In own Sub org | | |
| Add Data (Create Datasets) | X | X | X | |
| Edit data | X All the Suborgs associated with it | X In own Sub org | X In own Sub org | |
| View data | X All the Suborgs associated with it | X In own Sub org | X In own Sub org | X In own Sub org |

Members

You can invite new members to your organization

The screenshot shows the 'Members' page for the organization 'LBNL 302'. At the top, there is a navigation bar with links: 'Settings', 'Sharing', 'Column Settings', 'Column Mappings', 'Data Quality', 'Cycles', 'Labels', 'Sub-Organizations', 'Members' (which is highlighted in blue), 'Email Templates', and 'Derived Columns'. Below the navigation bar, there is a section titled 'Members' with three columns: 'MEMBER NAME', 'MEMBER EMAIL', and 'MEMBER ROLE'. A modal window titled 'Invite a New Member' is open, containing fields for 'First Name', 'Last Name', 'Email Address', and a dropdown menu for 'Role' with options: 'Member', 'Owner' (which is selected and highlighted in blue), and 'Viewer'. At the bottom of the modal are 'Cancel' and 'Send Invite' buttons. Red annotations are present: one arrow points to the 'Members' link in the navigation bar; another arrow points to the 'Role' dropdown menu; and a third arrow points to the 'Send Invite' button. A large red box highlights the 'Owner' role selection in the dropdown.

← Organizations

LBNL 302

Settings Sharing Column Settings Column Mappings Data Quality Cycles Labels Sub-Organizations **Members** Email Templates Derived Columns

Members

MEMBER NAME MEMBER EMAIL MEMBER ROLE

member name member email member role

Robin LBNL 302

Invite a New Member

First Name: Enter first name

Last Name: Enter last name

Email Address: Enter Email Address

Role:

- Member
- Owner**
- Viewer

Cancel Send Invite

You can set the role of the new member

Click on the **Members** link

When you click **Send Invite** the person will receive an email, asking them to set a password for their account

Reset all passwords – Invite a new member

Swagger Interface to SEED RESTful APIs

SEED PLATFORM™

LBNL 302 ▾

 **Swagger** Supported by SMARTBEAR

<https://seedv2.lbl.gov/api/swagger/?format=openapi> **Explore**

SEED API v3

[Base URL: seedv2.lbl.gov/api]
<https://seedv2.lbl.gov/api/swagger/?format=openapi>

Test description

Schemes **HTTPS** ▾

Django **rdmitchell+302@lbl.gov** [Django Logout](#) [Authorize](#) 

Filter by tag

v1 >

v2 >

v2.1 >

v3 ▾

GET /v3/analyses/ **v3_analyses_list** 

POST /v3/analyses/ **v3_analyses_create** 

Parameters [Try it out](#)

| Name | Description |
|--|-----------------------|
| data * required object (body) | Example Value Model |

```

  {
    name: string
    title: Name
    maxLength: 255
    minLength: 1
    integer
    title: Service
    Enum:
  }
  > Array [ 4 ]
  Configuration v {
  }
  
```

Contact

For SEED Platform™ Users:

Please visit our User Support website for tutorials and documentation to help you learn how to use SEED Platform™.

<https://sites.google.com/a/lbl.gov/seed/>

There is also a link to the SEED Platform™ Users forum, where you can connect with other users.

<https://groups.google.com/forum/#!forum/seed-platform-users>

For direct help on a specific problem, please email:

SEED-Support@lists.lbl.gov

For SEED Platform™ Developers:

The Open Source code is available on the Github organization SEED Platform™:

<https://github.com/SEED-platform>

Please join the SEED Platform™ Dev forum where you can connect with other developers.

<https://groups.google.com/forum/#!forum/seed-platform-dev>

About SEED Platform™

The Standard Energy Efficiency Data (SEED)™ Platform is a software application that helps organizations easily manage data on the energy performance of large groups of buildings. Users can combine data from multiple sources, clean and validate it, and share the information with others. The software application provides an easy, flexible, and cost-effective method to improve the quality and availability of data to help demonstrate the economic and environmental benefits of energy efficiency, to implement programs, and to target investment activity.

[More details](#)

[View Terms of Service](#)

Development Team:

Managed by: [National Renewable Energy Laboratory & Lawrence Berkeley National Laboratory](#)

Funding from: [U.S. Department of Energy](#)

Version

2.13.0.9de35f190

When reporting an issue, including the
complete Version # is useful

