Trimble Buildings

Training Manual

modelogix

Administration

Trimble

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Legend

The following symbols are used in this training.

Important
Indicates an important concept, step, or caution.

Tip
A shortcut or time-saving tip.

Note
Additional information or situation users may encounter.

Trademarks

Table of Contents

Getting Started

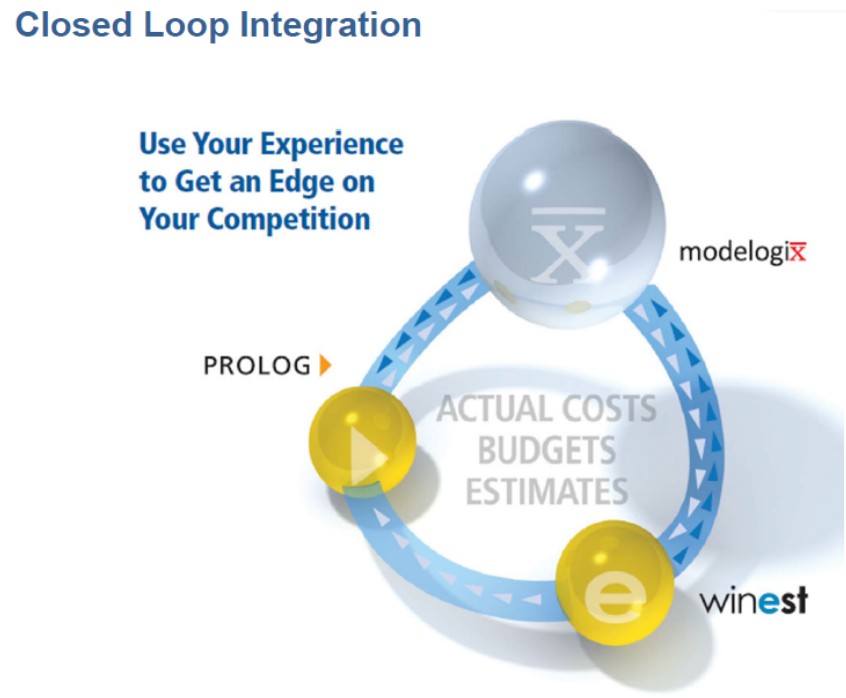
1 About Modelogix

Modelogix is a cost modeling software which sharpens your competitive edge. Using Modelogix, you build a database of your historical projects. You can use actual as-built costs or estimates. You then leverage this data to build models for conceptual pricing based on estimates of similar type scope. Modelogix enables you to easily build your database and access your estimates. Modelogix features include time and location indices to normalize your projects. The Smart Categories feature enables tagging your estimates so you can quickly access only those estimates relevant for your model. It also supports custom units and metrics so the data is relevant to your business.

A major benefit of Modelogix is having all of your historical estimates stored in a MS SQL database - a central repository that is readily accessible throughout your company. Your rich, intellectual estimates are backed up by your network administrator so your data is protected.

It doesn't matter what format your historical information is in as estimates can be imported from WinEst, Excel, Prolog and Vico Office. The Prolog and Vico Office integrations can be set to automatically import closed estimates directly into Modelogix. You can also export models directly into WinEst. Although tightly integrated with WinEst, Modelogix also complements any 3rd party estimating or project management solution.

You will also see how smoothly information flows from Modelogix to Prolog. We explain it as 'Closed-Loop Integration' but Modelogix can accept data from any application that can export to text or Excel.



2 Prerequisites

Software Requirements

To complete this training manual, you will need to have access to the Modelogix Cloud version and the Modelogix Training database used for this course. This database is not automatically installed with Modelogix. If you are taking our online training class, or a standard class hosted by Trimble, Modelogix and the training database will be available. Your trainer can provide the steps for signing in.

3 Getting Started

Modelogix was designed to generate conceptual models based on averaging costs from one or more estimates or 'as-builts', and adjusting for time and location. Using relevant estimates and one or more standardized Work Breakdown Structures provides you with an efficient and accurate cost model.

This course will provide you with an understanding of how to create a Modelogix database. This covers setting up WBS Tables, Smart Categories, Units, Control Quantities and importing and publishing estimates. This administration course has been designed for administrators who will be setting up Modelogix for themselves or for other end-users.

Business Value

- Increase efficiency, productivity and accuracy
- Access company historical project information
- Leverage best practices
- Standardize and present professional reports

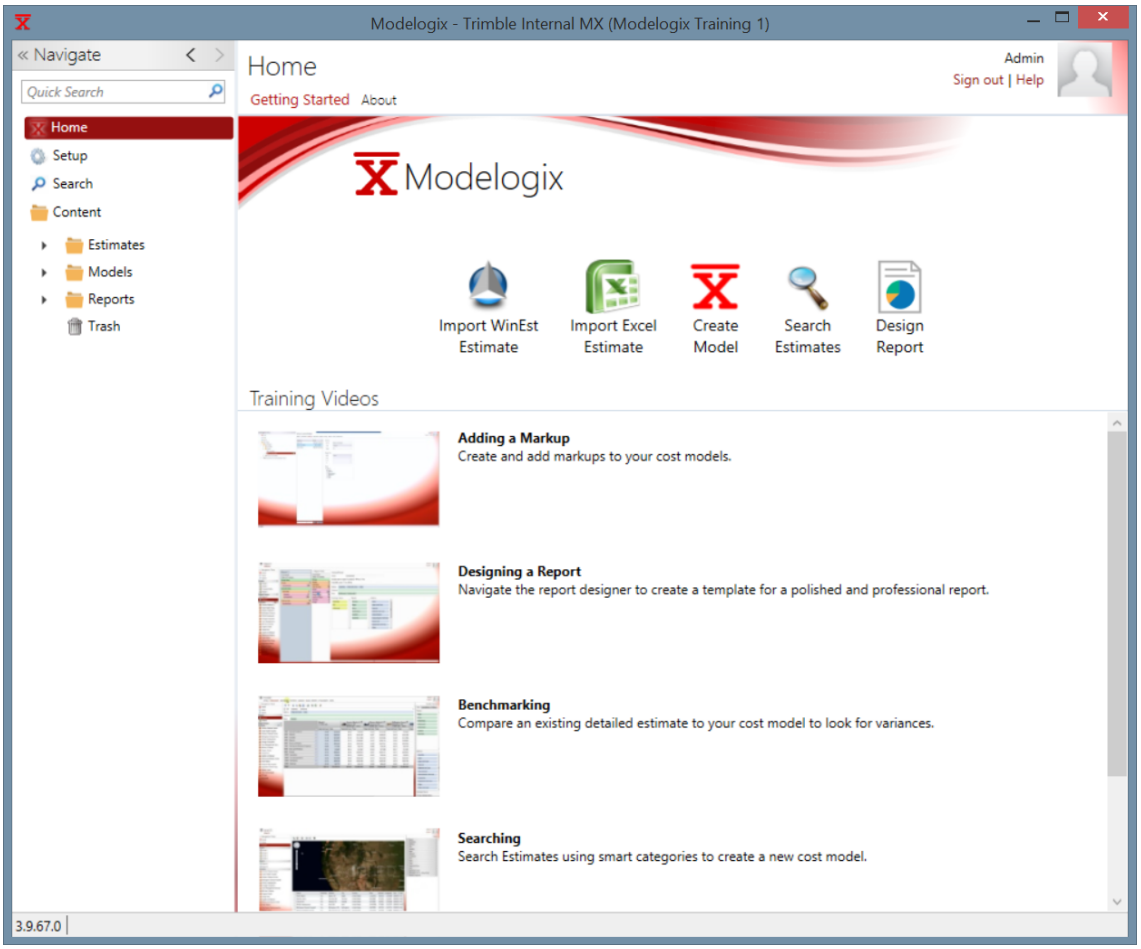
Objectives

After completing this course, participants will be able to:

- Search project data
- Create models
- Add markups
- Benchmark a model
- Design and create reports

4 Modelogix Navigation

Modelogix opens to a home screen with options that will take you to the most frequently used features. These features include Import WinEst Estimates, Import Excel Estimates, Create Models, Search Estimates and Design Reports. The home page has links to videos showing how to search, analyze and create models.



The Navigation Pane on the left side of Modelogix enables you to navigate through the whole program. The pane can be collapsed or expanded and is organized by sections which include Home, Setup, Search, and Contents folders for Models, Estimates and Reports.

5 Modelogix Roles

All users who access Modelogix are assigned one of the following security roles:

1. **User** Limited to creating models and building report templates.
2. **Publisher** Limited to importing projects and estimates, assigning projects and estimates to other users in the system, creating models, and building report templates.
3. **Administrator** Unlimited access to Modelogix, including all the models created by users. This includes those not marked as editable by everyone (Model | Details | Model can be edited by everyone).

WBS and Control Units

6 WBS and Control Units Overview

WBS coding structures are at the heart of Modelogix. You must have at least one WBS structure common to every estimate in Modelogix. This is the basis for getting a unit price based on one or more estimates to generate a model.

You can have more than one WBS structure. It is not uncommon to see users with CSI, Uniformat and Job Cost Codes. Then estimates can be rolled up and analyzed in a variety of ways.

Working hand-in-hand with WBS codes, are Control Units. These are optional and used for modeling alternative units of measure.

Business Value

- Configure Modelogix to use your WBS codes to meet your specific business needs
- Use the option Control Units to better analyze your estimates and models

Objectives

After completing this module, you will be able to:

- Add WBS tables
- Understand and set up Control Units

7 WBS Tables

Work Breakdown Structures, or WBSs, are vital to the way Modelogix sorts and summarizes information for the analysis of estimates when creating a model. As estimates are loaded into Modelogix, WBS structures contained within the estimate point to WBS structures contained within the Modelogix database. This is mapped prior to importing. There *must* be a minimum of one common WBS across all estimates. This allows you to compare similar data between estimates. You can define as many WBS tables as needed.

Many organizations use job cost codes as one of their WBS tables. Many use the CSI (Division, Major and Minor sections) database structure for their WBS. Codes and names are populated as estimates are imported. There is a maximum of 25 hierarchical levels in a single WBS table.

You analyze cost models based on work breakdown structures. Every aspect of breaking down your data should be discussed prior to building your database because these breakdowns are what you use to analyze your historical data.

For this exercise, you will set up additional WBS tables. You do not need to enter the rows of codes and names. These are automatically populated when you import the data. You only need to add the tables and later map the data to these tables.

This is the process for setting up any WBS table. You would do this for importing data from Excel or from other estimating products. In this example, we are setting up for import from Prolog.

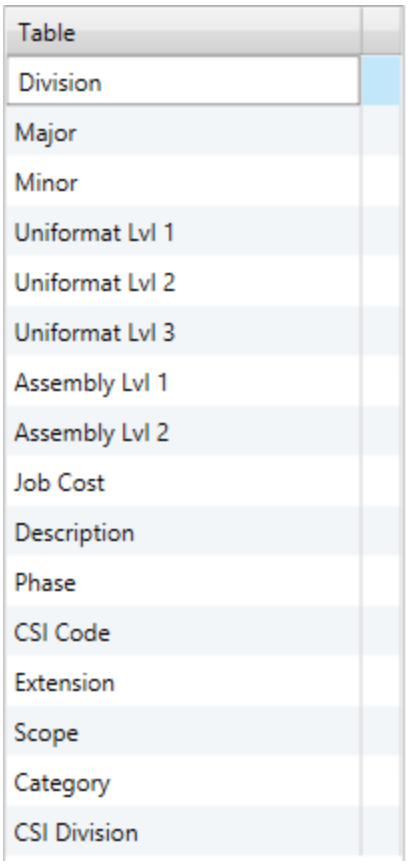
1. Click **Setup | WBS Tables.**
2. At the bottom of the screen, enter **Description** and click + or press **Enter.**

   Enter the rest of these codes in the same manner.

3. **Phase**
4. **CSI Code**
5. **Extension**
6. **Scope**
7. **Category**
8. **CSI Division**

   When done, your screen should look similar.



8 Control Units

When setting up a WBS table, you can define *Control Units*. Control Units are used for modeling alternate units of measure and are optional. For example, a project may be based on the square feet of the building, but you would like to view the concrete in cubic yards or the steel framing in linear feet.

If a Control Unit is included in your estimate import, it will automatically be added to the WBS table. If you add a Control Unit and that information is not included in the import, you will be required to input the value before publishing the estimate.

In the training database, a control unit has already been set up for Division 3000, Concrete. All of the estimates that have been published were required to enter a control quantity for this unit. If we were to add another control unit at this point, the estimates would need to be unpublished, a control quantity entered, and then republished. Setting up the proper control units for your company's data is an important consideration when developing a database. You should strive to do this correctly prior to importing estimates.

In the steps below, you will see how to set up a control unit but you will not actually do so. This will save you from republishing all the existing estimates. But you will see the steps for doing this.

1. Under the Table column, select **Division.**
2. Click on **3000 Concrete.**
3. At the right, under the Control Unit column, click in the **cell** to open a drop-down list.
4. Click the drop-down. You can see the list of available units. The control unit *cuyd* has already been selected. Leave this as is and exit the list.

Code	Name	Control Unit
1000	General Conditions	
2000	Sitework	
3000	Concrete	cuyd
4000	Masonry	
6000	Wood and Plastics	
7000	Thermal and Moisture Protection	
8000	Doors and Windows	

9 Review Questions

1. How many WBS Tables are required for importing estimates into Modelogix?
    a. 1
    b. 2
    c. 3

2. How many WBS Tables can you define?
    a. 1
    b. 15
    c. Unlimited

3. What is a Control Unit?
    a. A unit required on every item in every table
    b. An optional unit used for modeling alternate units of measure

Smart Categories and Metrics

10 Smart Categories and Metrics Overview

Smart Categories allow you to tag your items so that they are easily searchable. Determining how to tag your estimates so that searches are logical and practical is an important consideration when setting up Modelogix. Spending time to set up Smart Categories in the best way possible for your estimates is time well-invested.

Modelogix supports custom *Metrics*. You can set up your project data with data columns calculated from other data. And your smart category answers can be based off of the results of these metrics.

Business Value

- Configure Smart Categories to meet your specific business needs
- Use custom metrics reflecting your business needs

Objectives

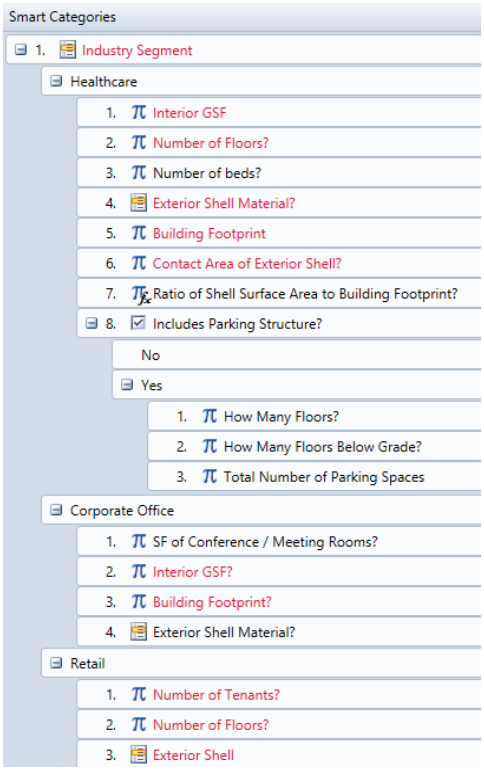
After completing this module, you will be able to:

- Set up and build Smart Categories
- Understand what metrics can be used in Modelogix

11 Smart Categories

Use Smart Categories to leverage your historical data to make better planning decisions. Smart Categories are used to define your estimates in such a way that they can be easily found during the search process. Although primarily used for search, smart categories can also be used as metrics in the model. If there is specific data that you want to include in the model, you can build a smart category to bring in that information. For instance, if your model is based on overall gross square footage of a building, you may also want to show building footprint, number of floors or exterior shell material.

Searches are used to determine the criteria for using estimates in a model. Each Smart Category must be given a type and a name and depending upon the type selected, valid choices need to be entered. Smart Category questions can prompt for date, money, multiple choice, number, text and Yes/No. Smart Categories are nested so that you will only need to answer the questions that apply to the type of project. A Smart Category can be set up as 'required' and display in red.



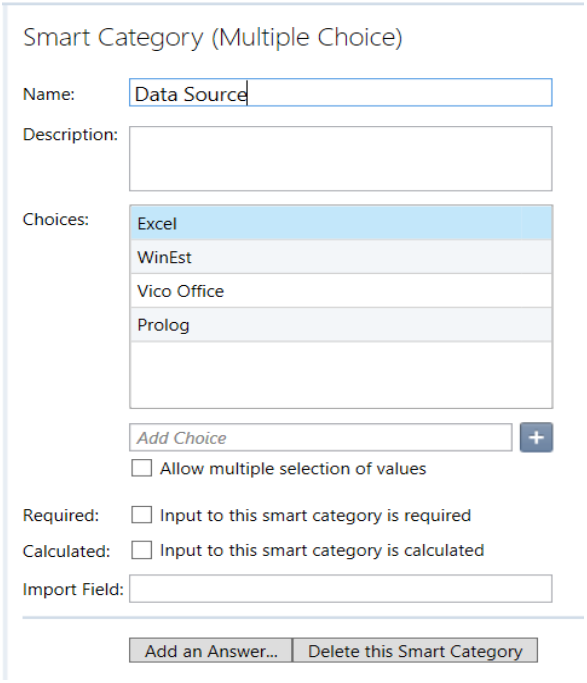
There are a couple best practices that should be considered when setting up Smart Categories. Don't forget that when you bring estimates into Modelogix, you will be importing table data such as CSI, Uniformat, and Job Cost Codes. There is no need to set up these imported tables as Smart Categories. You would be duplicating your coding structures and adding a lot of unnecessary work. Another thing to consider is 'how many Smart Categories'

do you want to set up and maintain? The intent of Modelogix is to create a conceptual estimate. Creating too many Smart Categories can make the process of importing estimates and searching estimates cumbersome. Try to find the right balance of useful Smart Categories and ease of use.

Modelogix ships with a blank slate for *Smart Categories*. We highly recommend that the team using Modelogix take as much time as necessary to develop the initial Smart Category setup as this will impact the long-term use of the system.

For this exercise, we are going to add an additional Smart Category. This will track the source of the estimate.

1. From **Setup**, click **Smart Categories.**
2. At the bottom of the window, input **Data Source** and click + or press **Enter.**
   A window displays with choices for the Smart Category type.
3. Click **Multiple Choice.**
4. Click **OK.**
5. In the Add Choice box, enter **Excel** and click + or press **Enter.**
6. In the Add Choice box, enter **WinEst** and click + or press **Enter.**
7. In the Add Choice box, enter **Vico Office** and click + or press **Enter.**
8. In the Add Choice box, enter **Prolog** and click + or press **Enter.**



The new Smart Category has now been added.

Note

If Smart Category questions are input after estimates have already been published, there is no negative impact on the estimates that have already been published, but you will need to unpublish and then republish if you want the new smart category questions to be included for all of your published estimates.

12 Metrics

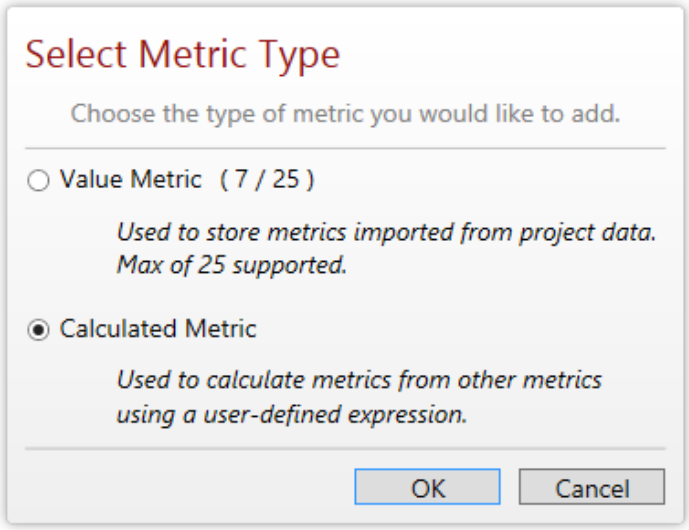
Metrics are typically set up to import values from project data or to create a calculated value from data in Modelogix. For example, you may have 'labor hours per unit' as a column in your Excel estimates. You can import this *Value Metric.* Or, you could create a 'labor hours per unit' metric by creating a *Calculated Metric* using existing data.

Modelogix lets you define Metrics used for modeling. You can define up to 25 Metrics. Most of the existing Metrics can be customized. Those with a warning flag are system metrics and cannot be deleted.

Don't forget that costs such as labor, materials, equipment and subs can be imported when importing estimates from Excel or WinEst. There is no need to duplicate these. Creating custom metrics here allows you to import additional data that is considered useful for your users when viewing estimates and models.

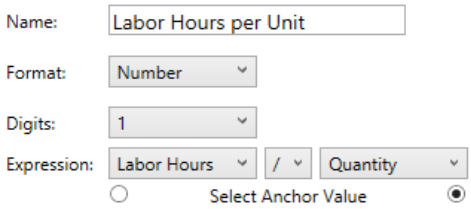
For this exercise, we will create a metric showing labor hours per unit.

1. From Setup, click **Metrics.**
2. At the bottom of the window in the *Add Metric* box, input **Labor Hours Per Unit** and click + or press **Enter.**
3. You are prompted to choose the type of metric. Select **Calculated Metric** and click **OK.**



4. From the Format drop-down select **Number.**
5. From the Digits drop-down select **1.**
6. For the Expression, select **Labor Hours / Quantity.**

7. For Select Anchor Value, select the **option** button on the right side under Quantity.



Note

Setting the anchor value means that in the spreadsheet, the anchor value is not modified if the value of the calculated metric is changed. For example, if you have Labor / Quantity = Labor Unit Cost and you set the anchor value to Quantity, then in the spreadsheet if you change the Labor Unit Cost value the Quantity metric is anchored and doesn't change. Instead, the Labor metric value changes.

13 Review Questions

1. Smart Categories are a way of tagging estimates so they can be searched on.
    a. True
    b. False

2. Smart Categories can be tagged as 'required'. What does this do?
    a. Smart Category answers tagged as 'required' must be answered before you can publish the estimate.
    b. All Smart Category answers must be answered before you can publish the estimate.
    c. You can publish the estimate, but later you will need to enter answers for 'required' Smart Categories.

3. How many custom metrics can be defined?
    a. 10
    b. 17
    c. 25
    d. Unlimited

Other Setup

14 Other Setup Overview

This section will provide you with an understanding of setting up Cost Indices, Units, Markups, Options and Users in Modelogix. These setup options usually follow the need to get the WBS and Smart Categories setup. Once those are addressed, the rest of these set up pieces can follow.

Business Value

- Use Indices to normalize your models for time and location
- Add custom units to reflect your company's needs
- Model markups can be added to expedite the modeling process
- Options can be set to use your terminology
- User Roles are defined to facilitate modeling and administration

Objectives

After completing this course, participants will be able to:

- Update and use Indices for time and location
- Add custom units
- Set up markups for others to use
- Choose options to reflect your company's needs
- Add users and set their roles

15 Cost Indices

Cost Indices are index values which modify pricing based on time, location or both. Modelogix can handle as many indices as needed to update an estimate or parts of an estimate to today's costs and the proposed model project location. These time and location indices are user-defined tables and not installed with Modelogix. The Cost Indices toolbar provides the functionality needed to create and edit your indexes.

There are buttons for copy, cut, paste, fill down, import and refresh.

Especially useful is the *Import* button listed above. If you have your own index in a format such as Excel, you can import a custom index.

When creating an index, you can choose a Date index, a Location index or an index that includes both Date and Location.

Turner, publishes both a construction cost index and a building cost index and has been in business for over 80 years.

ENR offers a time-based index. ENR publishes a monthly Building Construction Cost number. That number is a comparison of previous years and months. Modelogix uses date and cost number and compares them and applies the percentage of difference to the model.

RS Means supplies indexes based on location. The RS Means City Cost Location Index is factored based with 1 being the 30 city average. Every other location is different. If the factor is .95, the model will be adjusted -5%. If the factor is 1.2, the model will be adjusted +20%.

Important
Trimble does not supply indexes with Modelogix. The indexes shown here are for training only. For your implementation you can use your own indexes or purchase indexes from companies such as ENR.

For this exercise, you will update the ENR Cost Index

1. From Setup, click **Cost Indices.**
2. Select the **ENR Time Based Index.**
3. Scroll to the bottom and input the next three rows of data.
4. Input **1/1/2017** in the Date column and **6375** in the Total column.
5. Input **1/1/2018** in the Date column and **6500** in the Total column.

6. Input **1/1/2019** in the Date column and **6635** in the Total column.

321	9/1/2016	6329	6329
322	10/1/2016	6345	6345
323	12/1/2016	6359	6359
324	1/1/2017	6375	6375
325	1/1/2018	6500	6500
326	1/1/2019	6635	6635
327			

Note
You can use the indexes to input projected rates as well as historical rates. This lets you account for expected increases prior to the start date.

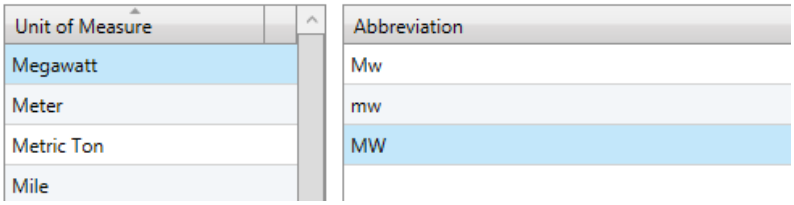
16 Custom Units

A standard list of units is included in a Modelogix database. You can also add *Custom Units* or modify existing units. Custom units can be defined once with any number of abbreviations. This enables Modelogix to recognize units defined by various cost estimating systems as a single same unit.

For this exercise we are going to add a unit, *megawatt*, and some abbreviations.

1. From Setup click **Units.**
2. At the bottom of the screen, in the *Add Unit of Measure* box, enter **Megawatt** and click + or press **Enter.**

3. Select **Megawatt** from the Unit of Measure list.
4. At the bottom of the screen, in the *Add Abbreviation* box, enter **MW** and click + or press **Enter.**
5. Add the abbreviation **mw**
6. Add the abbreviation **Mw**
7. When done, your screen should look similar.



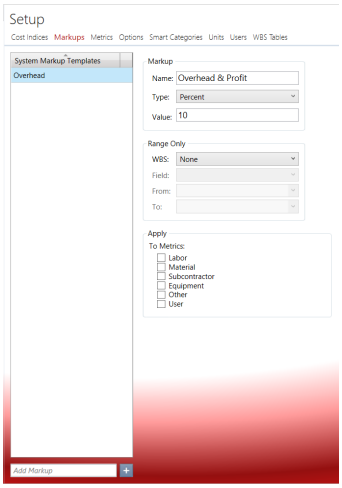
17 Markups

Use Markups to add overhead, profit, and other contract prices to your model. A user can add a unique markup to each model or add a *system markup*. A System Markup can only be created by an administrator, but the user can add it to the model and then customize it.

If the administrator sets up system markups, the user can choose from these or create a unique markup for their model. For this next exercise, we are going to create two system markups that can be used by all for any of their models.

For this exercise, you are going to create two system markups that can be used for any model. One will be for Overhead & Profit and the other for a labor markup. Overhead will be 10% of the cost of all items. It will not be restricted to any particular range of costs but will be applied to everything. The labor markup will be 5% of labor costs and applied to Division 3000 only.

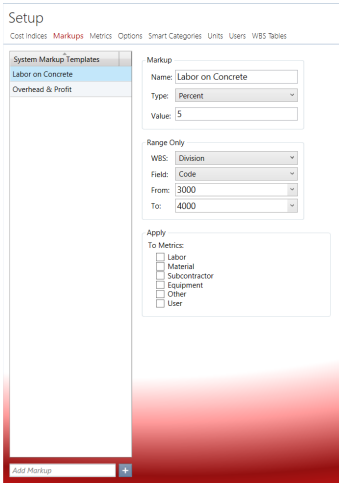
1. From Setup click **Markups.**
2. At the bottom of the markups table, enter **Overhead & Profit.**
3. Click + or press **Enter.**
4. Make sure the Type is **Percent.**
5. Enter a value of **10.**



Next we will create the labor markup on division 3000.

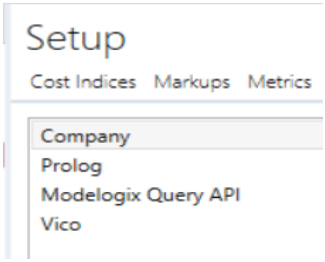
1. At the bottom of the markups table, enter **Labor on Concrete.**
2. Click + or press **Enter.**
3. Make sure the Type is **Percent**.

4. Enter a value of **5.**
5. Click the **WBS** drop-down and select **Division.**
6. Click the **Field** drop-down and select **Code.**
7. In the **From** field, select **3000.**
8. In the **To** field, select **3000.**
9. In the Apply box, check **Labor** to restrict this markup to labor costs only.



18 Options

Options enable you to set basic preferences and add a company logo which will display in reports. It is also where you set up Prolog connection information, Modelogix Query API codes, and Vico Import Mappings.



Company options are the basic options you can set. Let's assume your company refers to its estimates as *estimates* and we want to set this as our company preference throughout Modelogix. Modelogix offers nomenclatures in English and German. Set the name in the corresponding column.

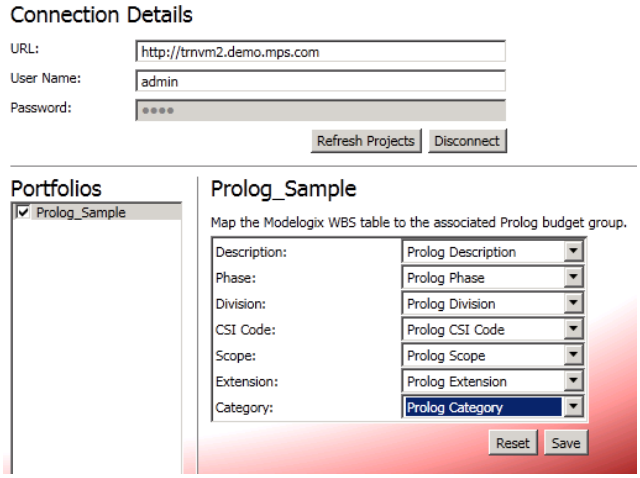
1. From Setup click **Options.**
2. Click **Company.**
3. If not already named Estimate(s), change to **Estimate** and **Estimates.**
4. Change the **Currency Symbol** to whatever you prefer.
5. If a company logo is available, simply click in the **gray box** and you will be prompted to browse to your file.

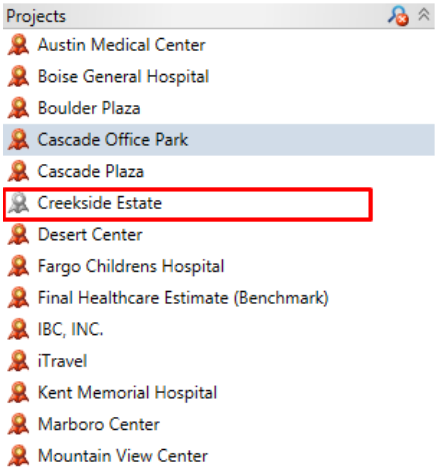
Prolog integration is optional and intended only for those planning to use this. First you need to connect to a Prolog database. Once this connection is successful and WBS tables mapped, your Prolog projects will be automatically imported into Modelogix as soon as they are marked as *closed.*

Here are the steps for logging on to a Prolog database and mapping to Modelogix.

1. Click **Prolog.**
2. Input the URL provided by your instructor.
3. Input the User Name provided by your instructor.
4. Input the Password provided by your instructor.
5. Click **Connect.**
6. Under Portfolio check **Prolog_Sample.**

7. Map the Modelogix WBS to Prolog as in the example on the next page.
8. Once the mapping is complete, click **Save | Refresh Projects.**





Modelogix Query API is optional and intended only for those planning to use this. Since accessing the API requires use of a third party product, we will show you only how to get your API credentials. Once you have these, there is good documentation in the Help file on how to access the Modelogix database using Power BI.

Here are the steps for getting your Modelogix API credentials.

1. From the Options window, click **Modelogix Query API.**
2. Your User Name and Password are displayed.
3. Go to your third party application and connect using these credentials.

Important
At the time of this writing, you must have 10 or more licenses of Modelogix to be able to get access to the API.

Vico integration is optional and intended only for those planning to use this. Projects created with Vico Office can be exported into Modelogix. With these Vico projects in your database, you can then create a model that can be used as the basis for a new project in Vico. The link between Vico Office and Modelogix is established from Vico Office.

Projects are exported to Modelogix from Vico Office. In Modelogix, you simply indicate which folder these projects should be in as well as how the Vico hierarchy should map to the associated WBS tables.

For this exercise, we will not be doing an actual import. But we will set up some mappings to see how this works. Before creating this mapping, ensure that WBS tables have been created in Modelogix.

First set the Projects folder.

1. From Setup click **Options.**
2. Click **Vico.**
3. Click **Select Folder** to select the folder where all Vico projects will be placed.
4. Select the **Projects** folder.

Next we will set the mappings. But first we need to understand that Vico supports the concept of hierarchical levels. Each active level is part of the hierarchy. In Modelogix, active levels can be mapped to each Modelogix WBS table. Not all levels must be mapped, but levels between mapped levels cannot be skipped. (e.g., if Level 2 and Level 4 are mapped, Level 3 must also be mapped.)

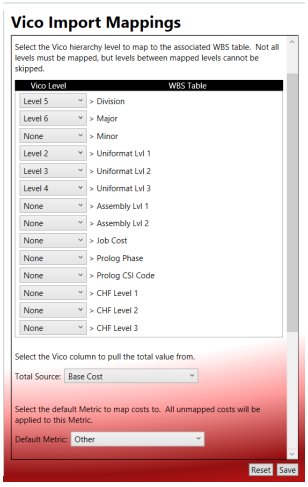
You determine the level of detail in which you want to map your Vico levels to the WBS tables. If you don't map a lower level (e.g., Level 4) and this level has cost items, they will be rolled into the next level up (e.g., Level 3).

Note
Level 1 is the project name and is not available on the drop-down list.

To map imported Vico projects, click the drop-downs under Vico Level:

1. For Uniformat Lvl 1, select **Level 2.**
2. For Uniformat Lvl 2, select **Level 3.**
3. For Uniformat Lvl 3, select **Level 4.**
4. For Division, select **Level 5.**

5. For Major, select **Level 6.**



   Next set the Total Source. This lets you choose either the *Base Cost, Gross Cost* or *Net Total*. This value comes from Level 1, which is a total of all the child levels.

6. Select **Net Total.**

You need to set the *default Metric*. Any unmapped cost will be mapped to this default metric.

1. Select **Other.**
2. At the bottom, click **Save.**

You can also set the *Vico Tag Values.* In Vico, tags are used for sorting and filtering purposes. Tag categories are used to organize these tags in your project. If tags have been defined in Vico, map them to the associated metric. For this exercise, we will leave them unmapped.

Note
The *Reset* button will change your mappings to the last saved settings.

19 User Types

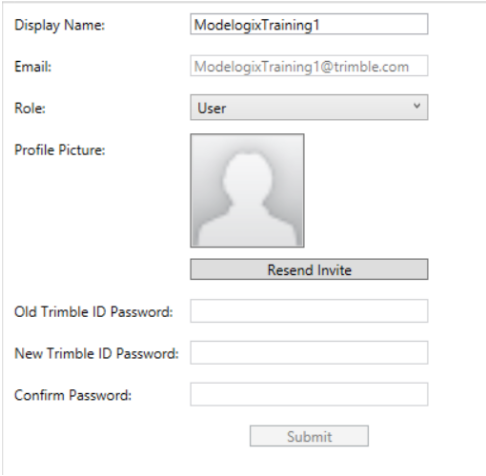
There are three types of Users in Modelogix; Administrator, Publisher and User. The Admin role enables access to the entire program. Most Setup functions and publishing of estimates are limited to Admins. Publishers have some functionality for setting up databases because they can import estimates and assign projects to other users. Publishers, like Users can search, create models and build reports.

1. **User** Limited to creating models and building report templates.
2. **Publisher** Limited to importing projects and estimates, assigning projects and estimates to other users in the system, creating models, and building report templates.
3. **Administrator** Unlimited access to Modelogix, including all the models created by users. This includes those not marked as editable by everyone (Model | Details | Model can be edited by everyone).

Users cannot change the administrative Sign-in password, publish estimates or make any changes to the database.

For this exercise, we will see the steps for adding a user. Since Modelogix requires a valid email address, this exercise is for review only and we will cancel before creating an actual user.

1. From Setup click **Users**.
2. At the bottom of the window, input the name, **User Name** and click + or press **Enter.**
3. In the Add New User window, enter the user's email address, click the **Role** drop-down and set to **User.**
4. If you were setting up a real user, you would click *Create User.* In this case, click **Cancel.**
5. Had you clicked Create User, an email would be sent to the new user asking them to sign in.
6. You can reset passwords using the dialog below.



You can deactivate users by clicking on an existing user name and clicking the red icon to the right. To reactivate a user, click on an existing deactivated user and click the green icon to the right.

20 Review Questions

1. What cost index types are available in Modelogix? Choose the best answer.
    a. Time
    b. Location
    c. Time and Location
    d. All of the above

2. Where do you activate Indices on a model?
    a. In the Models Details view under Cost Index Locations
    b. In the Models Spreadsheet view under Calculations

3. Where do you set the Cost Index Location on a model?
    a. In the Models Details view under Cost Index Locations
    b. In the Models Spreadsheet view under Calculations

Importing Estimates

21 Importing Estimates Overview

Estimates can be imported directly from WinEst. If you have access to the .est files, you can import them without installing WinEst on the computer. The import process is very straightforward. Select the estimate and import.

You can also import estimates from Excel. This allows you to import estimates from products other than WinEst. If that product allows you to export to Excel, then you can use those estimates for Modelogix. Importing from Excel requires that you set up a template with mappings so Modelogix knows what each column of data is. Once that is done, you are ready to import.

Business Value

- WinEst estimates can be directly imported into Modelogix
- Excel estimates can be imported with an additional step of mapping data
- You can use estimates from other estimating products by importing via Excel

Objectives

After completing this course, participants will be able to:

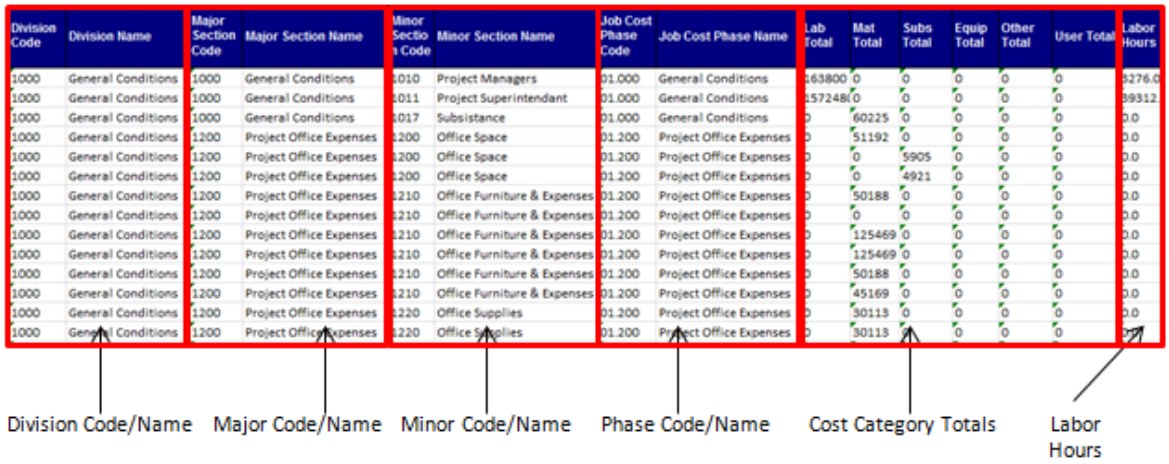
- Import WinEst estimates
- Create an Excel mapping template
- Import Excel estimates

22 Excel Templates

Projects can be imported from Excel, which means no matter what the software, your projects can be formatted to import into Modelogix. For this exercise, we will import the Excel file supplied for this training.

Before you can import estimates from Excel, you must create a template file. The *Excel Import Template* tells Modelogix what data is contained in the columns of the Excel file. We will map the incoming file to our WBS tables.

Excel estimates need to be formatted similar to this sample file provided for the training.



This is a flat file format with each row containing estimate specific data. You will need to include both name and code for WBS tables. Some data will be repeated within the Excel estimate. Metrics will be numbers – your quantities. You can have multiple Excel Import Templates for differing formats.

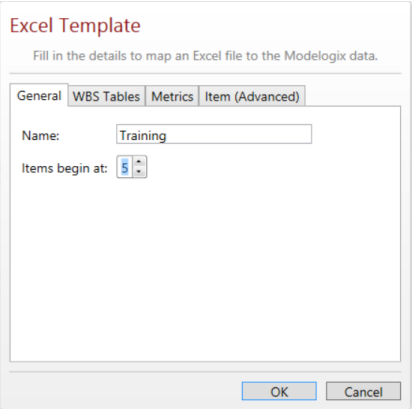
When importing estimates, you will want to make sure you import at least one column with costs. Some users import multiple costs such as labor, material, subs and equipment. Other users import just the total costs. If you don't import any costs, Modelogix will not have data available to generate a model with projected costs. The choice of which costs to bring in is yours. You need to consider what data you have available and what best suits your company's needs.

Trimble Business Consultants are available with assist in setting up templates and importing your project information.

For this exercise, we will set up the template file to import the sample Excel file provided for this training.

1. Click **Home.**
2. Click **Import Excel Estimate.**

3. Expand **Content** and select the **Estimates** folder.
4. Click **OK** to open the Excel Import window.
5. To map the data, start by clicking **Templates.**
6. Click **Add.**
7. Enter the Name, **Training.**
8. Set Item Rows begin at to **5**.

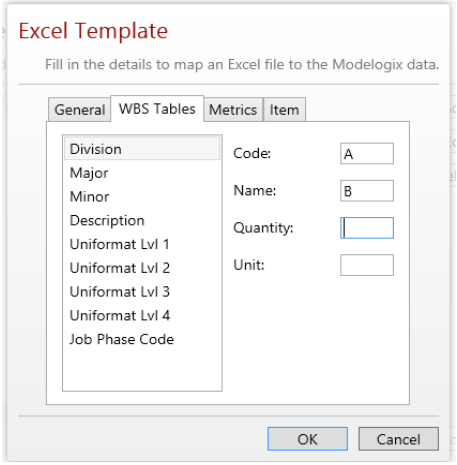


9. Leave this window open.

Now we need to map the WBS Tables to columns in our Excel file. In this exercise we are going to map only the Division, Major, Minor and Job Cost tables. We will ignore the other tables.

1. Click **Edit** to edit the training template.
2. Click the **WBS Tables** tab.

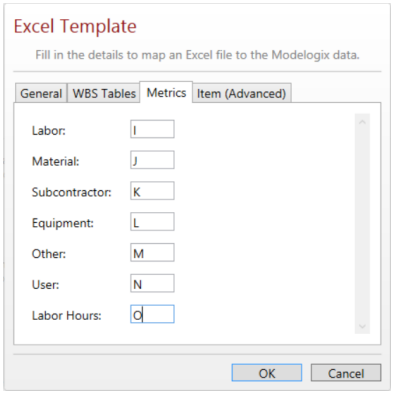
   Enter the following mappings:
   - Division: Code = column **A**
   - Division: Name = column **B**
   - Major: Code = **C**
   - Major: Name = **D**
   - Minor: Code = **E**
   - Minor: Name = **F**
   - Job Cost: Code = **G**
   - Job Cost: Name = **H**



Next we need to map the Metrics.

1. Select the **Metrics** tab.

   Enter the following mappings:
   - Labor = **I**
   - Material = **J**
   - Subcontractor = **K**
   - Equipment = **L**
   - Other = **M**
   - User = **N**
   - Labor Hours = **O**



2. Click **OK | Done**

Note

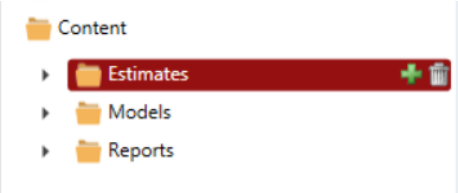
The last tab, Item (Advanced) is only needed if your project has item details in Excel, AND you will be exporting models to WinEst. We are not going to do mappings in this tab.

23 Excel Imports

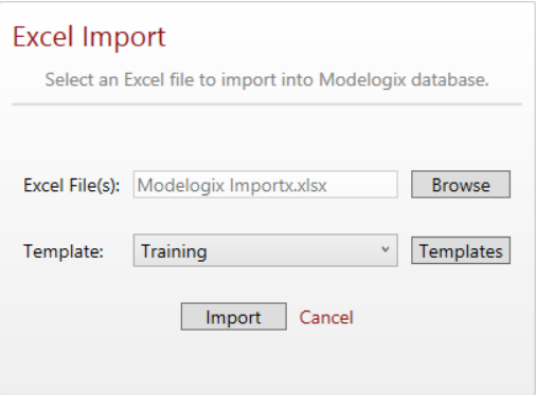
An application that can export the necessary data for Modelogix to Excel can be used to generate data for Modelogix. Once an Excel Import Template has been defined and matches the structure of the Excel file, it is ready for import.

For this exercise, we will import the sample Excel file provided for this training.

1. In the Navigation Pane, put your cursor over the **Estimates** folder.



2. Click the **+** button.
3. Click **Import Excel Estimate.**
4. In Template drop-down list, select **Training.**
5. Browse to the **Modelogix Import.xlsx** file provided for this training.



6. Click **Import.**
7. When done, under the Estimates folder, highlight the **estimate** you just imported.
8. Click **Attachments.** Note that the Excel spreadsheet is automatically attached.
9. Click the **+** button to the right.
10. Click **Add file** and attach **Valley Center.jpg.**

24 Review Questions

1. What types of files can Modelogix import? Choose the best answer.
    a. WinEst
    b. Excel
    c. Both of the above

2. How is Excel data formatted for importing into Modelogix?
    a. No specific formatting required
    b. In a flat file format with Names, Codes and metrics
    c. In a hierarchical file format with Names, Codes and metrics

3. Can you set up more than one template to accommodate differing Excel formats?
    a. Yes
    b. No

Publishing Estimates

25 Publishing Estimates Overview

The final step in creating a Modelogix database is to publish your estimates. In the previous step we imported estimates, but they are not ready to use until we answer all of the required Smart Category questions and enter any Control Units. This is the process of publishing estimates. Once published they are available for creating models.

Business Value

- Answering all required Smart Categories provides the basis for searching
- Entering Control Units allows you to use alternative units
- Published estimates can then be used for modeling

Objectives

After completing this course, participants will be able to:

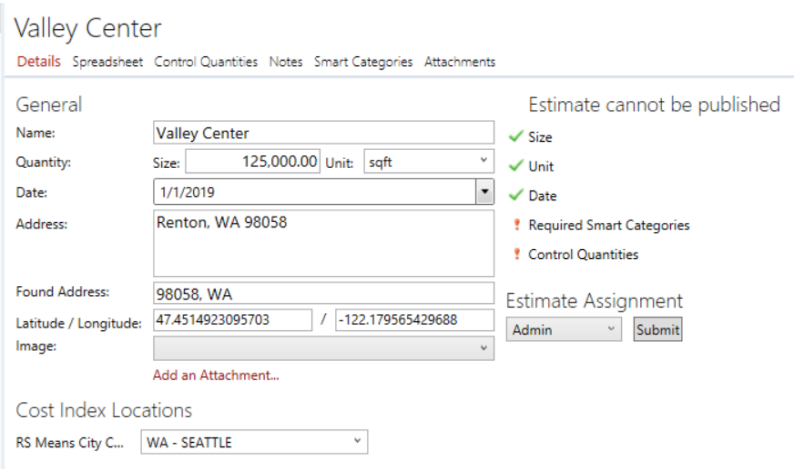
- Answer Smart Category questions
- Enter Control Units
- Publish Estimates
- Put Modelogix Knowledge Into Action

26 Answering Smart Category Questions

Notice that the Modelogix Import estimate that we just imported has a grayed out ribbon rather than red. This is because this project has not been published yet. Information needed to publish is listed under Details for this estimate. In order to publish this estimate, we need to answer all required Smart Category questions.

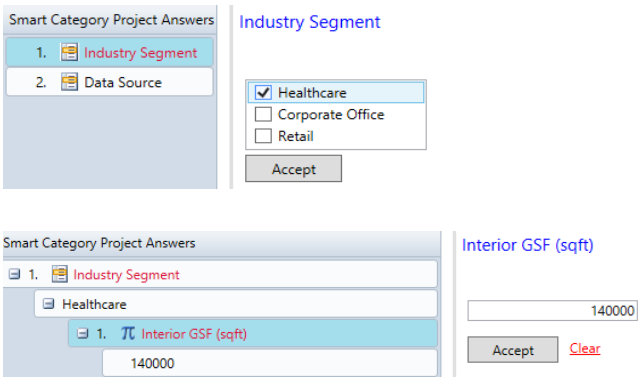
For this exercise, input estimate Details and answer the Smart Category questions. Once completed, the estimate can be published.

1. In the Navigation Pane, under the Estimates folder, select the **Modelogix Import estimate.**
2. From the ribbon, click **Details.**
3. Input the following values:
   - Name **Valley Center**
   - Size **125,000**
   - Unit **sqft**
   - Date **1/1/2019**
   - Address **Renton, WA 98058**
   - Set the Cost Index Locations to **WA-Seattle**



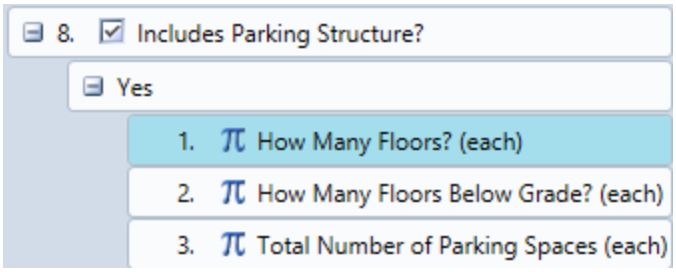
Now you can answer the Smart Category questions.

1. From the ribbon, click **Smart Categories.**
2. Select the **Industry Segment** and set to **Healthcare.**
3. Click **Accept.**



4. Input the following values:
   - Interior GSF **14,000**
   - Number of Floors? **3**
   - Number of beds? **110**
   - Exterior Shell Material, select **Concrete Block**
   - Building Footprint **45,000**
   - Contact Area of Exterior Shell **80,000**
   - Ratio of Shell Surface Area to Building Footprint? This smart category answer is a calculation: **1.7777777777778**
   - Includes Parking Structure? Select **No** and click **Accept.**

     Notice that because you answered No for the Parking Structure, you are not prompted with any questions. Had you answered Yes, there would have been additional prompts.



5. Click the **Data Source** drop-down and select **Excel.**

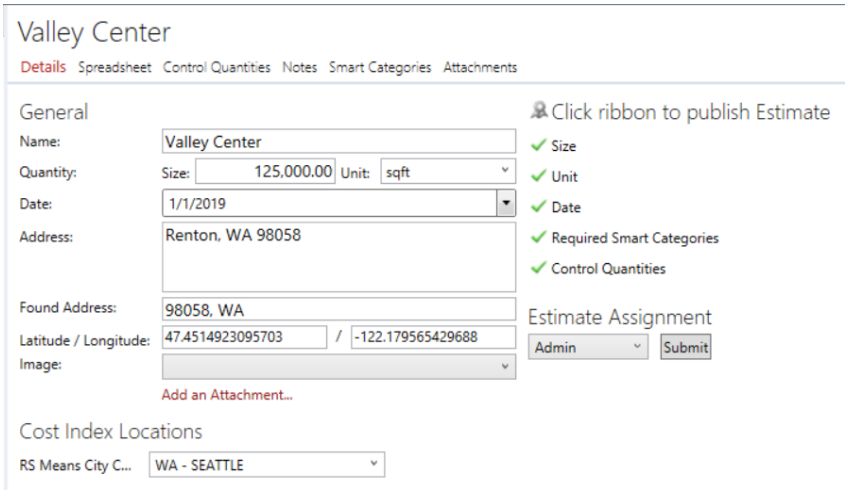
27 Entering Control Quantities and Publishing

For this exercise, we are going to add an *Estimate Control Unit* on Division 3000 Concrete. This will use cubic yards instead of the model unit, sqft.

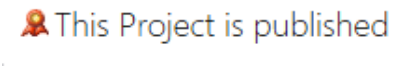
1. In the Navigation Pane, under Estimates, click on the **Valley Center.**
2. Click on **Control Quantities** in the ribbon.
3. Highlight **Division** and the **3000 Concrete** row.
4. Enter **4,200** in the **Quantity** cell.
5. Click the **Estimate Control Unit** drop-down and select **cuyd.**

	Code	Name	Quantity	Estimate Control Unit	System Control Unit
✔	3000	Concrete	4200	cuyd	cuyd

6. Click **Details** in the ribbon. Note that all required fields are now answered and the project can be published.



7. Click the **ribbon icon** to publish the estimate.



Note

The Estimate Control Unit is the unit of measure associated with this estimate. In some cases, this may not match the System Control Unit. In that case you need to adjust the Quantity column and change the System Control Unit column.

28 Review Questions

1. What does the grayed out ribbon in Estimate Details indicate?
    a. The estimate is published
    b. The estimate is not yet ready to publish
    c. The estimate is not published

2. What do the red check marks in Estimate Details indicate?
    a. The details are not answered
    b. The required Smart Categories are not answered
    c. The Control Quantities are not input

3. Can an unpublished estimate be used for modeling?
    a. Yes
    b. No