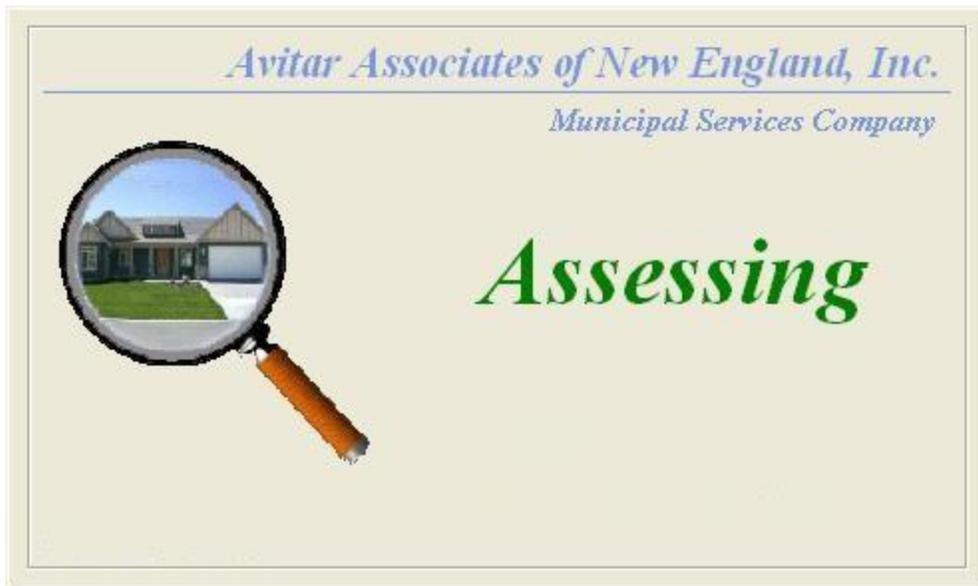




***Avitar Associates***  
*Municipal Services Company*

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Assessing Software Manual



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## Important Concepts

Before examining the details of how to use the Avitar Assessing program, it is necessary to explore several important definitions and concepts used throughout this manualhelp file.

### Parcel Identifier, PID, or Map/Lot/Sub Lot

Avitar Assessing maintains assessment data based on a unique parcel identifier assigned to each parcel. This identifier, often referred to as the PID, is generated from the map, lot, and sub lot assigned to each parcel on your tax maps. In Avitar Assessing, the PID is an eighteen character code, consisting of six characters each for the map, lot, and sub lot. For example, the PID of the first parcel shown on tax map number seven would appear as follows:

000007 000001 000000

If this parcel was later subdivided in to three lots, the resulting PIDs might appear as follows, depending on the nomenclature used in your community:

000007 000001 000000  
000007 000001 00000A  
000007 000001 00000B

In this example, PID 000007 000001 000000 would typically remain with the original “mother lot”, and the new sub lots carved out of the original parcel would be numbered 000007 000001 00000A and 000007 000001 00000B.

**Note:** if your municipality utilizes PIDs that do not conform to the standard Map/Lot/Sub format (e.g. Map/Lot/Sub/Unit) refer to System Settings for information on configuring a Custom PID format.

Throughout this document, the terms record, parcel identifier, PID, and map/lot/sub lot will be used interchangeably.

### Cards, Parcels, and Multi-Card Parcels

It is important to understand the difference between a card, a parcel, and a multi-card parcel.

A **card** is equivalent to what one typically associates with the printed assessment card. It may have a land description, a building description, or both, and it describes all of the attributes that together determine the associated values.

A **parcel** can typically be thought of as the total of all of the assessment data (whether maintained on one or more individual cards) that establishes the value for a single tax bill. A parcel generally

describes a single unit pictured on the town tax map described by a unique map, lot, and sub lot number.

Generally speaking, a parcel consists of a single card. In fact, this is so often the case that you may even hear these terms at times used interchangeably. However, there are certain instances when a single parcel requires more than a single card in order to describe all of the attributes of the parcel that combine to determine the parcel's total value. These are referred to as multi-card parcels. Together, the individual cards of a multi-card parcel describe all of the elements that determine the value used to calculate a single tax bill. On multi-card parcels, the entire land description and acreage is always maintained on the parcel's primary card (i.e. card one), but the secondary cards may consist of buildings, extra features, or both depending on the parcel. On **multi-card parcels**, all of the cards have the same eighteen character PID, but the card number may be indicated by a two digit suffix (e.g. 000007 000001 000000 01, 000007 000001 000000 02, and 000007 000001 000000 03 to describe the three cards for Map 7, Lot 1).

### Examples of multi-card parcels

- A parcel owned by a private school described by a single map and lot number on the tax map that nonetheless consists of several buildings. Each of the buildings requires its own sketch and building description (e.g. a classroom building, an administration building, and a dormitory). A single card can only maintain a single building description and sketch so additional cards are added on which the additional buildings are described. At the end of the year, the private school will receive a single tax bill for the total of all of the parcel's taxable value.
- A farm parcel with a single farm house and fifteen different outbuildings. Due to space limitations on the printed assessment card, the number of extra features (e.g. chicken coops, sheds, barns) on a single card is limited to ten. In this case, the land, farm house, and first ten outbuildings are maintained on the primary card. The remaining five outbuildings are maintained on a second card. Again, at the end of the year, the parcel receives a single tax bill.

In most municipalities, perhaps only one percent of the parcels may be multi-card parcels. However, it is important to understand the concept of multi-card parcels in order to properly maintain the parcel information.

## Property Valuation Methods

Avitar Assessing provides several methods by which you and your assessor can choose to determine parcel values. The default method by which parcels are assessed within the system is a "market modified cost approach to value." On its most basic level, this approach to value uses parameters defined within the system to determine the cost to build (i.e. to buy the land, to erect the structures, etc.) a property equivalent to the parcel being assessed. Then your assessor uses market sales over time to refine these cost parameters and values are adjusted accordingly.

In addition to the traditional cost approach, you and your assessor can use two slightly different income approaches to value individual properties. An income approach recognizes that, in certain circumstances, the value of a property may be dictated by the income it can produce rather than by simply the cost to build an equivalent property -- in essence, the parcel's whole is worth more than the sum of its parts. These income methods of valuation can be particularly helpful in municipalities with significant numbers of commercial properties.

In summary, parcels in your database will be assessed using the market modified cost approach to value, unless you choose to implement one of the income valuation methods. If you and your assessor wish to utilize an income approach to value, you must first enable it within the system and then individually select the parcels to be valued by this method. For instructions on enabling an income valuation approach, refer to the [Update Value Parameters](#) section of this document. For an overview on valuing individual parcels, refer to the [Income](#) section of this document.

## **The Concept of Data Record Sets**

Throughout virtually everything you do in Avitar Assessing you will be creating and accessing groups of parcels referred to as “record sets.” A record set simply indicates a group of parcels that match your search criteria and were therefore selected from the database. The number of possible records in your record set ranges from zero to all of the parcels in your database. If you select a single parcel by clicking on its PID, your record set will consist of one record. If you select a single owner, your record set may consist of several records if the selected owner owns many parcels in town. Alternatively, if you use the [Query Tab](#) to search for all parcels owned by Avitar Associates, your record set will likely consist of zero records.

When you create a record set by selecting particular parcels for access, Avitar Assessing will display the first record (generally based on the first PID). If there are several records in your record set, you can navigate among them using the Previous and Next buttons on the Toolbar. At all times, the record counter on the Data Display Banner will indicate which record of your current record set is now displayed. Most of the time, the record counter will say “Parcel 1 of 1”, indicating you only have one parcel in your record set and it is currently displayed. However, if you press the Select All button on the toolbar, you will notice the record counter will say “Record 1 of 1000” (or however many parcels your town contains). As you press the Next button on the toolbar, you will notice the record counter changes with the parcel record to indicate your current position in the record set (e.g. “Parcel 2 of 1000”, “Parcel 3 of 1000”, etc.). Once you have viewed or edited the data in one particular record set, just create a new record set by selecting different search criteria from any of the Data Access Tabs.

Avitar Assessing will continuously create new record sets based on the criteria you select, so do not get too preoccupied with the concept of record sets. But you can use the record counter to determine how many parcels match your current selection criteria.

## **System Functions Available To You**

This document describes every function of the Avitar Assessing system. You may not be able to access a particular function if you are not a member of the required user group.

## **Required Knowledge of Assessing Concepts**

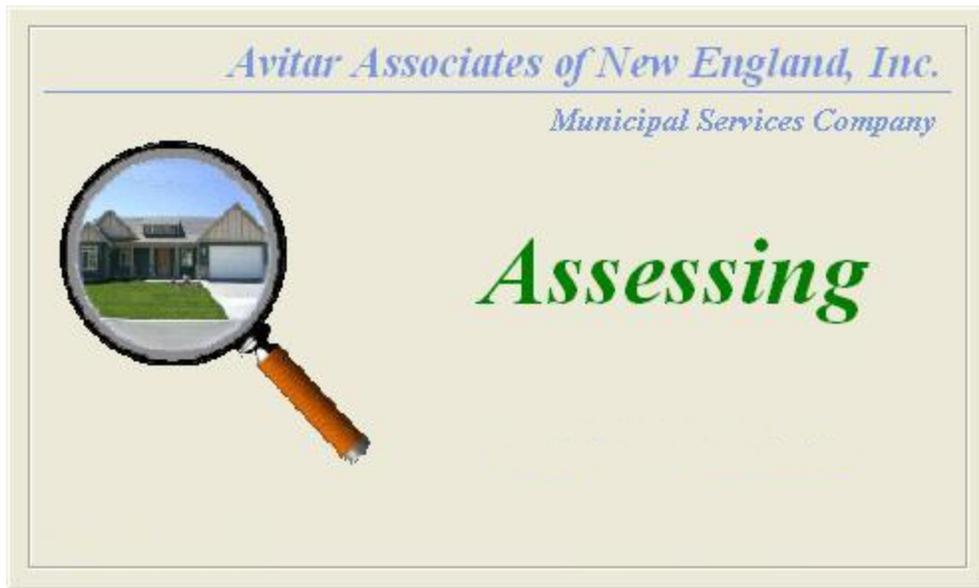
It is assumed that you and/or your assessor are familiar with the many complicated concepts associated with assessment and taxation of property in the State of New Hampshire. This document is not intended to serve as a substitute for or a short cut to the process of accumulating this knowledge. Rather, it is intended to apply what you already know to the proper use of the Avitar Assessing system.

## Starting Avitar Assessing



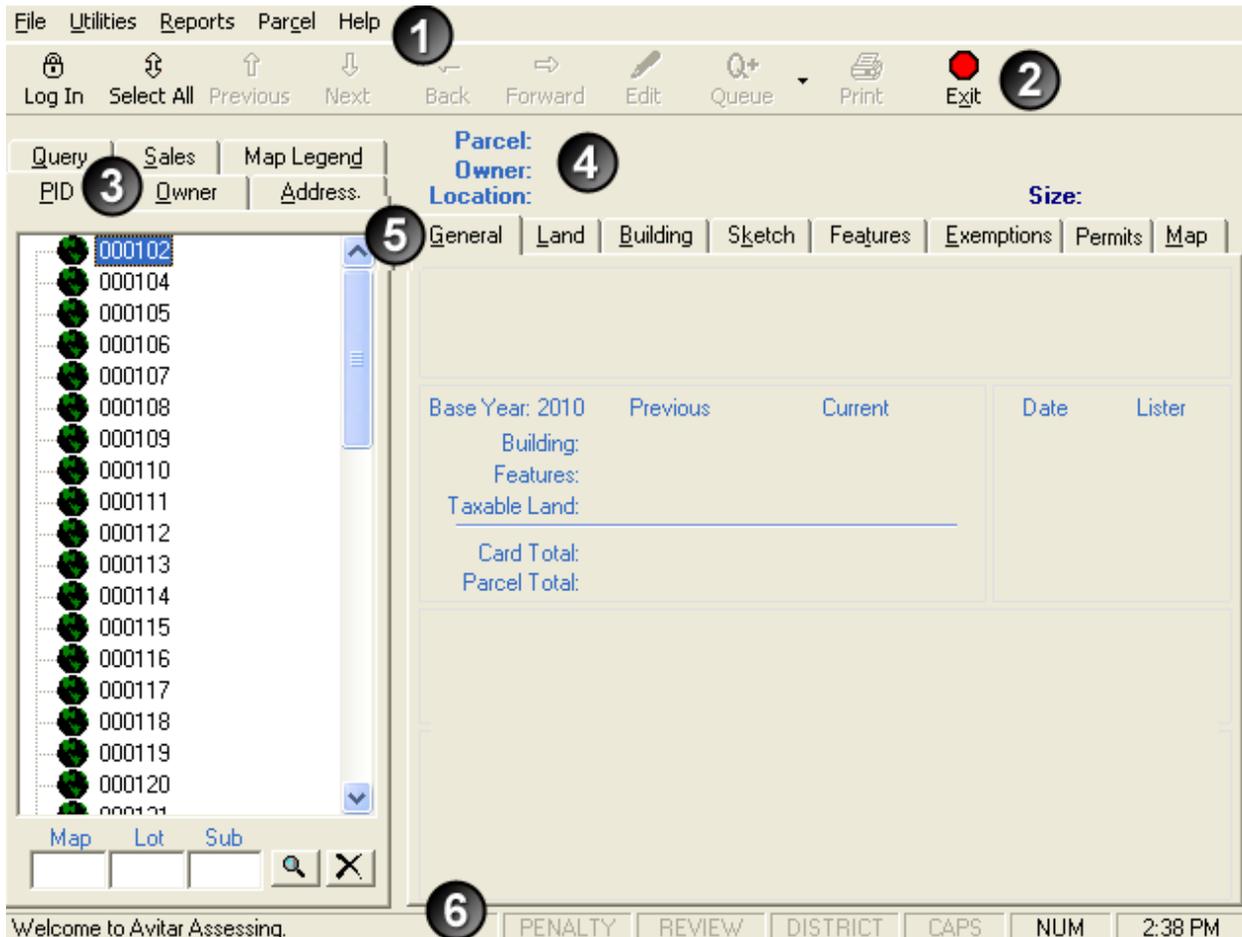
Avitar  
Assessing

Click on the Avitar Assessing desktop Icon or select Assessing from the Avitar program group on your Windows Start Menu. You will see what is referred to as the splash screen, visible while the program initially connects to the database. You are then greeted with the main Avitar Assessing window. The program opens in public access mode in which you will be able to view, but not edit, data.



# Avitar Assessing Main Program Window

Avitar Assessing's main program window is designed to provide quick and easy access to your assessment data. The main window appears below and consists of six basic areas. The areas are labeled below. It's a good idea to remember these terms as they will be referred to throughout this document.



1. Menus
2. Toolbar
3. Data Access Tabs
4. Data Display Banner
5. Data Display Tabs
6. Status Bar

**Note:** The syntax used throughout this document to refer to items available on the menus is Menu Name | Menu Item | Sub Menu Item. For example, the Values Summary report would appear as **Reports | Values | Value Summary**. To generate the report, click on the **Reports** menu located at the top of the main program window, then select the **Values** menu item which reveals the Values sub menu. Lastly, select **Values Summary**.

## Finding Existing Parcels – The Data Access Tabs



The Data Access tabs provide you with several different ways in which you can search, identify, and access records in your database. You can visually search and select records from the various tree view lists if you know the parcel's PID, Owner, or Address. You can also perform more complex Sales Analysis or user defined queries in which you define the characteristics of the records you want to review.

### PID Tab

The PID data access tab enables you to select parcels by Map and Lot. To do so, select the Map number from the first level of the tree view. The Map number will expand to display the parcels on that map. Choose the desired parcel by selecting its Lot and Sub Lot number. Alternatively, enter the Map, Lot, and/or Sub Lot numbers in the search text boxes at the bottom of the tab and press the magnifying glass symbol. If any match is found, the parcel will be displayed. You may select the **X** button to clear the search text boxes.

### Owner Tab

The Owner data access tab enables you to select parcels by owner name. To do so, click on the first letter of last name. The letter level of the tree view will expand to reveal all owners for that letter. Select the desired owner name by clicking on it in the tree view. Multiple parcel record sets will be returned for owners with multiple parcels. Alternatively, you can type the first few letters of the owner's name in the Find text box to jump automatically to the appropriate section of the list. The tree view list can be populated with a list of all secondary parcel owners if you are unable to find a particular owner name in the primary owners list. To toggle back and forth between displaying the primary and secondary owner use the radio buttons at the bottom of the tab. For both primary and secondary owner name tree views, the owners are listed alphabetically

### Address Tab

The Address data access tab enables you to select records by property location. To do so, select the street name. The street name level of the tree view will expand to show the street numbers on that particular street name. Select the desired parcel by clicking on the appropriate street number in the tree view. Alternatively, you can type the first few letters of the street name in the Find box beneath the tree view to jump automatically to the appropriate section of the tree view. "N/A" beneath a street name allows you to select parcels on the selected street for which no street number was entered.

## Query Tab

The Query data access tab allows you to execute a User Query in order to create a record set of parcels meeting specific user-defined criteria. For example, you could select all parcels in the database greater than 10 acres that are not in current use.



The screenshot shows the Query Tab interface. At the top, there are tabs for 'PID', 'Owner', 'Address', 'Query', 'Sales', and 'Map Legend'. Below these is a 'Category:' dropdown menu with 'Parcel Details' selected. A table with three columns: 'Attribute', 'Operator', and 'Criteria' is shown. The 'Attribute' column lists various fields: PID, Cards, Street, Street#, Acres, Zone, Neigh Code, Land Use, Penalty, Review, Precincts, and Notes. Below the table, there are radio buttons for 'Join With: AND' (selected) and 'OR'. At the bottom, there are three buttons: 'Expert', 'Reset', and 'Query...'.

## User Query – Description

To execute a User Query, you need to choose a category, select an attribute, indicate the proper query operator, and finally enter the appropriate query criteria. Each step within the process is outlined below.

### Step 1 – Choose a Category

To begin a user-defined query, select the appropriate category against which you wish to query from the Category dropdown box. The Parcel Details category includes the general parcel information. Other Category names are self-explanatory and allow you to query against the detailed information maintained in subordinate tables within the database (e.g. individual types of current use land or a particular sub area type within a building sketch).

### Step 2 – Choose an Attribute

Once you have selected a category on which to base your query, the available attributes for that table will populate the left column of the Query grid. Locate the attribute for which you want to add a query condition.

### Step 3 – Choose an Operator

Within the Operator column of your query attribute's row, select an operator from the dropdown list of available operators. The types of available operators depend on the type of data maintained in the attribute you selected. The specific types of operators are outlined below

### Step 4 – Enter the Query Criteria

After selecting the field's appropriate query operator in the Oper column, enter your query parameter in the column labeled Criteria. If the field you are utilizing uses a discrete number of specific descriptions (such as neighborhood or roof structure) the corresponding values can be selected from the column's dropdown box. Otherwise, in the case of numeric fields or alphanumeric fields with no corresponding codes (such as owner name or address) simply type in your value manually. Remember to use the percent symbol for wildcard pattern matching.

### Step 5 – Execute the Query

After selecting all of your field operators and adding all of your criteria, press the Query button to execute the query. Any matching parcels will be returned as your current record set. If no matches were found, you will be told so in the message portion of the status bar. If your query could not be executed for some reason you will get an error message. You can add as many additional conditions to your query as you have fields in the grid. Note, though, that all of the conditions will be joined using the AND operator (as opposed to OR). Therefore, a parcel must match all of your criteria to be included in your record set, so beyond several fields of criteria, you may find your queries don't return any records. With the use of these operators and the selection of one or more fields you can create almost any conditions in which to create a subset of records on which to review, print, or report. With enough planning and thought any record set can be created based on the parameters you enter.

### Step 6 – Recursive Queries

When you execute a query with parcels in the current recordset you will receive a prompt allowing you to select one of the following four choices:

**Create New Record Set:** The New Record Set option simply creates a new recordset of parcels that match your query criteria, disregarding whatever parcels are in the current record set.

**Add To Current Record Set:** The Add To Current Record Set option will add any records matching your query criteria to your current recordset, regardless of the attributes of the parcels in your current recordset and whether they meet the criteria on which you are currently querying.

**Select From Current Record Set:** The Select From Current Record Set option enables you to only query against parcels in your current recordset rather than query against the entire database. This option enables you to drill down within your current recordset by doing multiple queries to reach the exact criteria you need to create the recordset.

**Remove From Current Record Set:** The Remove From Current Record Set option can be useful when trying to eliminate parcels from the current recordset. It will remove parcels from the current

record set that meet the current query criteria, leaving those parcels that do not meet the current query criteria in your current record set.

Using these four options, even without any programming skills, you can isolate almost any dataset through multiple recursive queries.

## **User Query – Choose a Category**

To begin a user-defined query, select the appropriate category against which you wish to query from the Category dropdown box. The Parcel Details category includes the general parcel information. Other Category names are self-explanatory and allow you to query against the detailed information maintained in subordinate tables within the database (e.g. individual types of current use land or a particular sub area type within a building sketch).

## **User Query – Choose an Attribute**

Once you have selected a category on which to base your query, the available attributes for that table will populate the left column of the Query grid. Locate the attribute for which you want to add a query condition.

## **User Query – Choose an Operator**

Within the Operator column of your query attribute's row, select an operator from the dropdown list of available operators. The types of available operators depend on the type of data maintained in the attribute you selected. See [Numeric Field Operators](#) and [Alphanumeric Field Operators](#) for more information.

## **Numeric Field Operators**

Numeric fields (e.g. building value or acreage) use the following operators to compare the data in the field with your query criteria to determine whether a record should be included in your record set:

<Less Than  
<=Less Than or Equal To  
=Equal To  
>=Greater Than or Equal To  
>Greater Than  
< >Not Equal To

## **Alphanumeric Field Operators**

Alphanumeric fields (e.g. owner name or address) use the following operators to compare the data in the field with your query criteria to determine whether a record should be included in your record set:

## **Like**

The Like operator enables you to compare data in an alphanumeric field by entering the exact value or a pattern you wish to match. For example, selecting Owner LIKE RANDALL would return only parcels where the owner value is “RANDALL”. Or alternatively, you could use a wildcard character (the percent symbol) to search for values that match a certain pattern. For example, Owner LIKE RAN% would match all values beginning with the pattern RAN. Therefore, Owner LIKE RAN% would match “RANDALL” and “RANFORD” but not “RASMUSSEN”.

Note: Owner names are typically entered in the format “Last Name, First Name”, so it’s a good idea to always include the percent symbol at the end of any owner name query to allow for different first names and/or suffixes such as “Jr.” or “Sr.”

## **Not Like**

The Not Like operator is the opposite of LIKE and can also be used with complete values or just patterns with wildcards. Using the earlier example, Owner NOT LIKE RAN% would match “RASMUSSEN” but not “RANDALL” or “RANFORD”.

## **True/False Boolean Fields**

The True and False operators are used to query against values maintained in Boolean fields (e.g. building air conditioning or penalty). Therefore the equivalency operator (=) is the only operator needed for querying against Boolean fields.

## **User Query – Enter the Query Criteria**

After selecting the field’s appropriate query operator in the Oper column, enter your query parameter in the column labeled Criteria. If the field you are utilizing uses a discrete number of specific descriptions (such as neighborhood or roof structure) the corresponding values can be selected from the column’s dropdown box. Otherwise, in the case of numeric fields or alphanumeric fields with no corresponding codes (such as owner name or address) simply type in your value manually. Remember to use the percent symbol for wildcard pattern matching.

## **User Query – Execute the Query**

After selecting all of your field operators and adding all of your criteria, press the Query button to execute the query. Any matching parcels will be returned as your current record set. If no matches were found, you will be told so in the message portion of the status bar. If your query could not be executed for some reason you will get an error message. You can add as many additional conditions to your query as you have fields in the grid. Note, though, that all of the conditions will be joined using the AND operator (as opposed to OR). Therefore, a parcel must match all of your criteria to be included in your record set, so beyond several fields of criteria, you may find your queries don’t return any records. With the use of these operators and the selection of one or more fields you can create almost any conditions in which to create a subset of records on which to review,

print, or report. With enough planning and thought any record set can be created based on the parameters you enter.

## **User Query – Recursive Queries**

When you execute a query with parcels in the current record set you will receive a prompt allowing you to select one of the following four choices:

**Create New Record Set:** The New Record Set option simply creates a new record set of parcels that match your query criteria, disregarding whatever parcels are in the current record set.

**Add To Current Record Set:** The Add To Current Record Set option will add any records matching your query criteria to your current record set, regardless of the attributes of the parcels in your current record set and whether they meet the criteria on which you are currently querying.

**Select From Current Record Set:** The Select From Current Record Set option enables you to only query against parcels in your current record set rather than query against the entire database. This option enables you to drill down within your current record set by doing multiple queries to reach the exact criteria you need to create the record set.

**Remove From Current Record Set:** The Remove From Current Record Set option can be useful when trying to eliminate parcels from the current record set. It will remove parcels from the current record set that meet the current query criteria, leaving those parcels that do not meet the current query criteria in your current record set.

Using these four options, even without any programming skills, you can isolate almost any dataset through multiple recursive queries.

## **Sales Tab**

The Sales data access tab enables you to query for certain sales (e.g. within a given date range, qualified or unqualified, within a specific zone or neighborhood, etc.) and modify the criteria by which sales records are select for Sales Analysis. This method of data access is most often used during a revaluation or update process where an assessor is analyzing sales trends within the community.

### **Specifying Parameters for Sales Analysis**

From the Sales tab you are able to select a date range for the sales data you wish to analyze, as well as ranges and limits for other factors. Such factors might include the ability to analyze only sales of vacant land, only sales of improved parcels, or both vacant and improved sales to help you determine the status of the assessments in your town.

To modify the default values associated with each parameter, expand the individual parameter by clicking on the plus sign (+) to the left of the desired parameter. Next, click on the parameter value to be modified and type the appropriate value. Once you have set all of the desired parameter values, press the Query button to search the database for records meeting your criteria. Once the search is complete, your active record set will include the sales that meet your criteria. If you wish to start the Sales Analysis process over, press the Default button to reset all searchable parameter items to their initial default values. Press the Statistics button to produce the sales analysis statistics results for the sales found.

## **Sales Analysis Statistics**

The sales analysis statistics include such things as the raw sales data and ratio listings, as well as graphs depicting the results of the analysis based on any of several data attributes. Press the Print button to print any individual report. The Sales Charts menu in the upper left hand corner of the dialog box provides a list of graphs and reports available for display and printing. Reviewing the charts and ratio listings will help you analyze the sales to determine what, if any, corrective action is necessary. The Close button allows you to close the Sales Analysis dialog box and return to the main screen.

The Sales Analysis process allows you to query for certain sales (e.g. within a given date range, qualified or unqualified, within a specific zone or neighborhood, etc.) by selecting the different criteria within the sales criteria treeview on the Sales tab within the Data Access tabs on the system's main window. Previously, when determining the Sale Ratio (i.e. the assessment divided by the sale price) for any parcel, the system always used the parcel's current assessment. With this update, the Sales Analysis will use the Assessment associated with a given sale (as opposed to the parcel's current assessment) when that Sale Assessment is greater than zero. As such, if the sale to be included for analysis happened months ago, prior to the addition of a building to the parcel, you can use the Assessment attribute of the sale to record the assessment of the vacant parcel, even if the current assessment of the parcel reflects the addition of the building. To explicitly indicate the Assessment at the time of the sale and have that assessment utilized for the purposes of the sales analysis process, refer to the Proper Usage of DRA Property Description, Modifier, and Sale Assessment Attributes sections.

## **Map Legend Tab**

If the Map portion of the system is active, you will be able to turn on or off certain map display options, as well as create thematic maps based on your assessment data. For detailed help on this topic see the [Map Functions](#) section.

## Reviewing Existing Parcels - The Data Display Banner and Tabs

Once you have produced a record set of the parcels to be reviewed, the selected records will be displayed, one at a time, on the Data Display Banner and Tabs on the right portion of the main program window.

### Data Display Banner



The Data Display Banner is located directly beneath the toolbar and presents several lines of common information for the parcel currently displayed, including PID, Owner, Location, and Parcel Size. In addition, the banner indicates how many parcels are contained in your current record set, the number of cards for the current parcel, and the number of the parcel and card currently displayed. In the example above, notice that the Parcel Counter indicates the currently displayed record or parcel is "Parcel 5 of 5". This means there are five records in the current record set and you have already used the Next button on the Toolbar to move to the last parcel in the record set. Additionally, the Card Counter indicates that the current parcel has three cards, the first of which is currently displayed. You can use the Forward and Back buttons on the Toolbar to navigate between the multiple cards of a multi-card parcel. If the currently displayed parcel only has a single card, the Card Counter will not be displayed. If a Post-It had been attached to this record a little yellow Post-It icon would have appeared to the left of the Parcel and Owner labels.

### Data Display Tabs



The Data Display tabs display the multiple categories of attributes for the current parcel of the current record set. The information is logically divided up across eight categories, each represented by a tab. Simply click on the corresponding tab to display any of the following categories of information.

Note: The function keys F1-F8 at the top of your keyboard can be used in place of clicking the mouse to toggle between the individual Data Display tabs.

### General Tab

The General Data Display tab shows the complete owner name and mailing address (as opposed to the parcel location displayed in the Data Display Banner) for the current parcel. The General tab also displays values for the building, extra features, and taxable land for the current base year, as well as previous values when available. It also shows the listing history, sales information, and

parcel notes. By clicking the corresponding icons on the General tab, you can also display the [Value History](#) and Expanded [Listing History](#) for the current parcel.

**General**

BOUCHARD, RENE W & LINDA M  
 839 SIXTH AVENUE  
 BERLIN NH 03570

Base Year: 2010	Previous	Current	Date	Lister
Building:	\$57,600	<b>\$57,600</b>	05/25/07	MWVL
Features:	\$5,400	<b>\$5,400</b>	08/07/05	DWHN
Taxable Land:	\$9,800	<b>\$9,800</b>	02/05/03	JDDE
Card Total:	\$72,800	<b>\$72,800</b>		
Parcel Total:	\$72,800	<b>\$72,800</b>		

Date of Sale	Grantor	Book	Page	Sale Type	Sale Price
08/10/1981	BERLIN CITY BANK	642	357	U I 37	\$

WATER RUNS OFF FROM NEIGHBORS;

**Notes:**

- F1 is the corresponding function key to display the General tab.
- The Base Year indicates the year of the most recent revaluation or update.
- Within, the Sales Information grid the Sale Type column indicates the following details about the sale: whether the sale was qualified or unqualified (Q vs. U); whether the sale was of a vacant or improved parcel (V vs. I); and in cases in which the sale was unqualified (i.e. not an arms length sale) the reason why it was excluded (a two digit description code). The exclusion codes for unqualified sales correspond to the codes used by the Department of Revenue Administration. You can hover your cursor over the unqualified sale record and the exclusionary code description will appear in a tool tip (e.g. Family Relative Grant-or/Grantee).
- When long notes are added to a parcel, depending on the screen resolution it may not be possible to view the entire Notes field on the General tab on the application's main screen. In such cases, you can simply double-click on the **Notes** display and the Sales grid will be overlaid with the entire Notes field. You can double-click on the **Notes** field again to truncate it and display the Sales grid again, or it will revert to the default display when you select another parcel.
- Parcels on which the value has been determined by the Mass Income Approach to Value will display the Mass Income Valuation icon .
- Parcels on which the value has been determined by the Individual Income Approach to Value will display the Individual Income Valuation icon .

## Value History

Once your system has captured at least one set of taxable values you will see the Value History icon on the General tab to the left of the Parcel Total values. By pressing the Show/Hide Value History icon you can display the taxable values for each year that has been captured for the selected parcel. When selected, the Value History grid displays on the General tab in the space that is typically occupied by the Sales grid and the Parcel Note. If you move to another parcel or click the Show/Hide Value History icon again, the Value History grid will disappear and the Sales grid and Parcel Note will reappear.

History Of Taxable Values:

Tax Year	Building	Features	Land	Total Taxable
2005	\$123,600	\$6,000	\$160,080	\$289,680

## Listing History

The Listing Dates and Lister Initials on the General tab indicate when the parcel was most recently visited by the assessor. Depending on your community's assessor, it may also indicate the purpose of the visit using designated letter codes (e.g. ML for measure and list). Often times, however, the letter codes following the lister's initials may not be enough to indicate the reason for the visit to the property. In these conditions, the assessor or data collector may have added comments to the database. To view these comments, you can display the expanded Listing History by clicking the Show/Hide Listing History icon, located on the General tab beneath the listing dates and initials. When selected, the Listing History grid displays on the General tab in the space that is typically occupied by the Sales grid and the Parcel Note. If you move to another parcel or click the Show/Hide Listing History icon again, the Listing History grid will disappear and the Sales grid and Parcel Note will reappear.

Listing History:

Date	Lister	Comment
10/02/2002	KM	
08/20/1998	JRHL	
11/14/1996	EST	

## Land Tab

The Land Data Display tab displays all attributes of the current parcel's land description, including acreage, zone, neighborhood, land use, market value, taxable value, and (if applicable) current use credit.



- A check mark in the RC column of the Land grid indicates if the Current Use Recreation Discount has been applied to that particular Land Line. This will only have a value when the Land Line represents current use land.
- A check mark in the CR column of the Land grid indicates if the particular Land Line has been flagged to indicate there is a Conservation Restriction Assessment in place.
- For most Land Lines, AC in the size column indicates the Land Line is measured in acres. Alternatively, FF indicates the Land Line represents the value of frontage feet (i.e. road frontage), VU indicates the Land Line represents the contributory value for a view, and WF indicates the Land Line represents the value of waterfront. Depending on how the waterfront is configured for the zone, it could represent a single value for the frontage (similar to a view) or it could be priced on a per foot of water frontage basis.

## Building Tab

The Building Data Display tab shows all of the information describing the parcel building and may display one or more photo, when available.

Building

<p><b>Model:</b> N. ENGLAND</p> <p><b>Roof:</b> GABLE OR HIP ASBEST SHNGL</p> <p><b>Ext. Wall:</b> VINYL SIDING</p> <p><b>Int. Wall:</b> DRYWALL</p> <p><b>Flooring:</b> CARPET LINOLEUM OR SIM</p> <p><b>Heating:</b> OIL      HOT WATER</p>	<p><b>Bedrooms:</b> 3</p> <p><b>Bathrooms:</b> 1</p> <p><b>+Kitchens:</b>      <b>Frpcls:</b></p> <p style="padding-left: 20px;"><b>A/C:</b> NO      <b>Gener:</b></p> <p><b>Cml. Wall:</b></p> <p style="padding-left: 20px;"><b>Quality:</b> AVG</p> <p><b>Story Height:</b> 1.75 STORY</p> <p><b>Area/Eff.:</b> 1932    1125</p> <p><b>Base Type:</b> RESIDENTIAL</p> <p><b>Base Rate:</b> 59.54</p>													
<p><b>Year Built:</b> 1917</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;"><b>Normal:</b> VERY GOOD</td> <td style="text-align: right;">14 %</td> </tr> <tr> <td style="padding-left: 20px;"><b>Physical:</b></td> <td style="text-align: right;">0 %</td> </tr> <tr> <td style="padding-left: 20px;"><b>Functional:</b></td> <td style="text-align: right;">0 %</td> </tr> <tr> <td style="padding-left: 20px;"><b>Economic:</b></td> <td style="text-align: right;">0 %</td> </tr> <tr> <td style="padding-left: 20px;"><b>Temporary:</b></td> <td style="text-align: right;">0 %</td> </tr> <tr> <td style="padding-left: 20px;"><b>Total Depreciation:</b></td> <td style="text-align: right;">14 %</td> </tr> </table>	<b>Normal:</b> VERY GOOD	14 %	<b>Physical:</b>	0 %	<b>Functional:</b>	0 %	<b>Economic:</b>	0 %	<b>Temporary:</b>	0 %	<b>Total Depreciation:</b>	14 %		
<b>Normal:</b> VERY GOOD	14 %													
<b>Physical:</b>	0 %													
<b>Functional:</b>	0 %													
<b>Economic:</b>	0 %													
<b>Temporary:</b>	0 %													
<b>Total Depreciation:</b>	14 %													
<p><b>Building Value:</b> \$57,600</p>														

Notes:

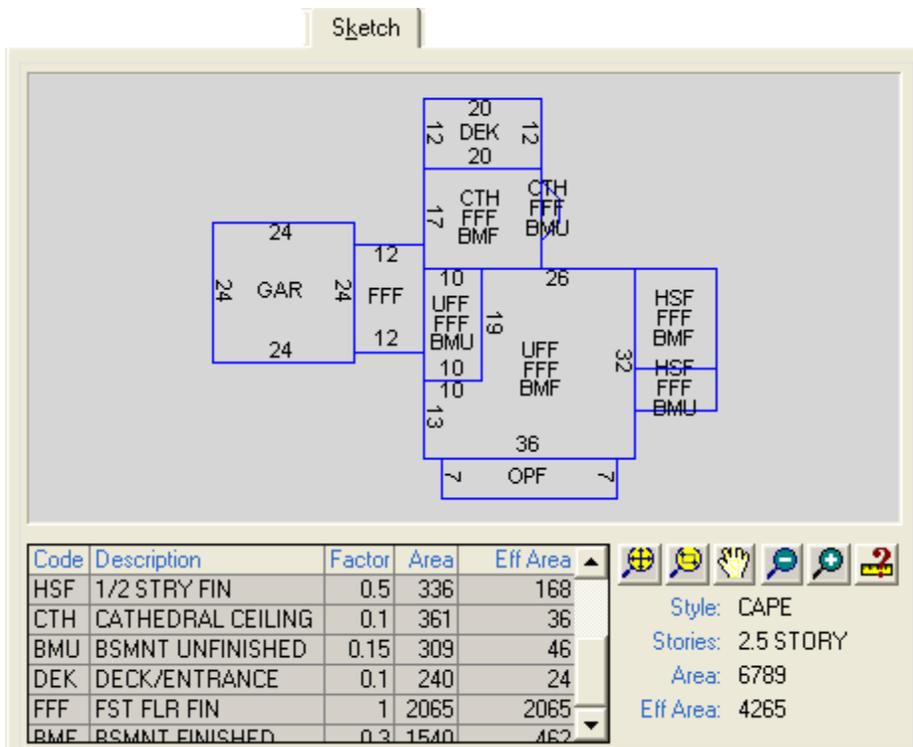
- F3 is the corresponding function key to display the Building tab.
- Cml. Wall indicates the commercial wall type, used for some types of commercial buildings. It is not used on most residential structures.
- Use the icons below the image to toggle between photos on parcels that have two photos.
- In some instances (particularly on parcel's with assessed views), the Building tab will display a parcel photo even if there is no building on the parcel.

- You can view either photo in an enlarged dialog box by double clicking on a displayed photo.
- Parcels on which the value has been determined by the Mass Income Approach to Value will display the Mass Income Valuation icon . The icon will display on the Building tab to the left of the picture icons.
- On the application's main window, parcels on which the value has been determined by the Individual Income Approach to Value will display the Individual Income Valuation icon . The icon will display on the Building tab to the left of the picture icons.

## Sketch Tab

The Sketch Data Display tab shows a sketch image of the building, the building style and stories, the building's total and effective area, and the related sub area descriptions.

Sketch



Code	Description	Factor	Area	Eff Area
HSF	1/2 STRY FIN	0.5	336	168
CTH	CATHEDRAL CEILING	0.1	361	36
BMU	BSMNT UNFINISHED	0.15	309	46
DEK	DECK/ENTRANCE	0.1	240	24
FFF	FST FLR FIN	1	2065	2065
BMF	BSMNT FINISHED	0.3	1540	462

Style: CAPE  
Stories: 2.5 STORY  
Area: 6789  
Eff Area: 4265

### Notes:

- F4 is the corresponding function key to display the Sketch Data Display tab.
- The Avitar Assessing system can maintain sketch descriptions in either of two different formats. The original format (still in use in some communities) used textual descriptions (e.g. FFF, BMU=D30R40) to enter and compute sub areas. The newer format allows you to draw sub areas using the mouse, similar to a drafting application. (The image above shows the newer sketch format, often referred to as the vector or mouse sketch format.) The sketch format in use in your community is determined on a town-wide basis, which is to say all of your sketches will be in either one format or the other – you cannot have some of your

sketches in one format and the rest in the other. The options available on the Sketch Data display tab will be determined by the sketch format used in your community.

- If the Sketch Data Display tab has a series of six buttons beneath the sketch image, your community is using the vector sketch format. If you have two check boxes beneath the sketch image, your community is using the older text based sketch format.
- If your system has been configured to display Gross Living Area that value will display next to the GLA Label.

## Vector Sketch Format

If you are using the vector sketch format:

- You can use the six buttons beneath the sketch image to manipulate the sketch. Hovering your mouse cursor over any button will reveal a tool tip displaying the button function.
- The Zoom All button restores the sketch image to its default size.
- The Zoom Window button allows you to zoom in on a particular section of the sketch. To do so, first press the Zoom Window button. Then click on the sketch image in one corner of the area on which you wish to zoom in. Finally, move the cursor to the opposite corner of the area on which you wish to zoom in and click a second time.
- The Pan button allows you to move to a different area of the sketch at the current zoom resolution. To do so, press the Pan button. Then, use the cursor to click and hold the button on a point on the sketch. While holding the button down, you can move the cursor in any direction to reposition the sketch. Release the mouse button when you are done moving. If you wish to continue panning you can repeat this process or press the right mouse button when you are done panning.
- The Zoom Out button allows you to zoom out from the current resolution without repositioning the current center of the sketch. To do so, simply press the Zoom Out button.
- The Zoom In button allows you to zoom in from the current resolution without repositioning the current center of the sketch. To do so, simply press the Zoom In button.
- The Measure button allows you to view the details of a single sub area section. To do so, first press the Measure button. You will notice the dimension and sub area labels disappear from the sketch, enabling you to click on any individual sub area section. Use the mouse to click on the desired sub area. When you do, the length of the selected side, the total sub area size, and the sub area description will display in the Status Bar Message panel in the lower left corner of the main program window (e.g. Length 14' ... Area: 980' ... Type: UFF, FFF, BMU). Additionally, the selected sub area will be highlighted with a dotted line on the sketch image. You can select another portion of the sketch to measure or right click to stop measuring.

## Text Based Sketch Format

If you are using the text based sketch format:



resolution of your screen and the size of the main screen, you may need to scroll right or left when all columns are displayed.

## Exemptions Tab

The Exemptions Data Display tab lists any Exemptions and/or Credits associated with the current parcel.



The screenshot shows a window titled "Exemptions" with a table of data. The table is divided into two sections: "Exemptions" and "Credits".

Exemptions		Credits	
Type	Amount	Type	Amount
Blind:		Charitable:	
Disabled:		Religious:	
Deaf:		Educational:	
Elderly (05/04/1932):	\$ 21,000	Impr. to Assist Deaf:	
		Impr. to Assist Disabled:	
		School Dining/Dorm/etc:	
		Water/Pollution Control:	
		Wood-Heating System:	
		Solar Power:	
		Wind Power:	
Credits			
Veteran Tax Credit:	\$ 700		

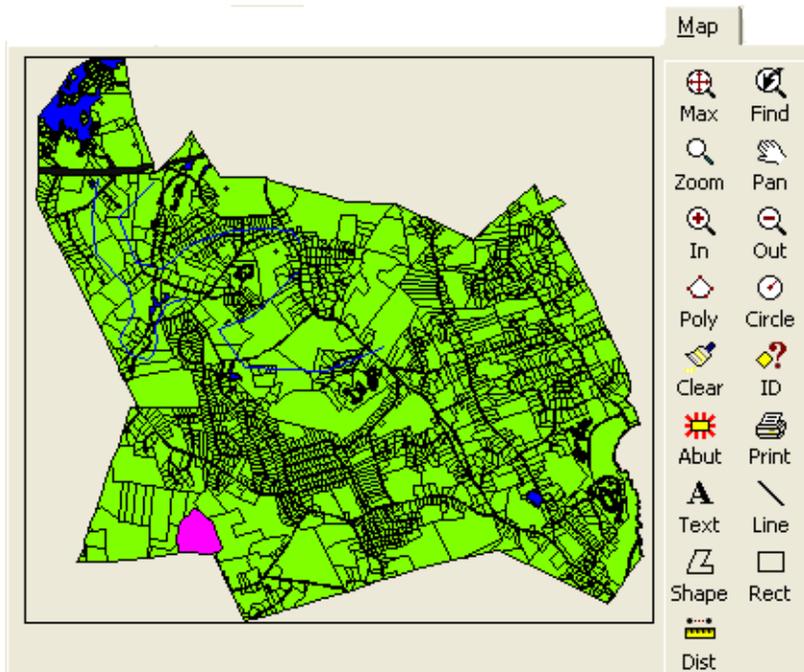
Notes:

- F6 is the corresponding function key to display the Exemptions Data Display tab.
- You must be logged in to view exemption/credit information.

## Permits Tab

The Permits Data Display tab shows any building permit information maintained for the current parcel. Depending on how your system is configured, permit data is either updated within the Avitar Assessing system or it is updated in the separate Avitar Building Permits system. In the latter case, the Permits Data Display tab will show the current permit information as it appears in Building Permit system.





Notes:

- F8 is the corresponding function key to display the Map Data Display tab.

## Toolbar Buttons

The Toolbar located at the top of the program's main window, provides a number of buttons corresponding to frequently performed tasks. Which toolbar buttons are enabled at any one time will depend on the parcels in the current record set, whether or not you have logged in to the database, and the level of user access you were assigned.



## Log In/Off Toolbar Button

The Avitar Assessing system does not require you to log in to the database when you start the program. In this public access mode you are able to view most data, but the majority of the system's functions are not accessible. To print reports or edit data you will need to log in. To do so, press the Log In button on the program's main toolbar. On the Login dialog box, enter your user name and password in the appropriate text boxes. Keep in mind that passwords are case sensitive. Your user level determines what functions you are able to access. User levels are explained in detail under the Maintain Users section.

You can press the Log Off button to end your user session without closing the Avitar Assessing system. Logging off is recommended when you are away from your computer. Alternatively, you can simply exit the program.

## Select All Toolbar Button

The Select All button on the program's main toolbar allows you to easily select every parcel in the database into the current record set. This is sometimes useful if you wish to print a complete set of assessment cards.

## Previous & Next Toolbar Buttons

The Previous and Next buttons on the program's main toolbar allow you to move back and forth between parcels in the current record set. These buttons are only enabled when you have records in the current record set.

## Back & Forward Toolbar Buttons

The Back and Forward buttons on the program's main toolbar are enabled when the currently displayed record is a multi-card parcel and they allow you to navigate between cards for the current parcel. Press the Forward button to display the next highest card of the currently displayed parcel. Press the Back button to display the next lowest card. You can refer to the Card Counter on the Data Display Banner to determine which card is currently displayed (e.g. Card 4 of 7).

## Edit Toolbar Button

The Edit button on the program's main toolbar allows you to edit data on the currently active Data Display tab, provided you have sufficient access privileges. For example, to edit the mailing address of a parcel owner begin by logging in and then selecting the parcel to be edited, using a method on any of the Data Access tabs. With the parcel selected, click on the General tab to display the owner information and then press the Edit toolbar button to display the Edit Owner dialog box. After making and saving any changes to the owner address, you can then click on the Features tab, for example, and again press the Edit toolbar button to edit the parcel's feature information. The currently selected Data Display tab will determine what information can be edited when you press the Edit toolbar button.

## Queue Toolbar Button

The Queue button on the program's main toolbar adds the currently displayed record to the Print Queue for future printing. The Print Queue allows you to keep track of a group of different parcels on which you can then base reports or print assessment cards. For example, you might browse the database looking for parcels that are comparable to a particular subject parcel. As you find comparable parcels you can press the Queue toolbar button to add the current parcel to the Print Queue. Once you are done you could print assessment cards for the comparable parcels by printing cards for everything in the Print Queue.

The dropdown menu to the right of the Queue toolbar button offers additional options related to the Print Queue:

The **Add To Print Queue** menu pick simply adds the currently displayed parcel to the Print Queue. It is equivalent to pressing the Queue toolbar button.

The **Clear Queue** menu pick clears all parcels from the current Print Queue. The number in parentheses to the right of the menu pick indicates the number of parcels currently in the Print Queue.

The **Review Queue** menu pick allows you to cycle through the list of parcels in the current Print Queue. The PID for each successive parcel is displayed and you can indicate whether or not you wish to keep the parcel in the Print Queue.

The **Print Queue List** menu pick simply prints a list of the PIDs of the parcels in the current Print Queue.

The **Set to Current Set** menu pick allows you to set the current record set based on the parcels maintained in the current Print Queue. This can be helpful if you wish to visually review the parcels in the Print Queue.

The **Set from Current Set** menu pick allows you to add parcels in the current record set to the Print Queue. If there are already parcels in the print queue when you select Set from Current Set, you are asked if you wish to append the parcels to those currently in the Print Queue or replace the

parcels currently in the queue. This can be helpful if you have selected parcels using a Query and wish to retain a list of those parcels by saving them to the Print Queue.

## **Print Toolbar Button**

The Print button on the program's main toolbar allows you to print assessment cards for a current set of parcels. You can print cards for parcels either in the current record set or in the current Print Queue. If there are no parcels in the Print Queue but parcels exist in the current record set, the program will generate assessment cards for parcels in the current record set. If there are no parcels in the current record set but parcels exist in the Print Queue, the program will generate assessment cards for parcels in the Print Queue. If there are parcels in both the current record set and in the Print Queue, the program will ask you if you wish to print assessment cards for parcels in the Print Queue or the current record set. In either case, the assessment cards are previewed to the screen and can subsequently be printed.

## **Exit Toolbar Button**

The Exit button on the program's main toolbar allows you to close the program. You do not need to log off prior to exiting the program.

## Status Bar



The Status Bar located at the bottom of the Avitar Assessing's main program window updates you on the status of current settings actions in addition to displaying information about the currently displayed parcel.

## Message Panel

The Message Panel located on the left side of the main program window's Status Bar will update you regarding the results of a query or the status of a pending action. It might indicate how many (if any) records were returned following a query, or it may tell you that updates are still being executed in the database.

## Penalty Status Cell

The Penalty Status cell located in the center of the main program window's Status Bar indicates whether a penalty has been applied to the currently displayed parcel. Penalties of 1% of the tax ranging from \$10 to \$50 are often applied when owners do not return inventory forms on time. If the word PENALTY is grayed out, no penalty has been applied. If it is highlighted, a penalty has been applied. Additionally, if you are logged in, you can double click on the Penalty Status Cell to toggle the penalty on or off for the current parcel.

## Review Flag Status Cell

The Review Flag Status Cell located in the center of the main program window's Status Bar indicates whether a parcel has been flagged for review. If the word REVIEW is grayed out, the parcel has not been flagged. If it is highlighted, the parcel has been marked for future review. Additionally, if you are logged in, you can double click on the Review Flag Status Cell to toggle the review flag on or off to flag the current record for future review.

## Districts Status Cell

The Districts Status Cell located in the center of the main program window's Status Bar indicates whether the current parcel is included in a taxable district or precinct. A taxable district is a portion of town that receives an additional tax, above and beyond the standard property taxes. Examples of taxable districts might include fire precincts or sewer districts. If the word DISTRICT is grayed out, the parcel is not included in a district. If it is highlighted, the parcel has been included in one or more taxable districts. Additionally, if you are logged in and taxable districts have been configured in your town, you can double click on the Districts Status Cell to update the district assignments for the current record. For more information on assigning parcels to individual taxable districts refer to the Editing Data on the Districts Dialog Box section of this document.

## **Caps Status Cell**

The Caps Status Cell located on the right side of the main program window's Status Bar indicates whether your system's Caps Lock is activated.

## **Num Status Cell**

The Num Status Cell located on the right side of the main program window's Status Bar indicates whether your system's Number Lock is activated.

## **Editing an Existing Parcel**

In all likelihood, by the time the Avitar Assessing system is installed in your town, your assessor will have already added most if not all of your town's parcels to your database. Your initial tasks will involve editing attributes on the existing parcels.

The process of editing an existing parcel is straightforward. To begin, you must log in to the database. Next you need to locate the parcel to be edited using any of the methods available to you on the Data Access Tabs (e.g. by PID, Owner Name, Address, etc.). Once you have located the parcel to be edited, you need to select the corresponding Data Display Tab (e.g. General, Land, Building, etc.) for the information you wish to edit. With the proper Data Display Tab selected, press the Edit toolbar button to display the corresponding Edit dialog box. Details of each Edit dialog box are discussed in more depth below.

It is important to recognize that, while your current record set may contain more than one parcel, any edits you make only affect the currently displayed parcel. Thus, if you have a record set of a ten parcels, when you edit the owner information you are only editing the owner information on the currently displayed parcel – not all ten parcels.

Regardless of the category of information you are editing (whether it be land, building, features, etc.) your changes are only saved when you press the OK button and return to the main program window. If you press the Cancel button, you will return to the main program window and any changes you made will be discarded.

Also note, that upon saving changes to an existing parcel, the system may prompt you that you may need to review existing exemptions and/or credits assigned to the parcel. For example, a parcel valued at \$250,000 may have an exemption worth \$225,000 assigned to it. If changes you make reduce the value of the parcel to \$180,000, you will need to review the existing exemption to avoid having a \$225,000 exemption on a parcel valued at \$180,000.

## **Editing Data on the General Tab**

When you have a parcel displayed on the General Data Display tab and you press the Edit toolbar button you are able to edit owner information, parcel location, sales information, listing history, and parcel notes.

**Edit General Information for 000002 000004 000000**

Owner: SMITH, PETER 

Owner 2:

Address: 120 NORTH ROAD

Address 2:

City: ROXBURY

State: NH Zip Code: 03431 

Number:  Parcel Location: NORTH ROAD

Penalty  Review

	Listing Date	Initials
▶	07/30/2007	JDHC
	08/03/2005	LCPR
	12/25/2004	LCPR
	11/05/2004	KCRL
*		

[Edit Listing History...](#)

Sales History   

	Date of Sale	Grantor	Book	Page	Impr	Type	Excl Code	Prprty	Modif.	Asmnt.	Sale Price
▶	07/30/2007	SMITH, JANE	2453	347	V	U	24			\$0	\$200,000
	12/21/2004	JONES, MARY	2206	75	V	U	89			\$0	\$37,000
	09/07/2004	BROWN, MIKE	2185	476	V	U	27			\$0	\$7,533

Notes 

VACANT; WOODED, PART LEVEL W/ RD PART STEEP UPGRADE, ROLLING TOPO; 7/13 ACREAGE ADJ PER SURVEY C13 D3 PL#151;

Notes:

- You can use the Existing Owner Lookup button to select an existing owner and address from the database. Doing so helps to eliminate unnecessary typing, while at the same time ensuring that the names of people that own more than one property will always display in the same format.
- The Street Number portion of the parcel location will accept up to five alphanumeric characters; it is not limited to numeric values, enabling you to enter values such as 98A.
- When entering the Street Name portion of the parcel location, you can either type a new street name or select an existing street name from the dropdown list. It is advisable to select existing street names from the dropdown list to ensure that the street names listed in the Address tree view on the program's main window are standardized and grouped properly. Entering parcels with a street name of MILLER AV, MILLER AVE, MILLER AVE., and MILLER AVENUE will result in four different selections in the Address tree view.
- You can press the Copy Owner Info to Clipboard icon (located by the zip code in the Edit General Information dialog box) to copy the entire name and address to the system clipboard. Note, you should not use this to copy one parcel's owner information within Avitar Assessing to update another parcel's owner information -- use the lookup functions from

the Choose Existing Owner icon for that. But the clipboard function can be helpful for transferring the entire block of information to other applications.

**Notes Regarding the Listing History grid:**

- To add a new listing record, begin by adding the Listing Date in the first empty line of the Listing History grid (indicated with an asterisk on the record selector).
- To delete a listing record, highlight the record in the Listing History grid by clicking on the corresponding record selector for the row (the gray box on the far left side of the grid) and then press the Delete key on your keyboard.
- When entering the Listing Date value use the forward slash (/) between date numbers and a 4-digit year (e.g. 01/01/2008).
- Press the Listing Details... button to access the expanded Listing History grid if you wish to enter comments, in addition to the Listing Date and Initials.
- The Initials field allows up to four characters which can be used in any manner you wish. At Avitar, we use the first two characters for the assessor or data collector’s initials, the third character for the Reason Code, and the fourth character for the Action Code. The following table illustrates what we use for Reason and Action Codes.

**Listing History Reason and Action Codes**

The following codes are Avitar’s default codes used in the third and fourth positions of the Initial column within the Listing History grid. You can use these or create your own codes that are meaningful to you and then ensure that your assessor uses the proper codes.

<b>REASON CODES</b>
A = Abatement/Appeal
C = Callback
H = Hearing
P = New Construction/Pickup
R = Revaluation
S = Subdivision
T = Taxpayer Request
U = Update

<b>ACTION CODES</b>
E = Estimate
L = Measure & Listed or listed after previous measure
M = Measure Only
R = Reviewed
X = Refusal with notes

## **Editing Data on the Sales History Grid**

The Sales History grid within the Edit General dialog box is read-only. You can scroll up and down to select an individual sale, if sales exist. You can also hover the mouse over an individual sale in the grid to display a tooltip indicating any note that may be attached to the sale. You can select an existing sale within the grid by simply clicking anywhere within the row for that sale. Once selected, the entire row for the selected sale will be highlighted blue.

The DRA Property Description, DRA Property Modifier, and Sale Assessment attributes are displayed on the Equalization Report. Additionally, the Sale Assessment attribute, if provided, will be used for the purpose of Sales analysis (i.e. the Query and Statistics buttons on the Sales tab on the system main screen and corresponding reports). Thus, when entering (or not entering) values for these attributes on new or existing sales, it is important to understand how the presence or absence of these values on individual sales will affect your Equalization Report and/or Sales analysis.

For the purposes of the Equalization Report and Sales analysis, the system will utilize the current assessment and parcel description to determine the DRA Property Description, DRA Property Modifier, and Sale Assessment values (for the Equalization Report) and to compute the Sale Ratio for individual sales (for Sales analysis). Therefore, when entering values on new or existing sales, you should only enter values for the DRA Property Description, DRA Property Modifier, and Sale Assessment attributes if you wish to explicitly override the default values or lock the values going forward. When these values are explicitly entered on an individual sale, as opposed to leaving them blank, the system will instead use the values explicitly provided for individual sales, as opposed to using the parcel's current description and assessment.

So, for example, if a parcel currently has a building but you wish to enter a sale for the parcel from when the parcel was vacant land, you might want to select the "22 -- Residential Land" DRA Property Description and enter the Sale Assessment of the vacant parcel at the time of sale. Otherwise, the system will likely use "11 -- Single Family Home" and the parcel's current assessment.

Alternatively, when you do not explicitly provide these attributes, the system will determine the appropriate DRA Property Description and DRA Property Modifier as indicated by the attributes of the parcel, as well as the parcel's current assessment at the time you generate specific reports or analysis.

So in most cases, whether editing existing sales or adding new sales, you should leave the assessment value blank (i.e. zero) when adding or modifying sales such that the system will analysis and/or report the sale based on the parcel's current assessment and description at that time. If you explicitly enter the assessment on the sale and then the assessment changes during a revaluation or update, the system will use the explicitly entered assessment to compute the Sale Ratio, which may complicate and/or lead to unintended results in subsequent Sales analysis performed as part of the revaluation or update.

### **To Add a New Sale**

Simply click on the "Add New Sale" icon (a blue plus sign) located to the upper right of the Sales History grid. (You can hover over each icon to reveal a tooltip to verify you are clicking on the correct icon.) The Add New Sale dialog box will appear, with several default values already selected based on what the system may already know about the parcel. Enter and update values as needed.

For new sales, the system will default the DRA Property Description and DRA Property Modifier based on the current attributes of the parcel. These values will typically be sufficient both in the immediate and long term. The Sale Assessment, however, will default to zero and should only be populated with a non-zero value if you wish to lock an assessment in for future Equalization Reports and Sales analysis rather than allow them to use the parcel's current assessment at that point in the future.

**Add New Sale for 000002 000004 000000**

Sale Date: 11/01/2013

Grantor/Seller: SMITH, PETER

Grantee/Buyer: ROY, LINDA

Book:

Page:

Improved/Vacant: Vacant

Qualified/Unqualified: Qualified

Unqualified Reason:

DRA Property Description: 22 RESIDENTIAL LAND

Modifier: 70 WATERFRONT

Assessment:  (Current: \$2,942)

Sale Price:  0

Notes:

\* Only provide these values if you wish to explicitly override the values indicated by the parcel's current attributes and/or assessment.

Cancel OK

### To Modify an Existing Sale

First select the sale you wish to edit by selecting the corresponding row in the Sales History grid within the Edit General dialog box. Once you have the desired sale selected, press the Edit Selected Sale icon (red edit tag) located to the upper right of the Sales History grid. (You can hover over each icon to reveal a tooltip to verify you are clicking on the correct icon.) Then enter any

necessary changes within the Edit Sale dialog box.

For existing sales on which you need to override the default values displayed for a sale's DRA Property Description, DRA Property Modifier, and/or Sale Assessment you will need to manually edit the sale in order to explicitly set the attribute value.

For existing sales that do not already have a manually entered DRA Property Description, DRA Property Modifier, or assessment, you can have the system individually determine any of these features by pressing the corresponding icon (magnifying glass) next to each attribute. If you wish to remove any of the current DRA Property Description, DRA Property Modifier, and Assessment attributes and have the system revert back to determining the appropriate values to be used at the time of an Equalization Report or Sales analysis, you can simply select "None" from the corresponding dropdown list (in the case of DRA Property Description or DRA Property Modifier) or enter zero (for Assessment).

Modify Existing Sale for 000002 000004 000000

Sale Date: 07/30/2007

Grantor/Seller: SMITH, JANE

Grantee/Buyer:

Book: 2453

Page: 347

Improved/Vacant: Vacant

Qualified/Unqualified: Unqualified

Unqualified Reason: 24 ABUTTER SALE

DRA Property Description:

Modifier:

Assessment: 0

Sale Price: 200,000

Notes:

\* Only provide these values if you wish to explicitly override the values indicated by the parcel's current attributes and/or assessment.

Cancel OK

### To Delete an Existing Sale

First select the sale you wish to delete by selecting the corresponding row in the Sales History grid

within the Edit General dialog box. Once you have the desired sale selected, press the Delete Selected Sale icon (black x) located to the upper right of the Sales History grid. (You can hover over each icon to reveal a tooltip to verify you are clicking on the correct icon.)

Delete Existing Sale for 000002 000004 000000

Sale Date: 07/30/2007

Grantor/Seller: SMITH, JANE

Grantee/Buyer:

Book: 2453

Page: 347

Improved/Vacant: Vacant

Qualified/Unqualified: Unqualified

Unqualified Reason: 24 ABUTTER SALE

DRA Property Description:

Modifier:

Assessment: 0

Sale Price: 200,000

Notes:

\* Only provide these values if you wish to explicitly override the values indicated by the parcel's current attributes and/or assessment.

Cancel Delete

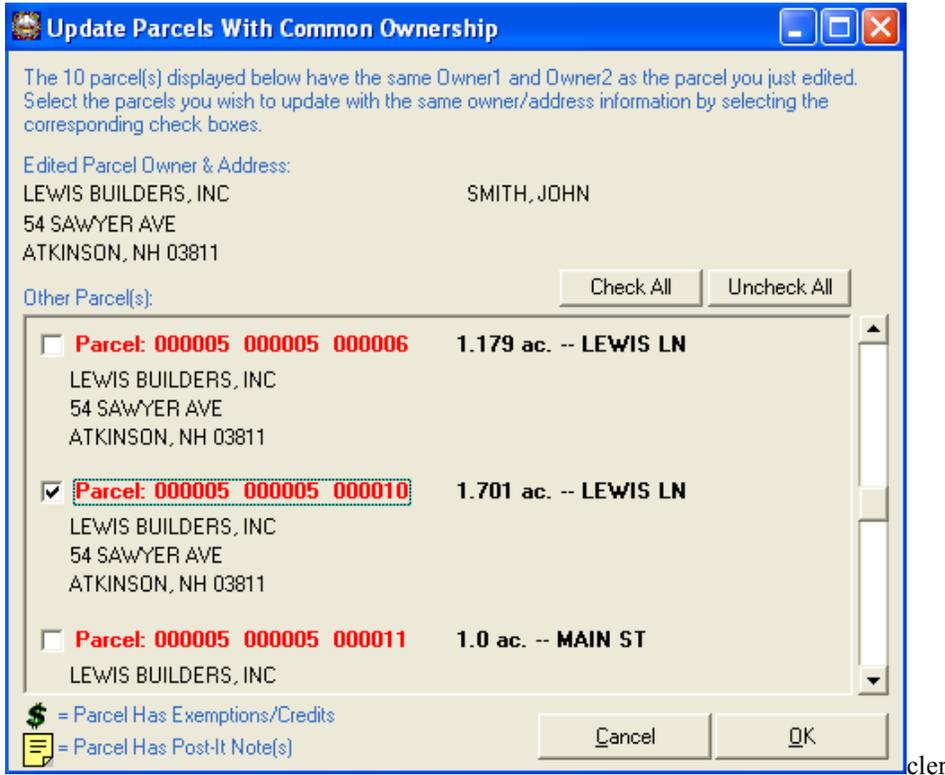
### To Save a Sale You Have Added, Modified, or Deleted

You must press the OK button on the Edit General dialog box to actually save any pending sale changes from the Edit Sales dialog box to the database. If you make any changes (add, modify, or delete) to a parcel's sales and you okay those changes within the Edit Sale dialog box, and you press the Cancel button within the Edit General dialog box you will be prompted whether you wish to save or discard the pending sale change(s). At this point, if you have made changes to sales and changes to other attributes within the Edit General dialog box you cannot save the sales changes without also saving the other changes.

### Editing Owner Info for Owners with Multiple Parcels

When you are editing owner and address information for the system checks to see if the same owner owns additional parcels in the database. If the system identifies additional parcels, you will be notified that additional parcels for the same original owner exist, and you will be asked if you

would like to review the list of parcel any of these parcels to determine if any of the others need to be updated as well. If you answer **Yes** the system displays the Update Parcel With Common Ownership dialog box in which the other parcels are listed. You can review the parcels and check the corresponding check box for any parcels for which you wish to update the ownership information with the information you just entered.



There are a few things to keep in mind when using this function:

- In order to be considered for update, other parcels must have the exact same owner and secondary owner as the originally edited parcel. For example, if Parcel A is originally owned by "AREND, JOSH" and Parcel B is owned by "AREND, JOSHUA" the system will not see these as identical, and thus will not offer you the opportunity to update Parcel B with the updated owner information applied to Parcel A. Similarly, if Parcel A is owned by "AREND, JOSH" with no secondary owner and Parcel B is owned by "AREND, JOSH" but has a secondary owner of "AREND REVOCABLE TRUST" the system will not see these as identical, and thus will not offer you the opportunity to update Parcel B.
- This function will not automatically add Sales information to any of the selected parcels. For example, if "AREND, JOSH" owns five parcels in town and all five are sold to "PENNYPACKER, WILLIAM" you can use this function to automatically update the remaining four parcels with the owner information for "PENNYPACKER, WILLIAM." However, you will still need to edit each of the remaining four parcels to add the appropriate sale information.



## Land Parcel Description

The Zone, Land Use, Neighborhood, and Total Acres selections are used to describe the entire parcel. The Zone, Land Use, and Neighborhood selections made at the top will indicate which the corresponding values in the Land Lines grid below.

### Notes:

- The Zone dropdown list will determine the minimum acreage and building site value for the parcel. The building site should be maintained on the first line of the Land Lines grid.
- The Land Use selection will indicate whether the parcel is taxable or not, and if so, at which tax rate the parcel will be taxed. For exempt parcels, make sure you indicate whether the parcel is EXEMPT-FED, EXEMPT-STATE, or EXEMPT-MUNIC. If the Land Use is any of these values, the parcel will not receive a tax bill.
- The Land Use code “EXEMPT-PILT” must be used on all parcels that are not issued a property tax bill, but instead make payments in lieu of taxes. When running the MS-1 report you will be prompted to enter the amount the Town receives in lieu of taxes. The assessment will not be included in the MS-1 totals and a tax bill will not be generated.
- When adding or editing utility parcels, make certain you select the appropriate code for UTILITY-ELEC, UTILITY-GAS, UTILITY-WATER, or UTILITY-OTHER. When the tax bill is calculated for parcels with these Land Use descriptions, the State Education portion of tax rate is not included. Make sure that the utility is on the approved list of companies which the DRA distributes each year with the MS-1 before assigning them any of these utility Land Use descriptions. The COMMERCIAL Land Use description should be used for telephone and cable companies.
- Use the Neighborhood dropdown list box to select the appropriate neighborhood adjustment code/factor for the parcel.
- The parcel’s area should be entered in acres. If you only know the parcel’s area in square feet, you can press the Conversion button in the lower left corner of the dialog box and the system will convert the value you enter in square feet into acres.

## Land Lines Grid

The Land Lines grid is used to describe the individual sections of land that compose the entire parcel. Many of the values in the grid cannot be edited directly, but rather derive their values from the selections made in the dropdown lists above.

### Notes:

- The Land Use column in the Land Lines grid is, except in the case of current use land, determined by the parcel description Land Use dropdown list. For example, you cannot have a record in the Land Line grid with a Land Use of 2F RES WTRFRNT when the parcel description Land Use is 1F RES. The only exception involves current use – you can have any type of current use Land Line records (e.g. FARMLAND, UNMNGD PINE, etc.) even when the parcel description Land Use is not a current use description.

- To enter current use land you must use the Land Use dropdown list box on the corresponding Land Line to select the appropriate current use category. You will need to enter one Land Line for each category of current use on the parcel.
- The Zn column indicates the parcel's zone. It can only be edited for the entire parcel using the Zone dropdown list at the top of the dialog box – it cannot be edited within the Land Lines grid.
- For most Land Lines, you will select AC in the Units column to indicate the Land Line is measured in acres. Alternatively, you can select FF to indicate the Land Line represents the value of frontage feet (i.e. road frontage), VU to indicate the Land Line represents the contributory value for a view, and WF to indicate the Land Line represents the value of waterfront. Depending on how the waterfront is configured for the zone, it could represent a single value for the frontage (similar to a view) or it could be priced on a per foot of water frontage basis.
- The sum of the sizes of the Land Line records (for which the units are acres) must equal the parcel's total acreage entered above.
- The NC column indicates the Neighborhood factor for each Land Line record. The Neighborhood. The Neighborhood for the building site described on the first Land Line record is determined by the parcel's Neighborhood. Typically, the Neighborhood value for subsequent Land Line records will be N-X BACKLAND.
- The Adj column (i.e. Adjustment) is determined by the Neighborhood value and is not editable.
- You can edit the Cnd column (i.e. condition factor) of each Land Line to account for special conditions, either positive or negative.
- The checkbox in the Ov column is used to indicate that the market value for that particular Land Line record is not calculated by the system but was overridden by the user. In such cases, you can manually enter the market value of the Land Line. You should only use this in order to comply with a court decision in which the value was not calculated by the system but instead was determined by a third-party such as the Board of Tax and Land Appeals (BTLA).
- You can use the CU Cnd column (i.e. current use condition) to enter the soil potential index (SPI) for Farmland or topography, access, and/or quality of land in other categories. This is only available when the Land Line represents current use land.
- You can place a check mark in the RC column of the Land grid to indicate the Current Use Recreation Discount has been applied to that particular Land Line. This can only be done when the Land Line represents current use land.
- You can place a check mark in the CR column of the Land grid to indicate that a Conservation Restriction Assessment flag has been placed on the particular Land.

Note that some changes you make to existing land descriptions may require you to make changes to any existing building description. For example, if you change an existing parcel's Land Use from non-exempt to exempt, the system may indicate that you will need to also select an exempt base rate for any existing building. Follow the system prompts to complete any additional changes that may be required.

## Editing Data on the Building Tab

When you have a parcel displayed on the Building Data Display tab and you press the Edit toolbar button you are able to edit the existing building description.

Note: If there is no building on the parcel and you press the Edit toolbar button, a message box will indicate that if you wish to add a building to a vacant parcel you must begin the process by entering a building sketch. If you wish to proceed you can answer Yes and the system will display the Add Sketch dialog box. For more information on entering sketches, refer to the section on Adding & Editing Sketches.

Within the Edit Building dialog box, most attribute descriptions can be selected from the corresponding dropdown lists. The acceptable values for each category are derived from the parameters table, created at the time of installation and/or edited locally.

Notes:

- You can select the Model description from the dropdown list or you can type in a new value – the model description has no impact on value.

- Roof, Exterior Walls, Interior Walls, and Flooring all have two possible entries. You may enter two different descriptions or you may use just one. If you choose to enter two different descriptions, the system will average both items for the correct value.
- The Cml. Wall (i.e. commercial wall) description is necessary for commercial properties. Use the dropdown list to select the appropriate value or skip this if the parcel is not a commercial property. When entering commercial wall descriptions, use the second text box to enter the average wall height of the building. The default value is twelve feet; values larger than twelve feet will affect the building value (the value increases at about 2% per foot of height).
- Count the number of Bedrooms, Bathrooms, Fixtures, Extra Kitchens, Fireplaces, and Generators by using the corresponding counter to the right.
- If your system has been configured to utilize the Textual Bathroom Description (described below) for a commercial or industrial properties, you may choose to first check the box labeled Describe Cml/Ind Bthrm Count As. Once the box is checked, the drop down list of Textual Descriptions will be enabled and you can select the appropriate description.
- The A/C check box is used when a building has air conditioning installed. Initially, all A/C values default to 100%. However, when the A/C attribute is checked, you can use the accompanying drop down list to select 25%, 50%, or 75% for buildings in which only a portion has Air Conditioning. The resulting building points used in calculating the building value will adjust accordingly. Note that the building points values are maintained as an integer value. So depending on the number of points you have assigned for Air Conditioning, you may not experience a difference in value by changing the percentage. However, typically Air Conditioning is set to four points, so by changing the percentage you can instead add one, two, or three points by using the 25%, 50%, or 75% percentages, respectively.
- Select the appropriate building Base Rate from the Base Type dropdown list. The descriptions in the Base Type dropdown list are determined by the Land Use of the parcel. For example, you are not able to select an exempt Base Type if the parcel's Land Use (as determined on the Land tab) is not also exempt.
- Normal depreciation is calculated based on the year built and the overall condition. Beyond that, you can enter additional Physical, Functional, Economic, and/or Temporary depreciation. For each of these, depreciation types you must enter a descriptive note. If no note is entered for Physical, Functional, Economic or Temporary, the depreciation will not be saved.
- Temporary Depreciation is used for new construction or renovations which are not completed by April 1st.

### **Building Bathroom Counts vs. Fixture Counts**

Avitar Assessing can utilize one of two different methods to calculate a structure's building points – based on either total bathroom count or total bath fixtures count. Traditionally, assessors have determined the bathroom count by dividing the total number of fixtures by three. However, occasionally this gave misleading information to system users if, for example, a house had two bathrooms with a total of nine fixtures (e.g. master bath with two sinks, shower, tub, etc.). The

assessor would enter three for bathroom count (i.e. nine fixtures divided by three fixtures per average bathroom) to get the proper building points total. However, the homeowners might complain that they only had two bathrooms and not three. By utilizing the Fixtures count you can satisfy both requirements by using the nine Fixtures to determine the building points while at the same time displaying two bathrooms on the card.

If you wish to use the Fixtures count for determining a structure's building points you may need to reconfigure your system. If you wish to use the Fixtures count, select **Utilities | Update Parameters | Building Parameters | Building Points | Internal Building Points | Bed/Bath Points**. Check the corresponding check box. When checked, the system will divide the total fixture count by three and round to the nearest half bathroom for parcels on which a total fixture count is given. If the Fixtures count equals zero, the system will use the bathroom value as before. The Fixtures value is entered on the standard Edit Building dialog box, to the right of the Bathrooms edit box. If you choose not to use the Fixtures count in calculating total building points, you can still use the Fixtures text box to maintain the Fixtures information. It will simply be ignored when calculating building points.

### **Textual Bathroom Description for Commercial Buildings**

For commercial buildings you can elect to use a Textual Description for the number of Bathrooms in addition to the traditional Bathrooms Count. We have found this to be useful in our own assessments on commercial properties to help eliminate confusion over the information displayed on the assessment card. This confusion can arise from the fact that the formula used by the application to determine the appropriate number for points to assign for bathrooms and bedrooms was developed with a primary focus on residential properties. For a residential building, four or more bathrooms is generally viewed as a relatively large number of bathrooms and two bathrooms is more typical. Whereas, in a large commercial office building, a total of two bathrooms would be below average or atypical. A total of six bathrooms may be average for the building's size. By providing textual descriptions (e.g. None, Below Avg, Extensive) you can still enter the actual bathroom count in the Bathrooms Count text box. However, for the purposes of the building's point calculation, the system will translate the textual description you provide to the proper corresponding point value. For example, you could enter a Bathroom Count of eight, but choose to describe it as Below Average (based on the building's relative size). Previously, to have the same effect on the building points calculation you would have needed to enter a Bathroom Count of one, perhaps causing confusion.

If you wish to utilize the Textual Bathroom Description on commercial buildings, you must first enable it within your database. Then you can begin assigning the appropriate descriptions to individual parcels. To enable the setting system wide, select **Utilities | Update Value Parameters | Continue > | Building Parameters | Building Points | Internal Building Points | Bed/Bath**. Check the box labeled **Enable Display of Textual Bathroom Description for Commercial/Industrial Buildings** and then press **Save**.

If you wish to utilize the Textual Description on a commercial or industrial property, within the Edit Building dialog box first check the box labeled Describe Cml/Ind Bthrm Count As. Once the

box is checked, the drop down list of Textual Descriptions will be enabled. Select the appropriate description and press **OK**.

## Editing Parcel/Building Photos

When you have a parcel displayed on the Building Data Display tab you can edit the parcel's primary and secondary photos by double clicking on the existing photos. If no photo exists on the current parcel, you can add a photo by simply clicking on the Add Picture button. The images are named Building Picture and Land Picture in accordance with where the images print on the assessment card (i.e. front vs. back of the assessment card). It's possible to have a Land Picture without having a Building Picture.



### Notes:

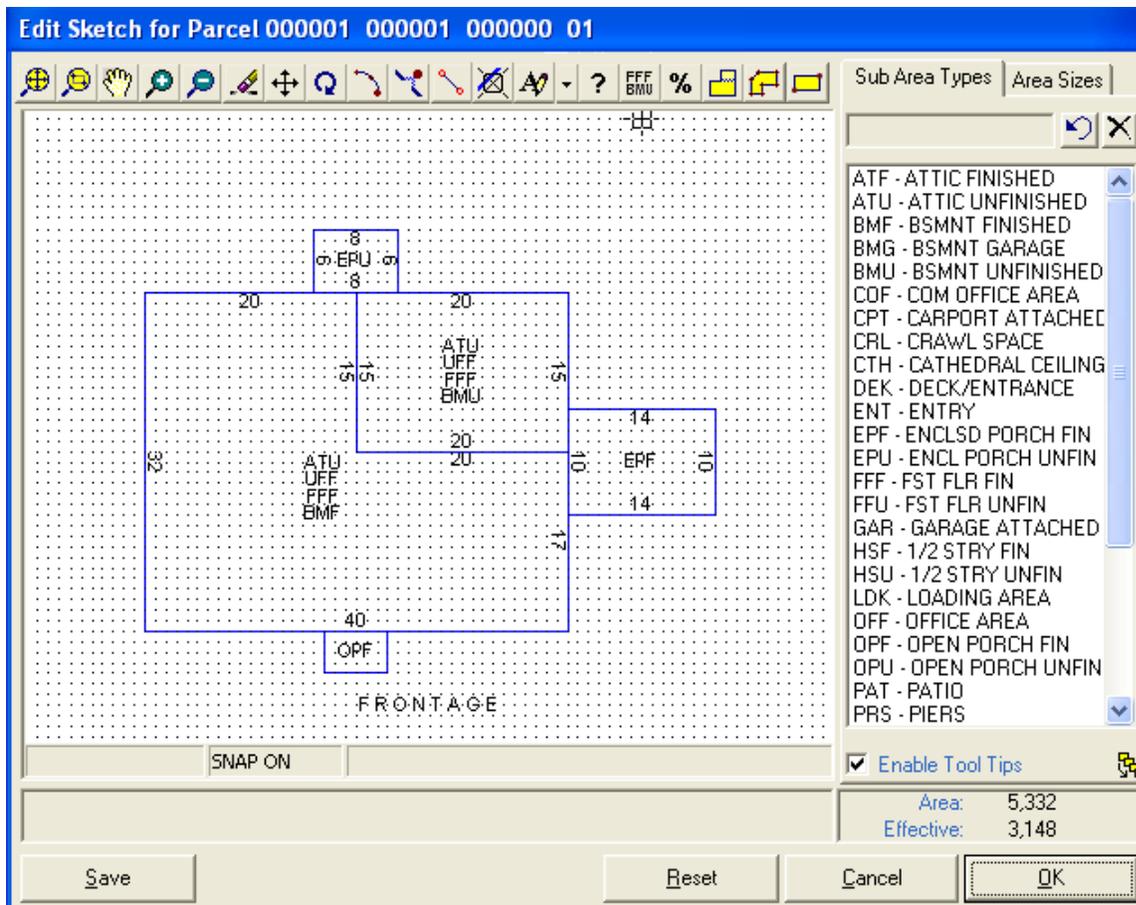
- To add a photo to a parcel select the corresponding Building Picture icon  or Land/Secondary Photo icon  and then press the Add Picture button to browse to where your picture file is stored. Once you have selected the appropriate image file, press **Open** to insert the image file into the database. (The system only accepts .JPG/.JPEG image file formats.) You cannot add a new photo until the existing photo has been deleted.
- To delete an existing photo, select the corresponding Building Photo or Land/Secondary Photo icon and press the **Delete Picture** button.

- To export a photo from the database to an image file, press the **Export Picture** button and you will be prompted for a location and file name for the image file. The file will be saved as a .JPG file. This may be helpful if you need to use the images in other documents or presentations.
- The Avitar Assessing system maintains digital photos within the database, as opposed to simply storing the location of the original photo. This is important for two reasons: 1) Once you have added the photo to the database, you do not need to continue to maintain the image file on your computer, and 2) parcel photos with excessively large resolutions will add significantly to the size of your overall database. When adding photos, you may receive a warning that the size of your image files may be excessive.

## **Editing Data on the Sketch Tab**

When you have a parcel displayed on the Sketch Data Display tab and you press the Edit toolbar button you are able to edit the existing building sketch.

Note: If there is no building on the parcel and you press the Edit toolbar button, a message box will indicate that if you wish to add a building to a vacant parcel you must begin the process by entering a building sketch. If you wish to proceed you can answer Yes and the system will display the Add Sketch dialog box.



The process of creating and editing sketches is detailed enough so as to require its own section of the document. For information on creating and editing sketches, refer to the section on Adding & Editing Sketches.

## Editing Data on the Features Tab

When you have a parcel displayed on the Features Data Display tab and you press the Edit toolbar button you are able to edit the existing feature descriptions.



- The Notes column will print on the assessment card, but it will not appear on the main display screen on the Features tab. However, if you hold the cursor over an individual Feature record on the grid on the Feature tab, the Feature Note will appear as a tool tip over the record.

## Editing Data on the Exemptions Tab

When you have a parcel displayed on the Exemptions Data Display tab and you press the Edit toolbar button you are able to edit the parcel's exemptions and credits.

**Edit Exemptions for Parcel 000001 000001 000000 01**

Percentage value below indicates the portion of the exemption or credit to be applied. (To be used for partial ownership.)

	%	Amount
Blind: NONE	100	0
Disabled: NONE	100	0
Deaf: NONE	100	0

**ELDERLY EXEMPTIONS**

<input checked="" type="checkbox"/> 07/01/1927	100	200000
<input type="checkbox"/> Initial Elderly Exemption Application Was Made This Year		
<input type="checkbox"/> 07/23/2008	100	0

**VETERAN TAX CREDITS**

VET - WAR SERVICE	100	250
NONE	100	0
NONE	100	0
NONE	100	0

Percentage value below indicates the portion of the CARD'S value that is exempt.

	% Exem.	Amount
Charitable: <input type="checkbox"/>	100	0
Religious: <input type="checkbox"/>	100	0
Imprvmnts to Assist the Deaf: <input type="checkbox"/>	100	0
Imprvmnts to Assist Disabled: <input type="checkbox"/>	100	0
School Dining/Dorm/Kitchen: <input type="checkbox"/>	100	0
Water/Air Pollution Control: <input type="checkbox"/>	100	0
Wood-Heating Energy Systems: <input type="checkbox"/>	100	0
Solar Power: <input checked="" type="checkbox"/>	10	38250
Wind Power: <input checked="" type="checkbox"/>	10	38250
Private School: <input type="checkbox"/>	100	0

Cancel OK

The exemptions tab is divided into two sections, corresponding to the two distinct ways in which the Avitar Assessing system handles exemptions. The first method (for Blind, Deaf, Handicapped, and Elderly exemptions) allows you to apply a globally-determined exemption amount. That is to say, you choose a specific type of exemption for which that exemption amount may also be applied to other parcels in the database. If, in the future, the exemption amount changes, you can change the amount in the Update Parameters section, recalculate the exemption amounts, and the amount of the exemption will be updated on each parcel to which that particular exemption type is applied. The second method (for such exemptions as Religious, Charitable, Educational, etc.) allows you to assign an exemption amount unique to the particular parcel. These amounts are not affected by updating or recalculating exemptions; the amount will remain the same on that parcel until it is edited or removed individually.

## **Globally-Determined Exemptions and Credits**

Use the left side of the Exemptions dialog box to enter exemptions and credits for which the amount of the exemption or credit is globally-determined within the database. The exemptions include Blind, Deaf, Handicapped, and Elderly exemptions, as well as Veterans tax credits. To apply a globally-determined credit or exemption, choose the category from the appropriate dropdown list. You may also enter a percentage value if you only wish to assign a portion of exemption for situations in which there is partial ownership on a particular parcel. (For example, two brothers each own 50% of the parcel, but only one of the brothers is entitled to a Handicapped exemption.) Otherwise, in the vast majority of cases where the parcel should receive the full exemption amount just leave the percentage text box blank and the parcel will receive the regular exemption amount. There is also an additional Elderly exemption and two extra Veteran credits, allowing you to handle virtually any scenario of multiple owners and partial ownership.

### Notes:

- To remove an exemption or veteran credit that has already been applied, select NONE from the corresponding dropdown list.
- While there are three categories of elderly exemptions that the system can apply (for ages 65 to 74, ages 75 to 79, and ages 80 and older) you only need to enter the birth date of the owner receiving the elderly exemption. As the system calculates taxes each year, it will determine, based on the birth date, the appropriate exemption level for the owner.
- Use the VET-SURVIVING SPSE veteran credit to indicate that the parcel is receiving a credit due to a surviving spouse, as opposed to the original recipient of the credit.
- Even if the exemption or credit amount is the same for multiple types of exemptions and credits, it is important to select the correct description as this determines how the amounts are reported on the MS-1. If you are unsure of where the exemption or credit will appear on the MS-1 report, you can hover your mouse cursor over the exemption label to reveal a tool tip indicating where the exemption is listed on the MS-1.

## **Parcel-Specific Exemptions**

Use the right side of the Exemptions dialog box to enter parcel-specific exemption amounts, such as Religious, Charitable, Educational, etc. With parcel-specific exemptions, you have two methods by which you can choose to apply them. Traditionally, you were only been able to enter a fixed dollar amount for the exemption to be applied. To do so, you can simply type in the dollar amount of the exemption in the corresponding Amount text box. Alternatively, you can choose to assign the exemption as a percentage of the card's total value. To do so, check the % check box next to applicable value and enter the percentage (from 1 to 100) of the card's value that should be exempt. With this method, if for example, 50% of the card value is to be exempt under an Educational exemption, you will not need to revisit the exemption in the future if the card's value changes. It will simply be calculated at tax time to receive an exemption equal to 50% of the new card value. Please note for parcels that have two or more cards the system will not allow you to create exemptions for card two or higher that exceed the card's value.

### Notes:

- Even if the exemption amount is the same for multiple types of exemptions, it is important to select the correct description as this determines how the amounts are reported on the MS-1. If you are unsure of where the exemption will appear on the MS-1 report, you can hover your mouse cursor over the exemption label to reveal a tool tip indicating where the exemption is listed on the MS-1.

## Editing Data on the Permits Tab

When you have a parcel displayed on the Permits Data Display tab and you press the Edit toolbar button you are able to edit the parcel's permit information.

	Permit Date	Permit Number	Permit Type	Fee	Est Cost	Notes
▶	09/14/2007	123	DECK	\$20	\$1,000	
▶	09/14/2007	3456	GARAGE	\$100	\$30,000	1 CAR GARAGE 20 X 20
*						

If your Avitar Assessing database is configured to work with Avitar Building Permits system you will not be able edit or add permit information – this information is all maintained within the Building Permits database and is displayed within Assessing.

Notes:

- To add a new permit record, begin by adding the Permit Date in the first empty line of the Permits grid (indicated with an asterisk on the record selector). Regardless of the Permit Date, the records will be sorted by date when they are saved to the database to the most recent permit always appears first.
- To delete an existing permit record, highlight the record in the Permits grid by clicking on the corresponding record selector for the row (the gray box on the far left side of the grid) and then press the Delete key on your keyboard.
- Use the dropdown list in the Permit Type column to select the appropriate permit type. If the existing list is insufficient, you can add new permit types using Utilities | Update Parameters | System Settings | Building Permit Descriptions.

## Editing Data on the Districts Dialog Box

Avitar Assessing allows you to maintain up to six taxable districts (also commonly referred to as taxable precincts). A taxable district is a portion of town that receives an additional tax, above and beyond the standard property taxes. Examples of taxable districts might include fire precincts or sewer districts.

The Districts Status Cell located in the center of the main program window's Status Bar indicates whether the current parcel is included in a taxable district or precinct. If the word DISTRICT is grayed out, the parcel is not included in a district. If it is highlighted, the parcel has been included in one or more taxable districts. Additionally, if you are logged in and taxable districts have been configured in your town, you can double click on the Districts Status Cell to update the district assignments for the current record.

Use the corresponding text boxes below to indicate the percentage of the parcel that is contained in any single district. Acceptable values are from 0 to 100.

Taxable District/Precinct Name	Percentage of Parcel in District
PARK:	50
WATER:	50

Cancel OK

To assign a parcel to any district, simply enter the percentage of the parcel that is contained within the corresponding district. To remove a parcel from a district, simply enter zero in the corresponding text box.

Typically, parcels will be 100% in a district. If the parcel is only 50% in a district, the additional district taxes for that parcel will be calculated using 50% of the district tax rate. Parcels may be assigned to multiple districts.

## Adding a New Parcel

The process of adding a new parcel to the database is straightforward as the system will lead you step to step through each appropriate data entry screen and will prompt you whether you wish to enter information for each category. The same dialog boxes used to edit existing parcels are displayed in the proper sequence, allowing you to enter all of the required information for the new parcel.

To begin the process of adding a new parcel select **Parcel | Add | Add Parcel** to load the Add New Parcel Wizard. Use the corresponding text boxes to enter the Map, Lot, and Sub Lot for the new parcel. Each field can be up to 6 characters in length. You do not need to type the leading zeros as the system will automatically right justify and zero-fill the unused positions.

**Add New Parcel Wizard**

This Wizard will lead you through adding a new parcel record. You will be asked for general owner information and land information, as well as building and features data if applicable.

If you wish to exit the Wizard for any reason, pressing the Cancel button at any time will finish the process without adding a new parcel. Enter the unique identification numbers of the new parcel in the boxes below and then press Next to begin.

Map      Lot      Sub

Cancel      Next >

**Example:** To indicate Map 27 you can simply type 27 in the Map text box and then press the tab key or the enter key to advance to the next field. As you do, the value in the Map text box will now be formatted as 000027.

When you have entered the complete PID, press the Next button to advance to the Owner Information screen. If you enter a PID that already exists, the system will warn you that the PID is already used, and you will need to re-enter a new PID or cancel the process.

## Adding Parcel – Owner Information Dialog Box

The Owner Information dialog box allows you to enter owner and mailing address, parcel location, listing history, sales information, and parcel notes.

The screenshot shows a software dialog box titled "Add New Parcel 000001 000001 000001". It contains several input fields and sections:

- Owner Information:** Fields for Owner, Owner 2, Address, Address 2, City (pre-filled with "TOWNNAME"), State (pre-filled with "NH"), and Zip Code (pre-filled with "03819").
- Parcel Location:** Fields for Number and Street (with a dropdown arrow).
- Listing History:** A table with columns "Listing Date" and "Initials". The first row contains an asterisk (\*).
- Sales History:** A table with columns: Date of Sale, Grantor, Book, Page, Impr, Type, Excl Code, Pprty, Modif, Asmnt, and Sale Price.
- Notes:** A large text area for entering notes.
- Buttons:** "Cancel" and "Next >" buttons at the bottom right.
- Icons:** A question mark icon at the bottom left, and plus, heart, and X icons at the top right of the Sales History section.

For more specific information on entering owner information when adding a parcel, refer to the [Editing Data on the General Tab](#) section of this document.

After you have entered all of the required information on the Owner Information dialog box, press the **Next** button to proceed to the [Adding Parcel – Land Information Dialog Box](#) dialog box.

## Adding Parcel – Land Information Dialog Box

After you have entered the Owner Information for the new parcel, you must enter the Land description.



portion of tax rate is not included. Make sure that the utility is on the approved list of companies which the DRA distributes each year with the MS-1 before assigning them any of these utility Land Use descriptions. The COMMERCIAL Land Use description should be used for telephone and cable companies.

- Even for parcels with no acreage, the Land Use description determines how the parcel is treated when the system calculates property taxes. For example, towns typically enter the value of electrical distribution networks (i.e. poles, wires, transformers, etc.) as a single feature on a parcel owned by the utility company. Even though there is no land acreage for these records, it is important that correct Land Use is selected in order calculate the property tax bill at the correct rate for the public utility.

If the parcel has no acreage (e.g. a utility distribution network, manufactured housing on land of another) enter zero in the Total Acres text box and you can proceed by pressing the **Next** button.

If the parcel has acreage, enter the total acreage in the Total Acres text box and press the **Enter** key on your keyboard. Once you have entered the Total Acres, the system will auto price the Land Line(s), based on the acreage, minimum building site, and value parameters defined for the Zone you selected.

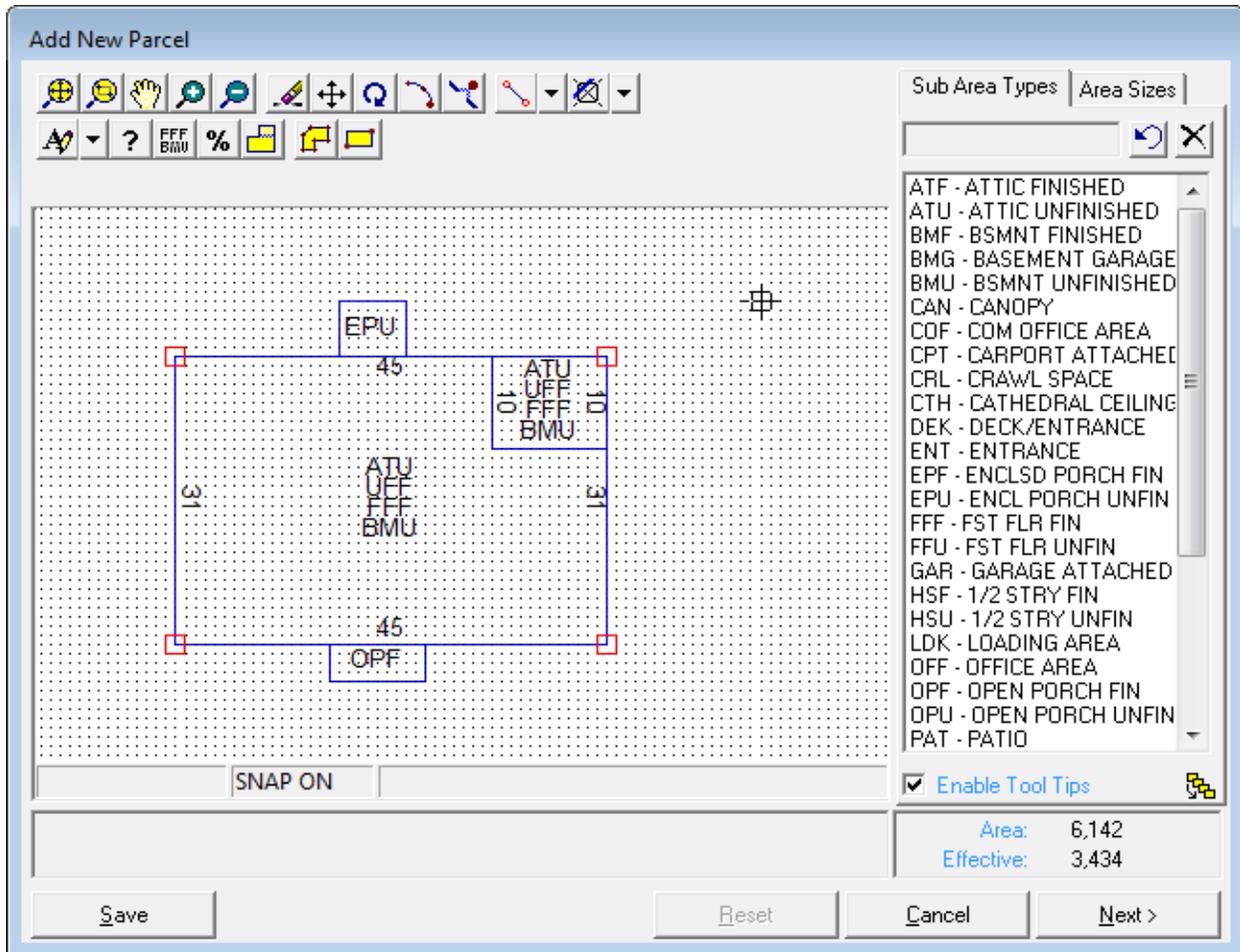
After the system has entered the default Land Line(s), you can edit the Land Line(s), changing any default conditions, reapportioning any default Land Lines to account for current use land, and adding any necessary frontage, view, or waterfront Land Lines.

For more specific information on entering land information when adding a parcel, refer to the [Editing Data on the Land Tab](#) section of this document.

Once you are done entering the land information, press the **Next** button. You will be prompted whether you wish to enter a building description. If you answer **Yes**, you will proceed to the [Adding & Editing Sketches](#) dialog box. If you answer **No**, you will be prompted whether you wish to enter feature descriptions. If you answer **Yes**, you will proceed to the [Adding Parcel – Features Information Dialog Box](#) dialog box. If you answer **No** to adding feature descriptions, you will be prompted whether you wish to save the vacant parcel to the database. Answer **Yes** to save the parcel or **No** to exit without saving the parcel.

## **Adding Parcel – Sketch Information Dialog Box**

If you choose to add a building to the parcel you are adding, you will begin by creating the building sketch. Once you have added the building sketch, you will be prompted to enter the building description (e.g. vinyl siding, average condition, etc.).



For instructions on drawing a sketch, refer to the section on [Adding & Editing Sketches](#).

Once you have completed the building sketch for your new parcel, press the **Next** button to proceed to the Adding Parcel – Building Information Dialog Box screen.

## Adding Parcel – Building Information Dialog Box

After you have entered the building sketch for your new parcel, you are prompted to enter the complete building description.

Add New Parcel 000001 000001 000001

Model: COLONIAL	Quality: A1 - AVG+10
Roof: GABLE HIP	Story Height: 2.00 STORY FRAME
METAL/TIN	Area: 6142      Eff. Area: 3434
Ext. Wall: VINYL SIDING	Base Type: RSA-RESIDENTIAL
AVERAGE	Base Rate: 88      Adj. Base Rate: 76.13
Int. Wall: DRYWALL	Replacement Cost New: \$261,430
AVERAGE FOR USE	
Flooring: HARDWOOD	
CARPET	
Heating: GAS      HOT WATER	Year Built: 2010
Cml. Wall:	Normal: GOOD      0 %
Bedrooms: 4	Physical:      0 %
Bathrooms: 3.0      Fixtures: 0	Functional:      0 %
	Economic:      0 %
	Temporary:      0 %
Extra Kitchens: 0      Fireplaces: 0	Total Depreciation: 0 %
A/C: <input type="checkbox"/> Generators: 0	<b>Building Value: \$261,400</b>
Total Points: 97	

?      Cancel      Next >

For more specific information on entering building description information when adding a parcel, refer to the [Editing Data on the Building Tab](#) section of this document.

Once you have entered the complete building description, press the **Next** button. You will be prompted whether you wish to add feature descriptions to the new parcel. If you answer **Yes**, you will proceed to the Edit Features dialog box. If you answer **No** to adding feature descriptions, you will be prompted whether you wish to save the parcel to the database. Answer **Yes** to save the parcel or **No** to exit without saving the parcel.

## Adding Parcel – Features Information Dialog Box

After you have entered the land information (and perhaps the building information) for your new parcel, you are prompted to enter any feature descriptions.

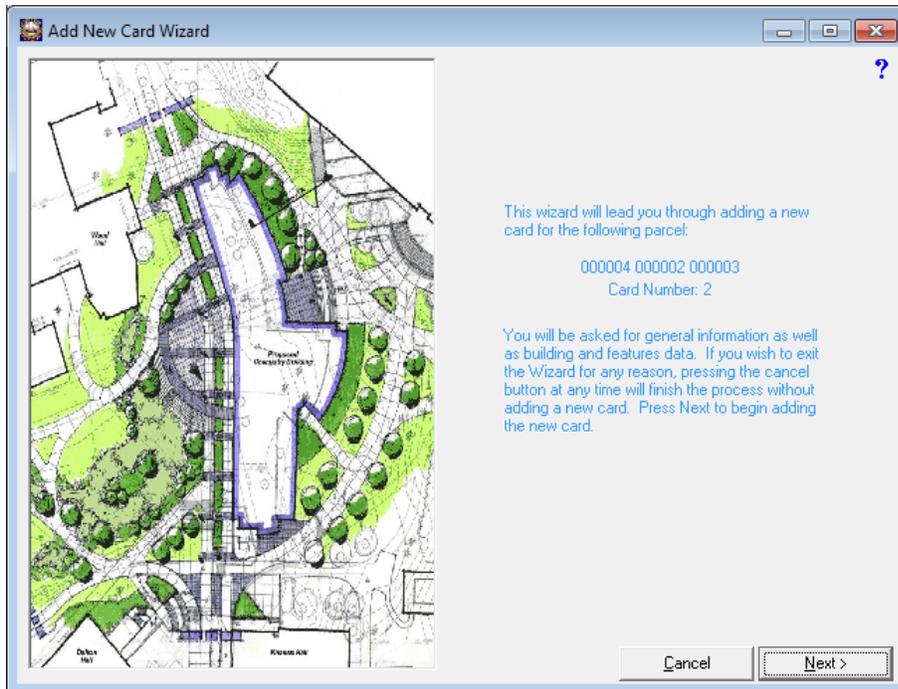


parcel's previous values (as opposed to the parcel's current values that are calculated by the system).

## Adding Additional Cards to an Existing Parcel

You will have occasions when you need to add an additional card to an existing parcel to create a multi-card parcel. (For a discussion of multi-card parcels, refer to the [Cards, Parcels, and Multi-Card Parcels](#) section of this document.)

To add an additional card to an existing parcel, begin by selecting the existing parcel using any method available on the Data Access tabs. With the appropriate parcel displayed, select **Parcel | Add | Add Card to Parcel**.



The system walks you through the Add Card sequence which is similar to the Add New Parcel process. The differences between adding an additional card to an existing parcel and adding a new parcel are reviewed below:

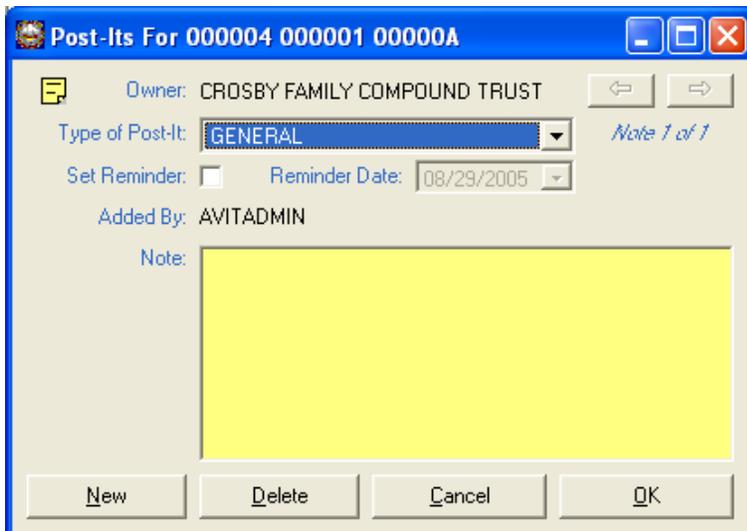
- When adding an additional card to an existing parcel, you do not need to enter the PID as this is determined based on the parcel to which you are adding the additional card.
- When adding an additional card to an existing parcel, the Owner and Sales information are disabled on the Owner Information dialog box – this information is all maintained on the parcel's primary card (i.e. card one).
- When adding an additional card to an existing parcel, the Land Information dialog box is skipped – Land information is all maintained on the parcel's primary card (i.e. card one).

## Parcel Post-Its

The Avitar Assessing system provides Post-Its whereby you can add notes or reminders to any individual parcel. Post-Its can be more powerful than the simple Notes field attached to each parcel in that you can create customized categories of Post-Its, easily and more precisely query against the Post-Its, add multiple Post-Its to a single parcel, and be reminded by the system when specific reminder dates pass or when parcel ownership changes. Post-It reminders are easily visible and accessible when you select a parcel, but only for users that are logged into the database. Thus, public access viewers that might use the system at a counter top terminal will not see or have access to any of the Post-Its. (Similarly, if you are not logged in you will not have access to them either). Likewise, the Post-Its do not print on any report or parcel card.

## Adding a Parcel Post-It

To add a Post-It to a specific parcel, first make certain you are logged in and then select the parcel to which you wish to add a Post-It. With the parcel selected, choose **Parcel | Add | Add Post It to Parcel**.



The screenshot shows a software dialog box titled "Post-Its For 000004 000001 00000A". The dialog has a blue title bar with standard window controls. Inside, the "Owner" is listed as "CROSBY FAMILY COMPOUND TRUST". Below that, "Type of Post-It" is set to "GENERAL" in a dropdown menu. There is a "Set Reminder" checkbox which is currently unchecked, and a "Reminder Date" field set to "08/29/2005". The "Added By" field shows "AVITADMIN". A large yellow rectangular area is designated for the "Note". At the bottom of the dialog, there are four buttons: "New", "Delete", "Cancel", and "OK".

You will see the default window, ready for you to create a Post-It. For each note, you can select a Type of Post-It. If you have not configured any custom Post-It Types, your only choice will be GENERAL. For each Post-It you can also select whether you want to be reminded on a certain date. For example, you may want to be reminded when an exemption should be removed after the second tax warrant is calculated. To be reminded, check the Set Reminder check box and then select the Reminder Date. Finally, you can enter up to 500 characters of a message or note in the yellow Note area. The system will automatically capture and display the username of the user logged in at the time of the Post-Its creation.

If you wish to add multiple Post-Its to a single parcel, press the New button to keep adding Post-Its. To move among multiple Post-Its on a single parcel, use the left and right arrow buttons within

the Post-It dialog box. To delete a Post-It, display the note to be deleted (using the left and right arrow buttons if multiple Post-Its exist on a parcel) and then press the **Delete** button.

## Viewing Post-Its



Once you have added a Post-It to a particular parcel, the yellow Post-It icon to the left of the PID label on the main screen will visually remind you of the Post-It every time the parcel is displayed (if you are logged in). Once a Post-It exists on a parcel, you can easily view it by simply clicking on the Post-It icon.

## Post-It Reminders

Each time you or any other user logs into the system, the system will check the database for any Post-Its with Reminder dates equal or prior to the current system date. If the system identifies one or more parcels with applicable Reminder dates, you will be notified immediately after logging in that you have reminders and you will be prompted whether or not you wish to view them. If you answer **No** you can proceed as usual. If you answer **Yes**, the system will query the database for all parcels with applicable Reminder dates and display them in your current record set. Keep in mind when searching a parcel's Post-Its for the Reminder in question that the Reminder Post-It might not be the first Post-It displayed in the Post-It dialog box. You may have to scroll through the multiple Post-Its to find the one in question. You will continually be notified of Post-Its with applicable Reminder Dates with each subsequent log in until such time as you either uncheck the "Set Reminder" checkbox on all of the applicable Post-Its, change the Reminder Dates to sometime in the future on all of the applicable Post-Its, or simply delete the applicable Post-Its.

Additionally, when you change the owner name on a parcel with a Post-It, you will be reminded of the existence of the Post-It. It is up to you then to determine whether or not the existing Post-Its are still applicable to the new owner or whether the Post-Its need to be updated or removed.

## Creating Custom Post-It Types

The customizable Post-It Types enable you to efficiently categorize information. Examples might vary from parcels that have filed an intent to cut timber to something as simple as a meeting date scheduled with an owner. In any case, it will be easier for you to track your Post-Its if you create custom Post-It Types to which different categories of Post-Its can be assigned. The **GENERAL** Post-It type will always exist and can be used for non-specific types of reminders or comments, but you can add additional types using the **Utilities | Update Parameters** function. Within the Value Parameters dialog box, press **Continue**, and then select the **System Settings | Post-It Types**. If an existing code is selected in the grid, you can change the Description in the text box below and then press the **Update** button to update the grid. To add a new Post-It Type, press the **Clear** button to empty the text boxes, then enter a Code and Description in the text boxes, and finally press **Add**.

## Querying For Post-Its

If you are logged into the system, you will be able to query for parcels with particular Post-Its just as you would for parcels with certain exemptions or feature types. To do so, select the Query Data Access tab on the left side of the program's main window. From the Table dropdown box, select POST-ITS. You can query against any of the displayed fields just as you normally would by selecting an operator and then entering the specific criteria

## System Post-Its

In addition to adding Post-Its to individual parcels, you can use them on a system-wide level for notes that do not necessarily relate to a specific parcel. These might include parameters that need to be changed following the next tax calculation or reminders to the assessor regarding an ongoing revaluation. To add a System Post-It, you begin by selecting **Utilities | Update Parameters**. In the upper left corner of the System Settings tab you will notice the yellow Post-It icon. To add, view, or delete System Post-Its press the icon and navigate just as you would for individual parcel Post-Its. The only differences for System Post-Its is that they are all added as GENERAL and you cannot set Reminder Dates as you can with standard parcel Post-Its

## Property Tax Warrants

The Avitar Assessing system allows you to easily calculate property tax warrants based on the values, exemptions, and credits you have created and maintained for each parcel. For more information on calculating a property tax warrant, please see the [Calculating a Property Tax Warrant](#) section of this document.

## Tax Calculation Settings

Before calculating a tax warrant you should be familiar with the System Settings that pertain to tax warrants. These settings can be reviewed and modified by selecting **Utilities | System Options | System Settings** or view the [Warrant Settings](#) section of this document.

## Calculating a Property Tax Warrant

If your system has been configured in accordance with your municipality's tax requirements, you can begin the process of calculating a property tax warrant by selecting the **Utilities | Taxes** menu item.

Note that the way in which your system calculates tax warrants is largely determined by whether you calculate one or two property tax warrants each year. Thus, there are essentially three categories of warrants that can be calculated by the Avitar Assessing system. Throughout this section, we will be referring to these three categories of warrants as follows:

1. Bill one of one (e.g. “2008P01”).
2. Bill one of two (e.g. “2008P01”).
3. Bill two of two (e.g. “2008P02”).

If your community only sends out bills once each year, you will only have a single warrant – bill one of one – which you will calculate at the end of the year using tax rates provided to you by the DRA.

If your community sends out bills twice annually, you will obviously have two warrants during the year – bill one of two and bill two of two. Typically, bill one of two is calculated in April or May with taxes due on or after July 1<sup>st</sup>. This warrant is an estimated tax, and the rates you will use are determined by taking half of the prior year’s final tax rates. Bill two of two is then calculated at the end of the year, using tax rates provided to you by the DRA for the entire year’s rate. When calculating bill two of two, the system uses the entire tax rate for the year to determine a parcel’s total tax amount, but then subtracts the parcel’s first bill amount to determine the amount of the second tax bill. In this way, any inaccuracies on bill one of two can easily be resolved on bill two of two. For example, if a parcel was not in the database at the time of bill one of two its first bill amount would be zero. However, if it is added to the database prior to bill two of two, the system will calculate the total tax amount for the year, then subtract zero (i.e. the first bill amount), leaving the entire tax amount to be collected on bill two of two.

The Tax Functions dialog box has a series of four tabs, each of which are described within the topics below:

## **Tax Rates Tab**

The Tax Functions dialog box always opens to the Tax Rates tab, displaying the tax rates of the four most recent tax bill cycles for review and history. What you see on your Tax Rates tab may differ depending on how long you have been using the Avitar Assessing system and how many warrants you calculate each year. The Tax Rates Tab shown below displays the rates of the last four tax warrants. Also note that it illustrates a town that uses Districts:

Tax Functions				
Tax Rates Per Thousand				
Warrant:	2005P01 of 2	2004P02 of 2	2004P01 of 2	2003P02 of 2
Municipal:	2.34	4.67	2.17	4.34
School:	3.41	6.82	2.45	4.90
State Ed:	1.42	2.83	1.55	3.10
County:	0.40	0.80	0.39	0.78
	\$ 7.57	\$ 15.12	\$ 6.56	\$ 13.12
District Rates				
Cntr Oss.:	0.65	1.30	0.55	1.09
West Oss.:	0.75	1.50	0.72	1.44
Oss. Cmr:	0.65	1.29	0.63	1.26

There are no functions or tasks to perform on the Tax Rates tab. It simply offers an overview of the most recent warrants. It also provides an easy way to determine where the database is in the tax warrant process as the left-most column always indicates that most recently calculated warrant.

## Tax Totals Tab

The Tax Totals tab displays the four most recent tax billing cycle totals listed by warrant as shown below:

Warrant:	2005P01 of 2	2004P01 of 1	2003P01 of 1	2002P02 of 2
Total Parcels:	2,869	2,869	2,863	2,870
Land:	382,643,580	382,645,700	183,053,300	184,931,700
CU Credits:	7,091,194	7,091,194	5,882,465	6,919,252
Improvements:	513,125,300	513,120,300	351,246,100	337,220,400
Exempt Properties:	25,709,700	25,709,700	14,687,685	13,684,139
Gross Exemptions:	3,589,181	3,589,181	3,303,016	2,599,016
Property Tax:	6,009,208.00	12,018,099.00	5,961,293.00	11,634,098.00
Veteran Credits:	26,450.00	52,900.00	25,450.00	49,365.00
Penalties:	0.00	0.00	0.00	0.00
First Bills:	0.00	0.00	0.00	5,255,972.00
Total Bills:	5,982,758.00	11,965,199.00	5,935,843.00	11,584,733.00

The Tax Totals tab provides an overview of the most recent warrants so you can see changes in total value and total tax amounts over time. After you calculate a warrant, the system will automatically display the Tax Totals tab so you can review the results, verifying that the warrant amounts are reasonable in comparison to past warrants.

### Calculate Taxes Tab

You should select the Calculate Taxes tab when you wish to calculate a new warrant for the first time or recalculate an existing warrant to reflect value or ownership changes you have made to parcels.

Depending on where your system is in the tax warrant process, you may be prompted with certain messages once you click on the Calculate Taxes tab. These messages are very important so make sure to read them carefully and respond accordingly. If you are not certain of the proper response you should call Avitar for assistance.

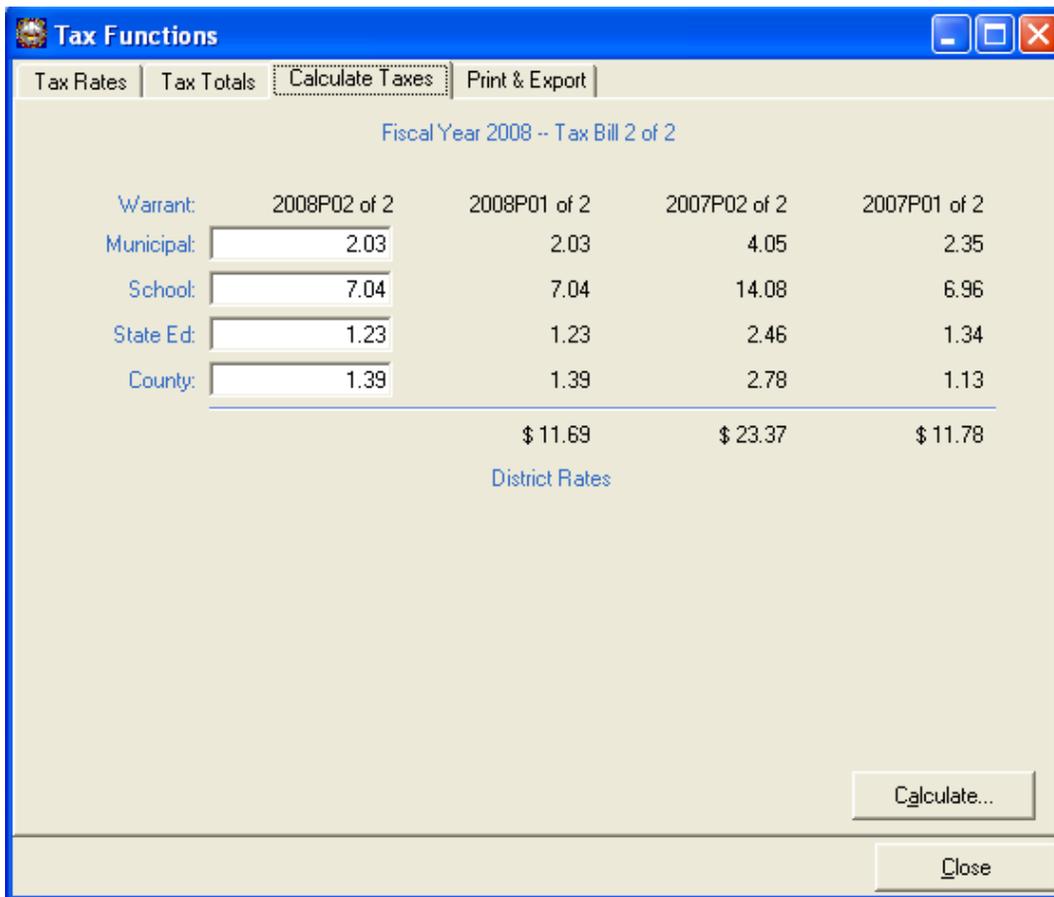
#### Step 1 - Select Calculate Taxes Tab



If you see this prompt and you were intending (in this example) to recalculate the final warrant for 2007, you should answer No and contact Avitar. This would indicate that you had inadvertently finalized the warrant on which you were working, and Avitar needs to correct it. If you were to answer Yes to this prompt you would start calculating the first warrant of the following tax year.

### Step 2 - Enter Tax Rate

If you continue to the Calculate Taxes tab you will be able to enter the individual component tax rates (i.e. Municipal, School, State Ed., and County) that comprise your total tax rate, as illustrated below.

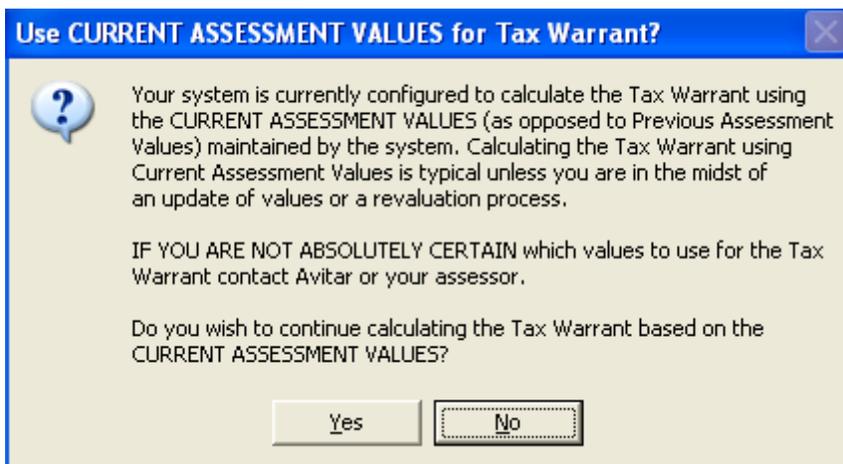


If you do two warrants per year, your rates for bill one of one will automatically default to half of the prior year's rates. You will be warned (in the form of red labels with an on screen message) that one or more of the previous year's final component rates has been rounded and you may need to adjust one or more rate manually. (Please note, if you use districts you may need to manually enter the correct tax rate.) You should always verify the default tax rates for bill one of one total, as nearly as possible, one half of the prior year's final total rate. If all four of your individual component rates were odd numbers (e.g. \$2.33, \$3.41, \$1.41, and \$0.47 for a total of \$7.62) the rounding of each rate may result in a total rate that is less than one half of the prior year's total (in the previous example, \$1.16, \$1.70, \$0.70, and \$0.23 for a total of \$3.79 rather than \$3.81). You may need to adjust one or more of the default rates up or down by a penny.

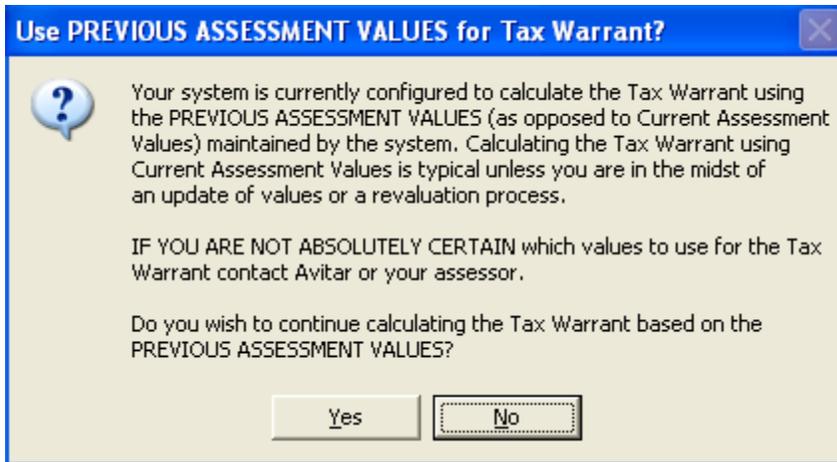
When calculating your final bill of the year (i.e. bill one of one or bill two of two), you will need to enter the full final tax rates for the year as provided by DRA.

### Step 3 - Calculate

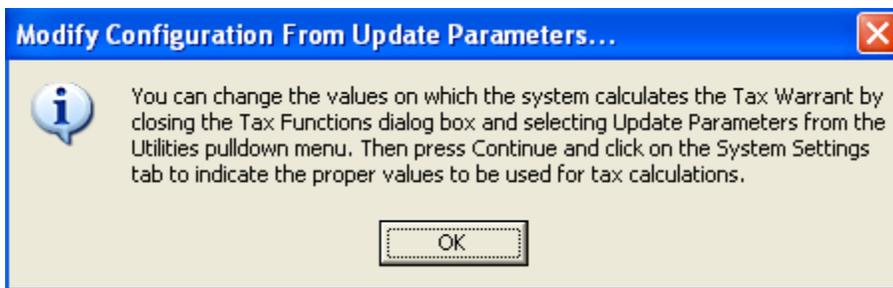
Once you have verified that the tax rates are correct press Calculate. You will be asked one of the following two questions depending on your system settings. If your system is set to calculate the Tax Warrant using current assessment values you will see:



If your system is set to calculate the Tax Warrant using previous assessment values you will see:



If you wish to change the setting from Previous to Current or vice versa, select No and you will see the screen below. If you want to modify your configuration just select OK. You can then close out of the Calculate Taxes window by pressing the Close button at the bottom of the screen, and go to the Update Parameters section to make your change.



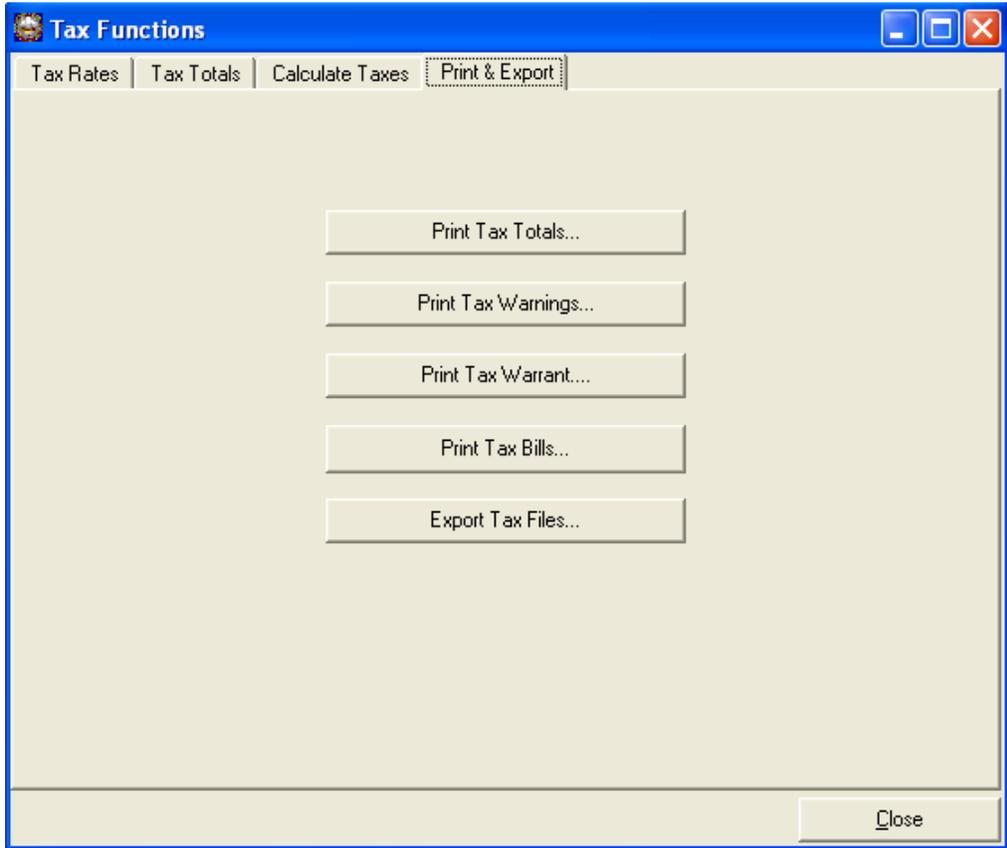
If you proceed with the calculation and this is your final bill of the year (i.e. bill one of one or bill two of two) you will be asked if you wish to apply penalties for unreturned inventory forms. You may choose Yes, No, or Cancel depending on your needs. Any abatements or supplements granted on the first billing will also automatically be adjusted at this time if your tax collector is using the Avitar Tax Collect system.

Once the calculation is completed, the Tax Totals screen will display so you can verify the totals prior to printing the formal warrant which finalizes the billing.

**Note:** Until the printing of the Formal Warrant, you can re-compute the taxes as often as necessary to account for ownership corrections, value or exemption corrections, etc. In fact, if you make a change to an owner's mailing address you will need to calculate the warrant again in order for that address change to appear on the warrant.

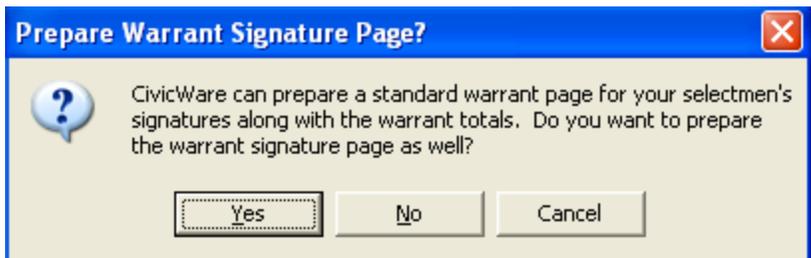
## Printing & Exporting a Tax Warrant

The Print & Export tab provides options for printing tax reports and warrants. Whether individual buttons are enabled or not depends on whether you are using the Avitar Tax Collect system.



## Print Tax Totals Button

The Print Tax Totals button prints a one page totals report. You can elect to include an additional formal signature page for the Selectmen to sign and commit to the Tax Collector. To choose between these two options you will be prompted by the system when you select the Print Tax Totals button:



If you choose to print the Signature Page you will be prompted to enter or confirm the required information:

If you are calculating bill one of one or bill two of two, you can use the Tax Totals report to verify that the total tax amount to be collected falls within the acceptable range defined for you by the DRA.

## Print Tax Warnings Button

This will produce a list of tax warnings created during the tax calculation process. It will provide you with a list by owner name including PID, land use, bill amount and the type of warning. You should always review the Tax Warnings report prior to finalizing your tax warrant.

The warnings you may encounter fall into three categories:

### “No Tax” and “No Tax - Exempt”

This category includes parcels for which the tax bill amount equals zero. This warning can appear on any tax warrant, whether it is bill one of one, bill one of two, or bill two of two. Generally speaking, the zero tax amount for these parcels is correct but it is a good idea to review the list just to ensure that parcels are not accidentally avoiding taxation. Parcels may receive a zero tax bill for any number of reasons. The parcel may be exempt (in which case the warning will be “No Tax - Exempt”). If the parcel is not exempt it may have exemptions that exceed its taxable value or credits that exceed its tax liability. Finally, the parcel may have such a low taxable value (for example small parcels that are completely in current use) that by the time the taxes are calculated and rounded to the nearest dollar the tax bill amount will equal zero. Warnings of this nature may not

prevent you from finalizing the warrant but you should review them to make certain the reasons for the warnings are valid.

### **“No First Bill”**

This category includes parcels for which no first bill amount was found in the database. This type of warning will only appear on bill two of two warrants in towns that calculate two warrants per year. Since there is no first bill amount in the system, the parcel will be taxed the full amount for the year on the second tax bill. This occurs when a parcel was added to the database after the first warrant was finalized. It may or may not indicate an actual problem with the warrant. Again, warnings of this nature may not prevent you from finalizing the warrant but you should review them to make certain the warnings make sense.

### **“Critical Missing Par” (i.e. Missing Parcel)**

This category includes parcels for which a first bill amount was found in the database but the parcel no longer exists. This type of warning will only appear on bill two of two warrants in towns that calculate two warrants per year, and it will prevent you from finalizing the warrant. This occurs when a parcel was deleted from the database or the PID for the parcel was changed after the first warrant was finalized. The system will caution users against deleting or renumbering parcels between the first and second tax bills but there may be valid reasons for doing it so the system will allow it. Warnings of this nature will need to be rectified before you can proceed with the warrant.

## **Print Tax Warrant Button**

When you select the Print Tax Warrant button you will need to decide whether this will be the formal warrant or a trial warrant. Printing the formal warrant means you are finalizing the tax warrant and will not be able to re-compute the taxes to correct any errors. If you answer **No** the system will print a trial warrant and you will still be able to make any corrections or changes and recalculate the tax warrant. If you choose to formalize the warrant you will be able to select either the multi-line traditional warrant format (which uses significantly more paper) or the single line format. When formalizing your final warrant of the year, you will be prompted to enter the amount which you were directed to collect by DRA. You will need to have this available before you can proceed. This information is provided on the Tax Commitment Verification Report sent to you or your tax collector each year by DRA (i.e. the one with the target commitment amount and the half percent acceptable high and low range). The system will then ensure that the actual amount of the calculated warrant falls within the acceptable range before you formalize the final warrant. Once you have formalized/finalized the warrant, you will be able to reprint the warrant, but you will not be prompted again (for this warrant) whether you wish to formalize the warrant.

At this point, if your tax collector uses the Avitar Tax Collect system you can notify the tax collector that the property tax warrant can now be imported. You have completed the tax warrant process once you have printed the formal warrant. The warrant can be reprinted at any time in the future, up until the time when you begin calculating the next warrant.

## Print Tax Bills Button

The Tax Bill Setup dialog box allows you to format and print tax bills for the most recently created tax warrant. This option will be disabled when your tax collector is using the Avitar Tax Collect system. If it is incorrectly available in your system it could be due to one of the following reasons: the options under the System Settings tab in Update Parameters are incorrect, the computer with our Tax Collect system on it is on a different network, or your computers are not networked at all. Printing bills out of Assessing is only recommended when you have no alternative. Please call us if you have any questions regarding this feature.

Message 1:

Message 2:

Leave postal information blank if not using postal permit.  
An entry in Postal Permit Information will cause the printed bills to be sorted by zip code.

Return Address Information	Print Date	Postal Permit Information
Avitar Assoc. of NE, Inc.	10/27/2005	
PO Box 981	Bill Due Date	
Epsom, NH 03234	11/27/2005	
	Interest Rate	
Temp - Return Service Requested	12	

Tax Collector Office Information

Bill Printer Type

Tractor Feed

Laser Jet

Phone Number:

Cancel OK

Message 1 and Message 2 are for you to enter two lines of information that will print on the top of the tax bill for notes or additional information of any kind. This will need to be done by or in consultation with the tax collector to ensure the proper dates and information are used. Once the information is correct, you can select the tractor feed bill or the single page laser format and press the OK button to continue. The bills will display in the report preview window. Press the printer icon on the toolbar to print the bills.

## Export Tax Files Button

The Export Tax Files function is not necessary if your tax collector is using Avitar's Tax Collect system, unless it is on a different network or your computers are not networked. If this applies to you, you should know that the tax files cannot be exported until a formal warrant has been finalized and printed.

## File Menu

The following menu items are available from the File menu, located on the main program window of Avitar Assessing.

### Refresh Lists

The File | Refresh Lists menu item will refresh any values previously displayed on the tree view lists of the Data Access tabs to reflect any changes made to the database. It is occasionally necessary to use this command if you (or someone in your office) are making changes to owner names, parcel addresses, or PIDs. For example, if you expand the tree view on the Address Data Access tab and select all parcels on MILLER STREET and edit then edit them all to be on MILLER AVENUE, your tree view will still display MILLER STREET because the address existed when the tree view was originally populated. Selecting Refresh Lists will repopulate data displayed in the tree views based on the most recent changes.

### Startup Window Size

The Startup Window Size menu item allows you to configure the size to which the application's main window will automatically resize when you first open the program.

### Maximize

If the File | Startup Window Size | Maximize on Startup menu item is checked, the program's main window will automatically maximize to fill your entire screen area when the program opens. To toggle this option off, simply select the menu item again to remove the check mark.

### Current

By choosing Current from the list of options you can have the system automatically resize to virtually any size when the program starts. To set this option, first resize the application's main window to the desired size and then select **File | Startup Window Size | Current**. To reset to the default select **File | Startup Window Size | Default**.

### Default

By selecting **File | Startup Window Size | Default**, the next time you open the program, the window size will be at the default setting.

### Print Setup

The File | Print Setup menu item allows you to select the printer and printer settings to be used by the program.

## Public Print Settings

The File | Public Print Settings menu item enables you to control whether users can print assessment cards when they are not logged in (i.e. Public Access Mode). It also allows you to limit the number of parcel cards that Public Access users can print at one time. This can be useful in towns in which a public access terminal is configured, allowing you to prevent taxpayers from inadvertently printing an assessment card for every parcel in town.

## Print Cards by Owner

When checked, the File | Print Cards by Owner menu item allows you to print assessment cards sorted by owner name. The default setting is to print assessment cards sorted by PID. Once you have changed the default setting, the system will display a check mark next to the Print Cards by Owner menu item. To return to printing the assessment cards sorted by PID, simply select **File | Print Cards by Owner** again to remove the check mark.

NOTE: The sort order you select for printing assessment cards will apply to all users that use the computer on which you make the change, but it will not apply to any user (including you) on other computers. Furthermore, it will remain the default sort order for all users that use the computer on which you make the change until it is changed back to sorting by PID.

## Backup Database

The **File | Backup Database** menu item allows you to backup your assessing data from your server to your local system at anytime. If the menu item is not enabled, even after you have logged in, it indicates that the backup settings have not been configured for your system. Call Avitar for assistance with configuring backup settings. If the menu item is enabled, simply browse to the location to which you wish to save the backup file.

For more information on methods of backing up your data, refer to the [Backup Procedures](#) section of this document.

## Import Database Script

The File | Import Database Script menu item allows you to run update scripts as provided by Avitar. You will need a special, time-sensitive password in order to utilize this function. We will walk through this process as needed.

## FTP Data to Avitar

The File | FTP Data to Avitar menu item allows you to transfer data to Avitar's FTP server when your computer is connected to the Internet. The acronym FTP stands for File Transfer Protocol and it is a method by which you can transfer data from your computer up to Avitar's web server utilizing the connectivity of the Internet. In order for this function to work, your computer's configuration must satisfy several conditions:

1. Your remote backup must be configured such that you can use the File | Backup Database menu item to successfully backup your data to your local computer. If this function is not configured, call Avitar.
2. Your machine must have a connection to the Internet. If your connection is a dial-up connection that you must manually start, you will need to start the connection before selecting the FTP Data to Avitar menu item. If your database contains digital photos and your connection to the Internet utilizes dial-up, then the FTP function may be impractical due to the size of the database with photos. In such cases, you will need to find an alternative for transferring the data.
3. Any firewall application on your network must allow Avitar's civicftp.exe application to access the Internet. Firewalls exist in part to prevent malicious applications that may somehow get installed on your computer from being able to connect to other computers on the Internet to exploit your machine. In most all cases, however, these firewalls can be configured to allow certain trusted applications to access the Internet. As with the steps outlined above, you may need to contact your local hardware or networking specialist in order to help configure your system.

If your system meets these criteria, select **File | FTP Data to Avitar** and then press the **FTP Data** button. The progress bars will indicate the time remaining in the total process.

## **Exit**

The File | Exit menu item allows you to close the program. Alternatively, you can use the Exit button on the program's main toolbar.

## Utilities Menu

The following menu items are available from the Utilities menu, located on the main program window of Avitar Assessing.

## System Options

The System Options section is used to maintain all of your local information such as; municipal office names, office hours, districts, exemption parameters, and backup settings. There are four tabs, each with their own information and function. The information contained in the tabs are configured by Avitar when your system is installed. For information on each tab, see the tab heading for assistance.

To access System Options choose **Utilities | System Options**. The System Options dialog box will display.

## Municipal Info Tab

The System Options Municipal Info Tab maintains the town name, hours, phone number, and the names of your current Selectmen. . To view and/or update the information choose **Utilities | System Options** and select the **Municipal Info** Tab. You have the ability to configure the number of municipal officials and the name of the municipal body (in addition to just the names of the individual officials) that appear on reports such as the Tax Warrant Commitment and the MS-1. You can choose to use from one to ten names and you can enter a name for the board itself. This can be useful in municipalities that may, for example, have a seven member Town Council rather than a three or five member Board of Selectmen. To modify the defaults, enter the appropriate number of officials, names of officials, and board name. Update the information if needed and press Save to complete the changes.

The screenshot shows a Windows-style dialog box titled "System Options". It has four tabs: "Municipal Info", "Tax Settings", "Exemption Parameters", and "System Settings". The "Municipal Info" tab is selected. The dialog is divided into two sections: "Municipal Information" and "Municipal Officials' Names".

**Municipal Information**

Town/City Name:	ANYTOWN	Telephone Number:	123-1234
Zip Code:	12345	Report Heading:	ANYTOWN
County:	MERRIMACK		
Office Hours:	M-F 8:30-12 & 1-4:30		

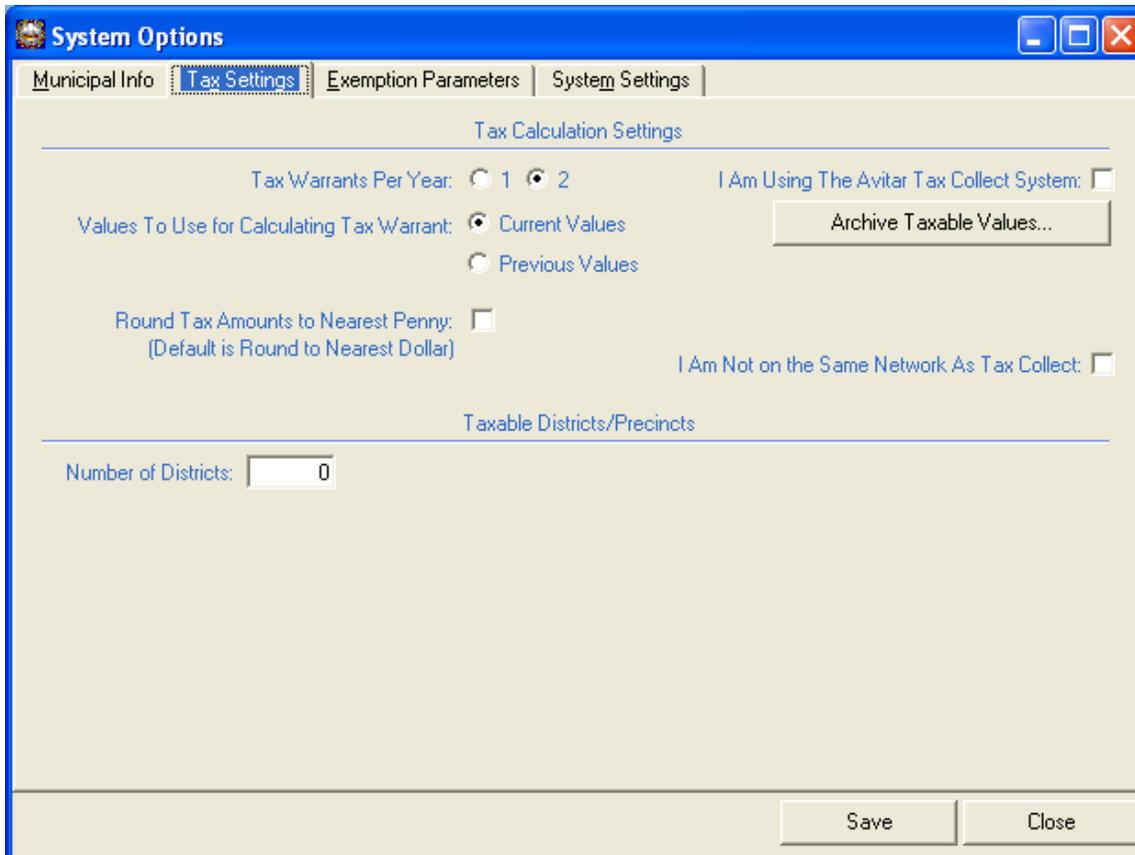
**Municipal Officials' Names**

Number of Officials:	3	Name of Board:	Board Of Selectmen
1.	ROBERT SMITH		
2.	JANE DOE		
3.	TOM BROWN		

At the bottom right of the dialog are two buttons: "Save" and "Close".

## Tax Settings Tab

The following settings are maintained on the main Tax Settings tab. They dictate how the system calculates a property tax warrant:



## Warrant Settings

1. **Tax Warrants Per Year** – Indicates whether the system is configured to calculate one or two tax warrants per year (i.e. a single warrant in November/December versus one warrant in May/June and another in November/December). If your community elects to change the number of tax warrants you calculate, make sure you only change this value either before your first warrant or after your final warrant for a given tax year – it should not be changed between first and second warrants.
2. **Values to Use for Calculating Tax Warrant** – Indicates the values on the system should use in calculating each parcel's property taxes, either parcels' current or previous values. In communities that have recently migrated to the Avitar Assessing system, you may need to calculate taxes based on previous values that were actually determined using another assessing system. Otherwise, in all likelihood, you should be using the current (i.e. system calculated) values when producing a tax warrant. If you are not certain about which values to use, contact Avitar or your assessor.
3. **Round Tax Amounts to Nearest Penny** – Indicates whether the tax amount for each parcel should be rounded to the nearest cent. When unchecked, the system will round each tax bill to the nearest dollar.

## Integration Settings

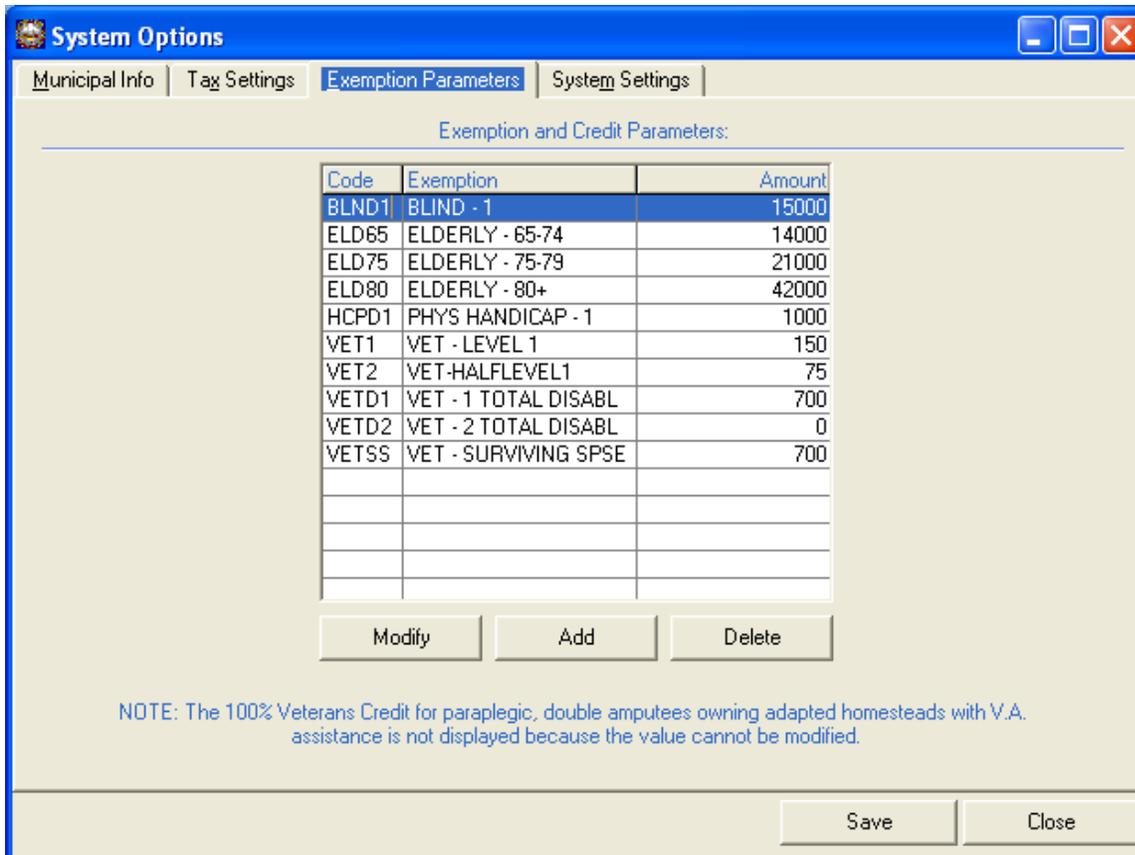
The following settings are maintained on the System Options | System Settings tab and dictate whether and how the Avitar Assessing system should integrate with the Avitar Tax Collect system:

1. **I Am Using The Avitar Tax Collect System** – This checkbox should be checked if you are using Avitar’s Tax Collect system, and the Collect Datasource and Collect Database text box values should correspond with the computer and database name of the machine on which the Tax Collect database is maintained. If you are not certain of these values, call us for assistance. When these settings are correct, you can press the Test Connection button to determine if the database is available.
2. If you calculate taxes within the Avitar Assessing system, the system will automatically archive the taxable values as part of the regular tax calculation process. If, however, you just use Avitar Assessing to determine values, and you then reenter those values into another application for calculating and collecting taxes you will need to manually archive the taxable values if you wish to have them displayed in the Value History grid. To manually archive the taxable values press the Archive Taxable Values button. You will be prompted to enter the year with which to associate the taxable values. If you enter a year for which taxable values have already been archived, the system will indicate that taxable values were already archived for that year. It will display the user that archived the values, as well as the date and time at which the values were archived. You will be prompted whether you wish to overwrite the currently archived values with the current values. Simply answer Yes or No.

## Taxable District/Precinct Settings

The following settings are maintained on the System Options | Tax Settings tab. Taxable Districts/Precincts are unique portions of your community that are assessed an additional tax, above and beyond the standard property tax amount, for some additional service. Examples of taxable districts are sewer districts or fire precincts.





## System Settings Tab

The System Settings tab is used to create and store the backup settings, and the Avitar Building Permit settings. Generally, you should only make changes to these settings in consultation with Avitar as they affect the way in which your system communicates with the other programs' databases. To access the System Settings tab choose **Utilities | System Options | System Settings**.

We have added the possibility of configuring your system to display PIDs in a manner different from the standard six character map, six character lot, and six character subplot. This is in response to the growing number of communities (predominantly towns that have had a remapping/renumbering project by Cartographic Associates) that have PIDs that do not conform to this standard. Previously, this could be accommodated within the existing 18 character PID framework but it was not always clean.

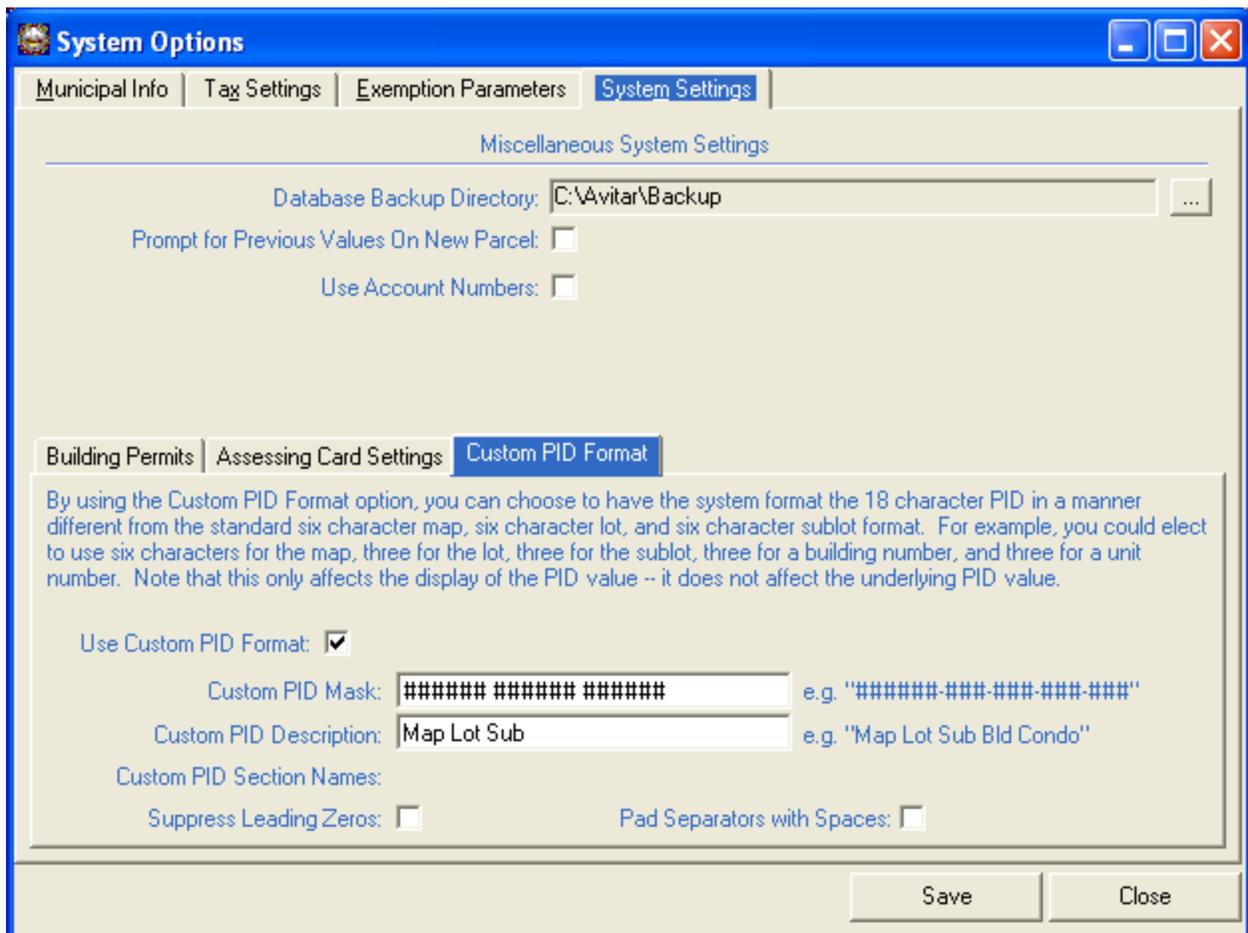
## Custom PID Format

The Custom PID function allows you to configure a PID mask that divides the 18 available characters up into as many as six distinct sections of any length (e.g. six sections of three characters or one section of ten characters and another of eight characters). Additionally, you can choose to

indicate a character that will separate each section and/or you can choose to suppress leading zeros from each section.

Note that this function must be enabled by Avitar through an internal database setting. Please contact us if you are interested in implementing a Custom PID format.

By using the Custom PID Format option, you can choose to the system format the eighteen character PID in a manner different from the standard six character map, six character lot, and six character subplot format. For example, you could elect to choose six characters for the map, three for the lot, three for the subplot, and three for a building number, and three for a unit number. The image below illustrates some of the different options available with this new functionality.



### Formatting a Custom PID

Custom PID Mask -You must use the # symbol to indicate the placement of the individual PID characters within the mask. Then use another character (for example a space or a dash or a slash) to indicate the character you wish to use to separate the component sections of the PID. However, you can only use one character as the separator character.

Custom PID Description - Enter a brief description of the entire PID (e.g. "Map/Lot/Sub/Bld/Unit"). This is the label that will appear on reports. It is best to use a capital letter for the first letter of each component and then lower-case letters for the rest. This will match the format of the rest of the program and report heading will look consistent.

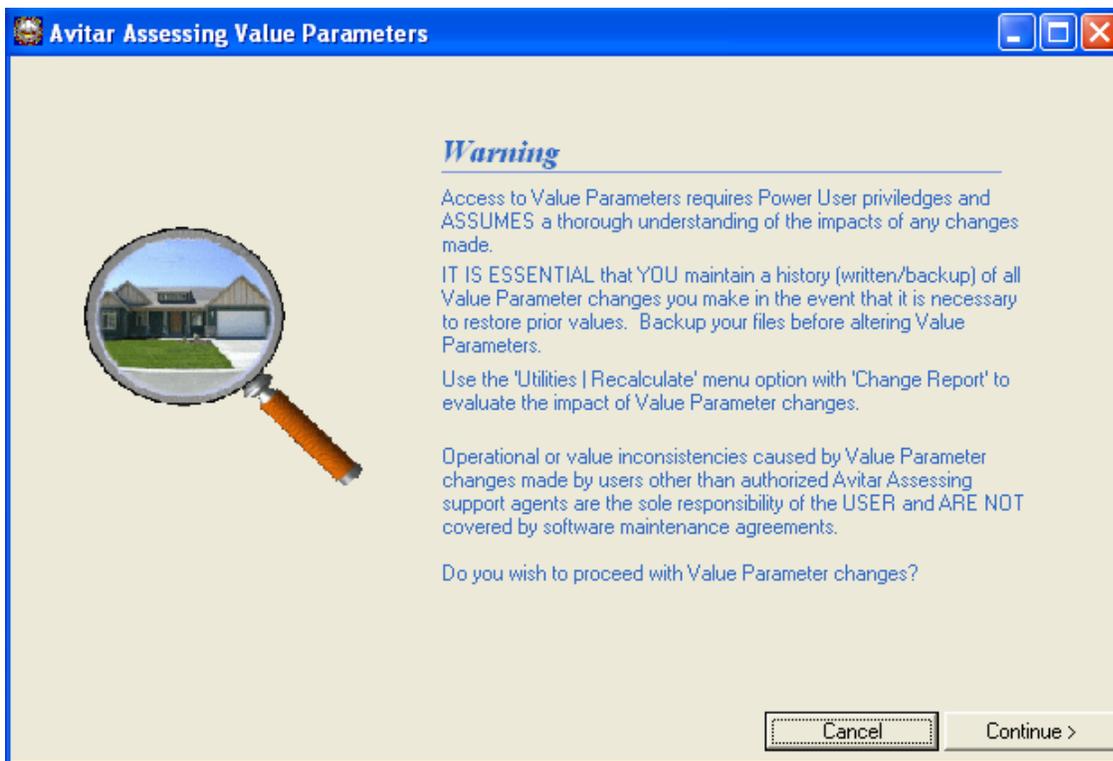
Custom PID Section Names - You can choose to enter a description for each component of the PID (e.g. "Map", "Lot", etc.). The Custom PID Section names are only visible when you hover over the individual boxes throughout the program used to enter PID values on which to search.

Suppress Leading Zeros - Check this box to suppress the leading zeros in each section of the customized PID (e.g. "1 / 2 / 3" instead of "000001 / 000002 / 000003").

Pad Separators with Spaces - Check this option to add a space before and after each separator, making it easier to read in some instances (e.g. "1 / 2 / 3" instead of "1/2/3").

## Update Value Parameters

The Utilities | Update Value Parameters menu item allows you to access all of the cost parameters and system settings configured for the Avitar Assessing system. You should have a thorough understanding of both assessing and the Avitar Assessing system prior to accessing this area. Alternatively, you should seek help from Avitar.



Before continuing, you should read the warning message and make sure you have a backup of your database.

The Value Parameters dialog box allows you to access various tabs that will allow you to add, edit, and delete any of the cost parameters maintained by the system in order to generate values. It allows you to customize the Avitar Assessing system to reflect your local market.

Whenever you edit settings in the Value Parameters dialog box, you should save your changes and restart the Avitar Assessing program. Many of these settings dictate how the system appears and behaves and are only loaded when the system is started.

## Editing Grid Parameter Values

Many of the tabs within the Update Parameters dialog box display grids containing the associated parameters. For each parameter grid, regardless of the parameter itself, you will find buttons that you will use to modify, add, or delete parameters.

### To Add a Parameter

To begin the process of adding a new parameter, select the **Add** button beneath the grid. Next, enter the required values in each of the corresponding text boxes. Depending on the category of parameter you are adding, you will have different choices. (The specifics of each category are outlined below.) Once you have entered or selected the required values for the new parameter, press the **Save** button. The new parameter will appear in the grid.

### To Modify a Parameter

To modify an existing parameter, select the parameter by highlighting the record in the grid. After selecting the parameter to be modified, make the necessary changes to the parameter's values in the corresponding text boxes. Depending on the category of parameter you are modifying, you will have different choices. (The specifics of each category are outlined below.) Once you have made the necessary changes to the values in the text boxes beneath the grid, press the **Save** button. The modified parameter will be updated in the grid.

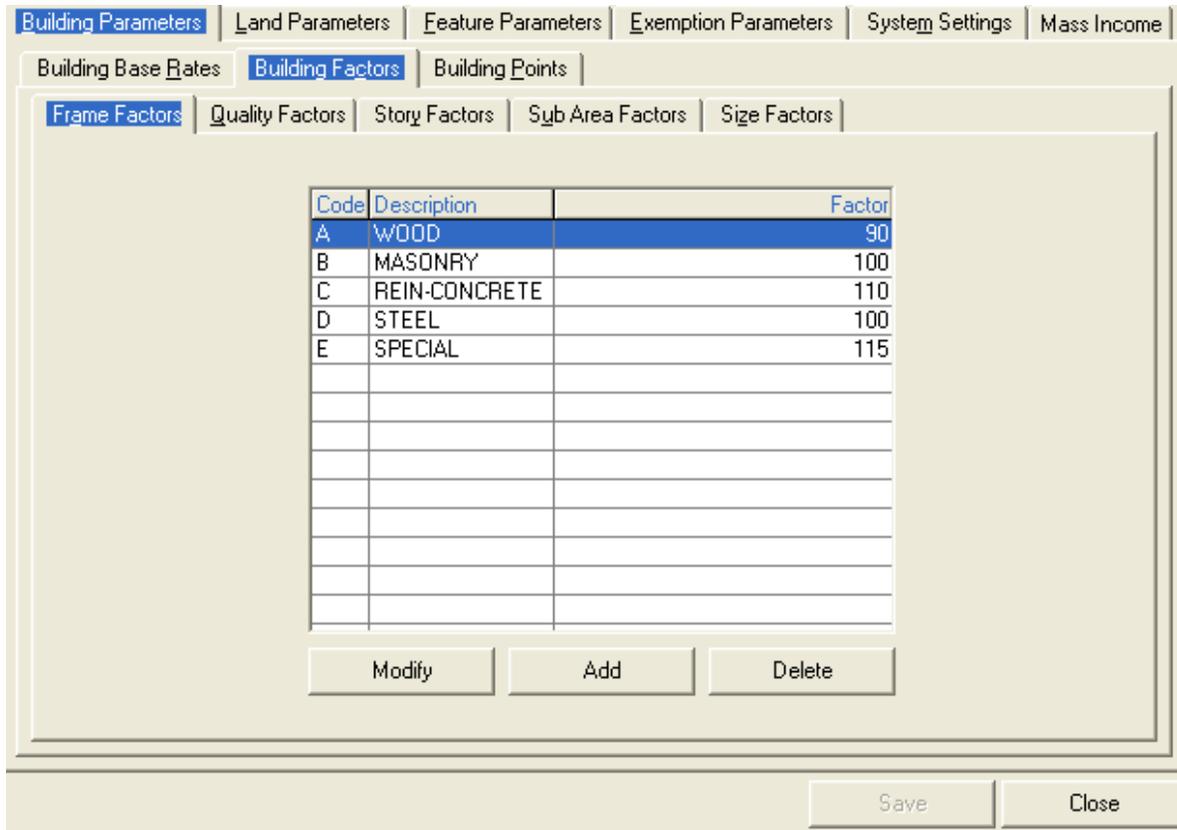
### To Delete a Parameter

To delete an existing parameter, select the parameter by highlighting the record in the grid. With the appropriate record highlighted, press the **Delete** button. You may be prompted that the parameter is still in use and cannot be deleted, or you will be asked to confirm the deletion. When you are done deleting parameters for the selected category, press the **Save** button.

## Building Parameters

The top level Building Parameters tab in the **Utilities | Update Value Parameters** dialog box provides access to all of the parameters associated with buildings, the categories of which are outlined below.





## Gross Living Area

You have the ability to display the building's Gross Living Area, both on the screen and on the assessment card. Doing so does not require that you update any of your existing sketches, but you will have to configure the system to indicate which sub area categories you would like the system to include when calculating Gross Living Area.

To implement the Gross Living Area attribute, go to **Utilities | Update Value Parameters | Continue > | Building Parameters | Building Factors | Sub Area Factors**. First, enable the display option by checking the box labeled Display Gross Living Area Where Applicable. Notice that initially each of your existing Sub Areas displayed in the grid have the Living Area attribute set to No. To include individual Sub Areas in the calculation of Gross Living Area, choose each individually in the grid and press **Modify**. In the Modify Building Sub Area Factor dialog box, simply check the box labeled Counts As Gross Living Area and then press **Save**. Do this for each Sub Area you wish to include in the calculation. For example, you will want to count Sub Areas such as First Floor Finished and Upper Floor Finished. Generally speaking, you should not count Sub Areas such as Unfinished Basement and Patio.

Once you have enabled the display option and modified the appropriate Sub Areas, you will notice the GLA label, both on the Sketch tab on the application's main window and within the Building

Sub Area Details section on the Assessment Card. The Gross Living Area is calculated as the sum of the Effective Areas for Sub Areas that you have elected to include.

## Building Points

Building Points are assigned for each value within a particular category (e.g. roof structure, bedrooms, bathrooms, etc.). **It is not recommended** that you modify building point values unless you thoroughly understand how each factor relates to the others and how any changes will impact your values. These values are standard and similar for all New Hampshire municipalities.

Code	Description	Factor
A	METAL/TIN	2
B	ROLLED/COMPO	2
C	ASPHALT	3
D	TAR/GRAVEL	3
E	ASBEST PNL	3
F	ASBEST SHNGL	3
G	CLAY/TILE	6
H	WD SHINGLE	5
I	SLATE	6
J	CORRUGATED COMP	3
K	PREFAB METALS	5
L	RUBBER MEMBRN	4

# Internal Building Points

## Bed and Bath

For commercial buildings you can elect to use a Textual Description for the number of Bathrooms in addition to the traditional Bathrooms Count. We have found this to be useful in our own assessments on commercial properties to help eliminate confusion over the information displayed on the assessment card. This confusion can arise from the fact that the formula used by the application to determine the appropriate number for points to assign for bathrooms and bedrooms was developed with a primary focus on residential properties. For a residential building, four or more bathrooms is generally viewed as a relatively large number of bathrooms and two bathrooms is more typical. Whereas, in a large commercial office building, a total of two bathrooms would be below average or atypical. A total of six bathrooms may be average for the building's size. By providing textual descriptions (e.g. None, Below Avg, Extensive) you can still enter the actual bathroom count in the Bathrooms Count text box. However, for the purposes of the building's point calculation, the system will translate the textual description you provide to the proper corresponding point value. For example, you could enter a Bathroom Count of eight, but choose to describe it as Below Average (based on the building's relative size). Previously, to have the same effect on the building points calculation you would have needed to enter a Bathroom Count of one, perhaps causing confusion. If you wish to utilize the Textual Bathroom Description on commercial buildings, you must first enable it within your database. Then you can begin assigning the appropriate descriptions to individual parcels. To enable the setting system wide, select **Utilities | Update Value Parameters | Continue > | Building Parameters | Building Points | Internal Building Points | Bed/Bath**. Check the box labeled **Enable Display of Textual Bathroom Description for Commercial/Industrial Buildings** and then press **Save**.

If you wish to utilize the Textual Description on a commercial or industrial property, within the Edit Building dialog box first check the box labeled **Describe Cml/Ind Bthrm Count As**. Once the box is checked, the drop down list of Textual Descriptions will be enabled. Select the appropriate description and press **OK**.

## Miscellaneous

There are several attributes you can use to describe and (where appropriate) value buildings. These include:

- Extra Kitchens
- Fireplaces
- Generators

Initially the building point value of each of these attributes will be zero. To modify the points for any of the attributes, go to **Utilities | Update Value Parameters | Continue > | Building Parameters | Building Points | Internal Building Points | Miscellaneous**. Enter the appropriate values in the corresponding boxes and press **Save**.

Additionally we have added a percentage description to the existing Central Air Conditioning attribute. Initially, all A/C values default to 100%. However, when the A/C attribute is checked, you can now use the accompanying drop down list to select 25%, 50%, or 75% for buildings in which only a portion has Air Conditioning. The resulting building points used in calculating the building value will adjust accordingly. Note that the building points values are maintained as an integer value. So depending on the number of points you have assigned for Air Conditioning, you may not experience a difference in value by changing the percentage. However, typically Air Conditioning is set to four points, so by changing the percentage you can instead add one, two, or three points by using the 25%, 50%, or 75% percentages, respectively.

## External Building Points

### Land Parameters

The four tabs on the Land Parameter tab allow you to modify the parameters associated with determining land values. Each tab is described below.

### Land Neighborhoods

The Land Neighborhood tab displays the factors associated with each category of neighborhood.

### Land Zones

The Land Zones tab displays the pricing values for each zone in the system. The Zone grid shows the minimum acreage, frontage, and default value for each zone. You can display the pricing details for parcels that are smaller than the zone minimum by selecting the particular zone in the Zones grid. This also displays the values associated with excess acreage, excess frontage, waterfront foot- age, and standard views.

Note: **You should never modify the minimum acreage for a zone** unless you have a thorough understanding of what you are doing. Mistakes here can have disastrous consequences on your land values. Generally speaking, if the minimum acreage requirement changes for a particular zone, it is easier to create a completely new zone and then modify the parcels individually.

The screenshot shows the 'Land Zones' tab in a software application. At the top, there are several tabs: 'Building Parameters', 'Land Parameters' (selected), 'Feature Parameters', 'Exemption Parameters', 'System Settings', and 'Mass Income'. Below these, there are sub-tabs: 'Land Neighborhoods', 'Land Zones' (selected), 'Land Current Use Codes', 'Land Acreage Discounts', and 'Land Modifiers'. The main area is divided into two sections: 'Zones' and 'Zone 01 Pricing'.

Zone	Acres	Frontage	Price	Description
01	1	200	22300	M-USEMIXED USE
02	1	200	22300	RES RESTRICTED
04	2	200	22500	RR-RURAL RESIDENTIAL
05	0.22	100	14000	RS-RES-SINGLE FAMILY
06	0.22	100	14000	RT-RES-TWO FAMILY
07	0.22	100	14000	RG-RES-GENERAL ZONE
08	0.03	15	7500	DT-DOWNTOWN ZONE
09	0.22	100	14000	BG-BUSINESS GENRL
10	0.22	100	14000	IB-INDST/BUSINESS

Below the table are two buttons: 'New Zone...' and 'Delete Zone...'. To the right, the 'Zone 01 Pricing' section shows a list of pricing options with input fields for price and acreage:

- Excess Acreage @ \$ 2000
- Excess Foot Frontage @ \$ 25
- Waterfront Frontage @ \$ 50000
- Standard View Value \$ 20000

At the bottom of the window are 'Save' and 'Close' buttons.

**Excess Acreage** – You can enter the per acre value for lots greater than the zoned minimum size.

**Excess Foot Frontage** – You can enter the dollar amount per linear foot of road frontage.

**Water Frontage** – You can use enter a dollar amount per water front foot or you can enter a flat value for the average waterfront site. You can adjust the condition up or down on a particular water front land line to account for varying qualities of the front foot approach or the average site value approach.

**Standard View Value** – You can enter the base contributory value of views for the zone. Each time it is used you can adjust the view condition up or down in value to compensate for varying views in the district, irrespective of site size.

## **Land Current Use Codes**

The Land Current Use Codes tab allows you to update the minimum and maximum values for each category of current use land.

### **Ability to Suppress “Market Value” on Current Use**

Often times the “Market Value” of individual Land Lines that appear on the screen and on the assessment card is meaningless for parcels that are in Current Use. This does not, however, stop taxpayers from asking all types of questions about the Market Value. In an effort to avoid the confusion, Avitar Assessing maintains a setting within the system that allows you to suppress the so called Market Value information for Current Use Land Lines. This does not change value or alter calculations in any way – it merely hides a value that can be misleading to some.

If you wish to suppress the Market Value information for Current Use, you can uncheck the corresponding checkbox on the Utilities | Update Parameters | Land Parameters | Land Current Use Codes tab.

The default setting is to display the values. However, when your market Land Line assessments on current use land lines are not realistic and consistent with similar, non-current use land values (which is most often the case with current use land) we recommend you use this option.

## **Land Acreage Discounts**

You can enter the excess acreage discount to account for the economy of scale. The economy of scale simply means that the more of anything you buy in one purchase, the cheaper the unit price.

You can enter the Minimum acreage (i.e. the lot size at which the discount will begin) and the Maximum acreage (i.e. the lot size at which the maximum discount will occur). Then you can enter the percentage point value of the maximum discount that will be given to the per acre value of a lot that is equal to or larger than the maximum acreage entered here.

## Land Modifiers

Site Quality, Topography, Road Surface, and Driveway Quality are available as additional land modifiers to describe the entire parcel. Value Factors must be entered in **Utilities | Update Value Parameters | Land Parameters | Land Modifiers** before they will have an affect on the parcel's land value. Initially, all modifiers have a factor of 100% such that selecting them will not alter the parcel's land value. You should not modify the Site Quality, Topography, Road Surface, and Driveway Quality factors unless you have a clear understanding of the effects doing so will have on parcel values.

## Feature Parameters

Your database comes with a table of the standard extra features that Avitar uses in the revaluations and updates that we perform. You will want to update these values regularly to maintain current square foot costs, as well as add new items and delete ones you may not use.

Code	Feature	Feature Rate	Size Adjustment	Qry Len&Wid
AGP-A	POOL-ABOVE GROUND	6	Normal	Yes
ARENA	RIDING ARENA	18	Normal	Yes
BARN	BARN-1STRY	15	Normal	Yes
BARN-B	BARN-1STRY/BSMT	17	Normal	Yes
BARN-L	BARN-1STRY/LOFT	19	Normal	Yes
BARN-LB	BARN-1STRY/LOFT/BSMT	21	Normal	Yes
BARN-S	BARN-2STRY	18	Normal	Yes
BARN-SB	BARN-2STRY/BSMT	20	Normal	Yes
BARN-SL	BARN-2STRY/LOFT	21	Normal	Yes
BARNSLB	BARN-2STRY/LOFT/BSMT	23	Normal	Yes
BATHHS	BATH HOUSE	20	Normal	Yes
BOATHSE	BOAT HOUSE	30	Normal	Yes
CABANA	CABANA	30	Normal	Yes
CABN	CABIN	25	Normal	Yes
CANOPY	CANOPY	23	Normal	Yes
CMPPR/TRLR	CAMPER / TRAILER	20	Normal	Yes
COOLER	COLD STORAGE	45	Normal	Yes
COOPS	COOPS-POULTRY	8	Normal	Yes
CPT-M	CARPORT METAL	8	Normal	Yes

Buttons: Modify, Add, Delete, Save, Close

When adding or modifying Feature parameters:

**Size Adjustment** – You can select one of three options for the size of adjustment of features: Zero (i.e. no size adjustment), Normal (i.e. 400 square feet is the average), and Special (which can be used for small structures like saunas and vaults where the average size is about 28 square feet).

**Qry Len&Wid** – Indicates whether the system should prompt the user to enter the length and width of the feature. This is used for such features as sheds where the system will compute the area based on the dimensions provided by the user.

## Historic Preservation Easements

Historic Preservation Easements relate to a requirement established by the New Hampshire legislature in 2002. It allows the governing body of any municipality to provide a reduced assessment on historic barns of between 25 and 75 percent.

If this feature description does not already exist in your database, you will need to create extra feature in the system parameters as follows if you wish to use this feature. It is important that you add the feature exactly as it is described below so that any easements granted will be reported properly on the MS-1 report.

Use the following values when adding a feature for historic preservation easements:

**New Code:** 79D

**Description:** 79-D HISTORIC BARN

**Rate:** 0

**Size Adj:** Zero

**Qry Len&Width:** No

Once you have added the feature description, you can select the feature from the Edit Features dialog box and you will be prompted to enter the required information.

To add information regarding the land for historic preservation easements, you will need to edit the land for the parcel and create a new Land Line record in the grid for the specific acreage you wish to assign. Select HIST.BARN ESMNT for the land use and then you will need to check the box in the OV column to indicate that you wish to manually override the Land Line record's value.

You can then enter the value you need to assign to the land portion of the Historic Barn Preservation Easement. At time of use, you will need to know the assessed value and the discount percentage being allowed. This data is necessary for the MS-1 report.

## Exemption Parameters

The Update Parameters | Exemptions tab allows you to add or modify exemption and credit amounts for which the amount of the exemption or credit is globally-determined within the database. Examples of these types of exemptions include blind and elderly exemptions, as well as the various levels of veteran credits.

## System Settings

The Update Parameters | System Settings tab allows you to configure some of the settings used by Avitar Assessing.

## Sales Codes

The DRA has added, eliminated, and renamed several of the sales codes used to describe why a particular sale is excluded from the equalization process. The result, in some municipalities, is that the sales codes in the database bear little resemblance to the standard codes utilized by the DRA. In an effort to resolve this situation, you can attempt to standardize the codes and definitions in your database with those currently utilized by the DRA.

To standardize your sales qualification codes, select **Utilities | Update Value Parameters | Continue | System Settings | Sales Codes**. Before you begin the process it is a good idea to print the codes as they currently exist in case you have any questions after you are done. Press the printer icon to print the list of existing sales codes. Once you have a report of the existing sales codes, press the Synch Sales Codes icon located to the right of the sales codes grid. You will be asked to confirm that you wish to begin the process. Once you do, the system will iterate through the list of sales codes and identify the following issues:

- Codes on the DRA list that do not exist in your database -- You will be asked if you wish to add a corresponding sales code to your database to match the DRA code.
- Codes that exist in your database that are not on the DRA list -- You will be asked if you wish to attempt to delete the code from your database. Note, however, the system will not allow you to delete the sales code if it is currently assigned to one or more sale in your database.
- Codes for which the DRA description differs from the description in your database -- You will be asked if you wish to update your description to agree with the DRA description. Note, however, you should not elect to update your description if the sales code has been used in your database and the DRA description is *dramatically* different from your description as you will in effect be classifying existing sales differently from the way in which they were originally created.

In cases where you either:

1. choose not to update the description of an existing sales code because the descriptions differ dramatically, *or*
2. cannot delete the sales code because it has been assigned to existing sales, you can use the user application's query function to locate the existing sales and reclassify them as one of the standard DRA codes. Once you have, you can redo the above process to modify or delete the sales codes in questions. As always, call Avitar if you have questions or concerns.

## Mass Income

In addition to the traditional cost approach, you can use two slightly different income approaches to value individual properties. An income approach recognizes that, in certain circumstances, the value of a property may be dictated by the income it can produce rather than by simply the cost to build an equivalent property -- in essence, the parcel's whole is worth more than the sum of its

parts. These income methods of valuation can be particularly helpful in municipalities with significant numbers of commercial properties.

If you wish to utilize either of the income approaches to valuation you must first enable the option within the system. To do so select **Utilities | Update Value Parameters | Continue > | Mass Income**. Check the box labeled Enable System-Wide Valuation by Mass and Individualized Income Approaches and press **Save**. At this point, you are ready to utilize the Individual Income Approach to value specific parcels. However, if you wish to utilize the Mass Income Approach you must first create an Income Category for each class of income producing properties (e.g. Apartments, Office Space, Warehouse, etc.).

To add, modify, or delete an Income Category for each class of income producing properties (e.g. Apartments, Office Space, Warehouse, etc.) select **Utilities | Update Value Parameters | Continue > | Mass Income | Income Categories**. To add a category press **Add**. Use the Add New Mass Income Category dialog box to enter the required parameters. Note that you should provide the income and rent values as amounts *per month*. Press **Save** when you are done. Existing Income Categories can be modified or deleted in a similar fashion by first selecting the specific category and using the corresponding button.

Once you have created one or more Income Categories, you may wish to review the Modifiers that can be applied to a specific property. There are three Categories of Modifiers: Building Modifiers, Location Modifiers, and Size Modifiers. Use the corresponding tabs and buttons to modify, add, or delete any of the Income Modifiers. Note that if you are modifying Income Categories which you have already assigned to existing parcels, this process should be followed by recalculating the Mass Income properties (Utilities | Recalculate Values) in order to propagate the changes within the rule to the parcel values themselves.

## **Recalculate Values**

The Utilities | Recalculate Values menu item, as the name indicates, enables you to recalculate parcel values for every parcel in the database based on the value parameters that have been configured in your database. This function is used mostly when the value parameters are altered to reflect current market trends and the intention is to update all values in the town, or a particular neighborhood or class of property. It should be used cautiously, as recalculations of any option have the tendency to unexpectedly change values which you may not have intended to change.

**NOTE: You should use this function cautiously and with a full understanding of the possible results. If you have questions or concerns, please call Avitar at 798-4419. It is recommended that you backup your data before performing a recalculation.**

Indicate the values you wish to recalculate by selecting the corresponding check boxes. You may use the Recalculate Land Values option to regularly recalculate the land values. This is necessary in order to recalculate values for parcels which have current use, after you have updated either the current use rates in accordance with information provided by the Current Use Advisory Board or your current equalization ratio.

Upon closing the Recalculation dialog box, you have the option to query for the recordset of parcels on which values may have changed as a result of the recalculation. If you answer Yes these parcels will display as your current recordset.

## Taxes

The **Utilities | Taxes** menu item allows you to calculate property tax warrants based on your assessment data. For a detailed discussion of all of the facets of the tax warrant process, refer to the **Property Tax Warrants** section of this document.

## Create Tax Supplement

The **Utilities | Create Tax Supplement** utility will assist you when generating warrants for your Tax Collector for individual parcels for either Land Use Change Taxes or Supplemental Property Taxes. To begin, you select the parcel for which you wish to create a supplement and then choose **Utilities | Create Tax Supplement**.

**Create Tax Supplement**

This utility enables you to easily produce a supplemental tax warrant for the selected property that you can provide to your Tax Collector. Make sure to choose whether the warrant should be for a Land Use Change Tax or a Property Tax Supplement.

Land Use Change Tax      Warrant Date: 05/04/2007  
 Property Tax Supplement      Amount:

Parcel:	Location:	Acreage:
000001 000016 000000	UTILITIES - ELECTRIC	0.0

Parcel Owner & Address:

UNITIL ENERGY SYSTEMS, INC      FORMALLY EXETER & HAMPSTON ELE  
6 LIBERTY LANE WEST  
HAMPTON, NH 03842-1720

Tax Collector's Name: Betsy Ross      Town Officials' Names: John Adams  
George Washington  
Thomas Jefferson

County: Rockingham

Close      Print

You can enter the type of tax warrant to be created and the amount of the tax.

Please note that this only generates a printed warrant that you can have signed by your Selectmen or Assessor and then provide to your Tax Collector. **Tax Collectors in towns that use the Avitar**

**Tax Collect system will still need to manually supplement the warrant to the Tax Collect system.** However, this utility makes it a little easier for users of the Avitar Assessing program to issue supplements to the Tax Collector by providing a simple function with which to generate the warrant.

## Copy Current Values to Previous

The Utilities | Copy Current Values to Previous menu item allows you to overwrite the values presently displayed for parcels' Previous Values with the values displayed for parcels' Current Values. Ordinarily, you will not need to use this function as the system will execute this function automatically after you finalize the last tax warrant of the year (in addition to archiving the taxable values for display in the Value History grid). However, you or your assessor may want to execute this function immediately prior to beginning a revaluation or update so you can easily compare the changes to parcel values.

## Maintain Users

The Utilities | Maintain Users menu items provides functions for adding and deleting users, as well as changing the password for an existing user. Each function is described below.

### Add User

The Utilities | Maintain Users | Add User function allows you to add other users to the system. When adding a user, you will assign the new user to a specific User Group that determines the specific tasks they will be able to perform. The default Public Access user group does not require a username or password. Remember that anyone with access to the computer will be able to start the program and review records without logging into the database. You can only add users to a User Group with similar or lesser privileges than your own. The User Groups are listed below.



The screenshot shows a dialog box titled "Add User" with a blue title bar and standard window controls (minimize, maximize, close). The dialog contains the following fields and controls:

- New User Name:** A text input field.
- Password:** A text input field.
- Confirm Password:** A text input field.
- User Group:** A dropdown menu with a list of options: PRINT USER, BUILDING INSPECTOR, BASIC USER, STANDARD USER, and POWER USER.
- Buttons:** "Cancel" and "Add User" buttons at the bottom.

### Avitar Assessing User Groups

- **Print Users** – Cannot edit records but may print all reports (except MS-1 and Listing Cards).
- **Building Inspectors** – Can edit Building Permits only (unless the system is configured to be used with the Avitar Building Permits system).
- **Basic Users** – Can print reports and edit owner, sales, and exemption information. Cannot edit value information.
- **Standard Users** – Can add, edit and delete parcels, including parcel value information. Limited access to Utilities menu items. Cannot recalculate values or update parameters.
- **Power Users** – Can access all system functions.

It is not wise to share usernames and passwords with co-workers as the system audits all changes to parcel information.

## Delete User

To delete a user from the system, you begin by selecting Utilities | Maintain Users | Delete Users. Next, select the user to be deleted from the dropdown list of users. Then click the Delete User button.

## Change Password

The Utilities | Maintain Users | Change Password allows you to change your password. Additionally, Power Users are able to change passwords for users with lesser access.

## Real Data Corp. Exchange

Note: This portion of the program has been removed. You should now be using the [DRA Mosaic system](#) for your equalization study.

The Utilities | Real Data Corp. Exchange menu item loads the RDC Sales Equalization module which you can use to match your assessment data to sales information you obtain from Real Data Corporation. For a complete discussion of this detailed process, refer to the Avitar/Real Data Equalization Module section of this document.

## Data Export

Avitar Assessing provides a number of formats you can use to export assessment data from your database. All of these formats are available from the **Utilities | Data Export** menu item. Each option is described below. The options available depend on the way in which your system is configured – you may not have access to all formats.

## **Mosaic Parcel Format**

The **Utilities| Data Export | Mosaic Parcel Format** export is designed to electronically provide parcel information directly to the DRA. For more information on using this export see [DRA Mosaic Exports](#).

## **Mosaic Advanced Sales Format**

The Utilities | Data Export | Mosaic Advanced Sales Format export is designed for you to export your sales information to the DRA and produce a printed report of your sales. For more information on using this export see [DRA Mosaic Exports](#).

## **Owners to Tax Collect**

The Utilities | Data Export | Owners to Tax Collect menu item provides a method by which users of the Avitar Tax Collect system that do not share a common network with the Tax Collect system can export owner information to update the Tax Collect database. For most users, this menu item is not needed.

## **GIS Format**

The Utilities | Data Export | GIS Format menu item provides dBase files that can be linked to Geographic Information Systems (GIS) for analysis of assessment data in relation to spatial databases. There are a number of configurations that can be selected. Contact Avitar for more detail if you think this function may be useful.

## **DRA Mosaic Exports**

The Utilities | Data Export | DRA Mosaic Exports are designed to electronically FTP your parcel and sales information to the DRA. For more information on how to utilize these exports see [DRA Mosaic Exports](#)

## **General Format**

The Utilities | Data Export | General Format menu item exports general parcel information in a basic text file. The fields are clearly identified in the first record of the file.

## **Munismart Format**

The Utilities | Data Export | Munismart Format menu item exports parcel ownership, value, and exemption data in a format that can be used with the Munismart property tax system.

## **Custom Format**

The Utilities | Data Export | Custom Format menu item exports selected parcel information in a format that has been customized for you municipality. Typically this format provides a unique format customized by Avitar to meet individual specifications necessary to integrate assessing data with a third party application or system. This menu item is not available by default.

## **ASCII Owner Format**

The Utilities | Data Export | ASCII Owner Format menu item exports owner information to a simple ASCII file. This is designed to be used with the Avitar Utility Billing system when it does not share a common network with Avitar Assessing.

## **Photos to Files**

The Utilities | Data Export | Photos to Files menu item allows you to export digital photos for selected records to external image files.

## **Purge Audit File**

The Utilities | Purge Audit File menu item allows Powers Users to purge older audit records from the database. The system automatically audits every change made to a parcel, recording such things as the PID, type of change, change in assessment, and username. This menu item allows you to purge older audit records from the database. It is, in many ways, a relic of the earlier days of the system when disk space was of more of a premium. These days, the size of the audit table in the database is dwarfed by the space allocated to sketches and pictures, so there is really no need to purge the audit file. In any event, you can only purge audit records that are older than 90 days.

## **Create Inspection Set**

The Utilities | Create Inspection Set menu item utility is designed to enable you to create a subset of records to review yearly based on the last listing date for each record. You need to select a starting year for the inspection process, as well as either the number of years left to finish reviewing all parcels in the town or the number of parcels you wish to review this year. You can indicate whether to only include improved parcels or not. When you press the Create Group button the system will tell you how many records were selected from the number of remaining parcels to be reviewed. Your current record set will reflect those records. You can then simply print the current record set of assessment cards for field review.

## **Inventory Penalties**

If your community annually mails parcel inventory forms to property owners, you can use the Avitar Assessing system to keep track of which owners have yet to return the inventory forms. If the inventory form is not returned, a penalty (equal to one percent of the total property tax, with a minimum of \$10 and a maximum of \$50) can be applied to the parcel's tax bill. Typically, at the beginning of the year you will assign penalties to all parcels when the forms are mailed to property

owners. Then, you remove the penalties individually from each parcel as the inventory forms are returned.

The Penalty Status cell located in the center of the main program window's Status Bar indicates whether a penalty has been applied to the currently displayed parcel. If the word PENALTY is grayed out, no penalty has been applied. If it is highlighted, a penalty has been applied.

## **Add Penalties**

You can use the Utilities | Inventory Penalties | Add Penalties menu item to add the penalty flag to every parcel in the database. Typically, at the beginning of the year you will use this to assign penalties to all parcels when inventory forms are mailed to property owners. Then, you remove the penalties individually from each parcel as the inventory forms are returned.

## **Delete Penalties**

You can use the Utilities | Inventory Penalties | Delete Penalties menu item to remove the penalty flag from every parcel in the database. If you wish to remove the penalty flag from an individual parcel you can double click on the Penalty Status Cell located in the center of the main program window's Status Bar to toggle the penalty on or off for the current parcel.

## **Delete Review Flags**

The Utilities | Delete Review Flags menu item allows you to globally remove the Review flag from every parcel in the database. Review flags are typically set on parcels that are to be reviewed the following year. This may be the result of incomplete construction as of April 1<sup>st</sup> or construction that began after April 1<sup>st</sup>. Once the assessor has reviewed each parcel on which the Review flag has been set, you can select **Utilities | Delete Review Flags** to reset all review flags prior to beginning the process again.

The Review Flag Status Cell located in the center of the main program window's Status Bar indicates whether a parcel has been flagged for review. If the word REVIEW is grayed out, the parcel has not been flagged. If it is highlighted, the parcel has been marked for future review. Additionally, if you are logged in, you can double click on the Review Flag Status Cell to toggle the review flag on or off to flag the current record for future review.

## Reports Menu

The majority of Avitar Assessing's pre-defined reports are accessed from the Reports menu. You must be logged in to the system in order to generate, preview and print reports. Unless you explicitly indicate otherwise, each of the reports is based on the entire database, as opposed to your current record set. Therefore, no matter what records you have displayed at a given time, executing the Current Use report, for example, will return the results for all parcels in town.

The reports are relatively straightforward, in most cases offering options for format, sorting and search criteria. In all cases, reports are initially displayed in preview mode allowing you to view the report results without actually printing the report.

## Reports Preview Toolbar

Virtually every report in Avitar Assessing will preview to the screen in the report viewer. At the top of the report viewer window you will find the report preview toolbar.



The report preview toolbar enables you to view and print the current report. The forward and back arrow icons allow you to sequentially move through the pages of the report in preview mode. The first and last arrow icons enable you to immediately jump to the first or last page of the current report in preview mode. The counter will indicate the number of the currently displayed report page.

If you decide you wish to print the report, click the Print Report icon. You will be able to see which printer the report will be sent to and you can indicate the pages you wish to print. If you want to select a different printer, you need to cancel the Print dialog box and then select a new printer using the **File | Print Setup** menu item on the main Avitar Assessing window. Avitar Assessing will always print to your current default Windows printer.

In cases when a report is grouped by specific criteria, you can display a list of the groups by pressing the Toggle Group Tree button (located next to the Print Report icon). The Group Tree pane will appear, revealing a list of the current reports group. To jump immediately to a particular group in the report, simply click on the group name in the Group Tree pane. If your report is not sorted by groups, nothing will appear in the Group Tree pane. To hide the Group Tree pane, click on the Toggle Group Tree icon a second time.

Depending upon your screen's resolution, the report may or may not be legible when it is first displayed in the preview mode. You can zoom in or out on the current report by selecting a new zoom factor from the dropdown list of percentages. The report will always appear at 100% initially, however, it may be necessary to set the zoom factor to 150% or higher to actually read the report in preview mode. Note that the zoom factor has no effect on the final print of the report, only on the way in which it is displayed in preview mode. Also note that depending upon your

resolution and system fonts, some labels or values may appear truncated in preview mode at higher zoom factors. However, the report should be fine when printed – this is only a display issue with some screen resolutions.

If you need to locate a specific record within the report, type the name or value for which you are searching in the find text box on the preview toolbar. To begin the search, click on the Search Text icon (pictured with the binoculars) and Avitar Assessing will search the report for the string entered in the text box. Any matches will be highlighted with a red rectangle in the preview window. To keep searching, just continue pressing the Search Text button. If the text is not found, you will receive a message indicating no results were found.

Once you have previewed or printed a report, you can close the report preview window by clicking on the standard close button (pictured with an “X”) in the control box in the upper right corner of the report form.

## **Exporting Reports**

In addition to printing reports, you have the ability of exporting most all of the reports in Avitar Assessing to a number of standard file formats. Your options range from distributable report formats like Adobe PDF files and HTML files, to formats like Microsoft Excel or delimited text files that allow you to share data with other applications. To export a report select the envelope icon on the toolbar and you will see all of the aforementioned options. Please note that some reports may produce unexpected results when exported to certain formats and it may take a bit of trial and error with different export types to get just the type of format that is most useful to you.

## **Value Reports**

A number for reports showing different types of value information can be accessed from the **Reports | Values** menu item. The various value reports are described in the topics listed below.

### **Values | Value List Report**

The Reports | Values | Value List report presents a list of all owners alphabetically and their total value broken down by acres, value of land, and value of any improvements.

### **Values | Value Summary**

The Reports | Values | Value Summary report presents a summary of total values by map number, land use, or base rate.

### **Values | Value Totals**

The Reports | Values | Value Totals report presents a list of value totals by new or old values which you can group by map, owner name, or land use.

## **Values | Value Ratio Old/New**

The Reports | Values | Value Ratio Old/New report displays a report comparing old and new values for all parcels or you may elect to only include parcels with a minimum percentage of value change.

## **Values | Value Ranges**

The Reports | Values | Value Ranges report produces a breakdown of the parcels across a given range of values, indicating the total parcel count and percentage of the total count for each class, as well as the total value and percentage of total values for each class.

## **Taxpayer List**

The Reports | Taxpayer List menu item produces a report of tax payers by owner name or tax bill amount.

## **Highest Taxpayers**

The Reports | Highest Taxpayers menu item produces a list of the 25 highest valued properties in town that is occasionally requested by DRA.

## **Parcel Count**

The Reports | Parcel Count menu item presents a report indicating a total parcel count, as well as a more detailed count by type (i.e. residential, commercial, etc.) and taxable status (i.e. taxable, exempt/nontaxable).

## **Parcel Detail**

The Reports | Parcel Detail menu item produces a detailed report summarizing the critical attributes of each parcel.

## **Current Use**

The Reports | Current Use report lists all current use (grouped by type or by owner) and shows the number of acres, total value, value per acre of current use land and whether or not it is receiving the recreational discount.

## **Exemptions**

The Reports | Exemptions menu item produces a report listing all exemptions and veterans credits. It is recommended that you run this report annually to verify your exemption and veterans credits information prior to running the tax warrant.

## Depreciation

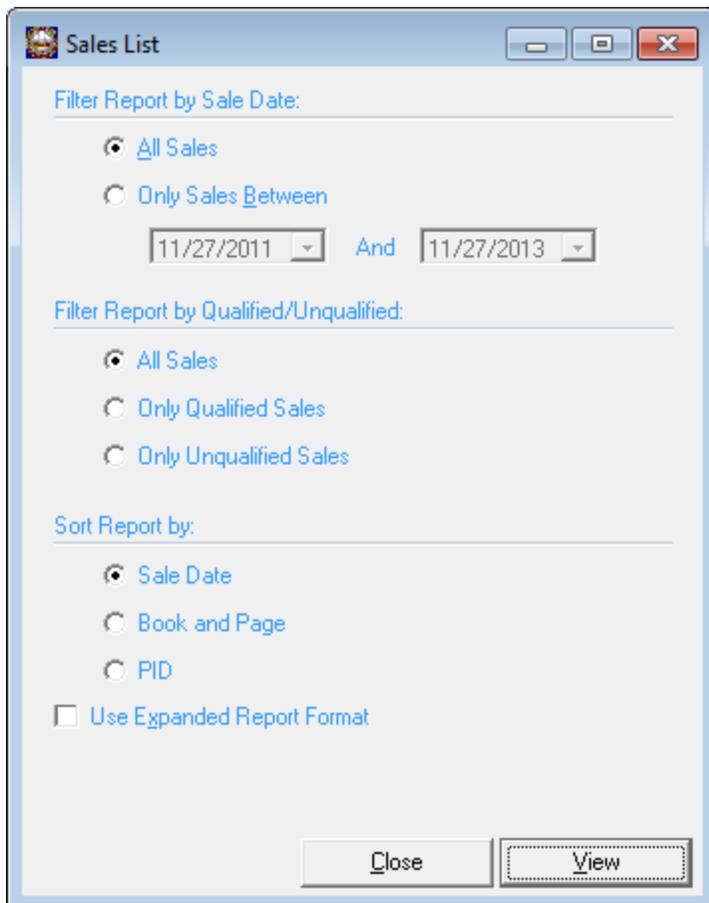
The Reports | Depreciation menu item produces a report of building depreciation. You may also limit the report to only buildings with a certain percentage of physical, functional, economic, or temporary depreciation.

## Under Construction

The Reports | Under Construction menu item produces a report you should run annually for your yearly pickups. It will include all parcels with temporary depreciation, recent building permits, review flags, or sketch sub areas that are less than 100% complete. In addition to the report, this menu item selects the record from the report and places them in your current record set so you can easily print field review cards.

## Sales List

The Reports | Sales List enables you to create a sales report based on different sort and filter options..



The image shows a screenshot of a software dialog box titled "Sales List". The dialog box has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area is divided into three sections:

- Filter Report by Sale Date:** This section contains two radio buttons: "All Sales" (which is selected) and "Only Sales Between". Below the "Only Sales Between" option are two date pickers with the values "11/27/2011" and "11/27/2013" separated by the word "And".
- Filter Report by Qualified/Unqualified:** This section contains three radio buttons: "All Sales" (selected), "Only Qualified Sales", and "Only Unqualified Sales".
- Sort Report by:** This section contains three radio buttons: "Sale Date" (selected), "Book and Page", and "PID".

At the bottom of the dialog box, there is a checkbox labeled "Use Expanded Report Format" which is currently unchecked. At the very bottom, there are two buttons: "Close" and "View".

## **Equalization Sales Report**

The Equalization Sales Report (Reports | Equalization Sales) is to assist you with the equalization process. The dialog box provides you with a date range and other options to customize the sales that will be included on the report. For sales that do not have an explicitly set DRA Property Description, DRA Property Modifier, or Assessment the system will determine these values at the time you generate the report based on the attributes of the parcel included in the sale.

## **Districts Report**

For towns that have districts configured (e.g. special taxable village, water, or fire districts) the Districts Report enables you to generate a report of the parcels either included in a specific district or not included in any district. You can also use a function included on the District Reports dialog box to send the parcels in a specific district to the system's current recordset. From there, you are able to print cards or generate a different report based on the current recordset. To do so, within the Districts dialog box you will notice a yellow data view icon to the right of each district. Simply click the corresponding icon for the desired district. You will be asked to confirm that you wish to reset the system's current recordset based on the district parcels and you will be notified of the number of parcels matching that criterion. You can simply close the Districts dialog box and proceed with reviewing the parcels, printing cards, or generating reports based on the current recordset. You also have the option of setting the current recordset to parcels not included in any district which can be helpful in identifying and updating parcels that should be in a district but may have been missed.

## **Codes & Adjustments**

The Reports | Codes & Adjustments menu item provides a number of reports that display the cost parameters and factors of the Avitar Assessing system database. They are used in revaluation manuals and should be printed each time you update parameters.

## **MS-1 Reports**

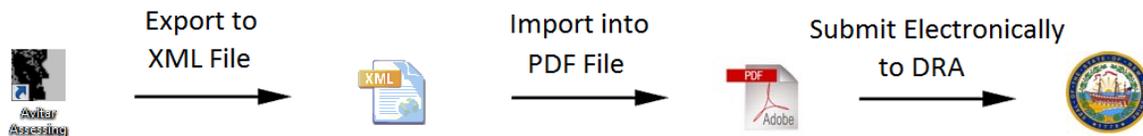
The DRA requires that municipalities submit the MS-1 electronically using a fillable PDF form provided by the DRA. Rather than forcing you to manually complete the PDF, Avitar Assessing enables you to easily export the MS-1 report information to an XML file. You can then import the XML file to populate the DRA's fillable PDF and submit it electronically to the DRA.

In order for you to import the system generated XML file into the MS-1 PDF form, it may be necessary for you to match the names, spelling, and format of the municipality, utility companies, and/or taxable district (where applicable) names you've used in your database with the standardized values required by the DRA. For example, in the PDF form, DRA provides a dropdown list of approved electric utility companies. If the parcel owner in your database was entered as "PSNH", you will need to select the corresponding state option of "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE" in order for the utility value to be listed properly when you import your XML file to the DRA's PDF form. However, once you have selected the corresponding standard values

(where necessary), the system will automatically populate these values the next time you run the MS-1. Instructions on setting these values are listed in the steps below.

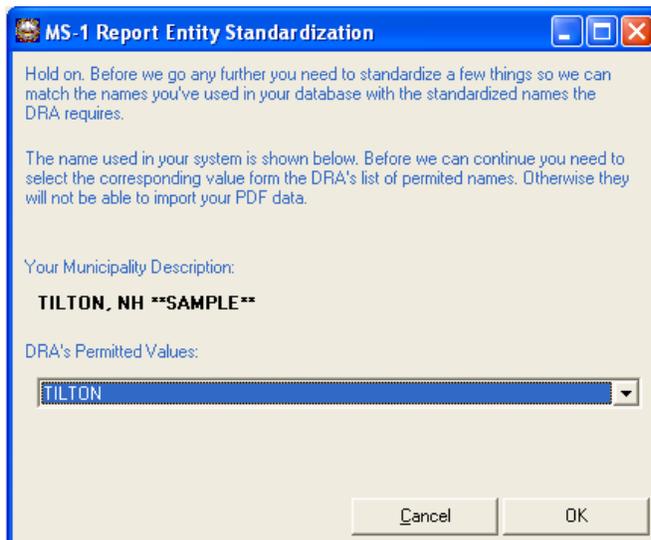
**If your Municipality has additional taxable precincts or districts**, you will have additional selections available beneath the Reports | MS-1 Reports | General menu item. You will have to create and submit additional PDFs for your MS-1 by choosing each district listed in the sub menu.

**The system retains values and information from the last time the report was generated, so be sure to review and update information on the screens before generating the report.**



### Step 1 - Generate the MS-1

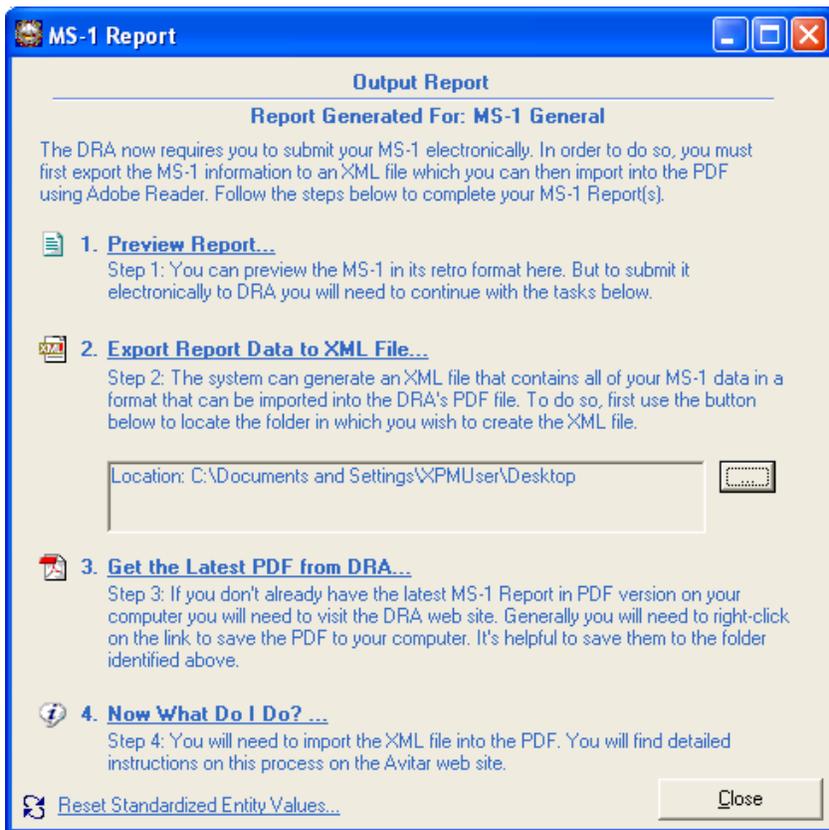
To generate the main MS-1 report, select **Reports | MS-1 Reports | General**. Review and update all of the required cover page information and select the **Next** button. If your Municipality name has not been standardized using the list of DRA permitted values, the Municipality description dialog box will open. Using the "DRA's Permitted Values" dropdown menu, select your Municipality description and select **OK** (this will only display if the Municipality description has not been set). If you set a description incorrectly or would like to change the set description, you can simply select the "Reset Standardized Entity Values" link at the bottom of the Output Report dialog box at the end of generating the MS-1.



If you have any "Payments in Lieu of Taxes" (PILTS) and have coded them in the land use box as "EX-PILT", then the MS-1 report will list them and ask you to enter the actual payment received and not include any assessed value anywhere in the report.

If your utilities descriptions have not been standardized using the values required by the DRA, the Utilities description dialog box will open. Using the "DRA's Permitted Values" dropdown box, select your utility descriptions and select **OK**. (This will only display if these utility description values have not been set).

Once you have entered the required information you will see the following set of output options. Each is explained within the following steps. If you set one of the DRA required descriptions incorrectly or would like to change the set description, you can simply select the "Reset Standardized Entity Values" link at the bottom of the Output Report dialog box.



If your community has additional taxable precincts or districts, you will have additional selections available beneath the **Reports | MS-1 Reports | General** menu item. You will have to create and submit additional PDFs for your MS-1 by choosing each district listed in the sub menu.

#### Step 2 - Preview the MS-1

Click on the Preview Report label or the corresponding icon to display the current MS-1 Report. Note that you will need to print this report (in its traditional format) and keep this for your records.

#### Step 3 - Export MS-1 Report Data to XML File

Once you have previewed the report and are ready to submit it electronically to the DRA, you can

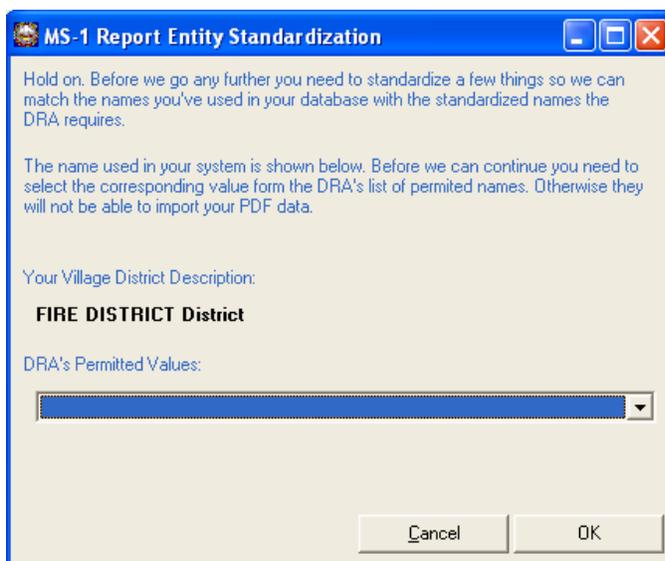
generate an XML file that contains all of your MS-1 data in a format that can be imported into the DRA's PDF file.

To do so, select the ellipsis button (...) and locate a folder on your computer in which you wish to create the XML file and click OK. Once this location is set, you won't need to set the location again for this machine. Select "Export Report Data to XML File" and this will create a file called MS1\_year.xml to the location that was set.

#### Step 4 - (Optional) Export District/Precinct Data to XML File

If your community has additional taxable precincts or districts, you will have to create an XML file for each precinct or district.

To export XML files for your district(s), select Reports | MS-1 | *District Name*. For the DRA to import your MS1 District PDF, you will need to match the district(s) description using the standardized names required by the DRA. These values will be set the first time through and they will automatically populate as the set values the next time you run the district MS-1. If you set a description incorrectly or would like to change one of the set descriptions, you can simply select the "Reset Standardized Entity Values" link at the bottom of the Output Report dialog box.



The information that populates for the districts is controlled by the information filled out on the General MS-1.

Once you have previewed the report and are ready to submit it electronically to the DRA, you can generate an XML file that contains all of your district data in a format that can be imported into the DRA's PDF file.

To do so, select the button with ellipsis button (...) and locate a folder on your computer in which you wish to create the XML file and click OK. Once this location is set, you won't need to set the

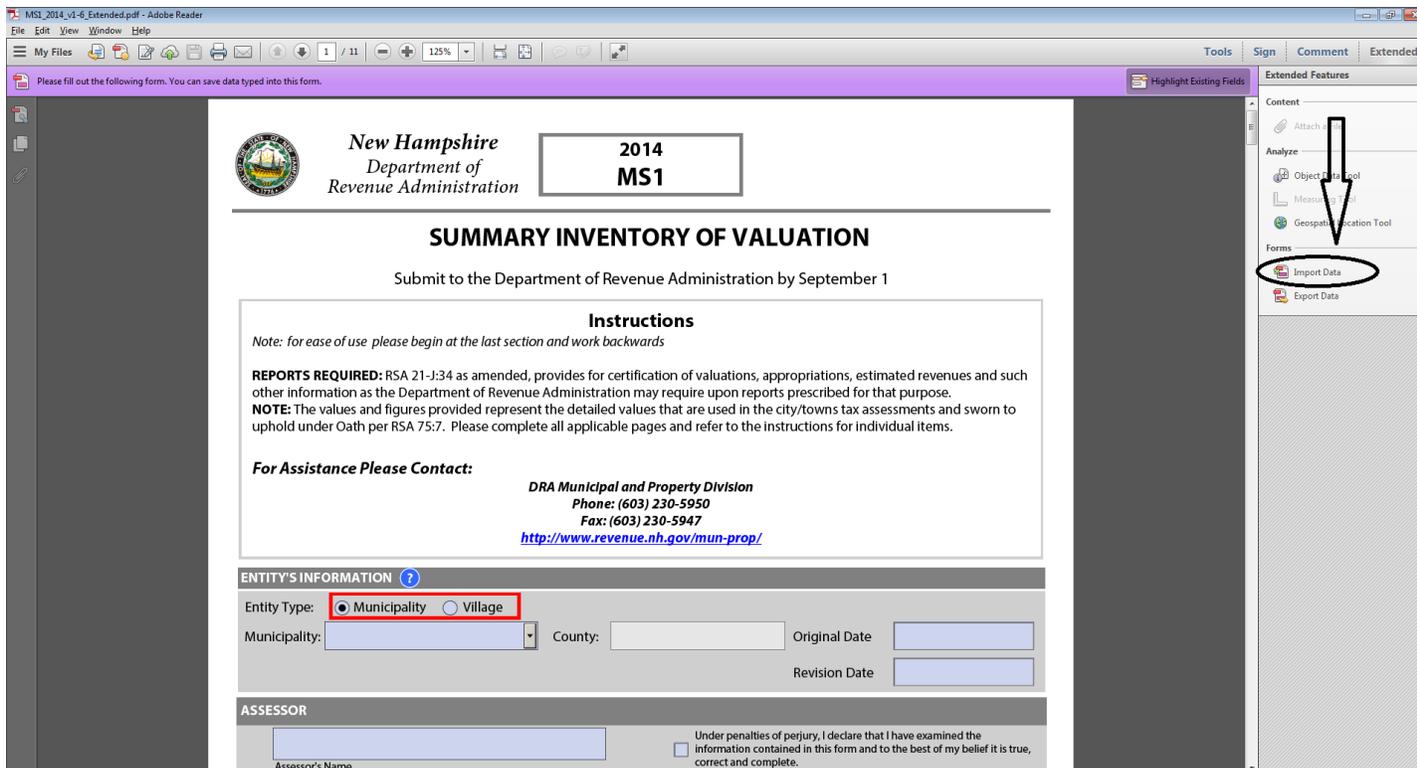
location again for this machine. Select "Export Report Data to XML File" and this will create a file called MS1V\_year\_District Name\_X\_PWD.xml to the set location. District Name representing the name of the district set in your program and X representing the district number identifier in the program.

### Step 5 - Get Latest PDF from DRA

To download the latest MS-1 Report in PDF version please visit the [DRA website](#) . Locate the MS-1 PDF with the most recent revised date. Save that PDF to the same location you exported the XML file to in the previous step. If your Municipality has districts/precincts, you will use the same PDF for your district(s) and the XML file will format the PDF accordingly.

### Step 6 - Import XML into PDF MS-1

To import the XML file properly into the PDF you downloaded from the DRA, you must have [Adobe Reader 11](#) installed. Open the PDF in Adobe Reader 11. Select Extended on the top right hand side of Adobe and select Import Data. If you do not see the Extended menu, go to View | Extended | Extended Menu and this will open the Extended options on the right hand side of the PDF.



Browse and select the MS1\_year.xml file that was exported to your computer and click **Open**. The fields of the PDF will populate with the data from the XML file. At the bottom of page 11 you will see the preparers certification section. The preparer will need to electronically sign their name to identify who is submitting the report verifying that the information submitted to the DRA is accurate. Once you have reviewed the data, save your changes. The next step is to submit the report to

the DRA by selecting the **Submit** at the bottom of page 11 of the PDF. You should also print the completed MS-1 PDF and have the selectmen sign that as well as keep a copy for your records.

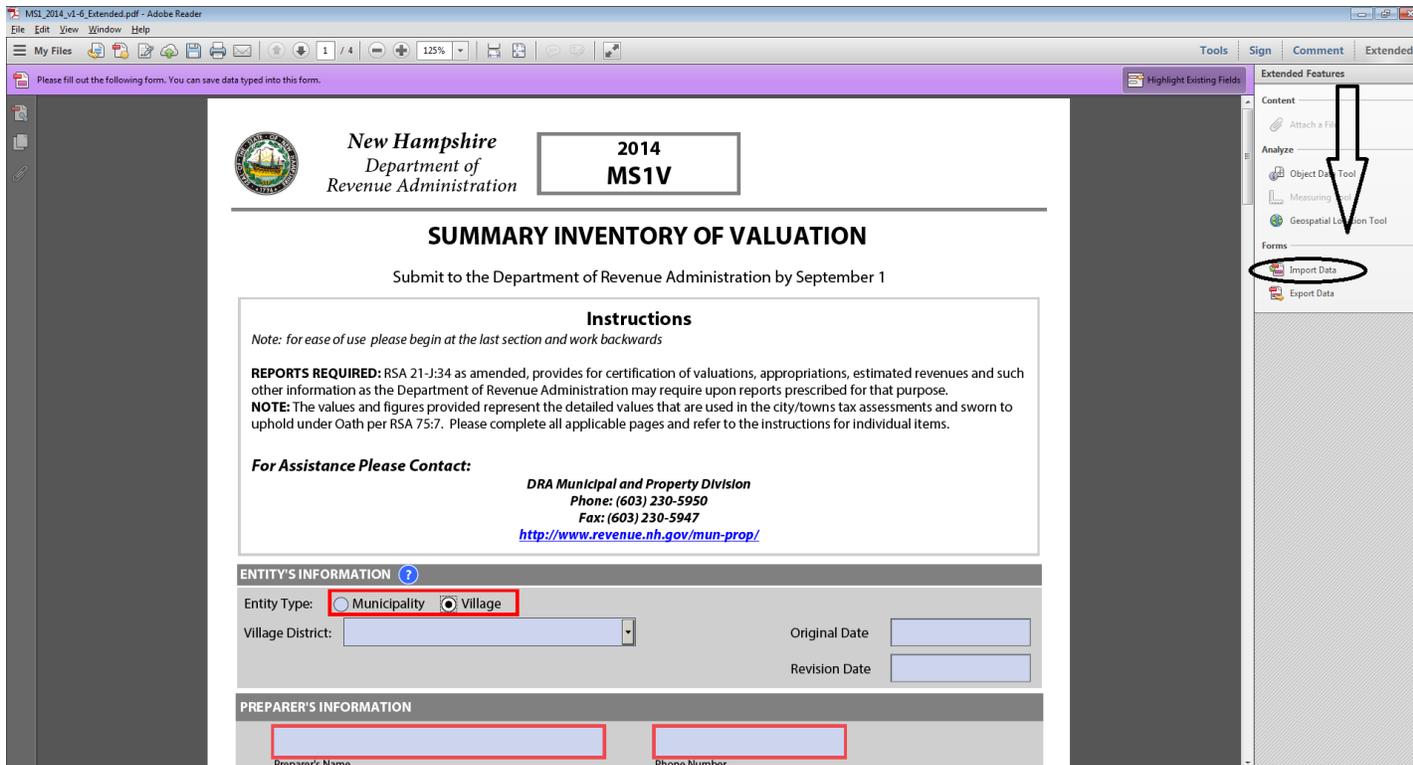


### Video - Import XML to MS-1 PDF

#### Step 7 - (Optional) Import XML into PDF MS-1 for Districts/Precincts

You will need to repeat these steps and submit a PDF separately for each District/Precinct your town has.

To import the XML file properly into the PDF from the DRA, you must have [Adobe Reader 11](#) installed. To import the XML file in Adobe Reader 11, select Extended on the top right hand side of Adobe and select Import Data. If you do not see the Extended menu, go to View | Extended | Extended Menu and this will open the Extended options on the right hand side of the PDF.



Browse and select the XML file that was exported to your computer and click **Open**. The fields of the PDF will populate with the information from the XML file. Once you have reviewed the data, save your changes. The preparer will need to electronically sign their name on page four to identify who is submitting the report verifying that the information submitted to the DRA is accurate. Once you have reviewed the data, save your changes. The next step is to submit the report to the DRA

by selecting Submit at the bottom of page four of the PDF. You should also print the PDF and keep a copy for your records.

## Notices

The Avitar Assessing can produce a number of notices that you can send to property owners. Each of these notice formats is accessible from the Reports | Notices menu item. They are described below.

### Notices | Preliminary Notices

The Reports | Notices | Preliminary Notices menu items generates preliminary notices to be sent to each taxpayer that enable the taxpayers to verify that the information in your assessing database is accurate. The mailer provides them with the current assessed values, acreage, and building description, as well as information necessary to schedule review appointments.

### Notices | Appointment Letters

The Reports | Notices | Appointment Letters menu item allows you to prepare notice letters for parcels that you need to inspect. As with mailing labels, you can create the letters for all parcels, just the current record set of parcels, or only for the parcels in the print queue. You have space to enter the town's return address, as well as a phone number and hours during which to contact the town to schedule appointments.

### Notices | Mailer/Correspondence

The Reports | Notices | Mailer/Correspondence menu item enables you to send notices to residents with any message for any particular purpose. You can elect to generate mailers for the current record set, the parcels in the print queue, or all records. In order to utilize a correspondence, you must first create the correspondence itself. To create, modify, or delete a correspondence select **Reports | Notices | Mailer/Correspondences**. Within the Print Correspondences dialog box press the Setup button. Within the Setup options you have tabs for Add New, Edit, Delete, and Header Setup. Messages that you had previously configured under the old Speed Mailer function will be converted to the new format, but you should verify that this was done properly before generating them.

Use the **Add New tab** to create a new correspondence message. This is everything (aside from the owner's name and address information) that will appear on the actual correspondence. The message could be anything from a notice of a special town meeting for all town residents and another for your notice of an impact hearing for a handful of residents that abut a particular property. You have several options for creating a new correspondence: you can create a blank correspondence (to which you will subsequently add text on the Edit tab), you can create a new correspondence using an existing correspondence as a template, or you can import a correspondence from a file you already created in WordPad. If you are using correspondences for the first time, you will probably

want to choose the blank correspondence option. Regardless of which option you choose, you will need to give the correspondence a title (e.g. Special Town Meeting).

Use the **Edit tab** to modify the text of existing correspondences. If you choose to add a blank correspondence, you should immediately select the Edit tab to modify the blank correspondence. To edit an existing correspondence, first select the correspondence by name from the drop down list. Once you do, the existing text (if any) of the correspondence will appear in the large text box below. Type any new text or modify existing text as needed. Use the alignment, font, bold, italicize, and underline buttons in the upper right to modify the appearance of any highlighted text as needed. There are also check boxes to Include Parcel Values and Include PID at the bottom of the Edit screen. Press Save once you are done.

Use the **Delete tab** to delete any existing correspondences which you no longer need. Simply select the correspondence by title from the dropdown list and press **Delete**.

Use the **Header Setup tab** to determine how the system should format the header of your correspondences. (Note that the header setup applies to all correspondences you generate within the system.) You have several options for formatting the header. If you just want to use basic return address information, select the Use Return Address option and enter the appropriate information in the text boxes provided. The recipient's address will print in an area suitable for use with standard #10 window envelopes. If you plan on printing your correspondences to special paper which is pre-printed with your office or municipal letter head, select the Use Letter Head option. In this instance, the system will not print anything within the header area of your correspondences. Finally, if you wish to use a digital image in place of a pre-printed letter head, select Use Image Header and then use the browse button below to identify the digital image to be used. Note the appearance of the image on the printed correspondence will depend on the size of the image you use. To avoid distortion of the image that may result from stretching, you should use images that are approximately 4.5 times as wide as they are high. Once you have configured your header, press **Save**.

## Notices | Inventory Forms

The Reports | Notices | Inventory Forms menu items allows you to easily print the owner address and parcel description information necessary when sending out parcel inventory forms. The report is designed to print the required information in the appropriate space provided on the DRA's inventory form. You should load these forms in your printer prior to printing the Inventory Forms.

## Mailing Labels

The Reports | Mailing Labels menu items provides numerous options to generate mailing labels for records in the current record set, the parcels in the print queue, or all records in the database. You have several options for sorting or suppressing certain labels or information fields. Additionally,

you can print to a number of different label formats or choose the Spreadsheet option to simply print a list of the parcels.

You can also print on certified forms when you need to send notices via certified mail. You will need to purchase pre-printed laser forms that provide the necessary certified mail bar scans and identifiers. (Search for single page certified laser forms by Walz Postal Solutions or call Avitar for more information.) Within the Mailing Labels dialog box choose the Certified Mailers option. Then click on the Add/Edit Certified Costs icon to enter the appropriate fees and return address. Note that you only have to configure these values initially and when they change -- you will not need to do this every time. Finally, before printing, make sure the pre-printed forms are in your printer and facing the correct way.

## **Listing Cards**

The Reports | Listing Cards menu item produces temporary listing cards for either the current record set or print queue parcels. The Listing Cards are essentially the same as the assessment card except that all value information is suppressed.

## **Owner Index**

The Reports | Owner Index menu item produces a basic report of owners sorted by PID, owner name, or parcel location. You can choose to expand this report by including value and owner address information.

## **Audit Report**

The Reports | Audit Report menu items produces a report of updates made to records in the database. You can limit this report in a number of ways such as only changes made to a specific parcel or only changes made by a specific user. This report can be helpful in determining why a parcel's value changed.

## **User Defined**

The User Defined report option allows you to print spreadsheet like reports showing the specific columns you choose. Unlike most other reports, the User Defined report option creates reports based on the currently displayed record set. If you want it to be based on all records, just use the Select All button on the main toolbar. Otherwise, create a record set of the records for which you wish to print information. This may be all parcels of a particular owner, it may be the result of a user defined query, or it may be created by selecting a group of records from the optional Map tab.

Once the current record set reflects the records for which you want to create a report, select **Reports | User Defined | Standard**. In the initial User Defined Report window, you will see a grid listing all of the fields in the master database table which can be included in your report. The second column, titled "Include" allows you to select the fields you want to be included in the report. Initially, no fields are included in the report.

Simply toggle the checkbox next to a particular field name on or off to include the field in the report. In the final Column Name column, you can enter your own title for any field you have selected for inclusion. For example, the default name for the owner name field is “Own Name”, but you may just want it to appear as “OWNER” when the report is printed. In that case, just type “OWNER” in the Column Name entry (and of course make sure to toggle the Include checkbox on).

Once you have selected and named the columns for inclusion in your report, click the **Format Report** button to preview the report. You will see the initial format for your user defined report. In the Report Title text box you can enter your own title for the report. If you want to change the order in which the columns appear, simply click on the column once to highlight the column. Once the column is highlighted (i.e. the background is blue) click on the column’s title and drag the column left or right until the column is in the proper location. The small red arrows will indicate where the column will be inserted. Once the column is in the proper location, simply release the mouse button to drop the column in place.

If you want to stretch the width of a particular column, hold your mouse pointer over the dividing line between column names. The pointer will change to the resize arrows (a vertical line with an arrow on either side). Click and drag the dividing line left or right until the column is the proper width. The report can also be sorted based on a selected field. To sort the report, first make sure the sort order you want is selected at the bottom – either Ascending or Descending. Once the proper sort type is selected, simply double click on the column title of the column on which you want to sort the report. The report will be sorted appropriately.

Finally, depending upon the number and width of the fields you include in your report, you can choose between printing the report in portrait or landscape format.

Once you have satisfactorily formatted the report, click the **Print Preview** button to see the results. You will see the results in preview mode. If you wish to go ahead and print the report, click the Printer icon. If you want to go back to the format page, select **Exit** from the File menu or just close the form using the form’s control box. Once you have reformatted the report, you can just preview the report again.

To close the User Defined report window, click the **Cancel** button. In some cases, if you have applied a new sort order to the record set, you will receive a message that the record set must be reset. In this case, your current record set in the main Avitar Assessing window will be empty.



[Video - User Defined Report](#)

## **Parcel Menu**

The parcel menu allows you to add, modify, and delete parcels within the database.

### **Add**

The Add menu item of the Parcel menu provides several methods for adding new parcels or new cards to the database.

### **Add Parcel**

The Parcel | Add | New Parcel menu item walks you through the process of adding a new parcel created by a subdivision or lot split to the database. For more information on adding a new parcel, refer to the [Adding a New Parcel](#) section of this document.

### **Add Card to Parcel**

The Parcel | Add | Add Card to Parcel walks you through the process of adding a new card to an existing parcel. For more information on adding a card, refer to the [Adding Additional Cards to an Existing Parcel](#) and [Cards, Parcels, and Multi-Card Parcels](#) sections of this document.

### **Add Post-It to Parcel**

The Parcel | Add | Add Post-It to Parcel menu item allows you to add a Post-It to the currently displayed parcel. For more information on adding parcel Post-Its, refer to the [Parcel Post-Its](#) section of this document.

### **Delete**

The Delete menu item of the Parcel menu provides several methods for deleting existing parcels or cards from the database.

### **Delete Parcel**

The Parcel | Delete | Delete Parcel menu item allows you to delete the currently displayed parcel. Before doing so, you should make certain that deleting a parcel will not cause problems for your tax collector. If your town calculates two property tax warrants each year, you should never delete a parcel between warrants. This process cannot be undone so make certain you are deleting the appropriate parcel.

### **Delete Card from Parcel**

The Parcel | Delete | Delete Card from Parcel menu item allows you to delete the currently displayed card from a multi-card parcel. After the card is deleted, the system will renumber the remaining cards for that parcel. You cannot delete a parcel's primary card (i.e. card one); rather,

you must use the Delete Parcel function. This process cannot be undone so make certain you are deleting the appropriate card.

## **Delete Building from Card**

The Parcel | Delete| Delete Building from Card menu item enables you to quickly and easily delete the building of the currently displayed card. This process cannot be undone so make certain you are deleting the appropriate building.

## **Modify**

The Modify menu item of the Parcel menu provides several methods for modifying existing parcels or cards within the database.

## **Modify Parcel PID**

Periodically, it may be necessary to change the PID of an existing parcel. Before doing so it is recommended that you check with your tax collector to make certain that no taxes are outstanding on the parcel. Changing a PID with outstanding taxes can complicate the lien and deed processes. Additionally, if your town calculates two property tax warrants each year, you should be very careful when changing a parcel's PID between warrants or the taxpayer will not be credited with the first tax bill amount.

To change a parcel's PID, you must first select the parcel on the program's main window and then select **Parcel | Modify | Modify Parcel PID**. Enter the appropriate values of the parcel's new PID in the Map, Lot, and Sub Lot text boxes. It is not necessary to enter any leading zeros. When you press the Change PID button, you may be asked to confirm the changes, especially if you are also using the Avitar Tax Collect system.

## **Modify Previous Values**

The Avitar Assessing system maintains two sets of values for each parcel: 1) the parcel's calculated or Current Values (i.e. the values that appear on the assessment card), and 2) the parcel's Previous Values. The only way to modify the calculated Current Values is by changing the parcel's attributes (e.g. changing the building condition or adding features). However, you are able to manually edit the Previous Values.

If your community has been using the Avitar Assessing system for several years, you will in all likelihood not need to concern yourself with editing Previous Values. However, if you are converting to the Avitar Assessing system from another CAMA system, you may need to enter the parcel's previous values in order to provide continuity to the tax bill process until your revaluation or update is complete. For example, you may be entering parcel information into the Avitar program in July leading up to a revaluation to be completed the following year. However, until that

reevaluation is completed, you will continue to calculate property taxes on the parcel values that were calculated in another CAMA system. In this case, you need to edit the parcel's previous values (as opposed to the parcel's current values that are calculated by the system).

To modify a parcel's Previous Values, you must first select the parcel on the program's main window and then choose **Parcel | Modify | Modify Previous Values**.

## Income

Whether you wish to value a parcel by either the Individual Income or Mass Income Approach, the parcel must satisfy the following criteria:

- The parcel must already exist in the database.
- The parcel must have a building (i.e. sketch and complete building description). You cannot use either income approach on vacant parcels.
- If you wish to use the Mass Income Approach, you must have already created at least one Income Category (see above).

To use either the Individual Income or the Mass Income Approach on a specific parcel, first select the parcel by any method (e.g. PID, Owner, Address, etc.) on the application's main window.

## Value via Mass Income Approach

Once the parcel to be valued is displayed, select **Parcel | Income | Value via Mass Income Approach**. The Mass Income Value dialog will display. Begin by selecting the Income Category for the parcel and then provide all of the appropriate attributes necessary to determine the Mass Income Approach to Value. Leave zeroes for any attribute that does not apply to this Income Category or property. If you need to know more about the building's sketch and area to calculate rentable square footage, press the question mark icon next to the square footage value to display the Sketch & Area Details dialog box.

If you wish to use the value displayed to override the default Cost Approach Value or any Individual Income Approach Value in effect for the selected parcel, do so by selecting the Mass Income radio button within the Assess This Property Using section of the dialog box. Press OK to save your changes. You will be asked to confirm your valuation choice.

To revert a parcel valued using its Mass Income Approach Value back to its default Cost Approach Value use the same dialog box and select the Cost Approach radio button within the Assess This Property Using section of the dialog box. Press OK to save your changes. You will be asked to confirm your valuation choice. If you wish to completely remove the mass income details from this parcel you can also click on the Delete Mass Income Details icon to the right of the Mass Income Value. However, this is not required in order to revert back to the Cost Approach Value. Which is to say, you can maintain the information necessary to generate a parcel's Mass Income Approach Value while still assessing the parcel using its Cost Approach Value.

## Value via Individual Income Approach

Once the parcel to be valued is displayed, select Parcel | Income | Value via Individual Income Approach. The Individual Income Approach dialog box will display. Here you can enter all of the parameters, specific to the individual parcel, necessary to determine the Individual Income Approach to Value. If you wish to use the value displayed to override the default Cost Approach Value or any Mass Income Approach value in effect for the selected parcel, do so by selecting the Individual Income radio button within the Assess This Property Using section of the dialog box. Press OK to save your changes. You will be asked to confirm your valuation choice.

To revert a parcel valued using its Individual Income Approach Value back to its default Cost Approach Value use the same dialog box and select the Cost Approach radio button within the Assess This Property Using section of the dialog box. Press OK to save your changes. You will be asked to confirm your valuation choice. If you wish to completely remove the individual income details from this parcel you can also just enter zero in the Gross Income text box. However, this is not required in order to revert back to the Cost Approach Value. Which is to say, you can maintain the information necessary to generate a parcel's Individual Income Approach Value while still assessing the parcel using its Cost Approach Value.

### Things to Know About Parcels Valued by Either the Individual Income or Mass Income Approach:

- On the application's main window, parcels on which the value has been determined by the Mass Income Approach to Value will display the Mass Income Valuation icon . The icon will display on the following tabs: General, Building, and Features.
- On the application's main window, parcels on which the value has been determined by the Individual Income Approach to Value will display the Individual Income Valuation icon . The icon will display on the following tabs: General, Building, and Features.
- When a parcel has been assessed by either the Mass Income Approach or the Individual Income approach, you can quickly review and/or edit the income attributes by double clicking on the corresponding income icon on the General tab. Alternatively, you can select Parcel | Income | Value via Mass Income Approach or Parcel | Income | Value via Individual Income Approach.
- When a parcel has been assessed by either the Mass Income Approach or the Individual Income approach, the total *parcel* value will be equal to the corresponding income value.
- When a parcel has been assessed by either the Mass Income Approach or the Individual Income Approach, the parcel's Land Value (as displayed on the assessment card, displayed on screen, and as used in queries and reports) will be the Land Value as determined by the Cost Approach.
- When a parcel has been assessed by either the Mass Income Approach or the Individual Income Approach, the parcel's Building Value (as displayed on screen and as

used in queries and reports) will be equal to the parcel's total Income Value minus the parcel's Land Value as determined by the Cost Approach. The sketch and description will still be visible/editable and will still be included on the card. However, the Building Value as determined by the Cost Approach will be suppressed in favor of the message "Income Approach To Value" on the assessment card.

- When a parcel has been assessed by either the Mass Income Approach or the Individual Income Approach, the parcel's Features Value (as displayed on screen and as used in queries and reports) will be equal to zero. The individual features and attributes will still be visible/editable and will still be included on the card. However, the Rate and Market Value will be suppressed on the assessment card.
- When a multi-card parcel has been assessed by either the Mass Income Approach or the Individual Income Approach, the Building Value and Features Value (as displayed on the assessment card, displayed on screen, and as used in queries and reports) of any supplemental cards (i.e. not card one) will be zero. All value (as determined by either of the two income approaches) will be maintained on the parcel's primary card.
- When a multi-card parcel has been assessed by either the Mass Income Approach or the Individual Income Approach, the net applied amount of any exemptions that exist on any of the parcel's supplemental cards (i.e. not card one) will be zero. This is because, as noted above, the valuation for income is all maintained on the parcel's primary card. In these cases, you should make certain that the necessary exemptions are consolidated on the parcel's primary card. The Tax Warnings Report will show these parcels.

## Find Comparables

The Parcel | Find Comparables function allows you to easily find the most comparable parcels in town relative to single subject property. The function utilizes a number of different attributes (acreage, building effective area, year built, condition, etc.) and assigns points to every parcel in town based on how closely they match the subject parcel. It then returns the most comparable parcels, or comps, as determined by the total point values. You can compare parcels based solely on assessment information or you can choose to compare parcels relative to recent sales information.

Keep in mind that the system uses an algorithm to determine comparable value which may yield different results from a trained professional, so make certain to review the set of comps returned by the function to select the most comparable properties. The best comps may not always be listed in the top three, but in our tests we almost always found what we considered to be the best comps were returned within the top dozen or so records.

To run the comps function, you first select the subject parcel on the program's main window. Next select **Parcel | Find Comparables**. Within the Find Comps dialog box you need to make the following choices:

- Indicate whether you wish to compare just the vacant land or the land and improvements. (You can choose to compare just the land portion, even when the parcel has a building by selecting Vacant).
- Indicate whether you wish to compare the subject parcel based on sales information or just assessment information of the possible comparables. If you elect to compare with sales information, you can set the base year for the sales comparison. Sales occurring closer to the base year will be assigned higher point values than other sales.
- You can choose to have the system make default adjustments to any comparables for differences in effective area. To do so, check the Calculate Default Effective Area Adjustment for Each Comparable checkbox. The default amount is set to the adjusted base rate of the subject parcel. If you wish to change it, enter a different value in the box labeled Based on \$\$ Dollars/Square Foot. If you choose this option, the system will set the default effective area adjustment using the square foot cost. For example, if the effective area of the subject is 2000 square feet and the dollars per square foot value is \$75.00, the effective area adjustment for a comparable with 2200 square feet will default to \$15,000 (i.e. 200 more square feet multiplied by \$75.00 per square foot. If you wish to change the adjustment, you can do so when selecting to include the comparable.
- Choose the number of comps you wish to return (e.g. the top twelve or top twenty comps).

Once you press the Find Comps button the system will then return the top comps, showing you the subject parcel information on the left and information for the highest-ranking comp on the right. Use the horizontal scroll bar to view other lower ranking comps within the record set and the vertical scroll bar to view more information for the currently displayed records. If you wish to include a specific comp in your final record set or report, check the Include check box at the top of the comparable column. To remove a comp from your printed report, simply uncheck the Include check box.

The system will return the number of parcels you indicated during your parameters setup, but as you view the lower comps, you may be notified that other equally comparable parcels exist and to see those parcels, you should rerun the process and choose to return a number greater than the number you previously entered.

Once you have selected the properties which you feel are the best comparables you can make the necessary adjustments to the comps based on the differences in the properties for size, age, quality, waterfront, view, etc.

There two categories from which you can use make adjustments to comparable properties. The adjustments allow you to make specific additions or subtractions to the included comps to reflect specific differences relative to the subject parcel. Whereas the other adjustments are all for specific categories (e.g. Features, Bedrooms, Acres, etc.) you can actually use these two editable categories -- one for the land and one for the building -- for anything you choose. You can assign each category a name (to be used on all comps) and then provide a note and an amount specific for each comp.

To use either editable adjustment category, double click on the label in the left column that says either "Editable Land Adj." or "Editable Building Adj." You will be prompted to enter the name for the adjustment category. Notice that once you enter the name, the corresponding label in the left hand column updates to reflect your new name. Then for any selected comp, you can enter a note and amount in the corresponding text boxes on the right. If you wish to rename or remove an editable adjustment category simply double click on the corresponding label once again in the left column. Answer the prompts accordingly by either providing a new category name or by removing the adjustment altogether. If you remove an existing editable adjustment category, any existing adjustments you have made on any selected comps for the editable category will revert back to zero.

You can also modify the assessment of the subject parcel by either providing a new assessment or by providing a new equalization ratio or by providing both. This can be helpful if you are preparing the report for a BTLA hearing or court case and the assessment for the subject has changed since the case began. To modify the subject's assessment or the EQ ratio, again double click on the corresponding label -- either Assessment or EQ Ratio -- in the left column and enter the desired values.

Once you have selected the appropriate comps to include and made any necessary adjustments, you can press the Print button to print your comps report. Press the Set Included as Current Record Set button to set the current system record set to your set of comps. By doing this, you can then easily print cards or create a user defined report for your set of comps.

You can save the list of comparables and any adjustments for a particular subject parcel by pressing the Save button. If you then return to the subject parcel in the future and select **Parcel | Find Comparables**, you will be prompted whether you wish to reload the previously saved list of comps or begin again. If you choose to reload a previously saved list of comps, your adjustments will remain the same but both the dialog box and the comps report will reflect the current information (i.e. values, zone, effective area, etc.) in the database for both the subject and any comps. If the underlying values in the database have been modified you should make certain to review your comps and any adjustments to make certain they are still valid.

**Important Note:** The Find Comps function is intended to help you, not to replace you or your common sense or the judgment and experience of an assessing professional. Do not assume that the first three properties returned by the function are the absolute best three comparables. Always remember to review the suggested properties to choose the best comps in your judgment.

## Data Menu

The Data Menu allows you to view/manage Archive and Update Databases.

The Archive Database allows you to archive the entire Assessing database and maintain historical copies of your data for each year, allowing you to refer back to a view of a parcel's complete attributes and assessments in previous years. You can associate a single database with each Archive Database year. However, unlike with the History of Taxable Values (in which you are able to only archive the *values* for each parcel) this new Archive Database function allows you to create a copy of the entire Assessing database as it existed at the end of the year. Going forward, within each Archived Database, you will be able to review parcels as they existed in that year, but you will not be able to add, modify, or delete parcels.

The Update Database is designed to maintain two copies of your assessing database during an update or revaluation processes, allowing you to perform sales analysis and parameter updates on your Update Database while the values in your Active Database remain unchanged. During the update process, you can refresh certain attributes from your Active Database to your Update Database. Once you are satisfied with the changes in the Update Database, you can import your changes back to your Active Database, making all of your changes active at once.

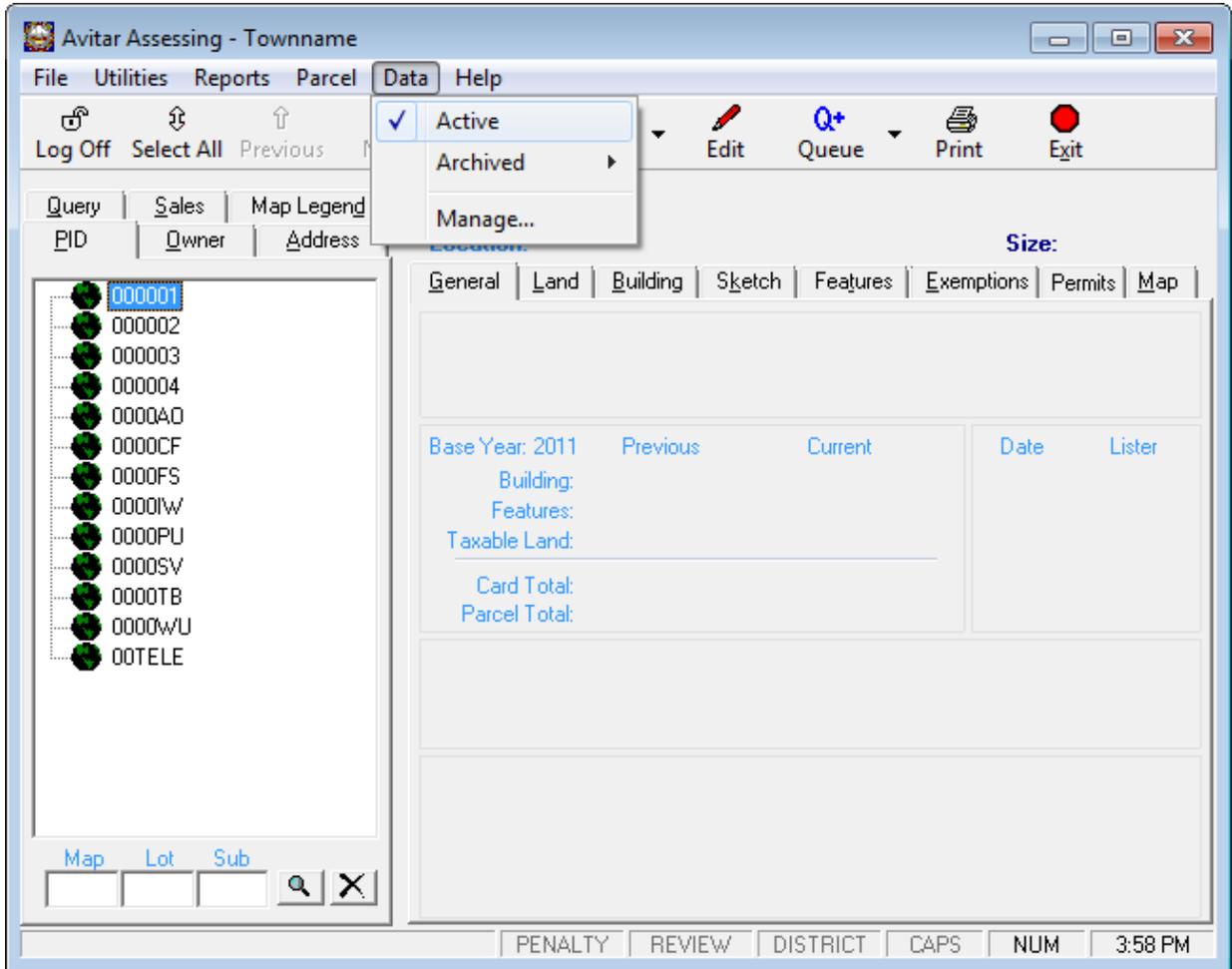
In order to take advantage of these functions, you will need to check a few requirements:

- You will need to verify that your version of the SQL Server/SQL Express database application is sufficient. This new functionality relies on capabilities that did not exist in earlier versions of the SQL Server and SQL Express database platform. However, some of your systems (depending on when they were installed and whether or not your server's operating system is compatible with newer versions of SQL Server/Express) may not support this. To check, select **Help | About Avitar Assessing** and check the number beneath your server name (shown below). If the number is *less than 10* you will need to contact Avitar to see if your current server will support updating the database application. If the number is 10 or greater your database application does not need to be updated.
- You will need to verify with your IT expert that you have enough physical disc space on your server to support an additional database or two. Assessing databases can get big, and you will need to know that the drive on which your current SQL data directory resides on the server can support the space requirements.

If you believe your system meets the minimum requirements (listed above) necessary to support the Archive Database and Update Database functions you will need to contact Avitar in order for us to enable the functionality within your configuration.

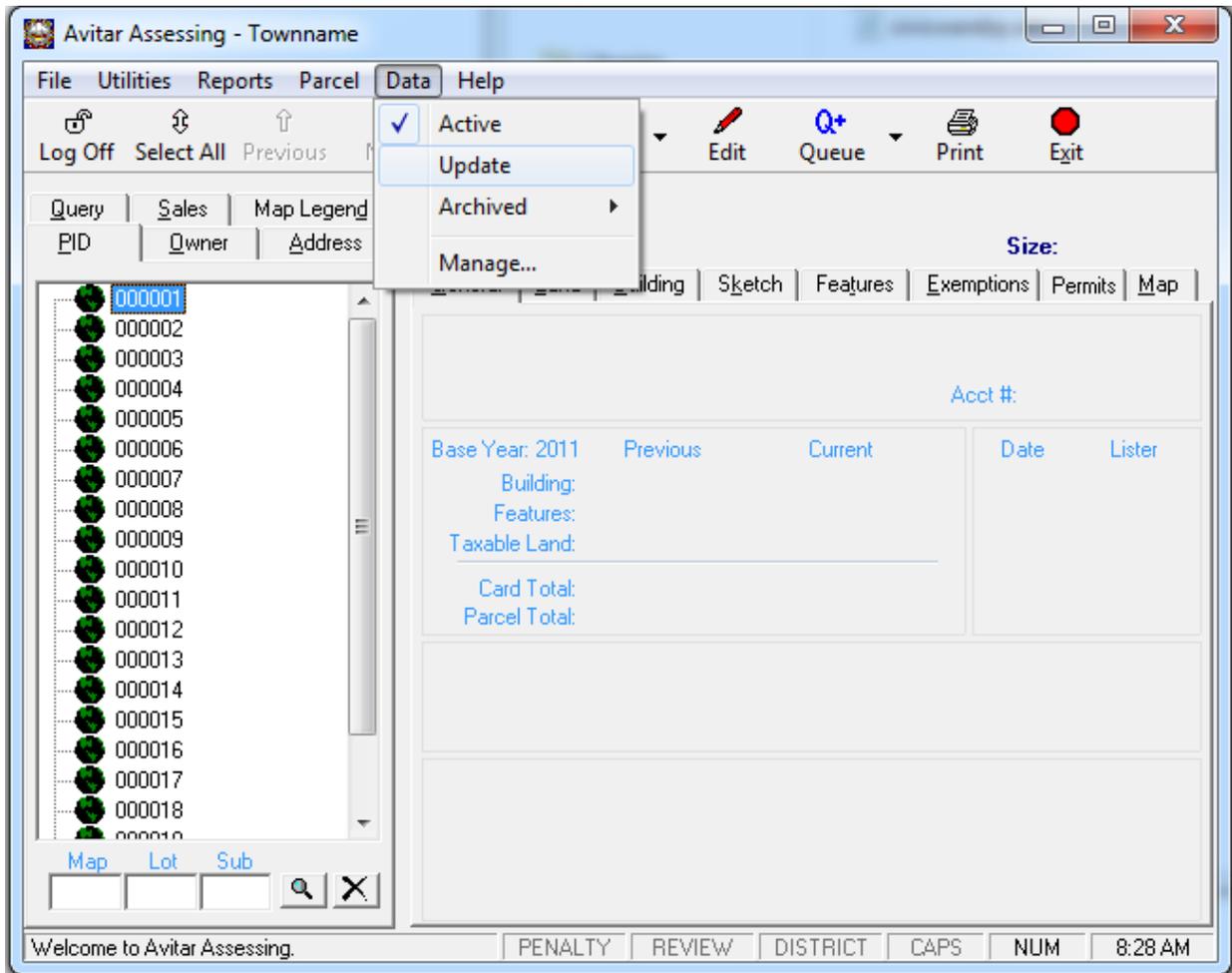
## Active

The **Data | Active** menu item allows you to return to your active database. When you are in your active database, you will see a check mark next to the **Data | Active** menu item.



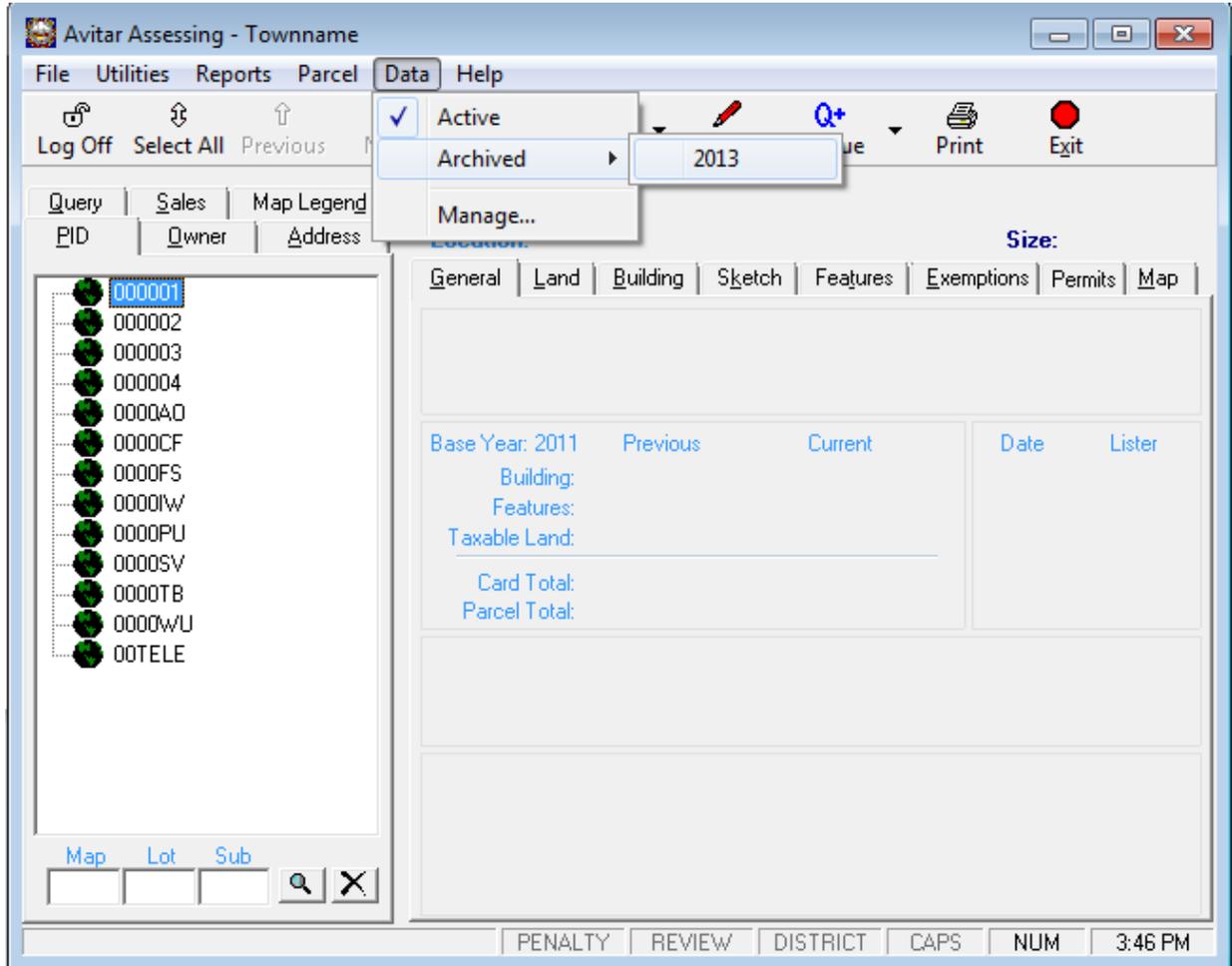
# Update

The **Data | Update** menu item allows you to select the available update database. For more information on how to manage and use the update database, see [Manage Update Database](#)



## Archived

The **Data | Archive** menu item allows you to select available archived databases. To view an Archive Database, select the corresponding year from the **Archived** menu item fly out. For more information on how to manage and use the Archived Database, see [Manage Archived Database](#).



To return to your Active Database select the **Data | Active** menu item.

## **Manage**

The **Data | Manage** menu item allows you or your system administrator to create, modify, view archived and/or update databases. For more information on how to utilize each function, select one of the options below

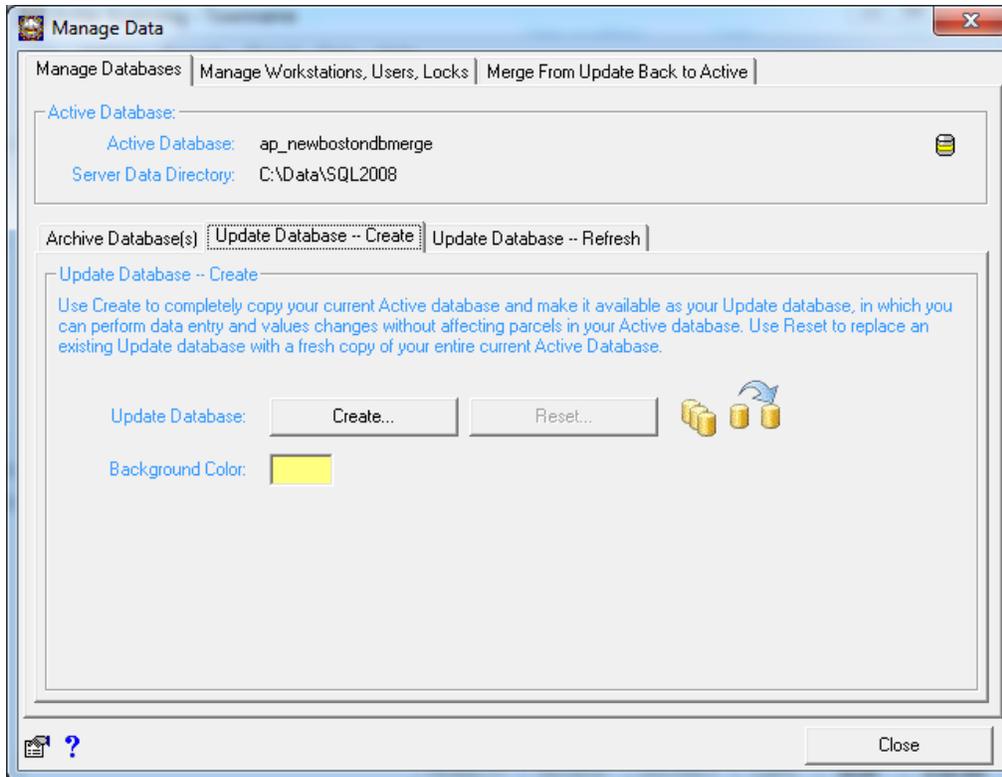
## Manage Update Database

The Update Database is designed to enable you to maintain two copies of your assessing database during an update or revaluation processes, allowing you to perform sales analysis and parameter updates on your Update Database while the values in your Active Database remain unchanged. During the update process, you can refresh certain attributes from your Active Database to your Update Database. Once you are satisfied with the changes in the Update Database, you can import your changes back to your Active Database, making all of your changes active at once.

### Creating the Update Database

To create an Update Database, you must be logged in to the system as a Power User. Select the **Data | Manage...** menu item from the **Data** menu. Within the **Active Database** frame at the top of the **Manage Databases** tab the system will display (when accessible) the size of the current database as well as the current amount of free space available on the disc drive on which your Active Database currently resides. If you have not already archived one or more databases you may need to click the **Check DB size/space...** icon displayed to the right of the **Active Database** label. Verify (by reviewing any information provided within the **Manage Data** dialog box and/or by speaking with your network administrator) that you have enough free space available in order to maintain an additional copy of your database.

If you have the required space, you can create a copy of your current database by selecting, within the **Update Database -- Create** frame, select **Create...** You will be notified whether the process was successful or not. Use the **Reset...** button to replace an existing Update Database with a fresh copy of your entire current Active Database.



### Configuring Access to the Update Database

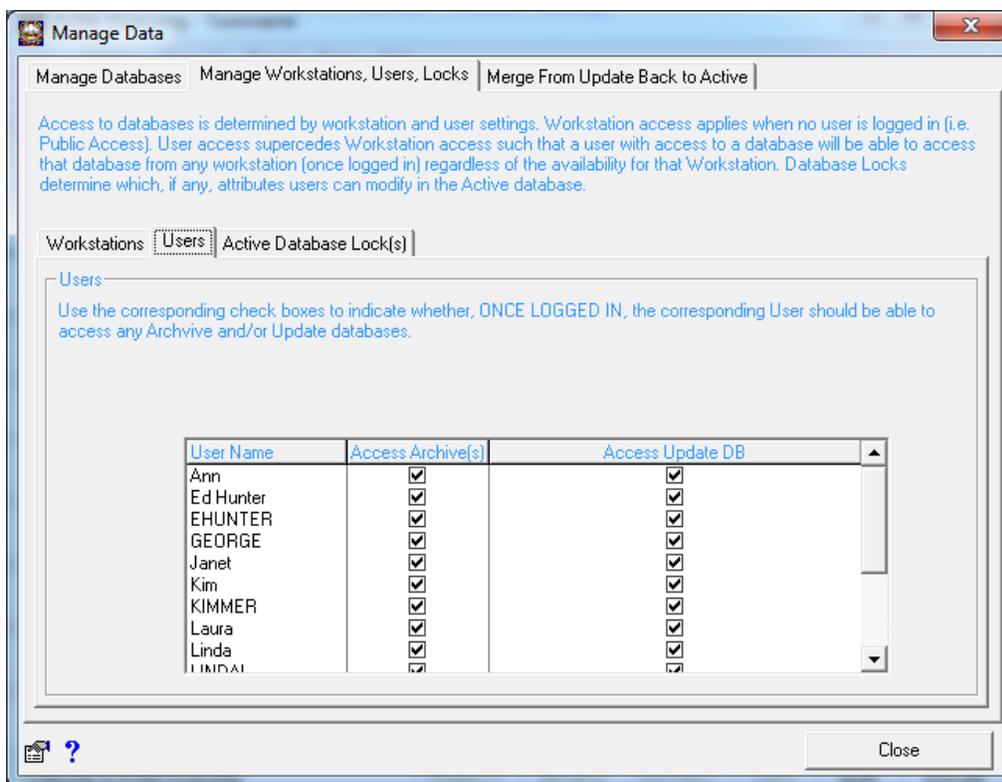
Once you have created the Update Database, you can configure who is able to access the Update Database by either workstation or by user name. To do so, when logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstations, Users, Locks** tab.

You can configure whether or not a workstation and/or a user (once they are logged in) is able to access your Update Database. The access configuration for a specific workstation determines whether the option to elect to connect to the Update Database is available within the system on that workstation before a user has logged in (i.e. within the public access once the program starts but before a user actually logs in). The access configuration for a specific user *supersedes* any access configuration for a specific workstation. So, for example, you might configure every workstation such that the Update Database is not available by default. However, if a user to whom Update Database access has been granted logs in on that workstation, the user would be able to access Update Database.

To Configure Workstation Access to the Update Database: When logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstations, Users, Locks** tab. Within the Workstations frame, choose the specific workstation name from the list of available machine names and check or uncheck the corresponding box to allow access or not. Note that access to the Update Database is *disabled* by default for each workstation so if you want to grant access to Update Database for a specific workstation (e.g. a terminal used

by the public) you must enable it. Also, if you have not run the program on a specific workstation *after* you have run this update the workstation may not appear in the list of available machines. Therefore, it is easiest to enable access to the Update Database for a specific workstation by logging in to the program *on that workstation* and selecting **Data | Manage...** and clicking on the **Manage Workstations, Users, Locks** tab.

To Configure User Access to the Update Database: When logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstations, Users, Locks** tab. Within the Users frame check or uncheck the corresponding box for each user within the Access Archive(s) column of the grid. Note that access to Archive Databases is *disabled* by default for each user so if you want to grant access to Update Database for a specific user you must enable it.

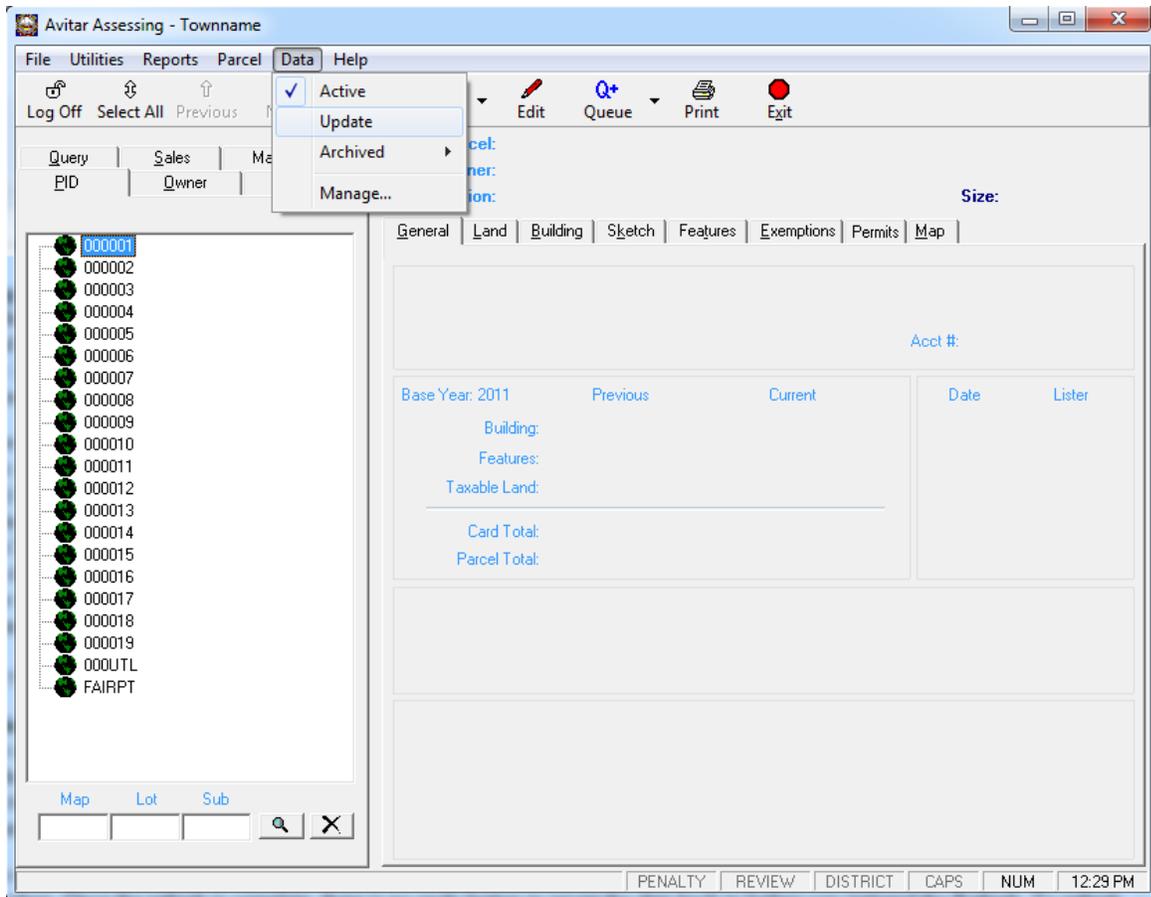


### Viewing the Update Database

To view the Update Database (if access is granted for your specific workstation or user) begin by starting the program as you would normally and (if necessary) log in. If access has been granted for your workstation and/or user you should see a new **Data** menu between the **Parcel** and **Help** menus across the top of the program's main window. To view the Update Database, select **Update** from the **Data** menu.

Once you are connected to the Update Database, you will be able to browse the data, make changes, and recalculate values, just as if you were in your Active Database. Additionally, any reports and/or assessment cards you print will be labeled (either in the title of the report or by a

watermark) to indicate it was generated from the Update Database. Lastly, the background color for a portion of the system's main screen will be displayed with a unique color to differentiate it visually from your Active Database. To change the background color associated with your Update Database select **Data | Manage...** choose the **Manage Databases** tab and then select the **Update Database -- Create** tab. Double click on the color swatch box below the **Update Database** frame and select a different color for the default background color. Note that the same color will be applied to the background color within Update Database across all workstations that connect to the database -- i.e. you cannot configure your own unique color by user.



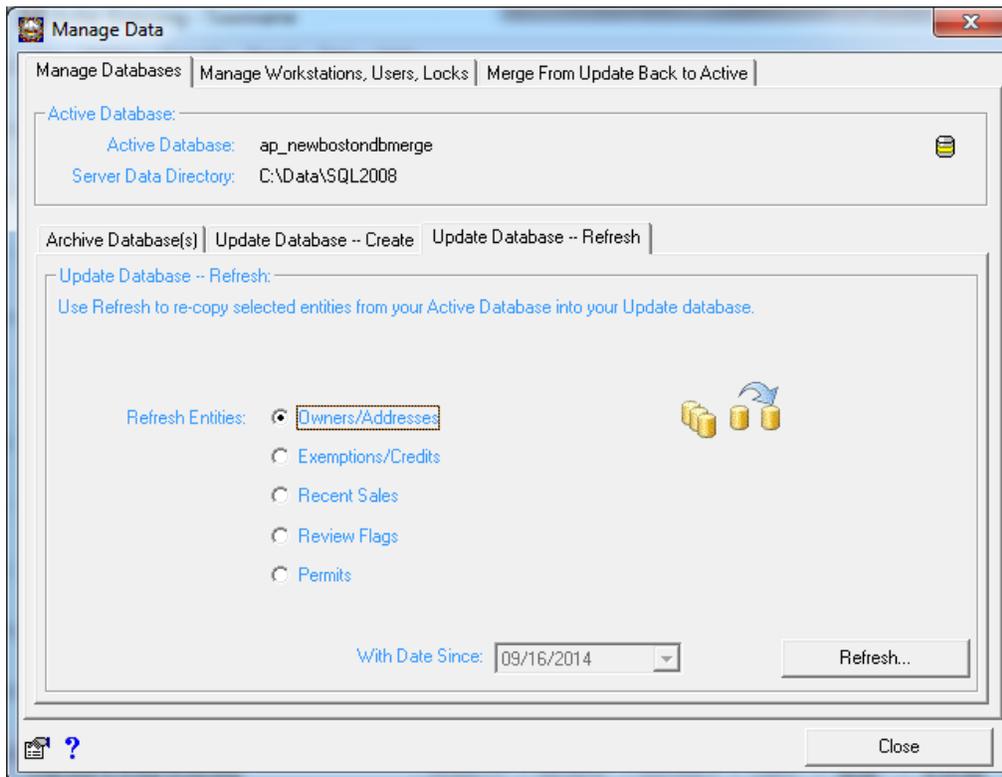
To return to your Active Database select the **Data | Active** menu item.

### Refreshing the Update Database

While your assessor is making value changes in the Update Database, the assessing clerk might be entering owner/address and other deed changes in the Active Database. It might be necessary to refresh some of the data (e.g. owners/addresses, sales, permits, review flags, exemptions) that has been changing in the Active Database to the Update Database. For the purposes of notices you will want the most current owners/addresses in the Update Database.

Before you refresh attributes in your Update Database, backup your Update Database. See [Backup Database](#) for more information on creating a backup. Once the refresh is complete, there is no undo

button to revert the data back to before you initiated the Refresh. To refresh attributes from your Active Database to your Update Database select **Data | Manage...** choose the **Manage Databases** tab and then select the **Update Database -- Refresh** tab. Select which entity you'd like to refresh in your Update Database and then select the **Refresh...** button. You will be notified once the refresh is complete. You can repeat this process for the additional entities you would like to refresh in your Update Database.

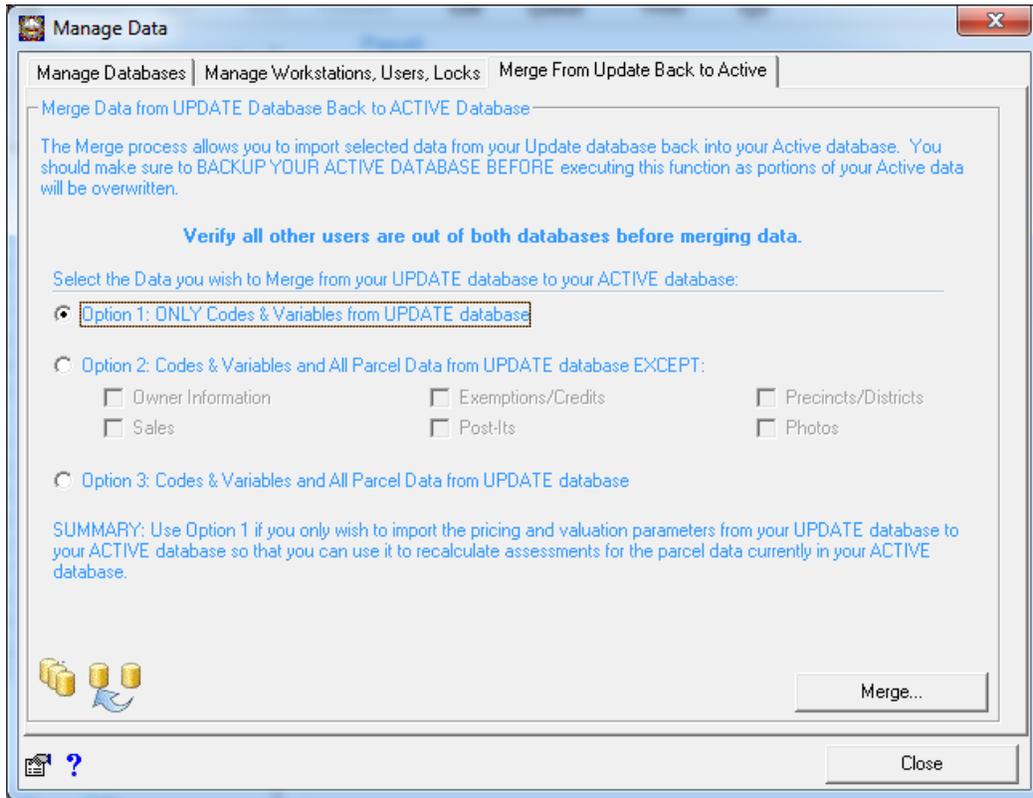


### Merge Data from Update Database Back to Active Database

The merge process allows you to import selected attributes from your Update Database back into your Active Database. Before executing this process, make sure you backup your Active Database. See [Backup Database](#) for more information about completing a backup. Each merge option is described below:

- **Option 1: ONLY Codes & Variables from UPDATE database:** Use this option if you wish to only import the pricing and valuation parameters from your Update Database to your Active database.
- **Option 2: Codes and Variables and All Parcel Data from UPDATE database EXCEPT:** Use this option if you wish to import pricing and valuation parameters and all of the parcel attributes from your Update Database into your Active Database but you want to preserve the selected information (indicated by the checkboxes) currently in the Active Database. Use this option if the owner addresses and deed changes were being input in the Active Database during the time you were working in your Update Database.

- **Option 3: Codes and Variables and All Parcel Data from UPDATE database:** Use this option if you wish to import the pricing and valuation parameters and all of the parcel attributes from your Update Database to your Active Database and you do not need to preserve any of the specific attributes currently in the Active Database. Use this option if the owner addresses and deed changes were being input in (or refreshed into) your Update Database.



## Manage Archived Database

The Archived Database allows you to archive the entire Assessing database and maintain historical copies of your data for each year, allowing you to refer back to a view of a parcel's complete attributes and assessments in previous years. You can associate a single database with each Archive Database year. However, unlike with the History of Taxable Values (in which you are able to only archive the values for each parcel) this Archive Database function allows you to create a copy of the entire Assessing database as it existed at the end of the year. Within each Archived Database, you will be able to review parcels as they existed in that year, but you will not be able to add, modify, or delete parcels.

The Archive Database functionality will enable you to:

- Archive and maintain historical copies of your data for each year, allowing you to refer back to a view of a parcel's complete attributes and assessments in previous years.
- Maintain a complete copy of the parcel and assessment data — building description, land details, pictures, sketches, etc. — to provide more depth than can be conveyed by the current History of Taxable Values.
- Configure by workstation and user who will have access to Archived Databases — e.g. maybe it's good to have access in the back office but you don't want users at a public terminal to be able to review it.

In order to take advantage of the Archive Database functionality your system must meet certain minimum criteria:

### Archive Databases System Requirements

- You will need to verify that your version of the SQL Server/SQL Express database application is sufficient. This new functionality relies on capabilities that did not exist in earlier versions of the SQL Server and SQL Express database platform. However, some of your systems (depending on when they were installed and whether or not your server's operating system is compatible with newer versions of SQL Server/Express) may not support this. To check, select **Help | About Avitar Assessing** and check the number beneath your server name (shown below). If the number is *less than 10* you will need to contact Avitar to see if your current server will support updating the database application. If the number is 10 or greater your database application does not need to be updated.
- You will need to verify with your IT expert that you have enough physical disc space on your server to support an additional database or two. Assessing databases can get big, and you will need to know that the drive on which your current SQL data directory resides on the server can support the space requirements.

If you believe your system meets the minimum requirements (listed above) necessary to support the Archive Database functionality you will need to contact Avitar in order for us to enable the functionality within your configuration.

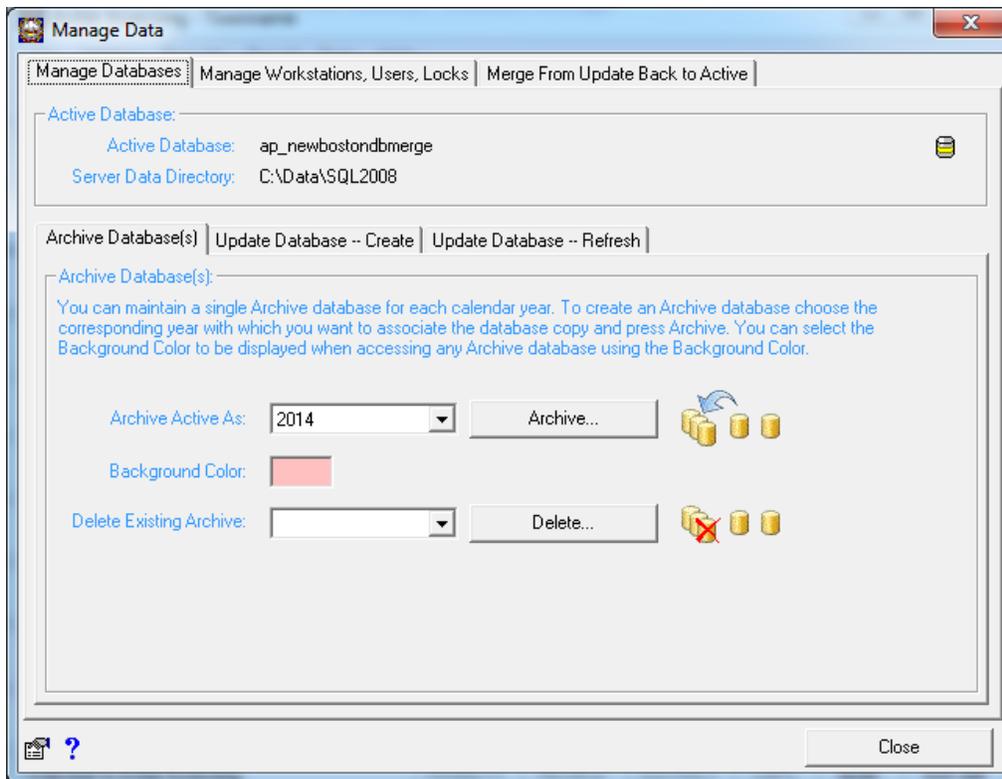
### **Creating an Archived Database**

If you believe your system meets the minimum requirements necessary to support the Archive Database functionality and you have contacted Avitar in order for us to enable the functionality within your configuration you can begin by creating an Archive of your current Active Database.

Before you create an Archive Database you should verify with your assessor and anyone else that edits data and/or calculates the property tax warrant that all changes and updates for the year have been made in the Active Database. You should create your Archive Database after you have completed all changes for one year in your Active Database and before you have begun making changes for the next year in your Active Database.

To create an Archive Database, you must be logged in to the system as a Power User. Select the **Data | Manage...** menu item from the **Data** menu. Within the **Active Database** frame at the top of the **Manage Databases** tab the system will display (when accessible) the size of the current database as well as the current amount of free space available on the disc drive on which your Active Database currently resides. If you have not already archived one or more databases you may need to click the **Check DB size/space...** icon displayed to the right of the **Active Database** label. Verify (by reviewing any information provided within the **Manage Data** dialog box and/or by speaking with your network administrator) that you have enough free space available in order to maintain an additional copy of your database.

If you have the required space, you can create an Archive of your current database by selecting, with the **Archive Database(s)** frame, the corresponding year with which to associate the Archive Database from this list of available choices listed in the **Archive Active As** dropdown list. With the proper year selected, press the **Archive** button. You will be notified whether the process was successful or not.



### Overwriting and/or Deleting an Archived Database

If you have created an Archive Database for a given year and you subsequently realize that you need to redo the process for that year (e.g. not all of the modifications for the selected year had been made in the Active Database at the time it was originally archived) you can overwrite the existing database by once again creating an Archive Database for that year (see above). When prompted that the database already exists you can indicate that you wish to overwrite the existing. Note that you can only have a single Archive Database associated with a single year.

In the event you need to delete an existing Archive Database associated with a given year, select the year of the Archive Database which you wish to delete from within the **Archive Database(s)** list within the Archive Database(s) frame of the dialog box. Once you have selected the appropriate year, press the Delete button located to the right of the **Delete Existing Archive** dropdown list.

### Configuring Access to Archived Databases

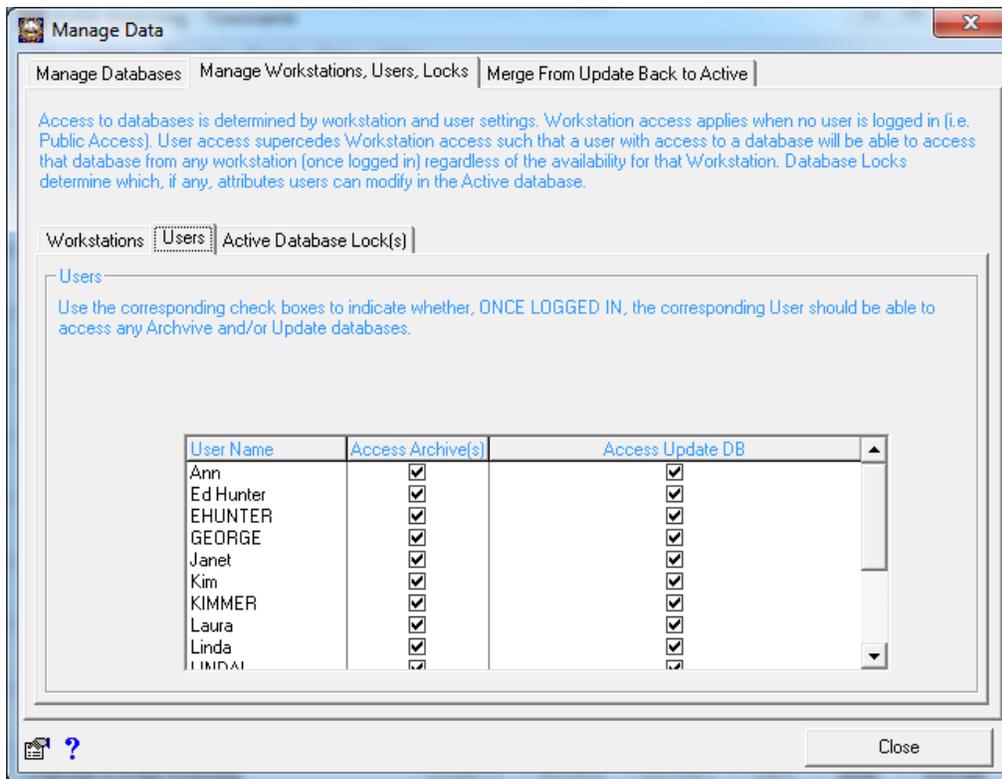
Once you have created one or more Archive Databases, you can configure who is able to access Archive Database(s) by either workstation or by user name. To do so, when logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstation and Users** tab.

You can configure whether or not a workstation and/or a user (once they are logged in) is able to access your Archive Database(s). The access configuration for a specific workstation determines

whether the option to elect to connect to an Archive Database is available within the system on that workstation before a user has logged in (i.e. within the public access once the program starts but before a user actually logs in). The access configuration for a specific user *supersedes* any access configuration for a specific workstation. So, for example, you might configure every workstation such that the Archive Database(s) is not available by default. However, if a user to whom Archive Database access has been granted logs in on that workstation, the user would be able to access Archive Database(s).

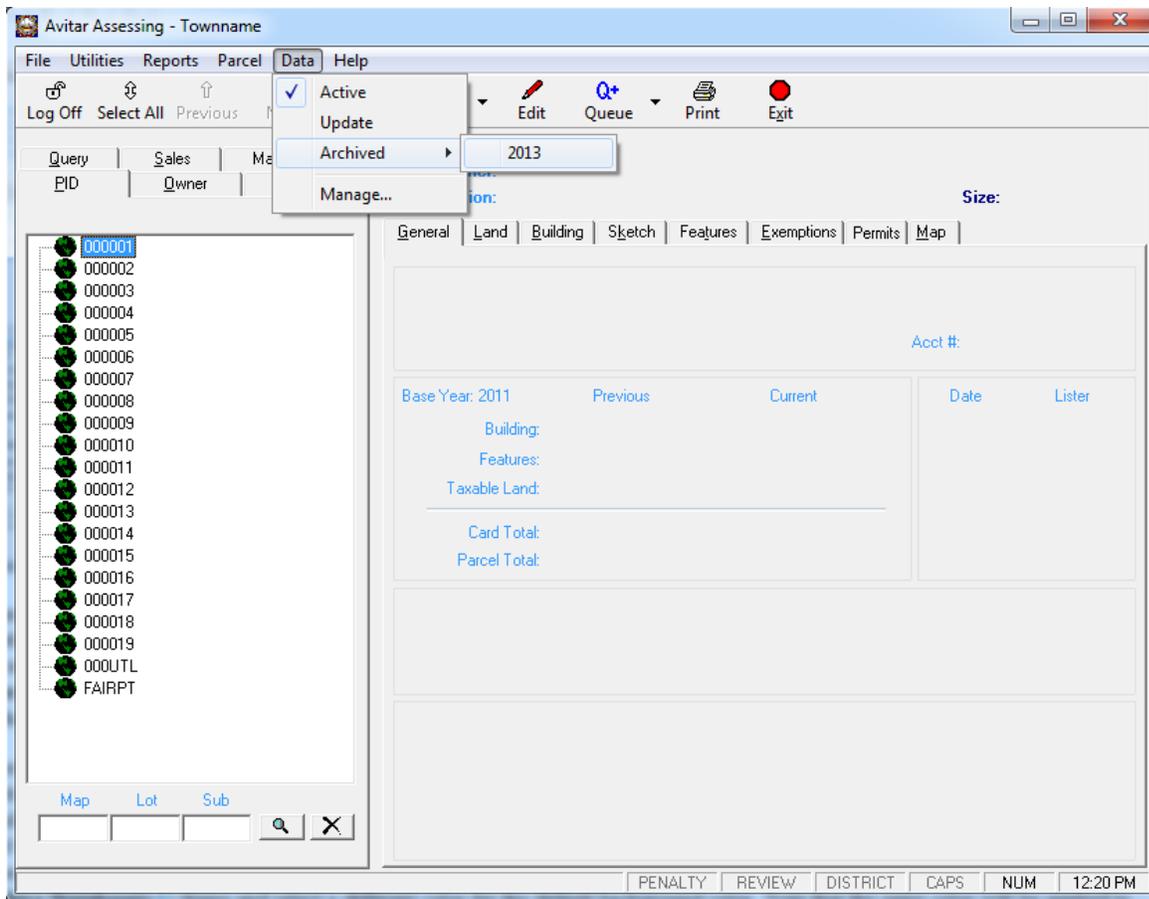
To Configure Workstation Access to Archived Database(s): When logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstation and Users** tab. Within the Workstations frame, choose the specific workstation name from the list of available machine names and check or uncheck the corresponding box to allow access or not. Note that access to Archive Databases is enabled by default for each workstation so that if you want to prohibit access to Archive Databases for a specific workstation (e.g. a terminal used by the public) you must disable it. Also, if you have not run the program on a specific workstation *after* you have run this update the workstation may not appear in the list of available machines. Therefore, it is easiest to disable access to the Archive Databases for a specific workstation by logging in to the program *on that workstation* and selecting **Data | Manage...** and clicking on the **Manage Workstation and Users** tab.

To Configure User Access to Archived Database(s): When logged in as a Power User and connected to your Active Database, select **Data | Manage...** and click on the **Manage Workstation and Users** tab. Within the Users frame check or uncheck the corresponding box for each user within the Access Archive(s) column of the grid. Note that access to Archive Databases is enabled by default for each user so that if you want to prohibit access to Archive Databases for a specific user you must disable it.



### Viewing Archived Data

To view information within an Archive Database (if access is granted for your specific workstation or user) begin by starting the program as you would normally and (if necessary) log in. If access has been granted for your workstation and/or user you should see a new **Data** menu between the **Parcel** and **Help** menus across the top of the program's main window. To view an Archive Database, select the corresponding year from the **Archived** menu item fly out.



Once you have selected an Archive Database, certain system functions will not be available, but you will be able to browse the data just as if you were in your Active Database. Additionally, any reports and/or assessment cards you print will be labeled (either in the title of the report or by a watermark) to indicate it was generated from a specific Archive Database. Lastly, the background color for a portion of the system's main screen will be displayed with a unique color to differentiate it visually from your Active Database. To change the background color associated with your Archive Database(s) select **Data | Manage...** and choose the **Manage Databases** tab. Double click on the color swatch box on the right side of the **Archive Database(s)** frame and select a different color for the default background color. Note that the same color will be applied to the background color within Archive Database(s) across all workstations that connect to the database -- i.e. you cannot configure your own unique color by user.

To return to your Active Database select the **Data | Active** menu item.

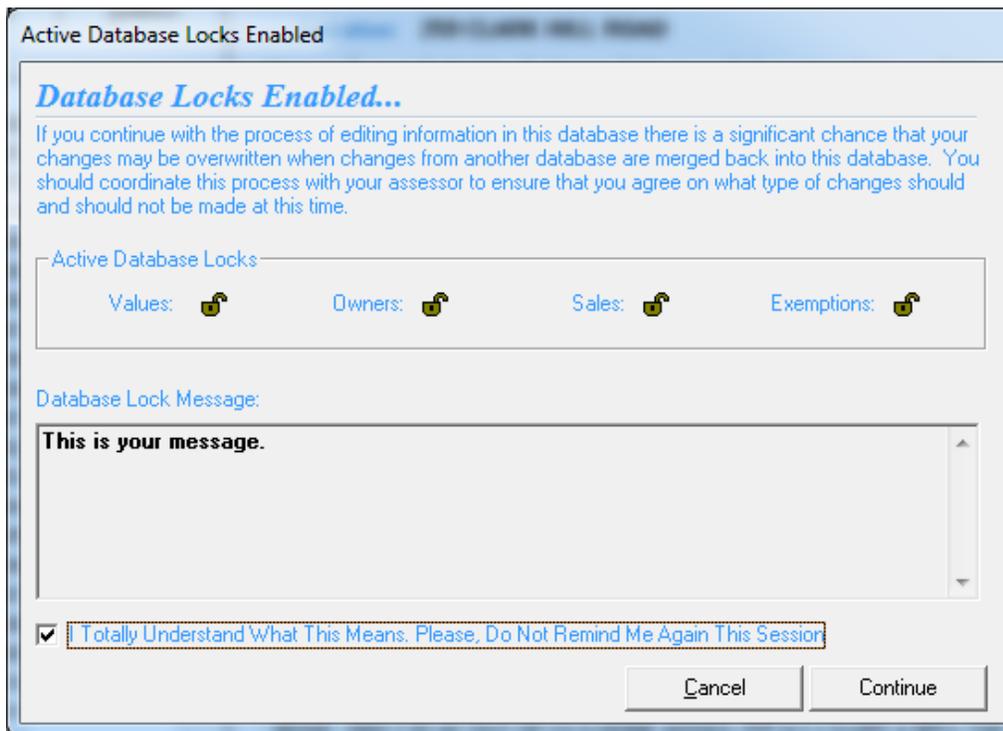
## Active Database Locks

The database lock settings determine which attributes users can modify in the Active Database. During an update or revaluation process, your system administrator can limit the changes entered into the Active database while changes are entered in the Update database and aren't overwritten once the update or revaluation is complete. The system administrator can also add a message that will display when the user edits attributes within the Active Database which users will have to acknowledge before continuing.

To configure the database locks, navigate to **Data | Manage | Manage Workstations, Users, Locks tab | Active Database Lock(s)** and select the **Configure...** button. Check the box **Enable Database Lock on Active Database** box. There are two radio buttons available to configure the locks:

### ALLOW Users to Modify Parcel Attributes in Active Database After They Acknowledge Warning

This allows users to still edit all attributes within the database but must acknowledge a warning message before continuing with the edit. To add a warning message, type your message in the window at the bottom of the Configure Active Database Locks dialog box and click **Save**.



### LOCK Users from Modifying Active Database Parcel VALUE Attributes

This radio button has a few configuration options. With the radio buttons alone selected and none of the corresponding check boxes checked, users will be allowed to edit owners, modify sales, and edit exemptions/credits to parcels. Users will be restricted from editing notes on parcels, edit listing

history, or edit the Land, Building, Sketch, and Features tabs within the Active Database. Users will still have the ability to view the parcel information and print cards regardless of which database lock has been set.

- *LOCK Users from Modifying OWNER Attributes in Active Database*- Users will still be restricted from editing the value attributes described above as well as restricted from modifying owners. When this box is checked, the sales attributes will also be locked out of editing.
- *LOCK Users from Modifying SALES Attributes in Active Database*- Users will still be restricted from editing the value attributes described above as well as restricted from modifying sales.
- *LOCK Users from Modifying EXEMPTION/CREDIT Attributes in Active Database*- Users will still be restricted from modifying the value attributes described above as well as restricted from modifying exemptions/credits.

**Configure Active Database Locks**

Database Lock Settings:

Enable Database Lock on Active Database.

ALLOW Users to Modify Parcel Attributes in Active Database After They Acknowledge Warning

LOCK Users from Modifying Active Database Parcel VALUE Attributes

LOCK Users from Modifying OWNER Attributes in Active Database

LOCK Users from Modifying SALES Attributes in Active Database

LOCK Users from Modifying EXEMPTION/CREDIT Attributes in Active Database

Message You Want Locked Users to See When They Are Locked Out of a Function:

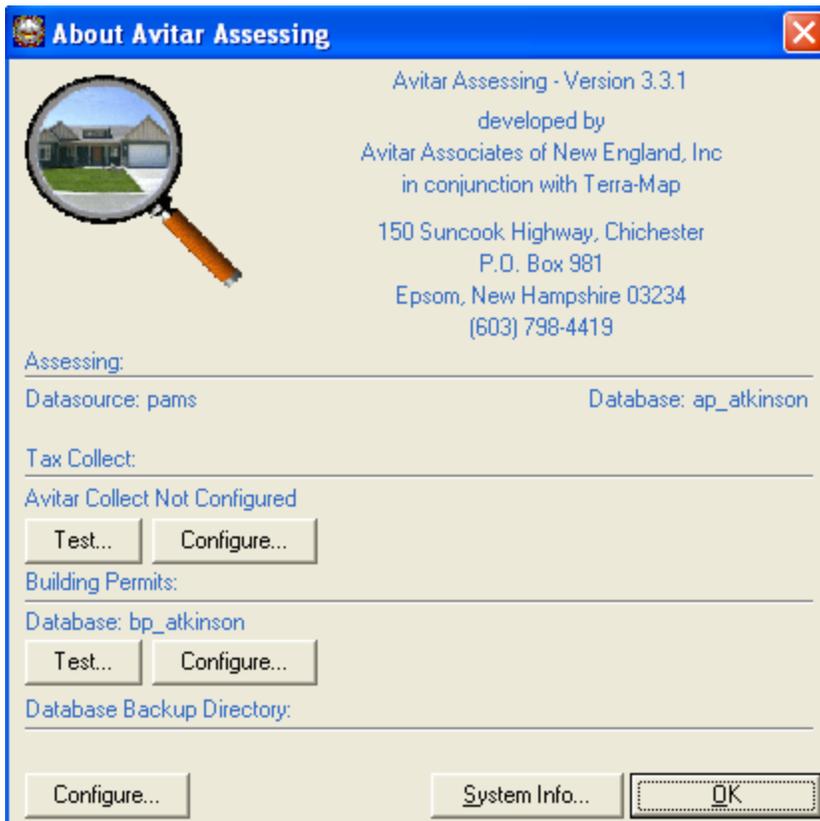
Close Save

## Help Menu

The following menu items are available from the Help menu, located on the main program window of Avitar Assessing.

### About Avitar Assessing

The Help | About Avitar Assessing menu item provides information and utilities that may be useful in troubleshooting system problems. We may ask you to provide us with information from this dialog box when diagnosing errors.



### Start Remote Help Session

The Help | Start Remote Help Session menu item allows you to launch a remote connection to Avitar Software Support. Using this utility, we will be able to connect remotely to your system to observe and/or resolve problems you may be having with the system if your computer has access to the Internet. Note that you will need to provide a User ID and Password for us to connect and it will only be used while you are on the phone with software support. Once the session has ended, we have no ability to connect to your computer unless you initiate this function and provide a new password.

## **Help Topics**

The Help | Help Topics menu item launches the online help file for Avitar Assessing.

## **Avitar Assessing Internet Kiosk**

Avitar maintains the Assessing Internet Kiosk web site ([data.avitarassociates.com](http://data.avitarassociates.com)) to make assessment data available on the Internet to taxpayers, realtors, banks, and others.

Via the Assessing Internet Kiosk, Avitar makes assessment data available, in various configurations, on Avitar's web site at no cost to its client municipalities. Limited assessment information (i.e. parcel owner name; parcel location; parcel acreage; building, land, feature, and total assessment) is available to all online users who access the database using an anonymous login. Complete assessment information (i.e. detailed assessment card information) is available to online users who wish to purchase a subscription from Avitar, either to a particular community or to all active municipal databases.

## Background

Avitar originally developed its Assessing Internet Kiosk web site ([data.avitarassociates.com](http://data.avitarassociates.com)) in 2003, at the request of numerous client municipalities that were seeking to make assessment data available on the Internet to taxpayers, realtors, banks, and others in hopes of limiting the time spent by municipal staff responding to phone and in-person inquiries for Assessment Cards. Avitar developed the web site at Avitar's own expense and hosted it on Avitar's own web servers to limit the technical configuration hassles presented by trying to host it within disparate municipal online environments.

After originally unveiling the web site as an additional service which individual municipalities could opt to provide at an additional expense (ranging from several hundred to a few thousand dollars per year) Avitar was met with resounding silence; few if any of the municipalities that had originally requested the service could or would pay additionally for it. So having developed a web site that its clients did not initially want to support, at least in terms of actual dollars, Avitar revisited its original business model for the web site and chose to implement a subscription-based "freemium" pricing structure to support the web site in which those to whom the data and convenient, one-stop access to it was most valuable – i.e. appraisers, banks, realtors, mortgage companies, certain taxpayers, etc. – would support the bulk of the costs associated with maintaining the web site by purchasing subscriptions. Additionally, other users could access limited parcel information without a subscription (i.e. the "free" part of the "freemium" pricing model). Lastly, municipalities that did want to make their complete assessing database available online to anyone, regardless of subscription, could choose to pay for the service.

## Current Internet Kiosk

Currently, the web site is hosted by Avitar on its own web servers and consolidates assessment data from more than one hundred municipalities in a single online location. Avitar devotes considerable resources each year to pay for the web servers, to assemble and process copies of databases for use online, to ensure consistency with system data by implementing new functionalities and displays for new attributes that are added to the Avitar Assessing system, and to support online users and subscribers.

The web site utilizes database copies provided to Avitar at periodic intervals by its client municipalities. The following description of the service is included every year in the “Avitar Software Support and Maintenance Agreement” Avitar provides to its clients:

*Avitar makes assessment data available, in various configurations, on Avitar’s web site at no cost to Municipalities. Limited assessment information (i.e. parcel owner name; parcel location; parcel acreage; building, land, feature, and total assessment) is available to all online users who access the database using an anonymous login. Complete assessment information (i.e. detailed assessment card information) is available to online users who wish to purchase a subscription from Avitar. The online assessment data provides a service to online users who, whether or not they wish to purchase a subscription, have the ability to quickly access either limited or complete information from communities throughout the State of New Hampshire. Additionally, the online assessment data provides a service at no cost to Avitar’s client communities that are able to reduce the number of phone calls and visits to the Town Hall by those seeking to review assessment information. Municipalities that do not wish to have their assessment data available online should contact Avitar. Alternatively, Municipalities that wish to have their complete assessment data available to all online users, regardless of whether or not individual online users have purchased a subscription, can elect to provide this level of access at an additional cost.*

## Municipal Options

Under the current pricing model utilized for the web site, municipalities have three different Assessing Internet Kiosk Availability options with regard to their assessment data appearing online on Avitar's Assessing Internet Kiosk:

1. A municipality can indicate to Avitar that the assessment data should not be available online in any form – either limited for all users or complete for users with subscriptions. The cost to the municipality for this option is zero. Approximately ten percent of Avitar's clients have chosen this option. Municipalities wishing to do so should contact Avitar to remove the database.
2. A municipality can indicate to Avitar that the assessment data should be available online – limited for all users and complete for users with subscriptions – but that the municipality does not wish to pay for online users to have complete access. Under this option, limited assessment information (i.e. parcel owner name; parcel location; parcel acreage; building, land, feature, and total assessment) is available to all online users who access the database using an anonymous login. Complete assessment information (i.e. detailed Assessment Card information) is available to online users who wish to purchase a subscription from Avitar. The cost to the municipality for this option is zero. Approximately seventy percent of Avitar's clients have chosen this option.
3. A municipality can indicate to Avitar that the complete assessment data should be available online to all users, regardless of whether the online user has purchased a subscription or not. The annual cost to the municipality for this option varies based on the number of parcels in the database. Approximately twenty percent of Avitar's clients have chosen this option.

Under this pricing model, Avitar has been able to essentially cover the costs associated with supporting and maintaining the web site, while at the same time providing a service to client municipalities – whether they wish to pay for the service or not – by limiting or eliminating the inquiries they get at the town office from the most frequent or intensive consumers of the data. Additionally, the pricing model is equitably based upon the notion that those to whom convenient access to the data is most valuable should absorb the majority of the costs associated with making the data, even if in some limited form, available to all.

## **Assessing Internet Kiosk Integration from Third Party Services**

Via its Assessing Internet Kiosk, Avitar has developed and supports a method for clearly, comprehensively, and accurately presenting detailed assessment data online. Thus, rather than devoting its own time and financial resources to developing methods by which municipalities or the third party vendors with whom they contract can export or extract ever more data from Avitar's Assessing system database for use with their own products and services, Avitar has developed methods by which third party vendors can link their online products and services to Avitar's own Assessing Internet Kiosk.

The existing Avitar Assessing system export functions (e.g. GIS Export) provide enough data on which third party vendor products and services can search and link. Avitar provides the third party with a standard format with which they can then generate the unique URL to link to the complete corresponding online record within the Avitar Assessing Internet Kiosk for a specific parcel. By doing so, the redundancy and potentials errors associated with exporting, formatting, and presenting the same information in multiple locations is eliminated. And when Avitar makes changes to its Assessing Internet Kiosk those changes are seamlessly available to third party vendor products and services that link to Avitar's web site.

The option to integrate third party vendor online products and services directly with the Avitar Assessing Internet Kiosk is currently available for municipalities that pay to make their assessment data available online to all users, regardless of whether the online users have purchased a subscription or not. Pricing for each municipality is available upon request and is determined based on the number of parcels in the municipal database.

## **Adding & Editing Sketches**

The building sketch creates a visual description of a parcel's building, while at the same time provides a method by which the system is able to calculate the building's effective area. While users of the system and the assessment card are most familiar with the sketch image, it is the effective area determined by the sketch that is actually more important in determining the building's value. (The effective area is multiplied by the adjusted base rate to determine the building's replacement cost.) As a result, it is important to create sketches that are not only visually accurate, but also precise with respect to effective area. Even slight errors in the way in which a sketch is drawn can lead to vast errors of thousands of dollars in a building's calculated value.

The Avitar Assessing system can maintain sketch descriptions in either of two different formats. The original format (still in use in some communities) used textual descriptions (e.g. FFF,BMU-U=D30R40) to enter and compute sub areas. The newer format allows you to draw sub areas directly using the mouse, similar to a drafting application, and is often referred to as the vector or mouse sketch format. The sketch format in use in your community is determined on a town-wide basis, which is to say all of your sketches will be in either one format or the other – you cannot have some of your sketches in one format and the rest in the other. The options available on the Edit Sketch dialog box will be determined by the sketch format used in your community.

## **Sketch Sub Areas**

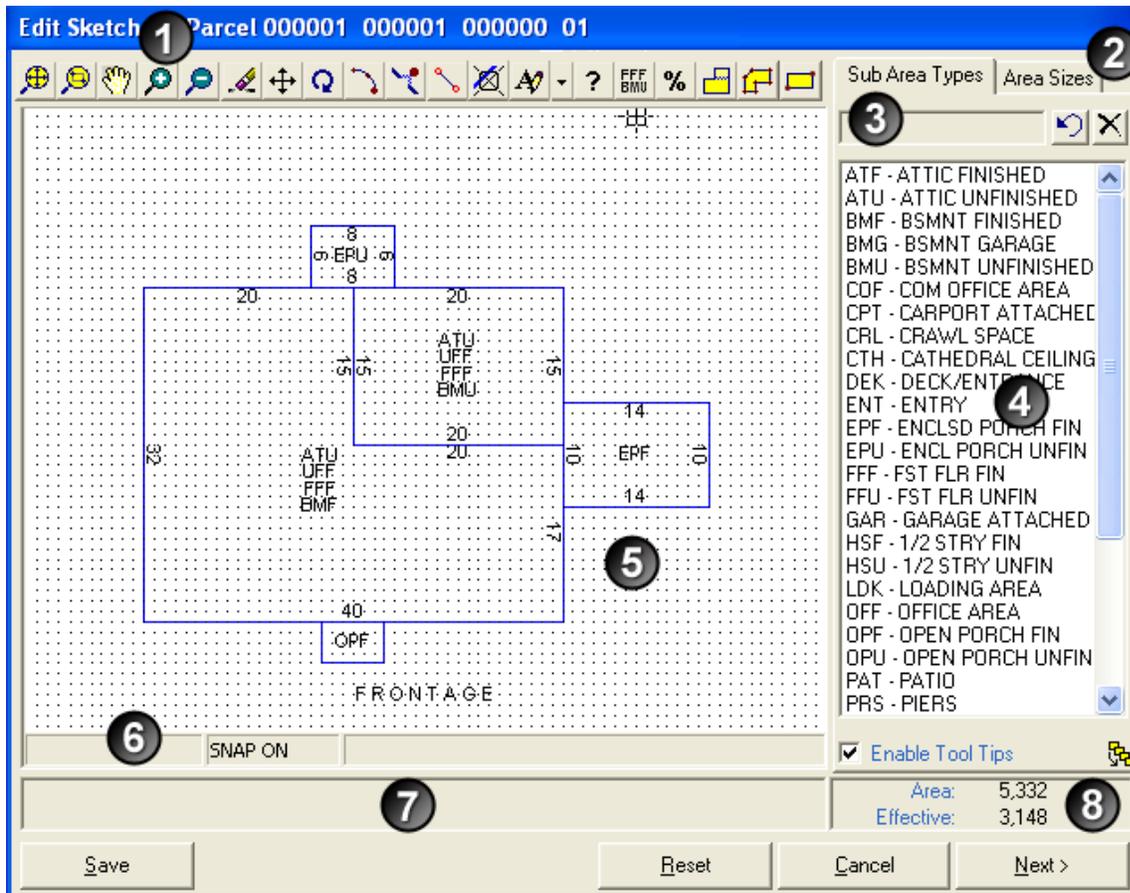
Regardless of the sketch format configured for your database, the basic element of every sketch is the sub area. You can think of a sub area as a single description for all levels of a building if you were to take a cross section of the building at that particular point. For example, if you had a three layer cake that was one foot by one foot, you could describe the entire cake with a single sub area. The total sub area description would consist of three unique sections: a three letter code identifying the cake's top layer (e.g. "TOP"), a three letter code identifying the cake's middle layer (e.g. "MID"), and a three letter code identifying the cake's bottom layer (e.g. "BTM"). Then, the geometry of the sub area would be a square measuring one foot by one foot. Typically, the individual sub area labels are sequenced from the top to bottom (e.g. "TOP,MID,BTM") as the labels will actually appear in the sketch as:

TOP  
MID  
BTM

If the cross sectional description of the building changes, you must create a new sub area to describe it. For example, to continue with the cake analogy, if the top layer of the cake only covered half of the cake, you would need two separate sub areas: "TOP,MID,BTM" to describe the three layer section, and "MID,BTM" to describe the two layer section. In the same way, to sketch a one story house with a finished basement beneath half of the building and an unfinished basement beneath the other half, you would need two sub areas ("FFF,BMF" for the finished basement portion and "FFF,BMU" for the unfinished basement portion).

## Vector Sketch Edit Dialog Box

If your Avitar Assessing system is configured to use the vector sketch format, your Edit Sketch dialog box will look like the image below. You should familiarize yourself with the several components of the Edit Sketch dialog box, as outlined below.



1. Edit Sketch Toolbar
2. Sub Area Tabs
3. Active Sub Areas Text Box
4. Sub Area List
5. Sketch Drawing Area
6. Sketch Status Bar
7. Tool Tip
8. Area Totals

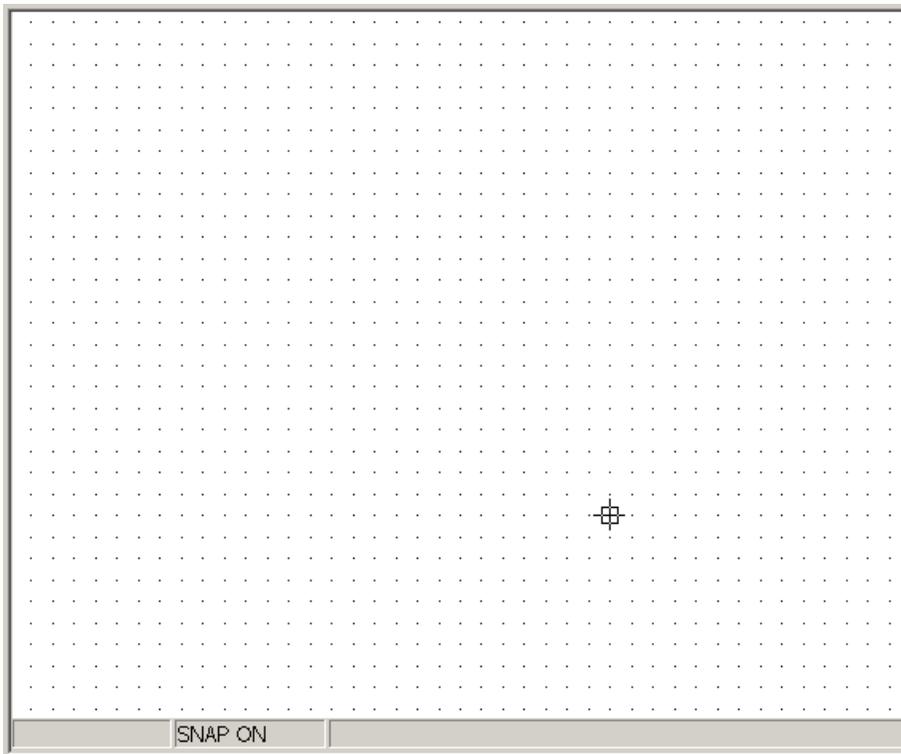
## Basics of Drawing Sketch Sub Areas

To sketch a sub area, you must first identify the sub area's description. Next, you select the geometry of the sub area. Finally, you sketch the actual geometry of the sub area. Once you have completed these three steps, the system will automatically label the description and dimensions of

your sub area, calculate your sub area's actual and effective areas, and recalculate the building's value.

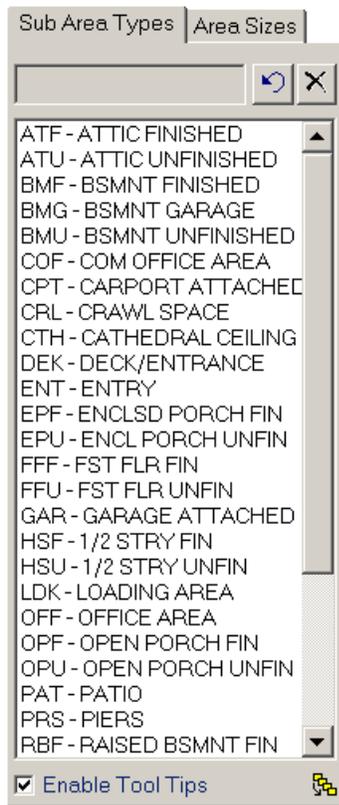
## Sketch Drawing Area Grid

The grid within the sketch drawing area is created with grid points located at one foot increments. By default, the sketch editor's grid snaps are enabled so that any point you pick will be repositioned (or "snapped") to the nearest grid point. In this manner, the grid is similar to drawing on graph paper. For the vast majority of sketches, you should confine yourself to the one foot increments by leaving the grid snaps enabled. Only occasionally, as described in detail below, will you want to deviate from the drawing grid. (For more information on deviating from the drawing area's grid refer to the Object Snap Buttons, Grid Twist Buttons, and Toggling the Sketch's Grid Snap sections of this document.)



## Selecting a Sketch Sub Area's Description

To begin a sketch sub area you first identify the sub area's description. To do so, double click on the desired sub area descriptions in the list of sub area descriptions. As you double click on each individual sub area, the three letter descriptions are added to the active sub areas text box above, indicating the complete sub area description that will be created.



## Clear Last & Clear All Label Buttons



The Clear Last Label button and the Clear All Labels button (located to the right of the active sub areas text box) allow you to remove either the last sub area description added or to remove all sub area descriptions from the active sub areas text box.

## Selecting and Sketching a Sketch Sub Area's Geometry

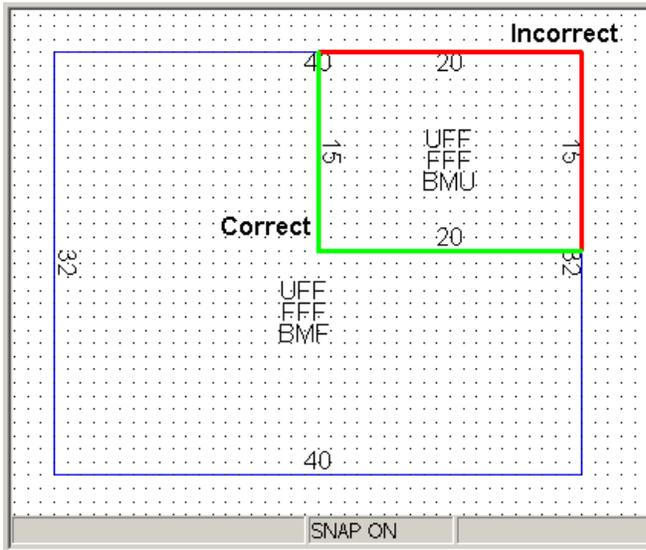
You can create two types of sub area geometry: rectangular sub areas and polygonal sub areas. Rectangular sub areas consist of any basic rectangle. Polygonal sub areas consist of everything more complex than a basic rectangle.

When drawing sub areas, each sub area must exist independent of any other sub areas. For example, if you are adding a rectangular deck to the back of an existing sketch, you need to draw all four sides of the sub area, even though one of those sides will precisely overlap with the back of the house already shown on the sketch.

**Note: It is of critical importance that no sub areas of your sketch overlap other sub areas.**

This is a classic way in which inexperienced users add too much area to a building, and con-

sequently over-valuing the structure, as pictured below. The Correct and Incorrect segments refer to that portion of the larger UFF,FFF,BMF sub area.



In this example, each of the two sub areas was drawn incorrectly using simple rectangular sub areas. As a result, the UFF,FFF,BMF sub area actually underlies the UFF,FFF,BMU section. (Returning to the cake analogy, the upper right portion of the building is incorrectly drawn as a six layer cake, rather than the actual three layer cake.) The incorrect method of drawing this sub area yields an additional 300 square feet of UFF, 300 square feet of FFF, and 300 square feet of BMF. Depending on the building description and the adjusted base rate, this mistake could incorrectly add \$50,000 or more to the building’s value. The correct method of drawing the larger sub area would require six segments rather than four, to account for the section of the building which is UFF,FFF,BMU.

## Add Rectangular Sub Area – Edit Sketch Toolbar



To add a rectangular sub area, begin by selecting the appropriate sub area descriptions. Then press the Add Rectangular Sub Area toolbar button. Using your mouse cursor on the sketch drawing area, locate one corner of the sub area to be drawn and select the point by clicking on the drawing area. After releasing the mouse button, move the mouse cursor to the opposite corner of the sub area. As you move, the size of the sub area is displayed in two places: near the first point selected, and in the Sketch Status Bar. When the sub area is the correct size, indicate the location of the opposite corner by clicking on the drawing area. The system will label the sub area’s description and dimensions.

Note: If you find the tool tip information that appears within the drawing area to be distracting, you can simply uncheck the Enable Tool Tips checkbox.

## Add Polygonal Sub Area – Edit Sketch Toolbar



To add a polygonal sub area, begin by selecting the appropriate sub area descriptions. Then press the Add Polygonal Sub Area toolbar button. Using your mouse cursor on the sketch drawing area, locate the first vertex of the sub area to be drawn and select the point by clicking on the drawing area. After releasing the mouse button, move the mouse cursor to the location of the next vertex or corner of the sub area. Notice that a small red dot on the drawing area will indicate the location of your first vertex. As you move, the length of the sub area's side is displayed in two places: near the previous vertex, and in the Sketch Status Bar. If you are moving at right angles relative to the previous vertex, only the size of the side in feet will be shown. If you are moving at an angle relative to the previous vertex, the size of the side in feet will be shown, along with the angle of the side relative to the previous vertex. When you have identified the next vertex, indicate its location by clicking on the point's location on the drawing area. Continue this process until you have located each of the sub area's vertices. To close the sub area, press the right mouse button. The system will label the sub area's description and dimensions.

Note: If you find the tool tip information that appears within the drawing area to be distracting, you can simply uncheck the Enable Tool Tips checkbox.

If, you return the mouse cursor to the origin of the sub area after you enter the first vertex, the red dot will disappear so as not to interfere with the placement of other vertices.

## Using Arrow Keys for Sketching

In addition to using your mouse cursor to indicate the locations of sub area vertices, you can also use the left, right, up, and down arrow keys on your keyboard. These keyboard buttons allow you to move the cursor one grid unit at a time in the corresponding direction. You can also use the arrow keys in addition to the mouse by, for example, stretching most of the way to a rectangular sub area's opposite vertex using the mouse and then using the arrow keys to fine tune the position.

When drawing rectangular sub areas, you need to indicate the location of the first vertex using the mouse. After that, you can use the arrow keys in some combination (e.g. up and right or left and down) to navigate to the location of the opposite vertex. Once you have positioned the cursor in the appropriate location, simply press the Enter key on your keyboard to finish the sub area.

When drawing polygonal sub areas, you again need to indicate the location of the first vertex using the mouse. After that, you can use the arrow keys to navigate to the location of the next vertex. Once you have positioned the cursor in the appropriate location of the next vertex, simply press the Enter key on your keyboard to add a vertex to the polygon. Continue the process until you have entered all of the vertices. To finish the sub area press Shift + Enter.

## Edit Sketch Toolbar

The remaining buttons on the Edit Sketch Toolbar are described below.



Zoom All Button – Edit Sketch Toolbar



Zoom Window Button – Edit Sketch Toolbar



Pan Button – Edit Sketch Toolbar



Pan Button – Edit Sketch Toolbar



Zoom Out Button – Edit Sketch Toolbar



Erase Button – Edit Sketch Toolbar



Move Button – Edit Sketch Toolbar



Rotate Button – Edit Sketch Toolbar



Edit Arc Button – Edit Sketch Toolbar



Insert Vertex Button – Edit Sketch Toolbar



Object Snap Buttons – Edit Sketch Toolbar



Grid Twist Buttons – Edit Sketch Toolbar



Sketch Notation Buttons – Edit Sketch Toolbar



Non-Visual Area Button – Edit Sketch Toolbar



Re-Label Sub Area Button – Edit Sketch Toolbar



Percent Complete Sub Area Button – Edit Sketch Toolbar



Merge Sub Areas Button – Edit Sketch Toolbar

## Zoom All Button – Edit Sketch Toolbar



The Zoom All button on the Sketch Toolbar restores the entire sketch back to the drawing area. This is useful after you have zoomed in on a particular section of a sketch.

## Zoom Window Button – Edit Sketch Toolbar



The Zoom Window button on the Sketch Toolbar allows you to zoom in on a particular section of the sketch. To do so, first press the Zoom Window button. Then click on the sketch image in one corner of the area on which you wish to zoom in. Finally, move the cursor to the opposite corner of the area on which you wish to zoom in and click a second time.

## **Pan Button – Edit Sketch Toolbar**



The Pan button on the Sketch Toolbar allows you to move to a different area of the sketch at the current zoom resolution. To do so, press the Pan button. Then, use the cursor to click and hold the button on a point on the sketch. While holding the button down, you can move the cursor in any direction to reposition the sketch. Release the mouse button when you are done moving. If you wish to continue panning you can repeat this process or press the right mouse button when you are done panning.

## **Zoom In Button – Edit Sketch Toolbar**



The Zoom In button on the Sketch Toolbar allows you to zoom in from the current resolution without repositioning the current center of the sketch. To do so, simply press the Zoom In button.

## **Zoom Out Button – Edit Sketch Toolbar**



The Zoom Out button on the Sketch Toolbar allows you to zoom out from the current resolution without repositioning the current center of the sketch. To do so, simply press the Zoom Out button.

## **Erase Button – Edit Sketch Toolbar**



The Erase button on the Sketch Toolbar allows you to delete one or more sub areas from an existing sketch. To erase one or more sub areas, begin by pressing the Erase button. You will notice that the sub area description and dimension labels disappear from the drawing area, allowing you to select individual sub areas by clicking on their perimeters. Choose the sub area(s) you wish to delete. As the sub area(s) are added to your selection set they will be highlighted with dotted lines. Once all the sub area(s) to be deleted are selected, right click to close the selection set and the sub area(s) will be deleted. If, at any time during the command you wish to cancel the command, press the Escape key on your keyboard.

## Move Button – Edit Sketch Toolbar



The Move button on the Sketch Toolbar allows you to move the position of one or more sub areas within an existing sketch, relative to the other sub areas of the sketch. To move one or more sub areas, begin by pressing the Move button. You will notice that the sub area description and dimension labels disappear from the drawing area, allowing you to select individual sub areas by clicking on their perimeters. Choose the sub area(s) you wish to move. As the sub area(s) are added to your selection set they will be highlighted with dotted lines. Once all the sub area(s) to be moved are selected, right click to close the selection set. Next, use the mouse to click on the reference point on the drawing area by which you wish to move the object(s). The reference point is essentially the point by which you wish to “pick up” the sub area(s) to be moved. After identifying the reference point, move the mouse cursor to the point on the drawing area where you wish to reposition the reference point. As you move the reference point, you will notice that the highlighted sub area(s) within your selection set move with the mouse. Indicate the new location of the reference point by clicking the mouse, and the sub area(s) will be repositioned.

Note that you can also use the arrow keys on your keyboard when moving sub area(s). After you use the mouse cursor to select the initial reference point, use the arrow keys on your keyboard to move the sub area(s) one unit at a time. Once the sub area(s) are repositioned to the desired location, press the Enter key to finalize the move.

If, at any time during the command you wish to cancel the command, press the Escape key on your keyboard.

## Rotate Button – Edit Sketch Toolbar



The Rotate button on the Sketch Toolbar allows you to rotate the position of one or more sub areas within an existing sketch, relative to the other sub areas of the sketch. To rotate one or more sub areas, begin by pressing the Rotate button. You will notice that the sub area description and dimension labels disappear from the drawing area, allowing you to select individual sub areas by clicking on their perimeters. Choose the sub area(s) you wish to rotate. As the sub area(s) are added to your selection set they will be highlighted with dotted lines. Once all the sub area(s) to be rotated are selected, right click to close the selection set. Next, use the mouse to click on the reference point on the drawing area around which you wish to rotate the object(s). The reference point is essentially the point by around which you wish to pivot the sub area(s). After identifying the reference point, move the mouse cursor to a point on the drawing area to indicate the angle you wish to use for the rotation. As you move the mouse cursor, you will notice that the highlighted sub area(s) within your selection set rotate with the mouse. Indicate the correct rotation by clicking the mouse, and the sub area(s) will be repositioned.

If, at any time during the command you wish to cancel the command, press the Escape key on your keyboard.

## Edit Arc Button – Edit Sketch Toolbar



The Edit Arc button on the Sketch Toolbar allows you to add or remove an arc on an existing segment of a sub area. By adding arcs to a sub area, you can accurately depict building sections containing circular segments.

**To add an arc to an existing segment**, begin by pressing the Edit Arc button. Use the mouse cursor to click on the segment of the existing sub area to which you wish to add an arc. After you have selected the segment, you are prompted if you wish to add an arc to the segment. Answer Yes. You are then asked to enter the altitude of the arc you wish to create. The altitude is the perpendicular distance from the straight line between the segment's two vertices to the top of the arc. This value can be positive or negative; the sign of the altitude will determine the direction in which the arc will deviate from the existing straight segment (i.e. either a convex or concave arc). The sign of the altitude you will ultimately need is determined by the direction (clockwise or counter-clockwise) in which the vertices of the sub area were originally created. As it is nearly impossible to predict whether you need a negative or positive altitude, begin by entering a positive value; if the direction of the resultant arc is not correct, edit the arc and use the opposite altitude value.

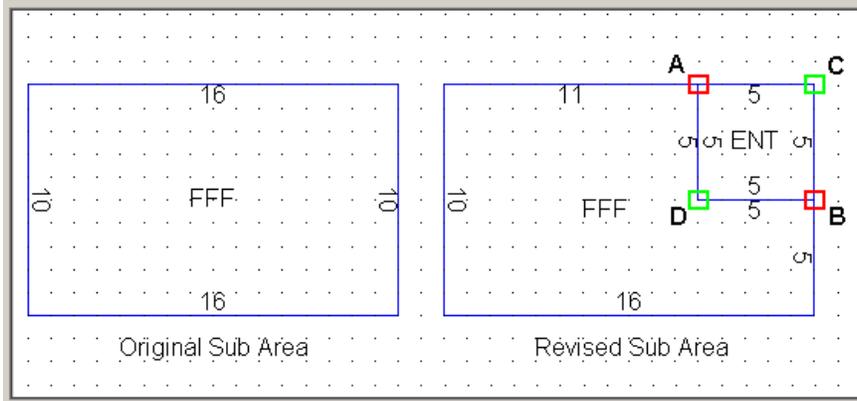
**To edit an existing arc segment**, begin by pressing the Edit Arc button. Use the mouse cursor to click on the existing arc segment of the sub area to be edited. After you have selected the segment, you are prompted to enter the new altitude of the arc (the existing altitude is presented as the default). The altitude is the perpendicular distance from the straight line between the segment's two vertices to the top of the arc. This value can be positive or negative; the sign of the altitude will determine the direction in which the arc will deviate from the straight line between the segment's two vertices (i.e. either a convex or concave arc). Enter the new arc altitude or cancel.

**To remove an existing arc segment**, begin by pressing the Edit Arc button. Use the mouse cursor to click on the existing arc segment of the sub area to be edited. After you have selected the segment, you are prompted to enter the new altitude of the arc (the existing altitude is presented as the default). Enter an altitude of zero to remove an existing arc or cancel.

## Insert Vertex Button – Edit Sketch Toolbar



The Edit Arc button on the Sketch Toolbar allows you add a new vertex to a segment of an existing sub area. When changes are made to a building, you may find it easier to add a new vertex to a segment of an existing sub area than to erase the existing sub area and redraw it. An example in which it would be useful to insert new vertices is illustrated below:



In the example above, it was necessary to modify the original FFF sub area (a simple rectangular sub area) to a slightly more complicated polygonal sub area in order to reclassify the upper right section of the building as ENT. One option would have been to erase the original FFF sub area and redraw it, along with the new ENT sub area. However, by inserting two new vertices on the original FFF sub area, it is possible to avoid erasing it. The Insert Vertex toolbar button was used to add new vertices to the FFF sub area at locations A and B, resulting in new segments on the original sub area. Then, using the object grips, it was possible to reposition the vertex previously at location C to location D. (For more information on object grips, refer to the Sketch Editing Using Grips section of this document.) Finally, the new ENT sub area was drawn. This is an overly simplified example, but hopefully you can see how inserting vertices to an existing sub area can save time when editing.

To insert a vertex on a segment of an existing sub area, begin by pressing the Insert Vertex button on the Sketch Toolbar. Next, use the mouse cursor to click on the existing sub area at the location at which you wish to insert the new vertex. You will notice that the system will create new dimension labels as it removes the dimension label of the single original segment and replaces it with a dimension label for each of the two new segments that are created on either side of the new vertex. (For more information on object grips, refer to the Sketch Editing Using Grips section of this document. Inserting a new vertex without knowing how to repositioning previous vertices is pointless.)

## Object Snap Buttons – Edit Sketch Toolbar



Object Snaps (also referred to as osnaps) allow you to create or reposition sketch sub areas by “snapping” the location of vertex precisely to the location of another vertex. For the vast majority of sketches, you will not need to concern yourself with object snaps – the sketch editor automatically snaps the locations of vertices to the grid points of the drawing area. However, if you rotate sub areas and/or twist the drawing grid to a different angle, the locations of vertices and/or sub area segments may no longer coincide with the one foot grid points. In such instances, it is necessary to use the object snaps when drawing or editing sub areas. The objects snaps allow you

to snap vertex locations to either an existing vertex (i.e. the endpoint osnap) or to the nearest location on an existing segment (i.e. the nearest osnap).

To select the appropriate object snap, you can press the displayed button (if it is the correct osnap type) or use the down arrow to the right of the Object Snap toolbar button. Unlike most of the other commands found on the Edit Sketch toolbar, object snaps are “transparent” commands, meaning you use them when you are in the midst of using another command (e.g. drawing a polygonal sub area or moving sub areas). As you select a different object snap, its button will be displayed on the toolbar. You have three choices:

### **Snap to Object Endpoint**



### **Snap to Nearest Object**



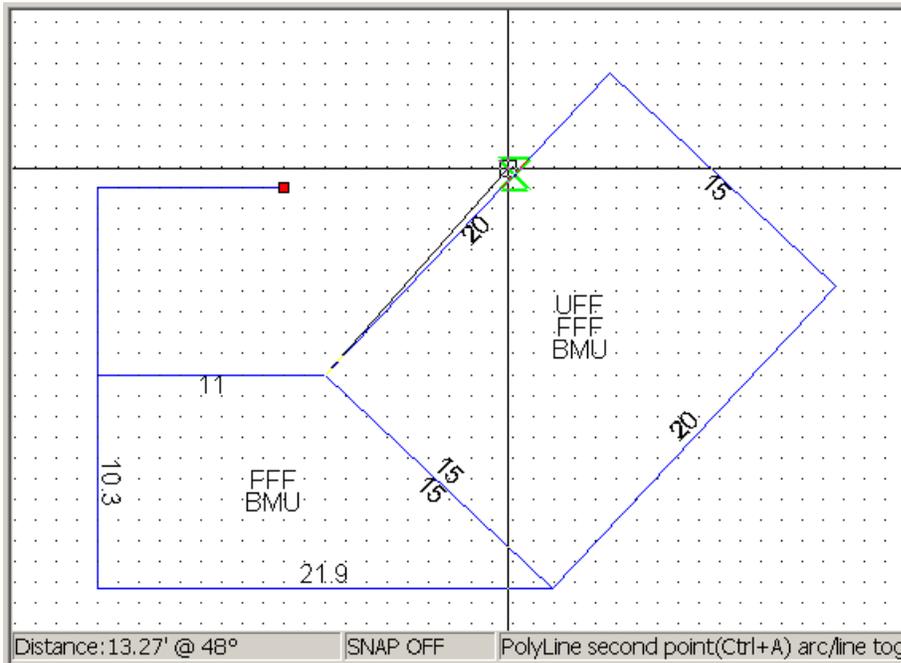
### **Clear Object Snaps**



To illustrate the use of the Endpoint Object Snap, refer to the example below in which a DEK is added to the back of a boomerang shaped house. After the UFF,FFF,BMU sub area was drawn, it was rotated 45 degrees to depict the layout of the house. After it was rotated, only a single vertex remained on the grid of the drawing area. As a result, you need to use the Endpoint Object Snap to allow you place the new vertex for the DEK on the existing vertex located near the top of the drawing area. After you select the Endpoint Object Snap, notice that a green box will appear as you move the mouse cursor near the existing endpoint vertex. The box indicates that the any vertex you add in this region will be repositioned to the location of the endpoint found within the box. (Note that it may be necessary to toggle off the sketch’s grid snap; for more information refer to the Toggling the Sketch’s Grip Snap section of this document.)

To illustrate the use of the Nearest Object Snap, refer to the example below in which a DEK is added to the back of a boomerang shaped house. After the UFF,FFF,BMU sub area was drawn, it was rotated 45 degrees to depict the layout of the house. After it was rotated, only a single vertex remained on the grid of the drawing area. Unlike the previous example, however, the DEK to be drawn here does not extend all the way along the back of the house. As a result, you need to use the Nearest Object Snap to allow you place the new vertex for the DEK at a new position along the existing segment at the back of the UFF,FFF,BMU sub area. After you select the Nearest Object Snap, notice that a green box will appear as you move the mouse cursor near the existing segment. The box indicates that the any vertex you add in this region will be repositioned to the nearest location along an existing segment within the box. (Note that it may be necessary to toggle

off the sketch's grid snap; for more information refer to the Toggling the Sketch's Grip Snap section of this document.)



Any object snap you select will remain active until you clear it by selecting Clear Object Snaps.

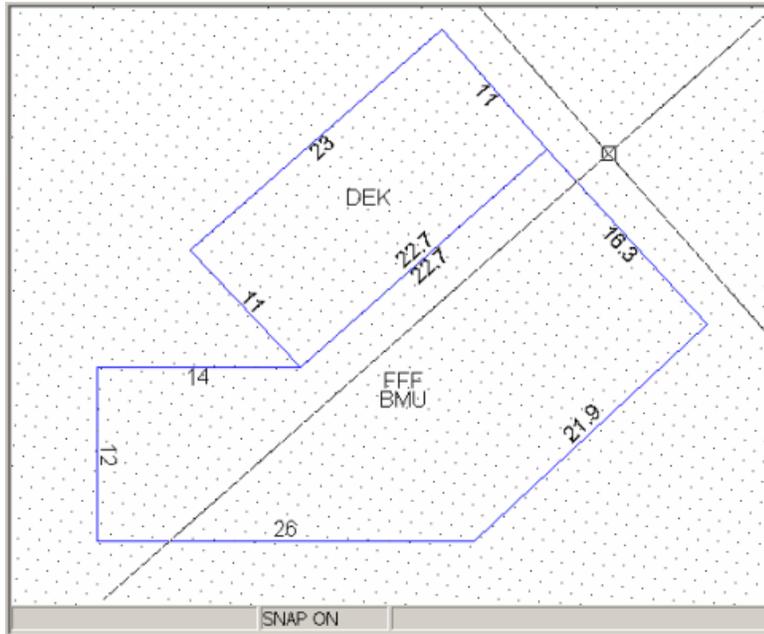
Note that, in addition to using object snaps while drawing new sub areas, you can also use object snaps when moving sub areas to reposition them precisely with respect to other vertices or sub areas. To do so, select the appropriate object snap type before using the mouse cursor to indicate the initial reference point or its subsequent location.

## Grid Twist Buttons – Edit Sketch Toolbar



As indicated above, the sketch drawing area is contains grid points located at one foot increments. By default, the sketch editor's grid snaps are enabled so that any point you pick will be repositioned (or “snapped”) to the nearest grid point. Additionally, the default grid is constructed perpendicular to the drawing area itself. The combination of the grid and the grid snap make it very easy to draw 90° angles and segments with lengths exact to the nearest foot – you only need to get your mouse cursor within the region of a grid point and it snaps to the nearest location. Otherwise, if you were forced to draw sub areas freehand, you would invariably end up with some angles at 87° and others at 91° when you intended them to be 90°, as well as some segments measuring 9.8' or 10.1' when you intended them to be 10'. To avoid this situation, you rely on the drawing grid and the grid snaps.

Sometimes, however, it is useful to rotate or twist the grid relative to some other object. Doing so enables you to continue relying on the grid and the grid snaps to keep your angles and distances square, but you can do so relative to something that is not perpendicular to the drawing area itself. The next example illustrates this type of scenario.



In this example, the FFF,BMU section of the building was drawn first, using the standard grid. In order to easily sketch the rectangular DEK sub area on the back of the house, maintaining the benefits of the grip and grid snaps, the grid was twisted relative to the back of the building. Then, with the grid twisted, it was easy to draw the DEK sub area using the grid. (Notice how both the grid and the mouse cursor crosshairs are twisted to the angle defined by the back of the building.)

There are two Grid Twist methods. The option you select will depend on the geometry of the existing sketch. Use the down arrow to the right of the Grid Twist button to display the different options. As you select a different twist method, its button will be displayed on the toolbar.

Regardless of the method by which you define the twist angle of the grid, you will need to draw all sub areas, whether or not they are simple rectangles, using the Polygonal Sub Area function. Even when the grid is twisted, the Rectangular Sub Area function will always create rectangular sub areas that are perpendicular to the drawing area. Also, when twisting the grid, you should leave the sketch's grid snap enabled; otherwise you defeat the purpose of twisting the grid.

### Twist to Angle



The Twist to Angle option allows you to establish the angle of the drawing grid by clicking on two points within the drawing area. Begin by pressing the Twist to Angle button, and then use the

mouse cursor to select the first point on the drawing area. Next, move the mouse cursor to the location of the second point to define the angle. Notice as you move the cursor to the second point, the rubber band from the first point will indicate the twist angle. After you select the second point, the drawing grid will twist. Note that you may use the Endpoint or Nearest Object Snap, in combination with the Twist to Angle function, to select points located on other sub areas objects. (This was the method by which the grid was twisted in the above example, using the Endpoint Object Snap to establish the twist angle defined by the back of the FFF,BMU sub area.

### **Twist to Object**



The Twist to Object option allows you to establish the angle of the drawing grid defined by an existing sub area object. Begin by pressing the Twist to Angle button, and then use the mouse cursor to select the sub area that defines the angle to which the grid should be twisted. Note that, depending on the object, the resulting twist angle may still be zero, especially if portions of the selected sub area object are perpendicular to the default drawing area grid. In this case, simply use the Twist to Angle, in combination with object snaps, to indicate the desired angle as defined by the existing object.

### **Clear Twist**



The Clear Twist function restores the grid to its default angle, perpendicular to the drawing area.

## **Sketch Notation Buttons – Edit Sketch Toolbar**



The Sketch Notation buttons on the Sketch Toolbar allow you to add notation to sketches. Often times this is to add labels, beyond the sub area and dimension labels, to assist others when looking at the assessment card in the field. There are standard notation buttons to automatically add the frequently used FRONTAGE and WATERFRONT text to the sketch. Alternatively, you can add your own textual notation. Use the down arrow to the right of the Add Notation button to display the different options. As you select a different function, its button will be displayed on the toolbar.

### **Add Notation**



You can use the Add Notation command to add your own textual notes to the sketch. Begin by selecting the Add Notation option. Next, use the mouse cursor to indicate the point on the sketch where you want the notation to begin. Then drag the mouse cursor to another location and click to

indicate the angle at which you want the notation to be entered. Once you have defined the location and the angle, type the notation and press Enter when you are done.

### **Add Frontage**



You can use the Add Frontage command to add a FRONTAGE label to the sketch, making it easier for others to interpret the position of the building relative the road. Begin by selecting the Add Frontage option. Next, use the mouse cursor to indicate the point on the sketch where you want the notation to begin. Then drag the mouse cursor to another location and click to indicate the angle at which you want the notation to be entered. Once you have defined the location and the angle, the FRONTAGE label will appear.

### **Add Waterfront**



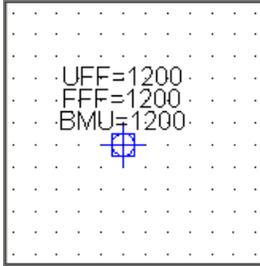
You can use the Add Waterfront command to add a WATERFRONT label to the sketch, making it easier for others to interpret the position of the building relative any water bodies. Begin by selecting the Add Waterfront option. Next, use the mouse cursor to indicate the point on the sketch where you want the notation to begin. Then drag the mouse cursor to another location and click to indicate the angle at which you want the notation to be entered. Once you have defined the location and the angle, the WATERFRONT label will appear.

## **Non-Visual Area Button – Edit Sketch Toolbar**



The Non-Visual Area button on the Sketch Toolbar allows you to add area for a section of the sketch that is not drawn. This can when be helpful when a portion of a sketch is too complicated to label every section in detail. Also, this enables you to quickly see the effect of proposed changes on a building's value (e.g. the effect of adding a four hundred square foot addition) even when you do not know the geometry of the sub area (e.g. is the addition 20' by 20' or 25' by 16'). The non visual area will appear as a single point on the sketch with the corresponding sub area description labels, but the area you entered will be added to the total and effective areas for the sketch.

To add a non-visual area, you begin by selecting the sub area description(s) as you would for a regular sub area. Next, press the Non-Visual Area toolbar button and enter the area you wish to represent in square feet. Finally, click the location on the sketch where you want the point and label to appear. An example of a non-visual area is shown below:



To remove a non-visual area from a sketch, use the standard Erase function.

## Re-Label Sub Area Button – Edit Sketch Toolbar



The Re-Label Sub Area button on the Sketch Toolbar enables you to modify the description of an existing sub area. For example, if an existing sub area is labeled as FFF,BMU and it really should be UFF,FFF,BMU you can re-label the existing geometry rather than delete it and reenter the sub area. To re-label a sub area, you begin by selecting the appropriate sub area descriptions as you would for a new sub area. Next, press the Re-Label Sub Area button and then, using the mouse cursor, select the sub area to modify. The sub area description label and the corresponding area and effective area values are automatically updated.

## Percent Complete Sub Area Button – Edit Sketch Toolbar



The Percent Complete Sub Area button on the Sketch Toolbar enables you to enter the percent complete for any sub area of the building. This is used when sub areas within a sketch are under construction, but as of the assessment date are not complete. To assign a percent complete to a sub area, you begin by pressing the Percent Complete button, enter the desired percentage at the prompts, and finally use the mouse cursor to select the sub area to modify. When the sub area is 100% complete, you can use the Percent Complete button to remove the previous value; you simply enter 100% at the prompt and then select the sub area.

Parcels that contain one or more sub areas that are less than 100% complete will automatically be flagged within the database. This flag is used to indicate that the parcel should be included in the list of parcels shown on the Under Construction Report.

## Merge Sub Areas Button – Edit Sketch Toolbar

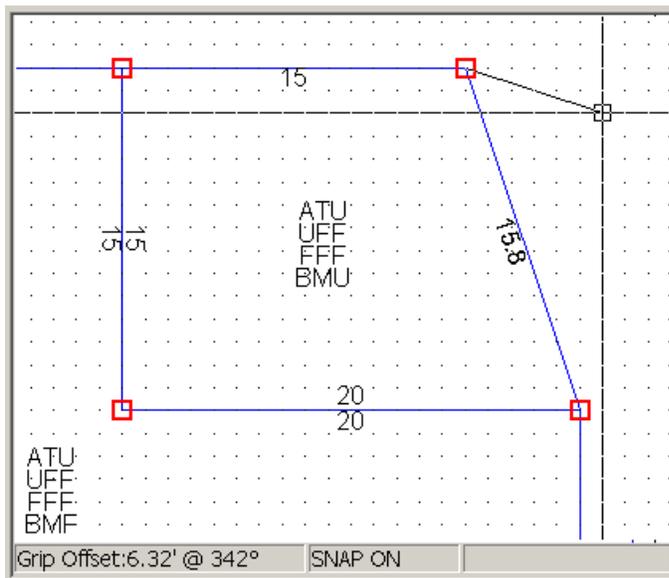


The Merge Sub Areas button allows you to merge two adjacent sub areas (i.e. two areas that share a common side). The sub areas must share a common side, but they can have different sub area

descriptions – the sub area description of the first sub area you select will be applied to the entire merged sub area. To merge adjacent sub areas, you begin by pressing the Merge Sub Areas button, and then use the mouse cursor to select the sub area into which you wish to merge another sub area. Next, use the mouse cursor to select the adjacent sub area to be absorbed into the sub area you already selected. Sometimes, based on the geometry of the sub areas, the system may not be able to merge sub areas, even though they appear to be adjacent. In such cases, you will need to delete one or both of the sub areas and redraw or edit. Similarly, if the total area of the newly merged sub area does not equal the total of the two individual sub areas prior to the merge, you are prompted by a message box giving you the option to accept or cancel the operation.

## Sketch Editing Using Grips

Most objects within a sketch have grips associated with each vertex or insertion point that enable you to reposition the location of the vertex or insertion point. This applies to the vertices of sub areas, as well as the insertion points of sub area description labels and notations. To reveal an object's grips, you click on the object within the drawing editor. The grips are identified by small red squares, as pictured below. With the grips revealed, you can select a grip by clicking within the grip. After selecting the grip, you can reposition it by moving the mouse cursor to the desired location and clicking again.



In the example above, by revealing the sub area's grips, it is possible to stretch the geometry of an existing sub area by moving one or more of its grips. In this case, a sub area that was previously 15' by 15' can be stretched to 20' by 15', adding 75 square feet of area the ATU,UFF,FFF,BMU sub area without having to redraw it. Similarly, you can use the grips of a sub area description label to reposition the label, making it easier to read.

To hide revealed grips, simply press the Escape button twice.

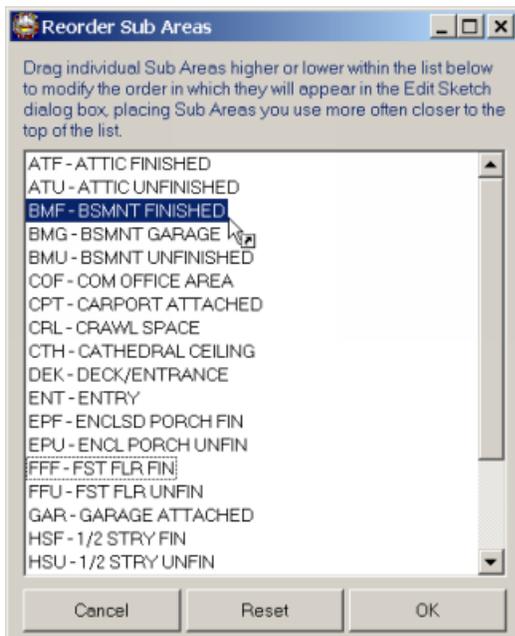
## Toggling the Sketch's Grid Snap

As discussed in the Sketch Drawing Area Grid section, the sketch editor's grid snaps are enabled by default so that any point you pick will be repositioned (or "snapped") to the nearest grid point. In this manner, the grid is similar to drawing on graph paper. For the vast majority of sketches, you should confine yourself to the one foot increments by leaving the grid snaps enabled.

There are situations, however, in which you would want to disable the sketch's grid snap. The SNAP ON/SNAP OFF panel of the sketch's status bar indicates the current status of the grid snaps. To toggle the grid snap on or off, simply double click on the SNAP ON/SNAP OFF panel of the status bar. This can be done transparently while you are in midst of another draw or edit command.

## Reorder Sketch Sub Areas

You can reorder the sequence of individual sketch sub areas in the list of available sub area descriptions so that the sub areas you use more often can appear towards the top of the list, reducing the need to scroll up or down within the list. To reorder the sub areas within the Edit Sketch dialog box, click the Reorder Sub Areas icon located to the lower right of the list of sub areas descriptions. This displays the Reorder Sub Areas dialog box, on which you will find a list of all of the current sub area descriptions in their present order.



To reorder sub areas, simply click the sub area name and drag the sub area higher or lower in the list, releasing or dropping the sub area in the appropriate location. Once you have the sub area descriptions in the desired sequence press the OK button to return to the Edit Sketch Dialog box. The sub area descriptions should be sorted in the desired order. Once you have reordered the sub

areas, the sub areas will appear in the same order on all parcels for all users on all workstations accessing the database.

## Other Sketch Notes and Suggestions

You may find the following suggestions helpful as you work the sketch editor:

### Save Button

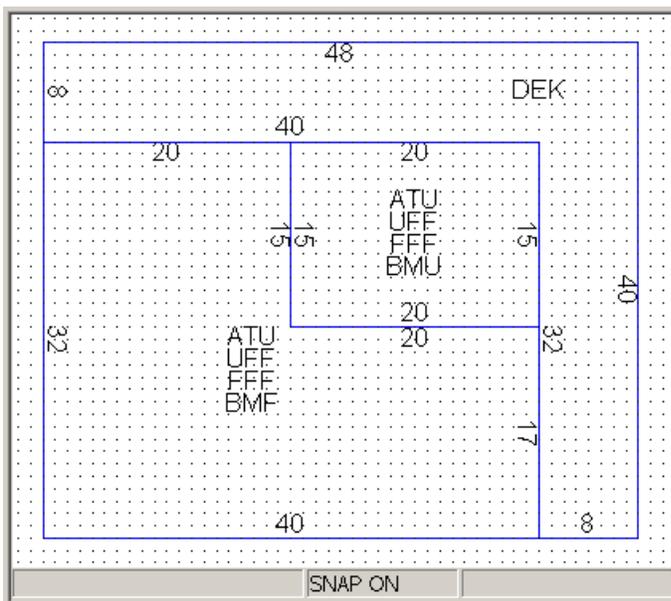
The Save button allows you to save the sketch on which you are working, as it currently appears, to the database without exiting the Edit Sketch dialog box. For new users this can be helpful, as they can save their sketch changes periodically while they are working.

### Reset Button

The Reset button allows you to reload the sketch as it existed in the database at the time of the most recent save. If you are editing a sketch and make a mistake, you can quickly return to the way the sketch originally appeared by pressing Reset. Note, that this is not an undo command. If you have made five changes prior to making a mistake and you press Reset, all five of your changes will be lost, unless you pressed Save after each change.

### Selecting “Land-Locked” Sub Areas

Often you may have particular sub areas within your sketch that completely surrounded by other sub areas, making it difficult to select the sub area. In these situations, the easiest solution is often to move one of the adjacent sub areas, exposing a segment on the land-locked sub area by which you can select it.



In the example above, if you wanted to select the ATU,UFF,FFF,BMU sub area in the center, the easiest solution would be to move the DEK sub area away from the building, exposing two seg-

ments on the land-locked sub area. Once you are done modifying the land-locked sub area, you can simply move the DEK section back in place.

## DRA Mosaic Exports

Each year, The New Hampshire Department of Revenue Administration (DRA) requires that municipalities provide the State with sales and assessment information as part of the Equalization process. The Equalization program is designed to ensure that assessments throughout New Hampshire communities accurately reflect the real estate market, as indicated by recent real estate sales, and to provide a method for comparing or equalizing assessments throughout different communities.

Using Mosaic, the DRA currently gathers the data necessary for the Equalization program from several sources. Much of the data come from the various Registries of Deeds throughout the State and the compulsory PA-34 forms that are completed by real estate buyers. But, in addition, DRA also needs recent assessment data for the parcels that were purchased. This includes not only the assessment values but also the property use description (e.g. Single Family Home or Commercial Land & Building, Waterfront or Water Access) or any qualifying factors influencing the sale that should exclude the sale from consideration as part of the Equalization study (e.g. Family/Relatives as Grantor/Grantee or Foreclosure Sale). For the assessment and property data, DRA relies on you.

The DRA Mosaic Exports are designed to electronically FTP your parcel and sales information to the DRA. Note that the Mosaic Parcel Format export and the Mosaic Advanced Sales Format export are two separate export processes that you must generate individually at the appropriate times. You should generate each of these exports in consultation with your assessor and/or the DRA.

Use the [Mosaic Parcel Format](#) to send the DRA selected property information for all parcels. To access this export navigate to **Utilities | Data Export | Mosaic Parcel Format**.

Use the [Mosaic Advanced Sales Format](#) to send the DRA specific sales information and print a sales report based upon your filter options as part of your annual Equalization process. To access this export navigate to **Utilities | Data Export | Mosaic Advanced Sales Format**.

## Mosaic Parcel Format

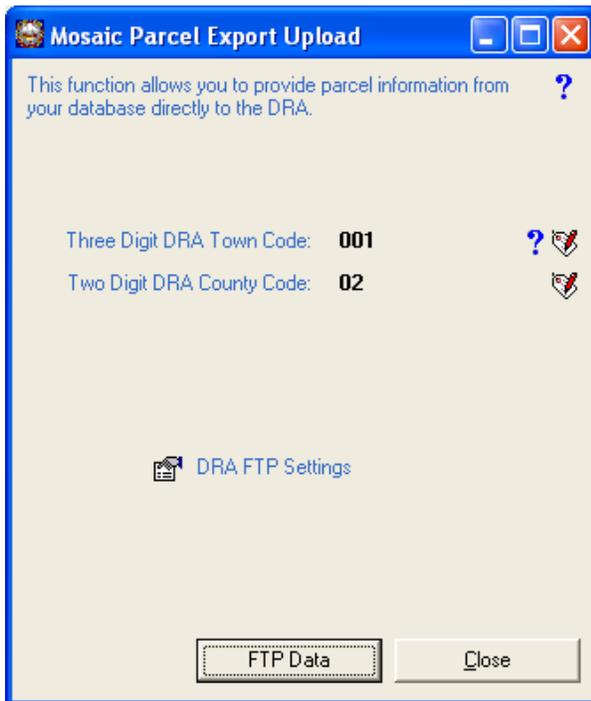
The **Utilities | Data Export | Mosaic Parcel Format** export is designed to electronically provide parcel information directly to the DRA.

Prior to attempting to FTP your parcel data to the DRA, your computer must have an active connection to the Internet. If your connection is not always on whenever your machine is on, you must make sure to first connect to the Internet as you would normally prior to selecting the FTP Data button.

Verify the three digit Town code and two digit County code have been set. If not, select the edit symbol to the right to enter them. If you're unsure of your specific DRA Town Code or DRA County Code, select the blue question mark next to the edit symbol or see [Town Codes](#) to view a chart of Town and County codes. Once you have verified the codes, select the **FTP Data** button. After the file transfer is complete, Mosaic's system administrators will be able to import your latest parcel information into the Mosaic system for your Municipality.

### NOTE:

- You should coordinate the process of uploading the Mosaic Parcel Format with your assessor and/or the Mosaic administrators to ensure that any and all required changes have been made to your local database, so as not to provide Mosaic with outdated or incomplete parcel information.
- Your system has been pre-set with the necessary DRA FTP Settings. You should only modify these settings in consultation with Avitar or DRA.





## **Mosaic Advanced Sales Format**

The **Utilities | Data Export | Mosaic Advanced Sales Format** export is designed for you to export your sales information to the DRA and produce a printed report of your sales. The dialog box provides you with a date range and other options to customize the sales that will be included on the report. For sales that do not have an explicitly set DRA Property Description, DRA Property Modifier, or Assessment the system will determine these values at the time you generate the report based on the attributes of the parcel included in the sale.

**NOTE:** You should only be utilizing the Mosaic Advanced Sales Format export functionality if you have received advanced training and approval from DRA -- otherwise your uploaded sales files will not be imported into Mosaic. Contact DRA directly to coordinate training for this export option.

### **Print Sales Report**

To print a sales report, use the filter and sort options and select **View**. You can print or export your report.

### **FTP Sales Information to DRA**

Prior to attempting to FTP your sales data to the DRA, your computer must have an active connection to the Internet. If your connection is not always on whenever your machine is on, you must make sure to first connect to the Internet as you would normally prior to selecting the FTP Data button.

Use the filter and sort options and then select the **Export to Mosaic** button. Once you confirm your selection parameters, you will access the "Mosaic Sales Export Upload" dialog box.

**Equalization Sales Report**

Filter Report by Sale Date:

All Sales

Only Sales Between

10/01/2013 And 09/30/2014

Filter Report by Qualified/Unqualified:

All Sales

Only Qualified Sales

Only Unqualified Sales

Sort Report by:

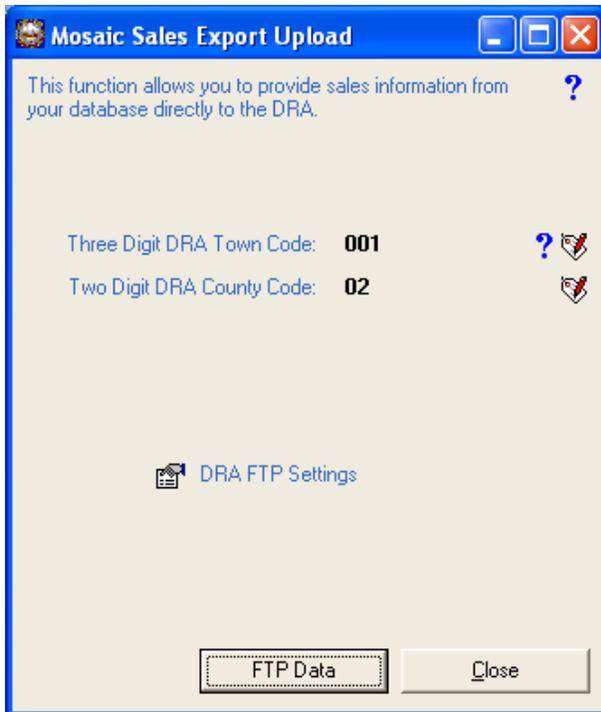
Sale Date

Book and Page

PID

Export to Mosaic... Close View

Verify the three digit Town code and two digit County code have been set. If not, select the edit symbol to the right to enter them. If you're unsure of your specific DRA Town Code or DRA County Code, select the blue question mark next to the edit symbol or see [Town Codes](#) to view a chart of Town and County codes. Once you have verified the codes, select the **FTP Data** button. After the file transfer is complete, Mosaic's system administrators will be able to import your latest sales information into the Mosaic system for your Municipality.



**NOTE:**

- You should coordinate the process of uploading the Mosaic Advanced Sales Format with your assessor and/or the Mosaic administrators to ensure that any and all required changes have been made to your local database, so as not to provide Mosaic with outdated or incomplete parcel or sale information.
- Your system has been pre-set with the necessary DRA FTP Settings. You should only modify these settings in consultation with Avitar or DRA.

## Town Codes

<b>Municipality</b>	<b>Town ID</b>	<b>County ID</b>
ACWORTH	001	10
ALBANY	002	2
ALEXANDRIA	003	5
ALLENSTOWN	004	7
ALSTEAD	005	3
ALTON	006	1
AMHERST	007	6
ANDOVER	008	7
ANTRIM	009	6
ASHLAND	010	5
ATKINSON	011	8
AUBURN	012	8
BARNSTEAD	013	1
BARRINGTON	014	9
BARTLETT	015	2
BATH	016	5
BEDFORD	017	6
BELMONT	018	1
BENNINGTON	019	6
BENTON	020	5
BERLIN	021	4
BETHLEHEM	022	5
BOSCAWEN	023	7
BOW	024	7
BRADFORD	025	7
BRENTWOOD	026	8
BRIDGEWATER	027	5
BRISTOL	028	5
BROOKFIELD	029	2
BROOKLINE	030	6
CAMPTON	031	5
CANAAN	032	5
CANDIA	033	8
CANTERBURY	034	7
CARROLL	035	4
CENTER HARBOR	036	1

CHARLESTOWN	037	10
CHATHAM	038	2
CHESTER	039	8
CHESTERFIELD	040	3
CHICHESTER	041	7
CLAREMONT	042	10
CLARKSVILLE	043	4
COLEBROOK	044	4
COLUMBIA	045	4
CONCORD	046	7
CONWAY	047	2
CORNISH	048	10
CROYDON	049	10
DALTON	050	4
DANBURY	051	7
DANVILLE	052	8
DEERFIELD	053	8
DEERING	054	6
DERRY	055	8
DORCHESTER	057	5
DOVER	058	9
DUBLIN	059	3
DUMMER	060	4
DUNBARTON	061	7
DURHAM	062	9
EAST KINGSTON	063	8
EASTON	064	5
EATON	065	2
EFFINGHAM	066	2
ELLSWORTH	067	5
ENFIELD	068	5
EPPING	069	8
EPSOM	070	7
ERROL	071	4
EXETER	072	8
FARMINGTON	073	9
FITZWILLIAM	074	3
FRANCESTOWN	075	6

FRANCONIA	076	5
FRANKLIN	077	7
FREEDOM	078	2
FREMONT	079	8
GILFORD	080	1
GILMANTON	081	1
GILSUM	082	3
GOFFSTOWN	083	6
GORHAM	084	4
GOSHEN	085	10
GRAFTON	086	5
GRANTHAM	087	10
GREENFIELD	088	6
GREENLAND	089	8
GREENVILLE	090	6
GROTON	091	5
HAMPSTEAD	092	8
HAMPTON	093	8
HAMPTON FALLS	094	8
HANCOCK	095	6
HANOVER	096	5
HARRISVILLE	097	3
HART'S LOCATION	098	2
HAVERHILL	099	5
HEBRON	100	5
HENNIKER	101	7
HILL	102	7
HILLSBOROUGH	103	6
HINSDALE	104	3
HOLDERNESS	105	5
HOLLIS	106	6
HOOKSETT	107	7
HOPKINTON	108	7
HUDSON	109	6
JACKSON	110	2
JAFFREY	111	3
JEFFERSON	112	4
KEENE	113	3

KENSINGTON	114	8
KINGSTON	115	8
LACONIA	116	1
LANCASTER	117	4
LANDAFF	118	5
LANGDON	119	10
LEBANON	120	5
LEE	121	9
LEMPSTER	122	10
LINCOLN	123	5
LISBON	124	5
LITCHFIELD	125	6
LITTLETON	126	5
LONDONDERRY	127	8
LOUDON	128	7
LYMAN	129	5
LYME	130	5
LYNDEBOROUGH	131	6
MADBURY	132	9
MADISON	133	2
MANCHESTER	134	6
MARLBOROUGH	135	3
MARLOW	136	3
MASON	137	6
MEREDITH	138	1
MERRIMACK	139	6
MIDDLETON	140	9
MILAN	141	4
MILFORD	142	6
MILTON	143	9
MONROE	144	5
MONT VERNON	145	6
MOULTONBOROUGH	146	2
NASHUA	147	6
NELSON	148	3
NEW BOSTON	149	6
NEW CASTLE	150	8
NEW DURHAM	151	9

NEW HAMPTON	152	1
NEW IPSWICH	153	6
NEW LONDON	154	7
NEWBURY	155	7
NEWFIELDS	156	8
NEWINGTON	157	8
NEWMARKET	158	8
NEWPORT	159	10
NEWTON	160	8
NORTH HAMPTON	161	8
NORTHFIELD	162	7
NORTHUMBERLAND	163	4
NORTHWOOD	164	8
NOTTINGHAM	165	8
ORANGE	166	5
ORFORD	167	5
OSSIPEE	168	2
PELHAM	169	6
PEMBROKE	170	7
PETERBOROUGH	171	6
PIERMONT	172	5
PITTSBURG	173	4
PITTSFIELD	174	7
PLAINFIELD	175	10
PLAISTOW	176	8
PLYMOUTH	177	5
PORTSMOUTH	178	8
RANDOLPH	179	4
RAYMOND	180	8
RICHMOND	181	3
RINDGE	182	3
ROCHESTER	183	9
ROLLINSFORD	184	9
ROXBURY	185	3
RUMNEY	186	5
RYE	187	8
SALEM	188	8
SALISBURY	189	7

SANBORNTON	190	1
SANDOWN	191	8
SANDWICH	192	2
SEABROOK	193	8
SHARON	194	6
SHELBURNE	195	4
SOMERSWORTH	196	9
SOUTH HAMPTON	197	8
SPRINGFIELD	198	10
STARK	199	4
STEWARTSTOWN	200	4
STODDARD	201	3
STRAFFORD	202	9
STRATFORD	203	4
STRATHAM	204	8
SUGAR HILL	205	5
SULLIVAN	206	3
SUNAPEE	207	10
SURRY	208	3
SUTTON	209	7
SWANZEY	210	3
TAMWORTH	211	2
TEMPLE	212	6
THORNTON	213	5
TILTON	214	1
TROY	215	3
TUFTONBORO	216	2
UNITY	217	10
WAKEFIELD	218	2
WALPOLE	219	3
WARNER	220	7
WARREN	221	5
WASHINGTON	222	10
WATERVILLE VALLEY	223	5
WEARE	224	6
WEBSTER	225	7
WENTWORTH	226	5
WESTMORELAND	227	3

WHITEFIELD	228	4
WILMOT	229	7
WILTON	230	6
WINCHESTER	231	3
WINDHAM	232	8
WINDSOR	233	6
WOLFEBORO	234	2
WOODSTOCK	235	5
ATK. & GILMANTON ACAD.	236	4
BEAN'S GRANT	237	4
BEAN'S PURCHASE	238	4
CAMBRIDGE	239	4
CHANDLER'S PURCHASE	240	4
CRAWFORD'S PURCHASE	241	4
CUTT'S GRANT	242	4
DIX'S GRANT	243	4
DIXVILLE	244	4
ERVING'S GRANT	245	4
GREEN'S GRANT	246	4
HADLEYS PURCHASE	247	4
HALE'S LOCATION	248	2
KILKENNY	249	4
LIVERMORE	250	5
LOW & BURBANKS GRANT	251	4
MARTIN'S LOCATION	252	4
MILLSFIELD	253	4
ODELL	254	4
PINKHAM'S GRANT	255	4
SARGENT'S PURCHASE	256	4
SECOND COLLEGE GRANT	257	4
SUCCESS	258	4
THOM. & MES. PURCHASE	259	4
WENTWORTH LOCATION	260	4
UNINCORPORATED AS GRP	300	4

## **The Avitar/Real Data Equalization Module**

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

The New Hampshire Department of Revenue Administration (DRA) contracts with Real Data Corporation (RDC) to provide the real estate sales data and software services for the DRA's annual Equalization program. The Equalization program is designed to ensure that assessments throughout New Hampshire communities accurately reflect the real estate market as indicated by recent real estate sales and to provide a method for comparing or equalizing assessments throughout different communities.

RDC gathers the data necessary for the Equalization program from several sources. Much of the data come from the various Registries of Deeds throughout the State and the compulsory PA-34 forms that are completed by real estate buyers. But, in addition to these sales data, RDC also needs assessment data for the parcels that were purchased. This includes not only the assessment values but also the property use description (e.g. Single Family Home or Commercial Land & Building, Waterfront or Water Access) or any qualifying factors influencing the sale that should exclude the sale from consideration as part of the Equalization study (e.g. Family/Relatives as Grantor/Grantee or Foreclosure Sale). For these assessment and property data, RDC relies on you.

Since 2000, RDC has offered their current program that allows users to enter assessment data online (at [www.equalization.net](http://www.equalization.net)). Logging into the Equalization system, users enter the assessment data for the sales within their community, prepare and analyze the ratio study, and then release the data to the DRA. With the RDC Data Exchange Module within Avitar Assessing, we have greatly simplified the process of entering assessment data by allowing you to do the matching of sales and property information within the Avitar program, using an intuitive and efficient interface that eliminates the need to retype data. The next sections highlight the series of steps necessary to import sales information from the RDC Equalization system into your assessing database, match the sales to existing properties in your database, and then return the completed sales and assessment data to the RDC Equalization system.

The entire RDC process is outlined before. It is recommended that you be familiar with all of the concepts presented before you use the module for the first time. If you simply need to remind yourself how to do a specific process you have already done, you can refer to the RDC Abbreviated Quick-Start section of this document.

## **Verify Sale Exclusion Codes In Your Database**

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

Before importing any sales from RDC, you must first verify that the sales Exclusion Codes (also known as qualified codes) in your database conform to those used by the DRA. Generally these are uniform throughout most communities, but users have had the ability to add or update Exclusion Codes within the Avitar system. Since the RDC Data Exchange module sends only the two digit numeric Exclusion Code to the DRA (as opposed to the full text description) it is critical that the codes used in your database match those used by the DRA and that you have not added Exclusion Codes that are not used by the DRA.

Use the list below to verify the sales exclusion or qualified codes in use by your town. If the two digit codes do not correspond to the exclusion reason you will need to resolve these conflicts before you can use the RDC Data Exchange Module. Call Avitar if you need assistance updating or deleting Exclusion Codes.

#### **DRA Exclusion Codes** (as of 11/2005)

##### **Mismatch of Rights Sold/Assessed**

- 11Property Sold Not Separately Assessed
- 12Subdivided Post Assessment /Pre Sale
- 13Improvements +/- (post sale/pre assessment)
- 14Improvements +/- (post assessment/pre sale)
- 15 Improvements +/- incomplete at assessment date
- 16L/O Assessment - L/B Sale
- 17L/B Assessment - L/O Sale
- 18Multiple Parcels/Same Town Per Deed \* '
- 19Non-Price Same Town MPC \*
- 20Multi-Town Property \*
- 21Multi-Parcel Conveyance (MPC)-can be sold separately

##### **Determination of Price/Consideration**

- 22Indeterminate Price/Consideration
- 23No Stamp Required Per Deed \*

##### **Open Market Exposure**

- 24Sale Between Owners of Abutting Property
- 25Insufficient Market Exposure

##### **Ownership Interests Sold**

- 26Mineral Rights Only
- 27Less than 100% Interest Transferred \*'
- 28Life Estate/Deferred Possession 1 Yr+
- 29Plottage or Assemblage Impact
- 30Timeshare \*
- 31Easement \*
- 32Timber Rights \*
- 37Financial Entity as Grantor/Grantee
- 38Family/Relatives/Affiliates as Grantor/Grantee
- 39Divorcing Parties as Grantor/Grantee
- 40Business Affiliates as Grantor/Grantee
- 44Non-Market with Trust as Grantor/Grantee

##### **Special Grantor/Grantee Relationships**

- 33Landlord/Tenant as Grantor/Grantee
- 34Public Utility as Grantor/Grantee

- 35Government Agency as Grantor/Grantee
- 36Religious/Charitable/Educational as Grantor/Grantee

**Sales of Convenience**

- 45Boundary Adjustment
- 46Deed to Quiet Title
- 47Other Sale of Convenience

**Forced Sales**

- 48By Sheriff or Other Court Official
- 49Deed in Lieu of Foreclosure
- 50Tax Sale \*
- 51Foreclosure \*
- 52Other Forced Sale

**Questionable Title**

- 55Other/Unspecified Deed Covenants \*’
- 56Other Doubtful Title

**Other Circumstances**

- 57Substantial Value in Trade
- 58Installment Sale
- 59Unfinished Common Property
- 60Unidentifiable in Assessor's Records
- 66Complex Commercial Sale
- 67Unknown Value of Personal/Non-Taxable Property
- 68Pertinent Mortgage Terms Unknown
- 69Assumed Lease With Unknown Terms
- 70Substantial Seller/Buyer Cost Shifting
- 77Special Assessment Encumbrance
- 80Subsidized or Assisted Housing
- 81Estate Sale with Fiduciary Covenants \*’
- 82Deed Date Too Old or Incomplete \*’
- 83Cemetery Lots \*

**Special DRA Consideration**

- 87Overrepresentation of Locale in Sample
- 88Overrepresentation of Property Type in Sample
- 89Resale in EQ Period
- 90RSA 79-A Current Use
- 97RSA 79-B Conservation Easement
- 98Sales Related Assessment Change

**For Use Only If No Other Code Applies**

- 99Unclassified Exclusion \*

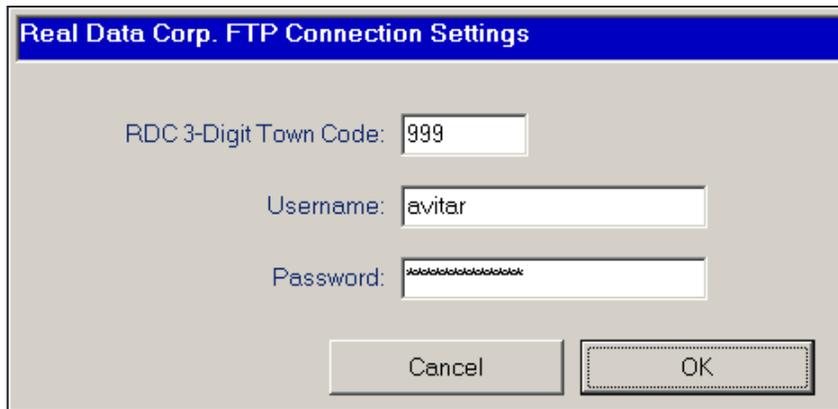
\* Indicates an Exclusion Code that may be assigned by RDC to Pre-Exclude a sale based on information from the deed. Refer to the Pre-Excluded RDC Sales section for more information.

‘ Indicates an Exclusion Code that may be assigned by RDC to Pre-Exclude a sale based on information from the deed but that can be re-included by the assessor.

## RDC FTP Connection Settings

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

The RDC Data Exchange Module enables you to connect automatically to the RDC web site and download the sales for your community using the File Transfer Protocol (FTP). This all happens seamlessly behind the scenes if Avitar Assessing is able to access the Internet and you have configured a few simple connection settings.



The image shows a dialog box titled "Real Data Corp. FTP Connection Settings". It has a blue header bar with the title in white text. Below the header, there are three input fields. The first is labeled "RDC 3-Digit Town Code:" and contains the text "999". The second is labeled "Username:" and contains the text "avitar". The third is labeled "Password:" and contains a series of asterisks "\*\*\*\*\*". At the bottom of the dialog, there are two buttons: "Cancel" on the left and "OK" on the right.

Prior to attempting to configure the RDC FTP Connection Settings you must ensure the following conditions are met. Contact your network administrator or computer specialist if you are unsure about these requirements.

1. Your computer must have an active connection to the Internet. If your connection is not always on whenever your machine is on, you must make sure to first connect to the Internet as you would normally prior to configuring the RDC FTP Connection Settings.
2. If you have any firewall or virus protection software enabled on your computer, it must allow the program `civicware.exe` (generally located in your `c:\program files\civicware` folder) to access the Internet. Some firewalls limit the programs that are allowed to access the Internet to protect against malicious spy-ware and Trojan horses. In order to download RDC sales, the `civicware.exe` program must be permitted to pass through the firewall and access the RDC FTP site.

To configure the RDC connection settings first load the Real Data Corp. Exchange dialog box by selecting Utilities | Real Data Corp. Exchange on the program's main window. Within the Real Data Corp. Exchange dialog box select Utilities | RDC FTP Connection Settings. You will need to enter three attributes to enable the FTP connection, all of which you can obtain from RDC if you do not already know them. The required items are 1) the three digit RDC town code assigned to your town, 2) your town's RDC user name, and 3) your town's RDC password. Once you have entered the required items press OK. The system will indicate whether or not it was able to

connect to the RDC FTP site. If your connection settings were correct, you will not need to set them again using RDC FTP Connection Settings until something such as your RDC user name or password changes. If you are for some reason unable to access the RDC FTP site, you can still use the RDC Data Exchange module but you will need to contact Avitar Software Support for assistance with configuring your system to allow you to import and export sales without using the standard FTP connection.

## **Exporting and Importing Sales from the RDC Equalization System**

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

While the RDC Data Exchange Module allows you to perform the data entry tasks for the Equalization study from within your Avitar Assessing program, you still must access the RDC Equalization system in order to first export the file containing the list of sales in your community, as well as at the end of the process to import the file of matched sales back into the RDC Equalization system.

The RDC Equalization system will add new sales in your town throughout the year as RDC obtains information about the sales from the Registry. Each time you export the sales from the RDC Equalization system you will be exporting all sales for a given Equalization Year, regardless of the number of sales you may have previously exported. So you can export and download sales as often as you like, either doing so periodically throughout the year or waiting until right before your Equalization Study is required.

To export an unmatched sales file or to import a matched sales file in the RDC Equalization system you must first do the following:

1. Using your Internet browser connect to the RDC Equalization system ([www.equalization.net](http://www.equalization.net)) and login using your town's user name and password as you would normally. If you are not sure what these values are contact RDC.
2. Once you are logged in, choose the Equalization Year for which you want to export or import sales. (You can maintain sales data for multiple Equalization Years in Avitar Assessing at once.)
3. From the RDC Main Menu choose "7. Match Menu" and press Enter.
4. On the Match Menu you have two choices.
  - A. To export sales for review in Avitar Assessing:
    1. From the Match Menu choose "1. Create a TRANSPORT file for your CAMA system to download" and press Enter.

2. You are asked to confirm that you want to export a transport file. Enter "Y" and press Enter. If a previous transport file still exists on the RDC system you will be asked if you wish to overwrite the existing file with the new transport file.
  3. Once the file has been exported, press Enter to return to the Match Menu and press F9 to return to the Main Menu.
  4. You can then log out of the RDC Equalization system and proceed with **Get Sales File from RDC** within your Avitar RDC Data Exchange module.
- B. To import sales for which you have matched assessment information within Avitar Assessing you need to do the following tasks. (Note: This process is really the final task after you have matched sales data and sent it back to RDC, but we describe it here because it is performed from the same Match Menu on the RDC Equalization system. You should refer back to this section after you have sent a matched sales file to RDC.)
1. From the Match Menu choose "2. Import an uploaded TRANSPORT file into Equalization" and press Enter.
  2. You will be asked to confirm that you want to import a transport file or you will be notified if the Equalization system cannot locate the transport file to import. Respond accordingly.
  3. Once the file has been imported, press Enter to return to the Match Menu and press F9 to return to the Main Menu. You can then review the imported sales and assessment information and proceed with preparing your Equalization Study and any final tasks before releasing your data to the DRA.

## Get Sales File from RDC

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

The RDC Equalization system will add new sales in your town throughout the year as RDC obtains information about the sales from the Registry. Each time you export the sales from the RDC Equalization system you will be exporting all sales for that Equalization Year, regardless of the number of sales you may have previously exported. So you can export and download sales as often as you like, either doing so periodically throughout the year or waiting until right before your Equalization Study is required.

Once you have you have configured your RDC FTP Connection Settings and exported the transport sales file for your town for the appropriate Equalization Year from the RDC Equalization system you are ready to download and import the sales into your Avitar Assessing database. It is worth noting that the process of importing the RDC sales into your database is separate and distinct from the process of matching sales to existing parcels. After you import the RDC sales into your database, those sales will simply be available in the database to be matched with existing parcels. They will not, however, automatically be linked with existing parcels or suddenly begin appearing in your sales reports or affecting your sales analyses within Avitar Assessing.

You can download the sales either automatically through Avitar Assessing (provided your computer has access to the Internet) or you can download the file manually. If it is necessary for you to download the file manually you will need to contact Avitar Software Support for assistance. The following instructions assume you either have access to the Internet from your assessing computer or you have already manually downloaded the sales file from the RDC Equalization system.

1. In the Real Data Corp. Exchange dialog box select Utilities | Get Sales File From RDC.
2. You will be prompted whether you wish to attempt to download the file directly from the RDC FTP site. Answer Yes to proceed with the automatic download. (If you have already downloaded the file manually answer No and then locate the file on your computer using the browse dialog box. Once you have located the file, the sales will be imported into your database and you are done with this task.)
3. If you are downloading the sales file, the system will attempt to connect to the RDC site and check to see if a sales file for the current year exists. If it locates the file it will ask if you wish to download the file. If it doesn't locate the file for the current year it will ask if you wish to look for the previous year's sales file. If you are still working on the Equalization study for the previous year you can answer Yes. If it doesn't locate a sales file, it will keep going back one year at a time and asking if you wish to keep trying. Answer No if you are not finding the correct year. If Avitar Assessing does not find the sales file for the correct Equalization Year make sure you exported the file as described in the section Exporting and Importing Sales from The RDC Equalization System. If Avitar Assessing cannot connect you will be prompted. If there are problems at this point and you have successfully configured your RDC FTP Connection Settings then contact Avitar Software Support.
4. Once the system has located the sales file for the correct Equalization Year, it will download the sales and import them into your database. If there are no new sales in the file since the last time you

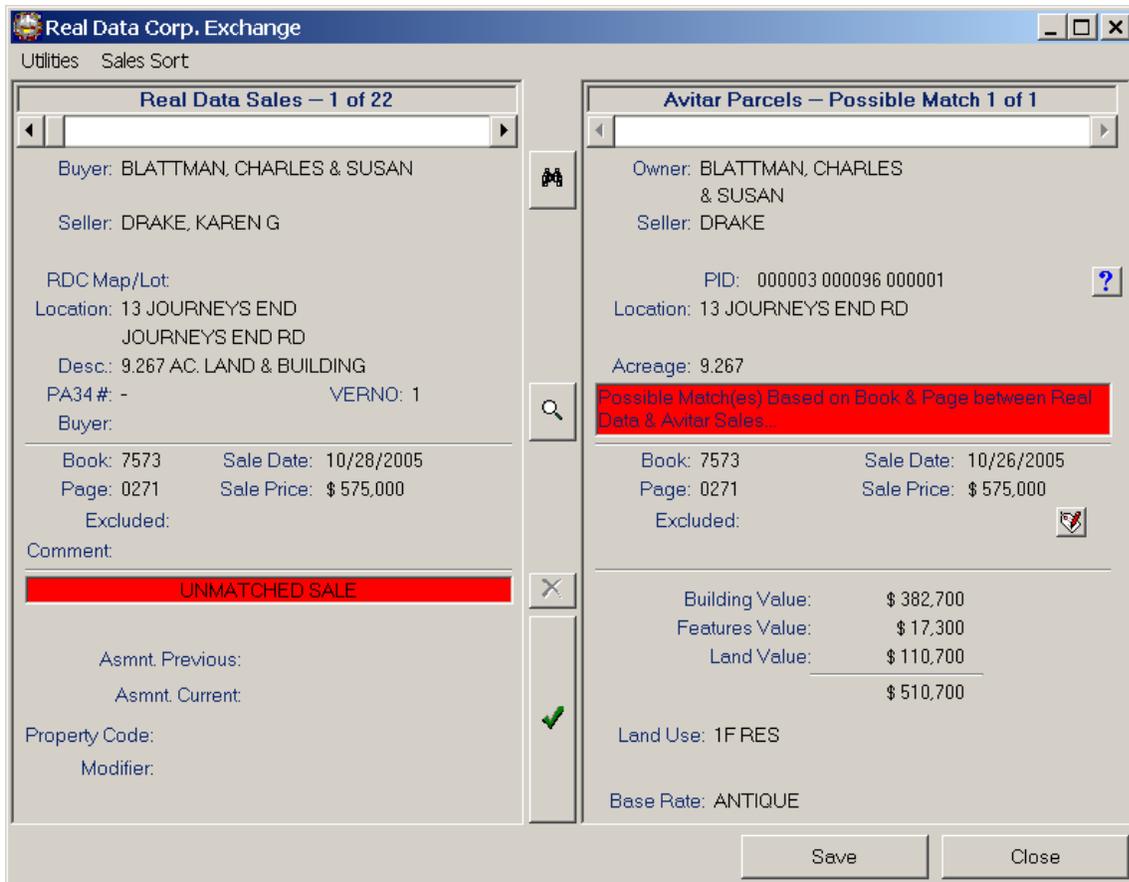
downloaded the sales file, it will indicate that zero sales were imported or updated. Otherwise, it will indicate how many new sales were added to your database for the selected Equalization Year.

After you have imported the RDC sales into your assessing database you are ready to load the sales for matching with parcels in your assessing database. Note that you only need to perform the Get Sales File from RDC task if you have exported a new sales transport file from the RDC Equalization system. But until you do, the sales you just downloaded and imported will remain in your assessing database for you to review and match. You do not need to perform the Get Sales File from RDC task every time you wish to match sales in Avitar Assessing – only when there are new sales in the RDC Equalization system that you have not downloaded to your Avitar Assessing database.

## **Load RDC Sales for Matching**

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

If you have imported RDC sales into Avitar Assessing you are now ready to Load RDC Sales for Matching. You can only load RDC sales for a single Equalization Year at one time, but you can have sales from multiple Equalization Years in your database at once. To load sales for a particular year select the corresponding year from the Utilities | Load RDC Sales for Matching menu from within the Real Data Corp. Exchange dialog box.



The RDC sales are displayed on the left half of the dialog box and the Avitar parcels and sales are displayed on the right half of the dialog box. On the top left you will see the total number of RDC sales you have loaded -- for example, "Real Data Sales -- 1 of 25". The first of the RDC sales will automatically be displayed on the left half of the dialog box. Use the horizontal slider on the upper left of the dialog box to navigate through the record set of RDC sales. Use the left or right arrows at either end of the slider to move one sale at a time through the set, or click the slider bar and drag it left or right to move backwards or forwards through the record set of sales.

## Displaying, Sorting, and Filtering Sales

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

If you have loaded RDC sales for a specific Equalization Year you can sort or filter the sales for display by whatever criterion is most useful for you. The default is to display all sales for the Equalization Year sorted by Verno (the unique number assigned to each sale in a town for a given Equalization Year). You can also choose to sort the record set of sales based on Sale Date, Buyer name, Seller name, or Street Name. Or you can choose to filter the record set of RDC sales so that it displays All Sales, Only Unmatched Sales, or Only Matched Sales. To change the sort

order of filter for the loaded set of RDC sales, choose the corresponding selection from the Sales Sort menu within the Real Data Corp. Exchange dialog box.

The screenshot shows a window titled "Real Data Sales - 8 of 22". The main area contains the following information:

- Buyer: ASH III, DONALD P
- Seller: EISENBERG, JOSEPH S
- RDC Map/Lot: UNIT 30B MOUNTAINSIDE AT CROTCHED MOUNTAINSIDE AT CROTCHED MTN
- Desc.: CONDO
- PA34 #: -
- VERNO: 8
- Book: 7618
- Page: 2842
- Sale Date: 01/24/2006
- Sale Price: \$ 63,000
- Excluded: MULTI-TOWN PROPERTY
- Comment:

A green status bar below the comment field displays "AVITAR MATCHED SALE".

At the bottom, there are fields for:

- Asmnt. Previous: \$ 484,500
- Asmnt. Current: \$ 484,500
- Property Code: Single Family Home
- Modifier:

All of the information about the sale that RDC provided is displayed in the upper left quadrant of the dialog box. The information includes Buyer Name, Seller Name, RDC Map/Lot, Location, Property Description, VERNO, PA34 Number (when available), Book, Page, Sale Date, Sale Price, and any existing Exclusion Code if the sale has already been excluded. Note that this information is gathered from the Registry and in many cases may not be as accurate as your own information, particularly with such items as Location and Map/Lot.

Once an individual RDC sale is displayed on the left of the dialog box, the appearance of the rest of the dialog box will change depending on the status of the RDC sale. If the RDC sale is unmatched (i.e. you have yet to associate the sale with the correct parcel in your Avitar Assessing database) the status bar beneath the sale will be red and indicate UNMATCHED SALE and the assessment and property information for that sale on the lower left of the screen will be blank. If the RDC sale is unmatched, Avitar Assessing will display the most likely parcel with which the RDC sale should be matched (based on criteria outlined below).

If the current RDC sale has been matched already the status bar will be green and indicate either AVITAR MATCHED SALE (for those sales that have been matched in Avitar Assessing but have not yet, to our knowledge, been matched in the RDC Equalization system) or RDC & AVITAR MATCHED SALE (for those sales that we have exported to RDC and have come back to us as now being matched in the RDC Equalization system).

## Locating Potential Match Parcels for RDC Sales

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

Matching is the process by which you associate the assessments and property information for an existing parcel in the Avitar Assessing database with an individual sale description that you obtained from RDC. Additionally, at the time of matching, you have the opportunity to resolve any differences between the sale description in the Avitar Assessing database and the RDC sale such that the sales information you maintain in your assessing database is identical to that used by RDC and the DRA for your Equalization study.

The RDC sales you download have a number of attributes that Avitar Assessing can use to attempt to match the RDC sale with an Avitar parcel. Based on what the system knows from the RDC sale and the level to which it correlates with the property information in your Avitar database, these preliminary matches may be quite accurate or they may miss the mark completely. It is your job to review the preliminary matches that the system makes, and either confirm the matched parcel or locate the correct parcel to match, and then resolve any discrepancies that may exist between the RDC sales data and the sales data you keep in your Avitar Assessing database.

Avitar Assessing has a number of searches that it performs each time you display an RDC sale in order to locate the most likely parcel or parcels for you to match to the RDC sale. If the system doesn't find any parcels for a particular search, it tries the next most likely search until it finds potential matches or runs out of search possibilities. The system will display possible matches on the right side of the dialog box, as well as the criteria by which it found the possible matches. You can elect to either match the property to the sale, have the system keep searching based on different criteria, or manually identify the correct property to be matched.

**Avitar Parcels – Possible Match 1 of 1**

Owner: MCAULEY, WILLIAM F.

Seller: TRIPP

PID: 000013 000036 000000 

Location: 37 2ND NH TURNPIKE S

Acreage: 0.450

**Possible Match(es) Based on Book & Page between Real Data & Avitar Sales**

Book: 7620	Sale Date: 01/19/2006
Page: 1251	Sale Price: \$ 240,000
Excluded: 	

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Building Value:	\$ 140,400
Features Value:	\$ 12,300
Land Value:	\$ 65,700
	<hr/>
	\$ 218,400

Land Use: 1F RES

Base Rate: ANTIQUE

The criteria used by Avitar Assessing to locate possible property matches are listed below, in decreasing order of probability. In each case, the red or green search status bar located on the right portion of the dialog box will indicate how the system located any possible matches. If the system locates more than one possible match for any search, you can use the slider on the upper right side of the dialog box to move throughout the record set to review the possible matches.

1. **Match Based on Previous Match by User in Avitar** – If you have already matched the RDC sale to a property, the matched property will automatically display.
2. **Possible Match(es) Based on Pre-Match of PID by Real Data** – Some communities may contract with RDC to provide "pre-matched" sales files, in which RDC (using an extract of your assessing database) attempts to pre-match a sale with a property.
3. **Possible Match(es) Based on Book, Page & Sale Date between Real Data & Avitar Sales** – If you have been entering parcel transfers in your Avitar Assessing database as you receive them from the Registry, it is likely that you have already added a sale record for an individual parcel with the corresponding book, page, and sale date. In these cases the system can display a possible match with a fairly high probability of being correct.
4. **Possible Match(es) Based on Book & Page between Real Data & Avitar Sales** – If you have been entering parcel transfers in your Avitar Assessing database as you receive them from the Registry, it is likely that you have already added a sale record for an individual parcel with the corresponding book, page, and sale date. However, sometimes the date you entered in your assessing database may be slightly different from the date used by RDC,

depending on whether you enter the sale date or the date on which the sale was recorded at the Registry. But, in these cases where we can match on book and page the system can still display a possible match with a fairly high probability of being correct.

5. **Possible Match(es) Based on Seller/Grantor & Street Name between Real Data & Avitar Sales** – If no possible match was found based on book, page, and/or sale date, then the system attempts to find possible matches by comparing the seller from the RDC sale with a Grantor on an existing Avitar sale record, while at the same time comparing the street name from the RDC sale with existing street names in Avitar.
6. **Possible Match(es) Based on Seller/Grantor between Real Data Sale & Avitar Parcel** – If no match is found using the Seller/Grantor and the street name, the system throws out the street name and tries to find matches based on just the RDC seller compared to grantor names for existing Avitar sale records.
7. **Possible Match(es) Based on Buyer/Owner & Street Name between Real Data Sale & Avitar Parcel** – If no possible matches are found using sale information (book, page, date, grantor) it is likely that no sale record was added to the Avitar Assessing database yet. Thus, the system tries to match the RDC sale's buyer with existing owners in the assessing database.
8. **Possible Match(es) Based on Street Name & Street Number between Real Data Sale & Avitar Parcel** – If no match can be found when comparing the RDC buyer and the Avitar owner, the system next tries to match street name and street number between the RDC sale and any existing Avitar parcels.
9. **Possible Match(es) Based on Seller/Owner between Real Data Sale & Avitar Parcel** – If still no possible matches are identified, Avitar Assessing compares the RDC seller name with the Avitar owner name.
10. **Possible Match(es) Based on Street Name between Real Data Sale & Avitar Parcel** – If still no possible matches are identified, Avitar Assessing throws out the street number (used a few searches ago) and compares just the RDC street name with the Avitar street name.

If none of these searches produce any possible matches then you will need to manually locate the Avitar parcel to be matched.

## Keep Searching Button

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.



Anytime Avitar Assessing locates one or more properties that might match the current RDC sale it will stop and display the set of one or more properties for you to review. If you are not satisfied with the possible match(es), you can press the Keep Searching button (in the center of the dialog box with the magnifying glass icon) to tell the system to keep searching using the next highest search criteria, as listed above.

It is worth noting that the system may still return the same property or properties if they come up when searching the next criteria in the search order.

## **Browse for Parcel Manually Button**

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.



If you do not like the possible property match(es) the system has proposed, you can at any time choose to manually identify the property to match. Based on the description of the RDC sale you may know exactly which parcel should be matched with the sale. To do so, press the Browse for Parcel Manually button (located in the top center of the dialog box with the binoculars icon). The right side of the dialog box will display the familiar PID, Owner, and Address tabs with which you can search the database as you would on the main screen to locate the parcel manually.

Once you have selected a parcel (either by PID, Owner, or Address) the information for the parcel will be displayed on the lower right. If the parcel has any sale records in the Avitar Assessing database they will display in the Sales grid. If the selected parcel has no sale records at all in the Avitar Assessing database the Sales grid will not be visible.

## **Select Parcel & Sale Button**

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

If the manually selected parcel has one or more sales displayed in the Sales grid, you may want to match the RDC sale with one of the existing Avitar sales in the Sales grid. If one of the existing Avitar sales in the Sales grid had the incorrect book and/or page assigned to it (i.e. it was not found in any of the searches performed by Avitar Assessing to locate potential matches), you should highlight the corresponding sale in the Sales grid and then press the Select Parcel & Sale button.

Date	Grantor	Bk.	Pg.	Price
06/19/06	ROBINSON	7692	1109	\$
06/03/93	OPPENHIMER, JOHN	5439	1226	\$30,000

This is the first step towards matching the RDC sale to the existing Avitar sale, and you will have the opportunity later to resolve the discrepancies between the RDC sale and the Avitar sale.

## Select Parcel Only Button

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

If the Sales grid is not visible or if none of the existing Avitar sales in the Sales grid correspond to the RDC sale (i.e. the Avitar sales displayed are from three years ago) you should press the Select Parcel Only button.

Date	Grantor	Bk.	Pg.	Price
10/27/03	DANFORTH	7107	0441	\$135,000

This will allow you to then match the RDC sale with just the Avitar parcel and not any particular Avitar sale. At that point you will have the opportunity to insert a new Avitar sale into Avitar Assessing based on the information from the RDC sale.

## Display Card Button

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.



If at any point throughout the matching process you need to find more information about an existing Avitar Assessing system parcel, simply select the parcel on the right side of the dialog box (either manually or through one of the potential matching searches) and then press the Display Card button (on the right side with the question mark icon) to load another window showing the full assessment card for the parcel.

Note that if you close the Real Data Corp. Exchange dialog box, you will need to reload the set of sales when you come back to match sales.

## Making Matches

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

Once you have displayed an Avitar parcel on the right of the dialog box that you wish to match with the RDC sale displayed on the left, simply press the Match Avitar Parcel to RDC Sale button.



The remainder of the matching process will be dictated by whether the Avitar parcel to be matched has a corresponding sale existing in the Avitar (in which case the details of the existing sale may need to be resolved with RDC sale) or whether the Avitar parcel you have selected does not have any sales records existing in the Avitar Assessing database (in which case a new sale record will need to be created in the Avitar Assessing database). Follow the instructions below, depending upon if you are matching the RDC sale to an Avitar parcel only or are matching the RDC sale to an Avitar parcel and sale.

### Match Avitar Parcel Only to RDC Sale

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

If you selected only an Avitar parcel to match to an RDC sale (as opposed to an Avitar parcel and a specific Avitar sale) the system will check to see if any other sale records exist in the Avitar database for the selected parcel with a sale date within the previous 18 months. This is so we are not inserting redundant sale records into the Avitar database if the sale we are matching already exists in the Avitar database but the information (book, page, date) might have been entered incorrectly. This additional check gives you a chance to resolve these discrepancies without cluttering your assessing database with redundant or incorrect sales information.

If the system does not locate any existing sales in the Avitar database for the selected parcel within the previous 18 months it will automatically insert a new sale into the Avitar database according to the information provided with the RDC sale. The RDC sale and the Avitar parcel will then display as matched.

**Recent Avitar Sales For PID 000006 000008 000000**

Select one of the recent Avitar sales to which the Real Data Corp. sale should be linked and press "Use Selected Sale". Press "Insert New Sale" to insert a new sale into the Avitar database based on the information provided by Real Data. Or press "Cancel" to cancel the current matching process.

Sale Date	Grantor	Book	Page	Sale Type	Price
06/19/2006	ROBINSON	7692	1109	U138	\$

If the system locates any existing recent sale records in the Avitar Assessing database for the selected parcel you will be presented with a Sales grid displaying the possible sales in a box labeled "Recent Avitar Sales." If none of the existing Avitar sales correspond to the RDC sale to which you are matching, simply press the Insert New Sale button, and the system will insert a new sale for the selected parcel based on the RDC sale information. The RDC sale and the Avitar parcel will then display as matched.

If, however, one of the existing sales from the Avitar Assessing database corresponds with the RDC sale you are matching, select the sale in the Sales grid, and then press Use Selected Sale. If the sale you selected is a perfect match with the RDC sale, the sale and the parcel will simply displayed as matched. If, however, discrepancies exist between the RDC sale and the existing Avitar sale you selected you will need to resolve these issues before the match can be completed. See Resolving Conflicts between Avitar Sale & RDC Sale for details on this process.

## Match Avitar Parcel and Sale to RDC Sale

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

If you selected an Avitar parcel with an existing Avitar sale to match to an RDC sale, Avitar Assessing will first check to see if any discrepancies exist between the specifics of the Avitar sale and the RDC sale. The check insures that the following attributes of the two sales agree and, where there is disagreement, forces you to reconcile the differences before completing the match:

- Sale Date**
- Book**
- Page**
- Grantor**
- Sale Price**
- Qualified/Exclusion Code**

If no discrepancies exist in the above attributes, the RDC sale and the Avitar parcel and sale will immediately display as matched. Otherwise, the system will display the Resolve Conflicts... dialog box. At this point, you will need to either insert a new sale into the Avitar Assessing database based on the attributes of the RDC sale or you will need to resolve the discrepancies between the

two sale descriptions. If you decide the match really shouldn't be made to the Avitar sale you selected for the parcel you can either press Cancel or you can press Insert New Avitar Sale. If you press Insert New Avitar Sale the system will insert a new sale for the selected parcel into the Avitar Assessing database based on the RDC sale information. The RDC sale and the Avitar parcel will then display as matched. Otherwise, you will need to resolve any discrepancies before the match can be completed. See Resolving Conflicts between Avitar Sale & RDC Sale for details on this process.

## **Resolving Conflicts between Avitar Sale & RDC Sale**

**Note:** This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

When matching an Avitar parcel and existing sale with an RDC sale, the Avitar Assessing system checks to insure that the following attributes of the two sales agree and, where there is disagreement, forces you to reconcile the differences before completing the match:

**Sale Date**  
**Book**  
**Page**  
**Grantor**  
**Sale Price**  
**Qualified/Exclusion Code**

If discrepancies exist in the above attributes, the system will display the Resolve Conflicts... dialog box with the attributes of the RDC sale on the left and the attributes of the Avitar sale on the right. The various labels will be grayed out when the RDC and the Avitar attributes for that category agree. You do not have to do anything for these sales attributes which already agree. But when conflicts exist between the RDC sale and the Avitar sale, the labels will show as either red or green and the radio button or checkboxes will be enabled. The green labels indicate which attributes will be used when the sales are resolved while the red labels indicate which attributes will be overwritten. Using the checkboxes or radio buttons beside each label, you can indicate which attributes you wish to use, thus toggling the labels from red to green. Each category of sales attributes behaves slightly differently when resolving conflicts. Refer to the appropriate section below for more information.

Resolve Conflicts Between Real Data Sale & Avitar Sale for 000009 000046 000000		
The Real Data & Avitar Sales do not agree for one or more of the attributes below. When different, the Book, Page & Sale Date from Real Data will always supercede those maintained in the Avitar database when sales are synched. Check the box to update the Avitar Grantor with the Real Data Grantor when they differ (not required). Use the radio buttons to indicate which Sale Price and/or Exclusion Code you wish to use once the sales are synched.		
	<b>Real Data Sale</b>	<b>Avitar Sale</b>
Date/Book/Page:	12/29/2005 7609 1227	10/29/2005 7609 1227
Grantor:	<input type="checkbox"/> GETTINGS PROFIT SHARIN	GETTINGS
Sale Price:	<input type="radio"/> \$ 9,533	<input checked="" type="radio"/> \$ 9,530
Excluded:	<input type="radio"/>	<input checked="" type="radio"/> BUSIN AFFIL GRNTR/E
	Insert New Avitar Sale	Synch RDC & Avitar Sales
		Cancel

### Sale Date, Book, and Page

Because the RDC sales information comes from the Registry, it is assumed that the Book, Page, and Sale Date on the RDC sale are correct and cannot be changed. Therefore, when resolving conflicts between RDC sales and Avitar sales, the top row of attributes (Date, Book, and Page) will always show the RDC values in green and the Avitar values in red. You cannot elect to overwrite the RDC Date, Book, or Page with the corresponding value for the Avitar sale. If a conflict exists with Date, Book, or Page first verify that you are trying to match the correct sale. Beyond that, some conflicts arise from entering the sale date versus the date the sale was recorded at the registry so the dates may be off by a few days.

It is assumed that the RDC values are correct, but, of course, mistakes happen. If you are certain the values for Date, Book, and Page are correct on the Avitar sale that you recorded you should contact RDC before making a match. Otherwise, simply accept the RDC values and the Avitar sale will be updated with the Date, Book, and Page from RDC.

### Grantor

Because RDC might enter the sale's Grantor differently than is conventional in your Avitar Assessing database, you are permitted to have different Grantors between the RDC sale and the corresponding matched Avitar sale. For example, the RDC sale might display "Arend, Joshua B." while the corresponding sale in the Avitar database might just list "Arend". In situations like this you can elect to update the Grantor on the sale in the Avitar database with the Grantor on the RDC sale by checking the checkbox to the left of the RDC Grantor. (In which case the RDC Grantor label will be green and the Avitar Grantor label will be red.) Or, by unchecking the Grantor checkbox you can elect to keep the Grantor as it was recorded originally for the Avitar sale (in which case both the RDC Grantor and the Avitar Grantor labels will be grey).

### Sale Price

When the Sale Price for the RDC sale disagrees with the Sale Price for the Avitar sale you must choose one or the other to use by selecting the appropriate radio button to the left of either the RDC sale price label or the Avitar sale price label. Often times, the RDC Sale Price is calculated working backwards from the cost of the real estate transfer stamp. This can introduce odd rounding errors into the Sale Price such that the RDC Sale Price might be \$10,533 while the Avitar Sale

Price you entered when recording the sale might be \$10,550. Regardless, indicate which sale price you wish to use by selecting the appropriate radio button.

### Qualified/Exclusion Code

An Exclusion Code indicates the reason why a particular sale should not be used in the Equalization Study. The absence of an Exclusion Code by definition means the sale should be included in the Equalization Study.

When the Exclusion Codes differ between the RDC sale and the Avitar sale or when one sale has an Exclusion Code and the other does not you will need to decide which is correct. For some Pre-Excluded RDC sales you will see a lock icon. These are sales which you cannot re-include. (See the section on Pre-Excluded RDC Sales.) Otherwise, use the radio buttons to indicate whether you wish to choose the RDC sale Exclusion Code or the Avitar sale Exclusion Code. Keep in mind, a blank Exclusion Code indicates the sale will be included.

## Pre-Excluded RDC Sales

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

Some sales will export from the RDC Equalization system with an Exclusion Code already assigned by RDC. These are sales for which the deed itself indicated to RDC that the sale should be excluded for the purposes of the Equalization Study. (Refer to the Verify Sale Exclusion Codes in Your Database section for the list of Exclusion Codes that can be pre-excluded.) Some of these pre-excluded sales can be re-included while others cannot.



Whether or not a pre-excluded sale can be re-included depends on the Exclusion Code that was assigned by RDC. If an RDC Exclusion Code cannot be re-included, you will see a small lock icon to the left of the Exclusion Code (either in the main RDC sale display area or in the Resolve Conflicts... dialog box). Avitar Assessing will prevent you from removing these Exclusion Codes.

To re-include Pre-Excluded sales that can be re-included simply remove the Exclusion Code, either by matching the RDC sale to an Avitar sale that is not excluded or by manually overriding the RDC Exclusion code.

## Exclusion Code Comments

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

The DRA requires that you provide comments or explanations when using certain Exclusion Codes. Beyond that, you might wish to add comments to other excluded sales, even when not required. When comments are required, you will be prompted by Avitar Assessing. Otherwise, press the Manually Set Adhoc Comment button to the right of the RDC sale comment display.

Book: 7609	Sale Date: 12/29/2005	
Page: 1227	Sale Price: \$ 9,530	
Excluded: BUSIN AFFIL GRNTR/E		
Comment: EXCLUSION CODE COMMENT		
AVITAR MATCHED SALE		

To update an existing comment, use the same button and simply type over the existing comment.

## Saving Matches

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

The matches you have made between RDC sales and Avitar parcels and sales are not saved until you press the Save button. It is recommended that you periodically save your work as you do it, so you do not run the risk of losing it.

## Manually Overriding Attributes of a Matched Sale

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

When you match an RDC sale to an Avitar parcel and sale the assessment and property information from the Avitar parcel are assigned to the RDC sale. The vast majority of the time, you will want to match these default values to the RDC sale and export them with the matched sales to return to RDC. There are certain situations in which you may want to override the default value such that the matched RDC sale is returned to RDC with data that differs from the parcel's corresponding values in the Avitar Assessing database. In these cases, you can press the Manual Override button associated with each attribute and manually select the value for that attribute that you wish to use for the matched sale. Any time you override the default value, the override value will display with a red label when the RDC sale is shown.

AVITAR MATCHED SALE		
Asmnt. Previous:	\$ 484,500	
Asmnt. Current:	\$ 484,500	
Property Code:	Residential Land	
Modifier:	<span style="border: 1px solid red; padding: 2px;">View Influence Positive</span>	
		✓
		Building Value: \$ 0
		Features Value: \$ 0
		Land Value: \$ 484,500
		\$ 484,500
		Land Use: 1F RES
		Base Rate:

The following examples highlight a few scenarios in which you might wish to manually override a particular assessment or property description for a matched sale and return the matched sale with a value that differs from the default value indicated by your Avitar Assessing database.

- A. When matching an Avitar parcel to an RDC sale, Avitar Assessing uses a number of factors to determine how to translate the Avitar Assessing land use descriptions to the corresponding property descriptions used by RDC and the DRA. However, if you have knowledge of the parcel involved, you may be better able to select the appropriate property description or property modifier code to use with the sale. For example, depending upon the Avitar database, some parcels with waterfront or water access may not be coded with the land use description of 1F RES WTRFRNT or 1F RES WTR ACS and they may not have a Land Line used for waterfront frontage or a view value. In these cases, the default RDC property code might be just Single Family Home with no property modifier. With knowledge of the parcel, however, you could override the default property modifier (i.e. nothing) with the Waterfront or Water Access modifier.
- B. Another scenario in which you might want to manually override the default assessment information involves sales of parcels in Current Use. When matching RDC sales with parcels in current use Avitar Assessing uses the tax value (as opposed to the ad valorem) as the RDC assessment, because in many communities the ad valorem may be unreliable if the parcel has long been in current use. However, if by looking at the assessment card you can determine the ad valorem value for the parcel you should use the manual override for the current and/or previous year assessments.

## Refreshing Manually Overridden Attributes of a Matched Sale

Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.

If you manually override a value for a matched RDC sale the overridden value will appear with a red label when the RDC sale is displayed. Since the RDC sale will have been matched, the corresponding Avitar parcel and sale will display on the right of the dialog box.



At this point you will be able to see what the current value is for the attribute that was overridden. If you wish to remove the overridden value and once again use the default value as determined by the Avitar parcel and sale simply press the Reset button visible to the right of the overridden value.

## Changes in Assessment and Property Descriptions for Matched Sales Over Time

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

The values of the Avitar parcel and sale are used at the time you make a match to establish the assessment and property information that will be returned to RDC when you export the sales at some point in the future. However, between the time at which you make the match and the time at which you export the matched sales back to RDC it is possible that the underlying values and/or parcel description of the matched parcel might change. When you subsequently display the matched sale the assessments and property descriptions may now display as manual override values. It is up to you to determine, based on the specifics of the parcel and why the underlying assessment or property description changed since the time of the match, whether you should refresh the attributes to reflect the current state of the parcel or whether you should keep the attributes that were in place at the time when you matched the sale.

## Un-Matching RDC Sale

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

If you wish to remove an existing match between an RDC sale and an Avitar parcel first load and display the RDC sale. The match status bar should be green and indicate either AVITAR MATCHED SALE or RDC & AVITAR MATCHED SALE.



If the status bar says AVITAR MATCHED SALE you can simply press the Un-Match RDC Sale button (located in the middle of the dialog box with the "X" icon). You will then be asked

whether you wish to delete the corresponding Avitar sale record from the Avitar database. Generally, you should answer Yes as the book, page, date, and sale price of the Avitar sale will match those of the RDC sale after you originally made the match, and if you are removing the match with the RDC sale because it was matched to the wrong parcel you would want to remove the Avitar sale record as well. If you need to select another Avitar parcel to be matched to the RDC sale you can go ahead and do so as if the RDC sale had never been matched. Or, if for some reason you wish to leave the RDC sale unmatched, you can simply leave the RDC sale as is and proceed without doing anything else.

However, if the status bar says RDC & AVITAR MATCHED SALE it means the match information has already been sent to the RDC Equalization system. If you intend to remove the existing incorrect match from the RDC sale and then rematch the RDC sale with another Avitar parcel you can press the Un-Match RDC Sale button (located in the middle of the dialog box with the "X" icon). As with removing simple AVITAR MATCHED SALE matches, you will next be asked whether you wish to delete the corresponding Avitar sale record from the Avitar database. Generally, you should answer Yes for the reasons described above. Next, you can select the correct Avitar parcel and match the new parcel with the RDC sale as you would normally. If, however, you wish to leave the RDC sale unmatched for the purposes of the Equalization study and the status bar indicated RDC & AVITAR MATCHED SALE, you will need to contact RDC to remove the assessment and property from the RDC sale in the RDC Equalization system. Since it has already been matched and Avitar Assessing only returns RDC sales that have been matched, the Equalization system will never see it as being unmatched, and it will continue to assume it should use the information from your earlier match.

## Send Matched Sales to RDC

**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

Once you have matched and reviewed the assessment and property information for one or more of the RDC sales in the set of sales for a given Equalization Year, you can send those matched sales back to the RDC Equalization site for inclusion in your Equalization Study. The sales can either be automatically uploaded to the RDC FTP site or it can be done manually on another computer if your assessing computer does not have Internet access.

To send matched sales back to RDC do the following:

1. From the Real Data Corp. Exchange dialog box select Utilities | Send Matched Sales to RDC and then select the corresponding Equalization Year.
2. You will be asked whether you wish to submit matched sales for the selected Equalization Year. Confirm by pressing Yes.

3. Next you will be asked if you would like to send the file automatically. Press Yes to continue with the automatic upload, and you should see the upload progress or receive an error message if the system is unable to upload the sales file. (If it is necessary for you to upload the matched sales file manually you will need to press No. Then indicate where you would like the system to save the export file, and contact Avitar Software Support for assistance with the manual upload).

Once you have exported the matched sales and uploaded them (either automatically or manually) back to the RDC Equalization system refer to the earlier instructions for Exporting and Importing Sales from the RDC Equalization System and follow the steps for logging into the RDC Equalization system and importing an uploaded transport sales file.

## **RDC Abbreviated Quick-Start**

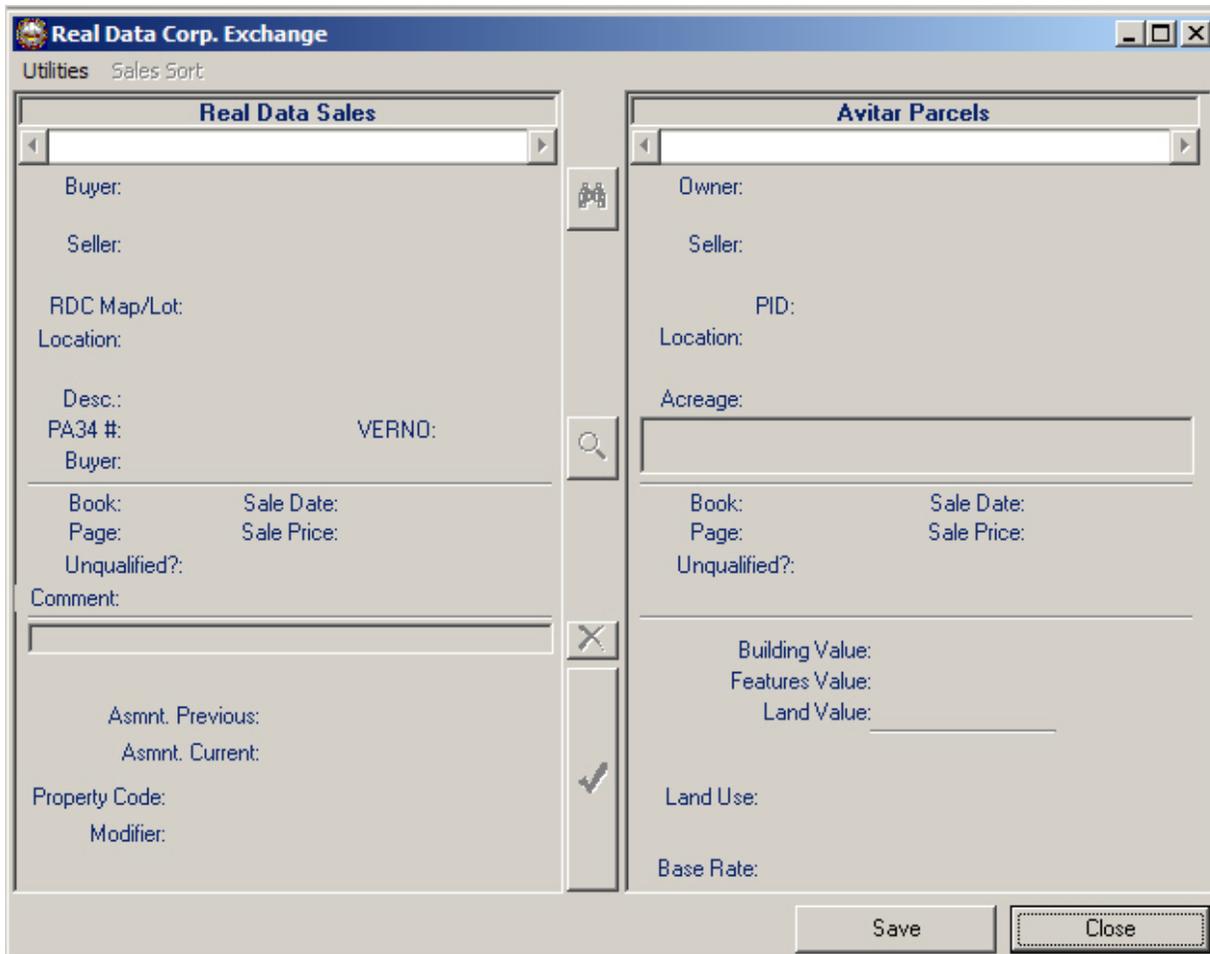
**Note: This portion of the program has been removed. You should now be using the DRA Mosaic Exports for your equalization study.**

If you are already familiar with the process of matching Avitar parcels to the RDC sales, you may find the following quick-start section helpful. It highlights the information presented above, while leaving out much of the explication for the sake of brevity.

To export an unmatched sales file or to import a matched sales file in the RDC Equalization system you must first do the following:

1. Using your Internet browser connect to the RDC Equalization system ([www.equalization.net](http://www.equalization.net)) and login using your town's user name and password as you would normally.
2. Once you are logged in, choose the Equalization Year for which you want to export sales.
3. From the RDC Main Menu choose "7. Match Menu" and press Enter.
4. Choose "1. Create a TRANSPORT file for your CAMA system to download" and press Enter.
5. Once the file has been exported, press Enter to return to the Match Menu and press F9 to return to the Main Menu.
6. You can then log out of the RDC Equalization system and proceed with Get Sales File from RDC within your Avitar RDC Data Exchange module.

Log in to Avitar Assessing and select Utilities | Real Data Corp Exchange to display the RDC module.



The Utilities menu within the dialog box contains the following menu items:

**Get Sales file from RDC** – Used to import sales data directly from the RDC website using the FTP protocol if you are **connected** to the Internet or to manually locate the file on your computer that you previously downloaded from RDC. Answer NO to locate the file on your computer.

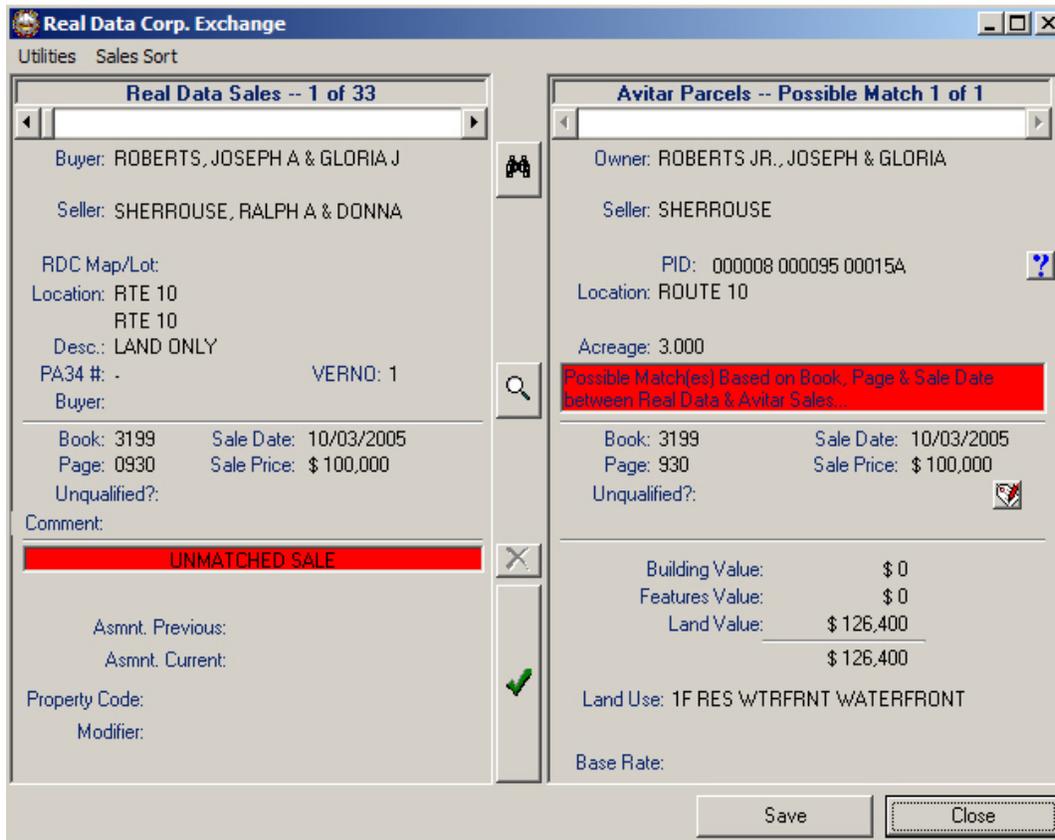
**Load RDC Sales for Matching** – Used to load a data file already imported from RDC. Individual Ratio Years will appear for you to select if one or more years were previously imported.

**Send Matched Sales to RDC** – To be discussed later.

**RDC FTP Connection Settings** – Used once to set up the information from RDC to access the site. The necessary information includes the 3 digit town code, username, and password.

To begin matching sales select Load RDC sales for Matching and select the ratio year on which you wish to work. The left side of the matching screen is populated with the first RDC sale and the right side of the matching screen is populated with possible matching assessment records. The Sales Sort menu items allow you sort the sales data by VERNO, Date, Buyer, Seller, or Street Name. It also gives you the options to view all sales, only unmatched sales, or only matched sales.

You can use the scroll bar on the left half of the screen to move forward and backward through the sales data. As you move, potential matches from the assessing database will appear.



The functions of each button are reviewed below. The name given refers to the icon of the corresponding button:

**Binoculars** – Enables you to browse the Avitar database for other parcels to find the correct record for a sale when the parcel displayed is not correct in your judgment.

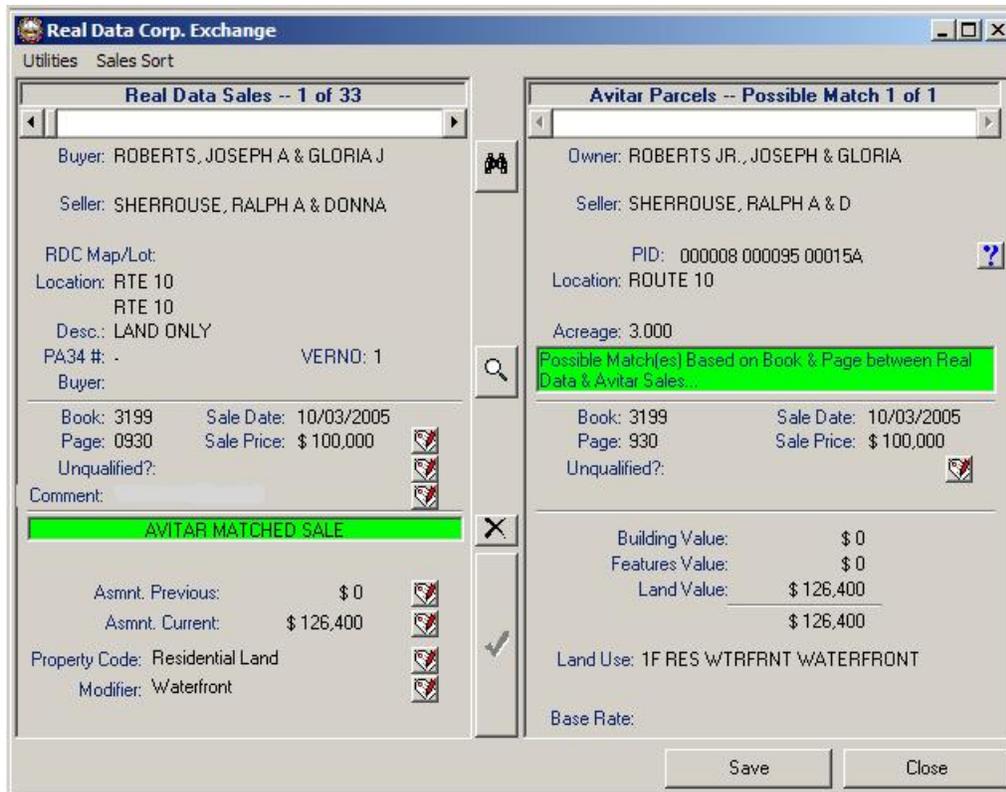
**Magnifying Glass** – Indicates you want the system to continue searching for another match.

**Check Mark** – Opens a new window to enable you to either A) insert a new sale into the Avitar system based on RDC data, B) synchronize the RDC and Avitar sales data, or C) cancel the operation without making any changes.

**Question Mark** – Displays the assessment record card of the current record for you to review.

**Manually Edit Attribute** – Lets you select the appropriate values for exclusions code for an unqualified sale, property code/modifier, etc.

Once you have selected to insert a new sale to the assessing database or synchronize the RDC and Avitar data, seven Manually Edit Attribute icons appear on the left side of the screen in addition to the assessing value information. The delete icon (which was previously disabled) will cancel the link previously established for the RDC sale and the Avitar assessment record.



To manually edit a sales attribute, select the appropriate icon. Each one is described next:

**Save Button** – Saves all matched sales and any edits.

**Close Button** – Closes session and returns to the program's main window.

You can input data files from RDC monthly, quarterly, or as often as you wish, getting more recent sale data without losing any matched and edited sales information from prior imports.

Once you have received all the sales data for the current ratio year study and have matched and edited all the sales with your assessing data, you are ready to perform your sales analysis in Avitar Assessing and develop your ratio from your assessing data. This may point out sales data that need further research and may mean that edits need to be made in the RDC data prior to exporting. If this is the case, return to the RDC module to make any final required edits.

### Exporting to RDC

As with the import process, the export can be done via the Internet directly to the Real Data FTP site. From the Avitar Assessing's main program window select Utilities | Real Data Corp

Exchange and then select Utilities | Send Matched Sales to RDC and indicate the correct ratio year from the available choices. Once you have selected the ratio year data file, you are prompted if you wish to continue. Click Yes to continue or No to cancel. If you elect to continue, you are prompted if you wish to send the file automatically to Real Data via the Internet. At this point you have three options: 1) select Cancel to cancel the operation and return to the dialog box; 2) select Yes to begin the automated transfer of the file to the Real Data FTP site; 3) select No to begin the manual transfer of data. If you choose to transfer the file manually, you will be asked to select a folder in which the transfer file (called RTRNXPRT####.TAB) will be created. The #### in the file name will be the Ratio Year you selected. Once the file is created you can then copy the file to a disk or burn to a CD and mail to RDC.

## Map Functions

If your Avitar Assessing system includes the optional Map functionality, you have access to a wealth of expanded capabilities which enable you to query and create town-wide maps that add a whole new dimension to your assessing data. Following are several examples of the additional system functionality available when your Map tab is configured:

- You can display the physical location on the Map of a single parcel you've selected by PID, Owner Name, or Address.
- Alternatively, you can identify a single parcel within the database by clicking on it on the Map tab.
- You can use the abutters function or other selection tools to create a current recordset of parcels meeting certain spatial criteria with which you can then create a report or a [Notices | Mailer/Correspondence](#) .
- Following a traditional user query, you can display every parcel within your current recordset on the Map to see the spatial distribution of your results.
- You can create thematic maps displaying attributes such as parcel zone or neighborhood or a graduated classification of parcels within certain value ranges using the assessment data tied to the parcels displayed on the Map.

For a list of requirements for integrating your digital map files with the system, refer to [Map Integration](#). For a summary of each of the functions you can find on the Map Toolbar, refer to [Map Tab Toolbar](#). For information on creating thematic maps and labels refer to [Map Symbol Properties Dialog Box](#).

PID	Owner	Address	Parcel: 000013 000001 000000	Parcel 1 of 39
Query	Sales	Map Legend	Owner: LEWIS, STEVEN W	Card 1 of 2
			Location: 95 MAIN ST	Size: 2.01 Ac.

<input checked="" type="checkbox"/> WELLS	<input checked="" type="checkbox"/> WATER	<input checked="" type="checkbox"/> STREAMS	<input checked="" type="checkbox"/> ROADS	<input checked="" type="checkbox"/> PARCEL	<input checked="" type="checkbox"/> ZONING

Land	Building	Sketch	Features	Income	Exempt/Permit	Map
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39 Parcel(s) Found	PENALTY	REVIEW	DISTRICT	CAPS	NUM	12:53 PM
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## Map Integration

In order to display your digital map files on the Map tab you must first have digital map files that meet certain requirements. Then you must verify with Avitar that additional required system components necessary to view the digital map files have been installed on your machine. And finally, the system must be configured to use the digital map files.

Digital map files requirements:

- Spatial data must be provided to you in the shapefile format. (A shapefile is an industry standard file format utilized by GIS applications. For more information on shapefiles you can [consult Wikipedia.](#))
- At a minimum, you must have a single **shapefile** containing every parcel within the Municipality (as opposed to a number of tiled map files).
- The name of the parcels shapefile does not matter but you must have all three file components that comprise an individual shapefile (e.g. example.shp, example.shx, and the example.dbf files).
- The parcels shapefile must consist of individual closed polygons corresponding to each parcel.
- Each parcel polygon within the parcels shapefile must have an attribute that corresponds to the unique [Parcel Identifier, PID, or Map/Lot/Sub Lot](#) used by Avitar Assessing.
- The parcel identifier attribute of the parcel shapefile must be maintained in a single attribute (as opposed to being separated into multiple individual columns).
- The parcel identifier attribute of the parcel shapefile must conform exactly to the format and structure for the corresponding parcel and must consist of all 18 characters, “zero filled” or “zero padded” as necessary (i.e. no spaces or values less than 18 characters in length). For example “000001000002000003” as opposed to “1-2-3” or “001/002-03”.
- If you or your map vendor needs to see the internal format to which the parcel identifier attribute of the parcel shapefile must conform you can refer to the PID column contained in the file produced by the system’s GIS data export ([GIS Format](#)).

Additional layers (e.g. lakes, roads, zoning, etc.) can provide an added depth to the parcel shapefile on your Map tab. These additional layers can overlay or underlay the parcel shapefile, can be configured with different colors and styles, and can be toggled on or off as needed. While not required, when used these additional layer shapefiles must conform to the following requirements:

- The additional layer shapefiles must also be shapefiles.
- The additional layer shapefiles must share a common coordinate system with the parcel shapefile.
- The additional layer shapefiles must be either polygon, line, or point layers.
- The additional layer shapefiles can have their own corresponding attribute data but it is not required.

Once you have obtained digital map files in the format necessary, contact Avitar for assistance with verifying that the additional required system components necessary to view the digital map files have been installed on your machine and for help configuring your system to use the digital map files.

## Map Settings Dialog Box

The File | Map Settings dialog box allows you to configure the integration of digital map files with your Avitar Assessing system. This process presupposes that you have already completed the following:

- Coordinated with your mapping vendor and Avitar to obtain geographic shapefiles with PID attributes in the specified format.
- Contacted Avitar to install any additional map components and modify any initialization settings.
- Installed the corresponding map files on your computer.

Once the above items have been addressed, select **File | Map Settings** to load the Map Settings dialog box. The Map Settings dialog box is separated into two tabs.

## Parcel Layer Tab

The Parcel Layer tab specifies the settings to be used by the system when connecting to the polygon shapefile that defines your tax map parcels. There are several settings for this layer since the system needs to link to the equivalent of the PID attribute that identifies each parcel on the tax map. To select these settings:

1. Use the browse button to locate the folder in which your parcel shapefile is located.
2. Once you have selected the shapefile directory, the Shapefile For Parcel Layer dropdown list should refresh to display a list of the shapefiles in the selected folder. Choose the file name that corresponds to your parcels shapefile.
3. Once you have selected the parcel shapefile, the Field on Which PID Links dropdown list should refresh to display a list of fields within the selected shapefile. Select the name of the field that contains the unique eighteen character equivalent of the Avitar PID. If the field is not listed and you know the name of the field, you can use the Manually Add Field Name button (i.e. the plus sign icon) to enter it. If you are not certain of the field to choose, you can see the type of data contained in any field by selecting the field name and pressing the Display Data in Link Field button (i.e. the question mark icon).
4. Once you have made the appropriate selections, press the OK button. You will need to restart the Avitar Assessing system to see the map you have just configured.



[Video - Add Parcel Layer](#)

## Additional Layers Tab

The Additional Layers tab allows you to include other shapefiles (beyond just the parcels shapefile identified above) on your Map tab. These other shapefiles (e.g. streams, roads, zoning, etc.) can add additional information to your Map tab, but they are not linked directly to specific data in your assessing database (as is the case with the parcels shapefile). In order to be available, these other shapefiles need to be located in the same folder you identified on the Parcel Layer tab. Any other available shapefiles will appear in the Additional Layers grid. The file name displays in the first column. If you wish to include a particular shapefile on your map, check the corresponding Include column. Use the Name column to indicate the name you wish to associate with this layer when it appears in the Map Legend. Once you have made the appropriate selections, press the OK button. You will need to restart the Avitar Assessing system to see the map you have just configured.

Note that it is assumed that any additional shapefiles you add to the Map tab are on the same coordinate system as your parcel shapefile. If they are not, the Map tab may appear empty when you zoom to the extents of the map. If this happens, contact your map vendor.

## Map Tab Toolbar

The Map toolbar is located on the Map Data Display tab, to the right of the map itself. The buttons on the Map toolbar enable you to interact with the map in many different ways, from zooming in or out, to adding text or printing. In most cases, by clicking on the toolbar, you make a specific function active and it will remain active until you choose another function by clicking on another toolbar button. The specific toolbar button functions are described next.

 Max Zoom Max Button – Map Toolbar

 Find Find Button – Map Toolbar

 Zoom Zoom Button – Map Toolbar

 Pan Pan Button – Map Toolbar

 In Zoom In Button – Map Toolbar

 Out Zoom Out Button – Map Toolbar

 Poly Poly Select Button – Map Toolbar

 Circle Circle Select Button – Map Toolbar



Clear Select Button – Map Toolbar



ID Button – Map Toolbar



Abut Button – Map Toolbar



Print Button – Map Toolbar



Text Button – Map Toolbar



Line Button – Map Toolbar



Shape Button – Map Toolbar



Rect Button – Map Toolbar



Dist Button – Map Toolbar

## Zoom Max Button– Map Toolbar



The Zoom Max button restores the map display to the maximum extents of the map.

## Find Button – Map Toolbar



The Find button zooms the map in on the currently selected parcel (as indicated on the Data Display Banner).

## Zoom Button – Map Toolbar



The Zoom button allows you to zoom in on a selected rectangle. To use the Zoom command:

1. Click Zoom and the pointer icon will become a magnifying glass.
2. Using the left mouse button, click on the map (and hold down the button) at one corner of the desired zoom rectangle.
3. While continuing to press the left mouse button, drag the mouse to the opposite corner of the desired zoom rectangle, releasing the mouse button when the desired zoom window is displayed.

## Pan Button – Map Toolbar



The Pan button allows you to navigate around the map at the current zoom resolution. To use the Pan command:

1. Click the Pan button.
2. Using the left mouse button, click on the map (and hold down the button) at any location.
3. While continuing to press the left mouse button, drag the mouse around the map, and the current map extents will change to display a new portion of the map. Release the mouse button once the desired location is displayed.

## Zoom In Button – Map Toolbar



The Zoom In button allows you to zoom in on a portion of the map. To use the Zoom In command:

1. Click the In button.
2. Using the left mouse button, click on the map on the desired center of your new display. The new map display will be magnified by a factor of 50% and will be centered on your selected point.

## Zoom Out Button – Map Toolbar



The Zoom Out button allows you to zoom out on a portion of the map. To use the Zoom Out command:

1. Click the Out button.
2. Using the left mouse button, click on the map on the desired center of your new display. The new map display will be zoomed out by a factor of 50% and will be centered on your selected point.

## Poly Select Button – Map Toolbar



The Poly button allows you to select all parcels located within a user-defined polygon. To use the Poly command:

1. Click the Poly button.
2. Using the left mouse button, identify the vertices of your selection polygon. As you identify vertices, you will notice a rubber banding polygon indicating the size of your polygon.
3. When you have created the desired selection polygon, double click on the map to identify the final vertex of your selection polygon. Avitar Assessing will query the database and create a record set containing all of the parcels identified on the map (shown in the corresponding selection color). Once you have selected parcels from the map, you can move throughout the selection set using the Previous and Next toolbar buttons, as well as click on the other display tabs to show land or building information for the current parcel of your record set.

**Note:** By holding down the Shift button, you can add additional map parcels to your selection set by repeating the steps outlined above.

## Circle Select Button – Map Toolbar



The Circle button allows you to select all parcels located within a user-defined circle. To use the Circle command:

1. Click the Circle button.
2. Using the left mouse button, click on the map (and hold down the button) to identify the center point of your selection circle. After locating the center point, you can drag the mouse outwardly from the center point to indicate your selection circle's radius. You will notice a rubber banding circle indicating the size of your selection circle.
3. Once you have identified the desired radius of your selection circle, release the left mouse button. You will be prompted with an input box showing you the radius of the current circle and allowing you to enter a known radius if you prefer. Press "OK" when you have entered the desired radius.
4. Avitar Assessing will query the database and create a record set containing all of the parcels identified on the map (shown in the corresponding selection color). Once you have selected parcels from the map, you can move throughout the selection set using the "Previous" and "Next" toolbar buttons, as well as click on the other display tabs to show land or building information for the current parcel of your record set.

**Note:** By holding down the Shift button, you can add additional map parcels to your selection set by repeating the steps outlined above.

## Clear Select Button – Map Toolbar



The Clear button clears any currently selected map parcels. (NOTE: The corresponding parcels will still be contained in your database record set).

## ID Button – Map Toolbar



The ID button allows you to find out information about a map parcel by clicking on it. To use the ID command:

1. Click the ID button.
2. Using the left mouse button, click on the desired map parcel. The parcel will become your currently selected database record. Once it is selected you can click on the other display tabs to show land or building information about the parcel.

## Abut Button – Map Toolbar



The Abut button allows you to identify parcel abutters by selecting a parcel and entering a desired abutting distance. To use the Abut command:

1. Click the Abut button.
2. Using the left mouse button, click on the map parcel around which you want to locate abutters.
3. You will be prompted with an input box to enter the desired radius to be used in locating abutters. Enter the desired offset and press OK.
4. Avitar Assessing will use the map data to create a record set of parcels that are within the specified distance of the boundaries of your selected parcel. The abutter parcels will be displayed on the map in the corresponding selection color and will be contained in your current database record set. You can move throughout the selection set using the Previous and Next toolbar buttons, as well as click on the other display tabs to show land or building information about the any of the parcels in your abutter's record set.

## Print Button – Map Toolbar



The Print button allows you to print the currently displayed map image.

## Text Button – Map Toolbar



The Text button allows you to add temporary text labels to the map. To use the Text command:

1. Click the Text button.
2. Using the left mouse button, click on the map where you would like the text label to begin (i.e. the lower left corner of the label).
3. You will be prompted to enter your label in the input box. Type your label text and press the OK button. Your label will be drawn on the map.

Note: Use the Clear button to erase all temporary text labels from the map.

## Line Button – Map Toolbar



The Line button allows you to add temporary lines to the map. To use the Line command:

1. Click the Line button.
2. Using the left mouse button, click on the map to identify the vertices of your line. As you add vertices, the line will be shown with a temporary rubber banding line on the map. Double click on the map to indicate the final vertex of your line. The line you created will be displayed in the maps corresponding selection color.

Note: Use the Clear button to erase all temporary lines from the map.

## Shape Button – Map Toolbar



The Shape button allows you to add temporary polygon shapes to the map. To use the Shape command:

1. Click the Shape button.
2. Using the left mouse button, click on the map to identify the vertices of your polygon. As you add vertices, the polygon will be shown with a temporary rubber banding line on the map. Double click on the map to indicate the final vertex of your polygon. The polygon shape you created will be displayed in the maps corresponding selection color.

Note: Use the Clear button to erase all temporary shape polygons from the map.

## Rect Button – Map Toolbar



The Rect button allows you to add temporary rectangles to the map. To use the Rect command:

1. Click the Rect button.
2. Using the left mouse button, click on the map (and hold down the button) at one corner of the desired rectangle.
3. While continuing to press the left mouse button, drag the mouse to the opposite corner of the desired rectangle, releasing the mouse button when the desired rectangle is displayed by the temporary rubber banding rectangle.

Note: Use the Clear button to erase all temporary rectangles from the map.

## Dist Button – Map Toolbar



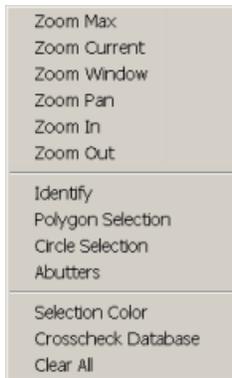
The Dist button allows you to measure distances (such as frontages) on the map. To use the Dist command:

1. Click the Dist button.
2. Using the left mouse button, click on the map to identify the vertices along the distance you wish to measure. As you add vertices to the distance, the distance path will be shown with a temporary rubber banding line on the map. Double click on the map to indicate the final vertex of your distance path.
3. The measured distance is displayed beneath the map.

Note: The distance measured is approximate. It assumes a level of precision that may or may not be appropriate based on the precision with which the underlying maps were created.

## Map Tab Pop-up Menu

The Map Tab pop-up menu can be accessed by right clicking on the map. It allows you to access many of the same commands available on the Map Toolbar, but allows easier access to several frequently used commands.



The only commands on the pop-up menu which are not available on the Map Tab toolbar are described below. For all other items on the pop-up menu refer to the corresponding command listed above in the toolbar section for more information about each individual command.

### **Selection Color – Map Pop-Up Menu**

The Selection Color command allows you to modify the color with which selected parcels are displayed on the map.

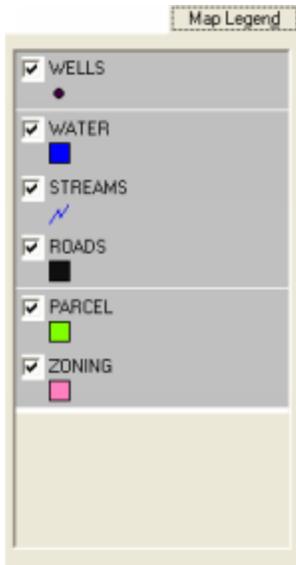
1. Select Selection Color from the pop-up menu.
2. A color selection dialog box will be displayed. Choose the color with which the selected parcel should be displayed and press OK.

### **Crosscheck Database – Map Pop-Up Menu**

The Crosscheck Database function allows you to identify parcels that are in your database but for which there is no corresponding parcel polygon on the map. Conversely, it also identifies parcel polygons on the map for which there is no corresponding record in the database. It presents these parcels in a report. This can be helpful to you or your mapping vendor in identifying mismatches between your assessing database and map file.

### **Map Legend**

The Map Legend Data Access tab displays all of the "layers" (also commonly referred to as "themes") included on your current map.



A layer refers to a single level of geographic data. For instance, your map may consist of a parcels layer, a water layer, and a roads layer. Each of these layers would have its own entry on the map legend, showing the layer's name and the color with which it is displayed on the map. If there are numerous layers on your map, some of the layers may not be visible in the map legend and you can click on the little arrows in the upper right or lower right corners of the legend to scroll up or down within the legend.

## Turning Map Layers On/Off

A layer can be turned on or off by checking or unchecking the check box to the left of the layer's name within the map legend. Turning a layer off will not delete it from the map permanently – it only removes it from the current map display.



## Changing the Order of a Map Layer

If you have more than a single layer in your map, these layers will be added to your map in a certain sequence. The layers added first will be beneath the subsequent layers, both in the map legend and on the map. Since layers on top will cover up the layers beneath them, in some instances you may want to reorder the layers to improve the appearance of your map. For instance, if you have a parcels layer and a roads layer, the parcels layer might cover up the roads layer if the parcels layer is on top. Or perhaps a sewer line layer needs to be on top of the roads layer in order for the sewer lines layer to be visible to the user.

The hierarchy of the layers in the map legend indicates the order in which layers are drawn on the map – layers at the top of the legend will overlay layers at the bottom of the legend on the map.

## **Modifying a Map Layer's Display Properties**

The display properties of a particular layer can be modified in several different ways, from simply assigning it a different color, to generating a thematic map based on values in your assessing data. To modify a layer's display properties, simply double click on the layer name in the map legend to display the Symbol Properties dialog box. In some instances, when you double click on your parcels layer, you will be questioned about refreshing the data, prior to opening the Symbol Properties dialog box. For layers other than the parcels layer, or in situations when your parcel layer is already bound to the parcel data, you will not be prompted to refresh the data and will simply go directly into the Symbol Properties dialog box.

## **Refresh Parcel Map Data**

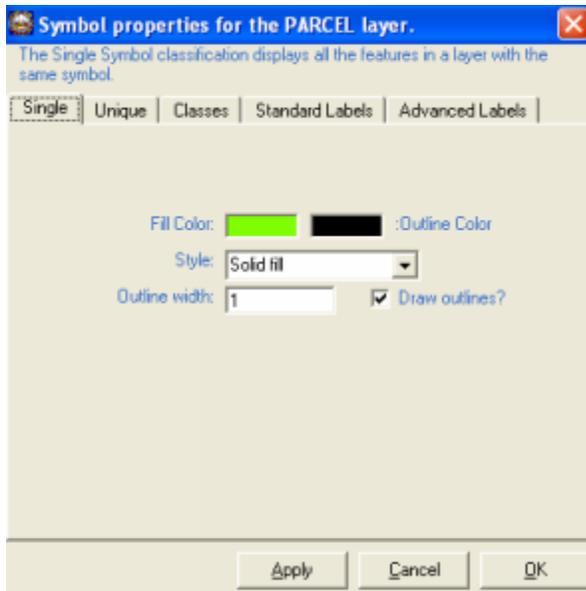
Avitar Assessing can bind the parcels map layer to your assessment data, enabling you to create thematic maps based on your data. However, to improve the speed with which thematic maps are generated and to eliminate any conflicts with other users accessing the assessment data, the maps are bound to a copy of your assessment data. Therefore, when you open the Symbol Properties dialog box by double clicking on the parcels layer, you may be prompted whether you wish to refresh the copy of the assessment data to which your maps will be. The prompt will inform you when the last copy was made and whether you wish to refresh it. If the last copy was made recently or no significant changes affecting the display of the maps have been made since the last time it was refreshed, you can just answer No. Otherwise, you can answer Yes and Avitar Assessing will proceed to create a new copy of the assessment data for generating thematic maps.

## **Map Symbol Properties Dialog Box**

The Symbol Properties dialog box allows you to modify a layer's display properties in five basic ways. These display methods correspond with each of the tabs within the Symbol Properties dialog box.

### **Single Tab – Map Symbol Dialog Box**

The Single tab properties are used to modify the layer's display properties when the layer is being displayed in a single, uniform manner. This is the default method for all layers (e.g. all parcels are green, with black outlines).



**Fill Color** – The Fill Color allows you to select the color with which objects on the layer will be colored. To modify the Fill Color, click on the color box and select a new color from the Color dialog box.

**Outline Color** – The Outline Color allows you to select the color of the layer's outlines. The default is black, but you can select a different color by clicking on the color box and selecting a new color from the Color dialog box.

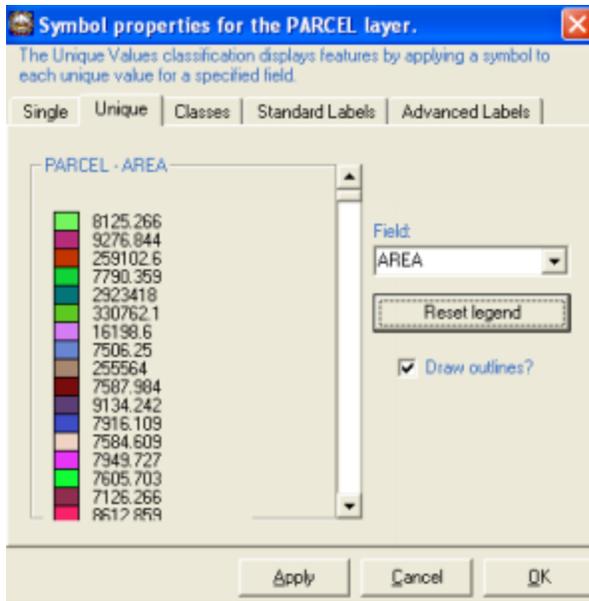
**Style** – You can select a new fill pattern for the layer's symbol using the Style drop-down box. The default style is a solid fill, but the numerous other patterns can be helpful when you are printing in black and white.

**Outline Width** – Outline Width indicates the relative width of the layer's outlines. Higher numbers will create thicker outlines.

**Draw Outlines** – Draw Outlines indicates whether or not the layer's entities should have outlines. Depending upon the layer, its entities may be indistinguishable without outlines (e.g. parcel layers).

## Unique Tab – Map Symbol Dialog Box

The Unique tab property enables you to create thematic maps based on discrete data values. In the case of the parcels theme, the available data comes from your assessment database. With other layers, the data comes from the shapefile itself. (Depending on your shapefiles, this data may or may not be very useful.) You can select the field on which you wish to base your map from the Field drop-down list.



Unique value maps are best when based on fields that have several (less than a few dozen) discrete values. For instance, a Unique value map based on the Zone or Neighborhood value for each parcel would create an informative map, whereas a map based on the Owner or Residence Value field would be of little usefulness. In the latter case, the map would have a distinct color for almost every parcel (parcels owned by the same owner or having the same building value would be the same color) and the legend would have hundreds of entries. Therefore, Avitar Assessing will warn you if the number of unique values exceeds one hundred.

**Field** – The field dropdown list allows you to select the field on which you want to base your unique value map. (Note: Not all of the possible fields will necessarily produce informative unique value maps).

**Reset Legend** – The Reset Legend button creates the unique values map based on the field currently selected in the Field dropdown list.

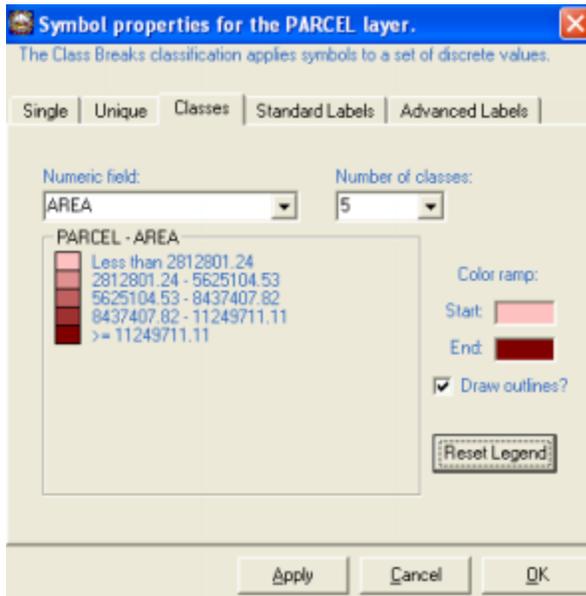
**Draw Outlines** – The Draw Outlines checkbox indicates whether or not the layer objects within unique value areas should have outlines (e.g. should all of the individual parcels within an area identified as Zone 1 have outlines).

**Legend Preview** – The preview grid enables you to see the unique values and associated colors that will be used to create the unique values map. By double clicking on any of the individual color boxes within the legend preview, you can change the color associated with a value prior to creating the map by selecting a new color from the Color dialog box.

## Classes Tab – Map Symbol Dialog Box

The Classes tab properties enables you to create thematic maps based on numeric ranges of data values. In the case of the parcels theme, the available data comes from your assessment database.

With other layers, the data comes from the shapefile itself. You can select the field on which you wish to base your map from the Numeric Field dropdown list.



Class range maps are used to create categories for ranges of values, rather than create a single category for each value. For example, it would be of little use to create a unique values map based on building value – a parcel with a \$100,000 building value would appear differently from a parcel with a \$100,100 building value. However, a class range map will group entities with similar values into a series of ranges, enabling you to move beyond the particulars and display trends.

**Numeric Field** – The Numeric Field dropdown list allows you to select the field on which you want to base your class range map.

**Number of Classes** – The Number of Classes dropdown list enables you to select the number of ranges (from 2 to 12) that Avitar Assessing should create for your class range map.

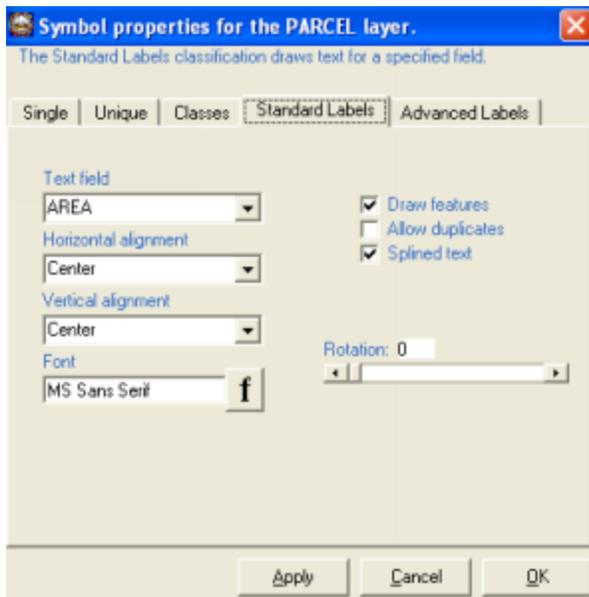
**Color Ramp** – The Color Ramp boxes enable you to set the color scheme Avitar Assessing should use in creating your class range map. The Start color box indicates the color for all objects falling into the lowest range category. To set the color, double click on the Start color box and select the color from the Color dialog box. The End color box indicates the color for all objects falling into the highest range category. Again, to set the color, double click on the color box. Based on the Start and End colors you select, Avitar Assessing will use color shades for the intervening range categories based on the number of classes you choose.

**Draw Outlines** – The Drawing Outlines checkbox indicates whether or not the layer objects within class range areas should have outlines.

**Reset Legend** – The Reset Legend button creates the class range map based on the values you have selected.

## Standard Labels – Map Symbol Dialog Box

The Standard Labels tab enables you to label layer features with a few simple settings.



**Text Field** – The Text Field dropdown list allows you to select the field with which the layer's objects will be labeled.

**Horizontal Alignment** – The Horizontal Alignment dropdown list indicates how the labels should be horizontally justified with respect to the object. For example, with polygon shapes, labels will be placed on the centroid of the object. The Horizontal Alignment indicates which side of the label (left, right, or center) should be aligned with the centroid.

**Vertical Alignment** – The Vertical Alignment dropdown list indicates how the labels should be vertically justified with respect to the object. For example, with polygon shapes, labels will be placed on the centroid of the object. The Vertical Alignment indicates which side of the label (top, bottom, or center) should be aligned with the centroid.

**Font** – The Font dropdown list enables you to select the font with which the layer's objects will be labeled.

**Draw Features** – The Draw Features checkbox indicates whether or not the layer's objects themselves should be drawn, or just the objects' labels.

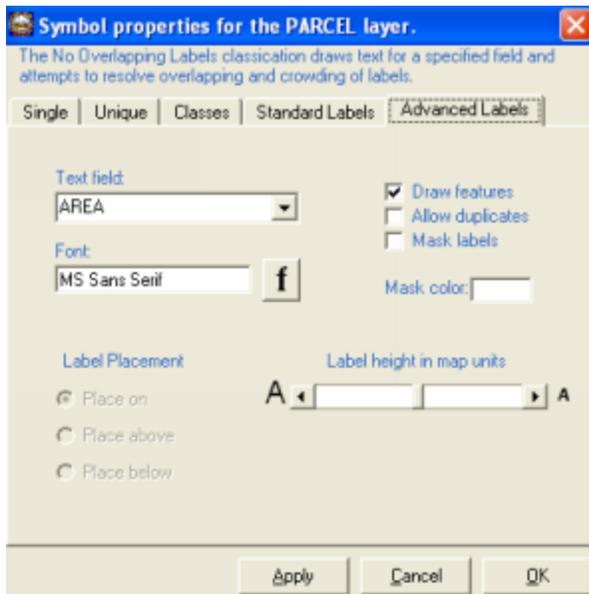
**Allow Duplicates** – The Allow Duplicates checkbox indicates whether or not duplicate labels should be drawn. If not selected, Avitar Assessing will only label one object with a particular label. Otherwise, all objects will be labeled.

**Splined Text** – For layers with line objects (as opposed to polygons or points) labels will be placed along the length of the object. Splining the text will allow the text to follow the twists and turns of the object.

**Rotation** – The Rotation scroll bar enables you to rotate the labels by a given angle.

## Advanced Labels – Map Symbol Dialog Box

The Advanced Label tab enables you to create labels with an attempt to resolve some problems of overcrowding and overlapping often experienced with the standard labels.



**Text Field** – The Text Field dropdown list allows you to select the field with which the layer's objects will be labeled.

**Font** – The Font dropdown list enables you to select the font with which the layer's objects will be labeled.

**Draw Features** – The Draw Features checkbox indicates whether or not the layer's objects themselves should be drawn, or just the objects' labels.

**Allow Duplicates** – The Allow Duplicates checkbox indicates whether or not duplicate labels should be drawn. If not selected, Avitar Assessing will only label one object with a particular label. Otherwise, all objects will be labeled.

**Mask Labels** – The Mask Labels checkbox indicates whether or not the labels should be masked. Masking the label places a rectangle of solid color behind the label which can sometimes make them easier to read.

**Mask Color** – The Mask Color selection indicates the solid color with which labels should be masked. To select a different color, double-click on the color box and choose a new color from the Color dialog box.

**Label Height in Map Units** – Standard Labels will generally appear the same height, regardless of the scale of the map view. By assigning the label height in map units, the height of the labels will stay constant, regardless of the scale of the map view

**Label Placement** – The Label Placement options indicates where, in relation to the labeling point, the labels should be placed.

## Backup Procedures

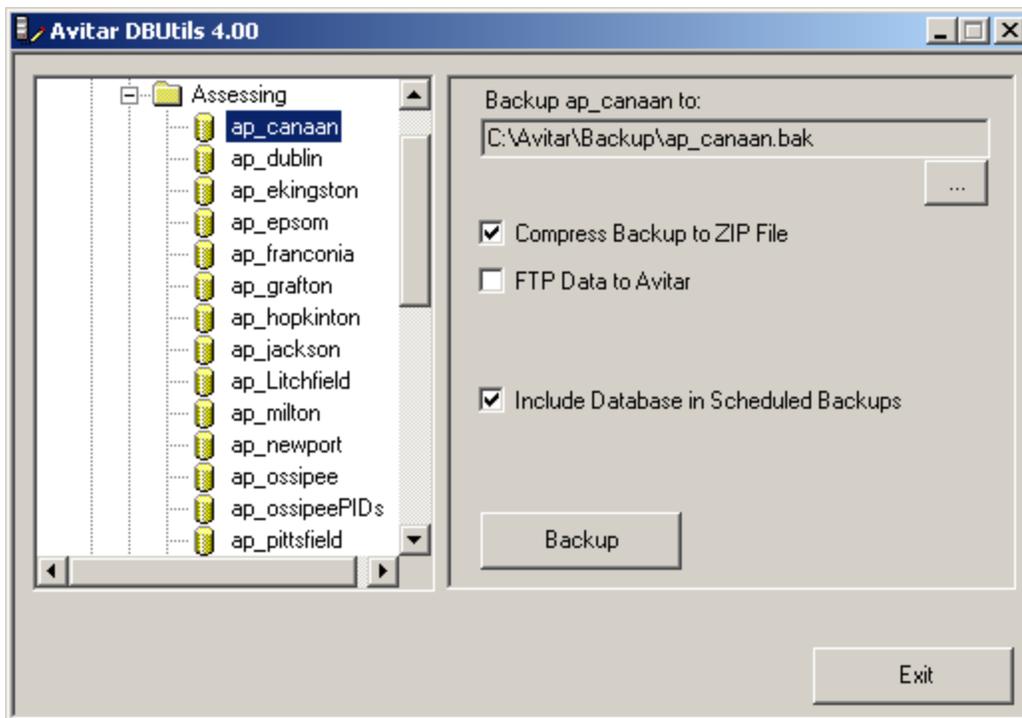
The Avitar Assessing system was designed in what is referred to as “client/server” architecture. Essentially, the system consists of two parts:

1. The client application that you use everyday to view and update parcel records.
2. The server application that runs behind the scenes and makes the data available to the client application. If your town only has the Avitar Assessing application installed on one computer, then that computer is fulfilling both roles, that of client and the server. If your town has several computers which can all access the assessment data, then you have a single server and multiple clients.

## Server Application

This method is used to create a backup using DBUtils while standing at the server computer. You will also need to run an initial backup to save the settings for scheduling a Windows Scheduled Task.

Highlight the ap\_townname database you wish to backup. Choose the browse button (...) and navigate to the appropriate backup folder and name the file (e.g. ap\_townname.bak). You can choose to check the box “Compress Backup to ZIP File” if you would like to compress the backup.



Press the Backup button to create the backup file. This method creates a single backup file and must be initiated manually.

## **Scheduling Automated Backups on the Server**

This method is used to schedule backups for one or more databases using DBUtils and DBUtilsScheduled. Again, this is performed on the server. You will first need to run an initial manual backup using DBUtils as outlined above to save the settings for a scheduled backup for each database. When doing so, make sure to check the box to Include Database in Scheduled Backups and once you press Backup make certain to indicate you wish to save the settings for use with the scheduled backups.

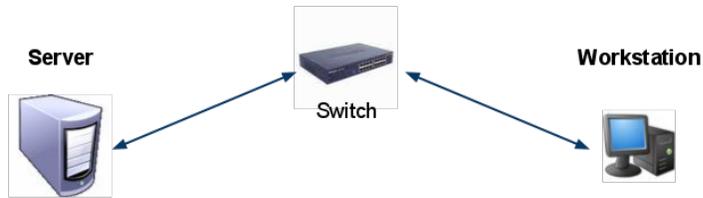
Once you have configured the settings for each database you wish to include in the scheduled backup, you will need to add DBUtilsScheduled.exe (located in the C:\Program Files\Civicware folder as a Windows Scheduled Task. DBUtilsScheduled uses the settings configured within DBUtils to create backups without the need for user input.

For information on creating a Windows Scheduled Task refer to <http://support.microsoft.com/kb/308569>

## **Workstation Settings**

By initially configuring these settings, you can allow users (who may not have access to the server) to perform their own backups of the data from within the application on their workstation to a location on the user's computer. This is often helpful to allow users to create their own backups before undertaking significant operations such as warrant calculations or lien executions. Essentially, in this method the application requests SQL Server to create a backup file in a predetermined folder on the server from which the application can then retrieve the backup file to the workstation.

The following schematic depicts the settings outlined below in more detail:



**SQL/SQL Express**

**Avitar Application**

e.g. Assessing, Collect, Clerk, etc.



**DBUtils Configuration**

**Database Backup Directory Configuration**

*Used to set "Remote Backup Location..." to physical location on server.*

*Must be set to point to same logical location selected on server.*



e.g. "c:\Avitar\Data\Backups\Remote"

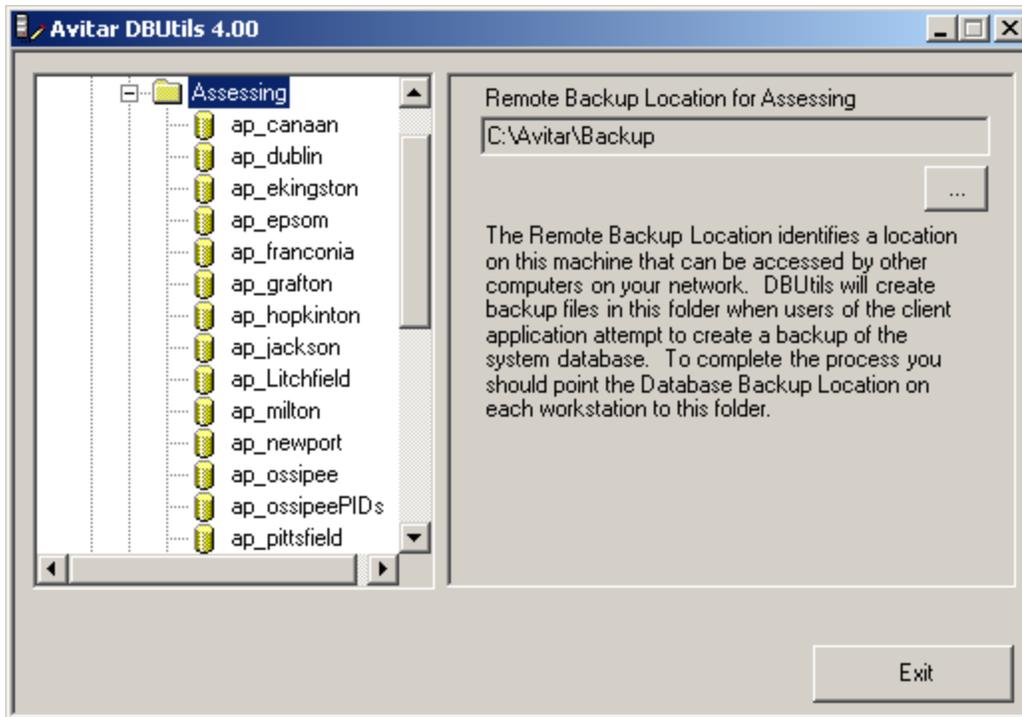
e.g. "m:\Remote" where m: was mapped to "\\Server\c\$\Avitar\Data\Backups"

*Windows user on workstation must have full access to at least "Remote" folder.*

*Assumes Windows user on workstation can access location on server (via either UNC or mapped drive).*

You will need to create a shared directory on the server which is accessible by all workstations and users. We recommend C:\Avitar\Backup\Remote for the directory on the server. In order for the backup to work from the application, users must have permission to create and delete a file in this directory.

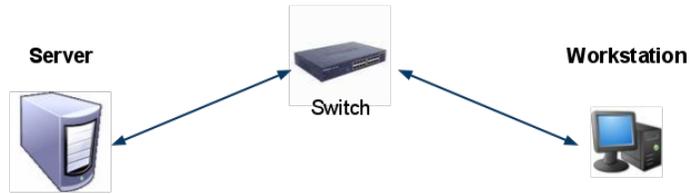
To do so, open DBUtils and select the Assessing folder. If no remote backup location is set, select the browse button (...) and navigate to the appropriate remote backup folder on the server. Once you have selected the folder press the "OK" button. Repeat these steps for the other folders such as Collect or Clerk that apply to the town.



Once you have identified the shared location in DBUtils in which SQL Server will create backup files, you will have to set the corresponding backup location in the application as well:

- Navigate to **Utilities | System Options | System Settings** and press the browse button (“...”) adjacent to the Database Backup Directory text box. A message box may indicate the network path currently configured to point from the workstation to the folder identified on the server as the Remote Backup Location. (Note this path should identify a location on the server using a path relative to the workstation.) Choose Yes if you wish to proceed with selecting a new location. The Server Backup Device Location message box will indicate if the Remote Backup Location has been set on the server using DBUtils. (Note this path identifies a location on the server using a path relative to the server itself – this path will be different from the perspective of the workstation.) Press OK on the message box and browse to locate the appropriate remote backup folder location on the server relative to the workstation.

Once the configurations have been made on the server and the workstation, the user can create a backup on their own workstation by selecting **File | Backup Database** from within the program. Review the following schematic to better understand the sequence of events necessary during a backup from the workstation.



1. *User initiates backup from application...*
2. *... SQL Server creates backup to local file...  
(as indicated by DBUtils "Remote Backup Location")*
3. *... creation of backup file on server is completed  
(e.g. file "c:\Avatar\Data\Backups\Remote\assess.bak") ...*
4. *... SQL Server responds to application that creation  
of assess.bak file is complete...*
5. *... application copies assess.bak from "m:  
\Remote" location (physically located on server) as  
indicated by "Database Backup Directory" and  
compresses to local zip file...*
6. *... application creates local zip file  
(e.g. "c:\mybackups\assess.zip") ...*
7. *... application deletes assess.bak from  
"m:\Remote" folder.*