Mosaic Property Tax Equalization

REFERENCE GUIDE-Version 1.0

NH Mosaic Parcel Map

Contents

REFERENCE GUIDE-Version 1.0 1
Contacts 4
Department of Revenue Administration (DRA) 4
Technology Transfer Center 4
Equalization General Information 5
Overview of Property Tax Equalization Process 5
Data Abstraction 5
Equalization Year 5
Data Streams 6
Municipal Validation Process 6
DRA Validation Process and Questions 7
Ratio Studies 7
New Equalization System 7
Background 7
Basic Information 7
User Structure 7
Program Functions 7
Verification of Real Estate Transactions (Verify) 8
Verification Step 1-Select a Transaction 9
Verification Step 2-Assigning a CAMA Record 10
Verification Step 3-Verify CAMA Information, Include or Exclude 11
Verification Step 4-Review and Document Attachment 12
Questions 12
Ratio Studio 14
Creating a Ratio Study 14
Viewing an Existing Ratio Study 15
Reports 16
Settings 17
Managing Town Users 17
Managing existing users: 18
Adding a New User 18

Utilities 19

Contacts

Department of Revenue Administration (DRA)

Stephan Hamilton-Director of Property Appraisal
Phone: (603) 230-5960
Email: stephan.hamilton@rev.state.nh.us

David Cornell-Assistant Director of Property Appraisal
Phone: (603) 230-5970
Email: David.Cornell @rev.state.nh.us

Josephine Belville-Property Appraisal Field Supervisor
Phone: (603) 419-0525
Email: Josephine.Belville@rev.state.nh.us

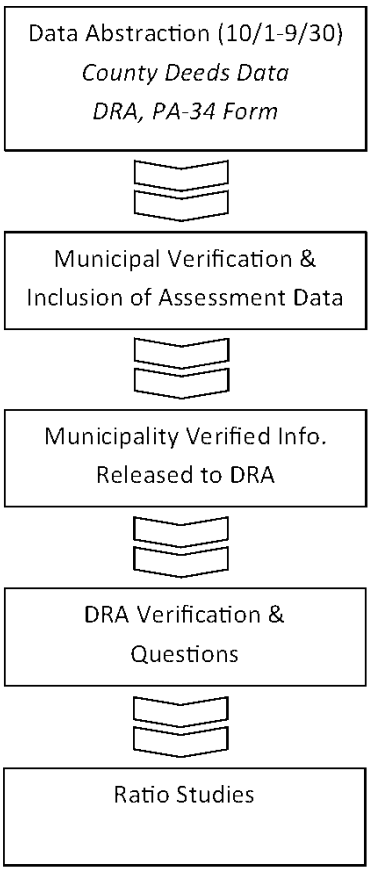
Technology Transfer Center

David Salzer-Project Manager
Phone: (603) 862-3114
Email: dsalzer@unh.edu

Patrick Santoso-Equalization Manager
Phone: (603) 862-4209
Email: psantoso@unh.edu

Equalization General Information

Overview of Property Tax Equalization Process



Data Abstraction

Equalization Year

The equalization year is from October 1st of the prior year to September 30th of the current year in accordance with RSA 21-J:9-a I. For example: The 2006 equalization year is October 1, 2005, to September 30, 2006.

RSA 21-J:9-a III (b) allows the DRA to include arm's length sales for a period of up to 2 ½ years prior to April 1st of the year for which the equalization study is being conducted. This would generally occur when sample sizes are small or it can be determined that the sales are unrepresentative of the property within the municipality.

The sales will be added in six month increments until at least 20 valid sales are available to conduct the ratio study for the municipality.

Data Streams

For the new Equalization system, the data streams that feed the process are being abstracted electronically, directly from the source.

Real Estate Transaction Information

Real estate transaction information is obtained directly from the 10 County Registries of Deeds on a nightly basis. Data abstracted from the registry includes:

- Grantor
- Grantee
- Deed Type
- Recording Date
- Book and Page Numbers
- Tax Stamp Amount

Supplemental Real Estate Transaction Information

Supplemental information about real estate transaction is abstracted from the DRA PA-34 form which must be filed by the purchaser of real estate. Data abstracted from the registry includes:

- Property address
- Parcel Identification Number
- Grantor
- Grantee
- Book and Page Numbers
- Fair Market Value Indicator

Municipal Computer Assisted Mass Appraisal Data (CAMA)

Municipal CAMA data is supplied by the municipalities themselves. CAMA data collected as part of the Mosaic Parcel Map Project is incorporated into the system. Municipalities that provide CAMA data to the Mosaic do not need to supply additional CAMA exports for Equalization.

Municipal Validation Process

The municipal validation process ensures that the information being abstracted from the Counties and PA-34 is correct. This is also the point where information from the municipal CAMA system is associated with a transaction. The municipal validation process is the core of the Equalization process, without this step, accurate ratio studies would not be possible.

DRA Validation Process and Questions

Following the release of municipal verified data to DRA, the information is reviewed by Property Appraisal staff to ensure accuracy. At this point DRA staff will provide questions to the municipality to clarify any issues with a particular transaction(s).

Ratio Studies

Following successful completion of the municipal and DRA verification processes, a final ratio study is produced by DRA.

New Equalization System

Background

For the past 12 years the DRA has contracted with Real Data Corporation (RDC) to provide a web based tool for the validation of real estate transactions. After many successful years with this process, DRA made the decision to build their own Equalization system as part of the *Granite to Green Modernization Project*. The intent was for the new system to be built on a foundation of automated, electronic data streams and be directly connected to the Mosaic Parcel Map System. In 2010 DRA partnered with the UNH Technology Transfer Center (T2) to build the new Property Tax Equalization System. The goal was to develop a system that produced the same results as the old system, but with a much improved interface and added functionality.

Basic Information

The new Equalization System is a web-based software platform that is available to municipal officials 24/7. The software requires that users have an internet connection and a web browser for access. The program is managed by DRA, DoIT and in the near term T2.

User Structure

The new system allows for multiple users inside of a single municipality to work on the system simultaneously. To accommodate this, the system has different levels of users. Each municipality will have an administrative account provided to them by DRA. Administrative accounts have full access to all municipal functions, additionally Administrators can create sub-accounts. The sub-accounts (user accounts) are intended for municipal personal whom are not the administrators. Administrators can limit the access to functions for sub-accounts.

Program Functions

The Equalization System has six (6) major functions:

1. Verification of Real Estate Transactions (VERIFY)-This is where the majority of functionality in the system resides. Municipal users can verify and added assessment data to real estate transactions in a wizardized, four (4) step process.

2. Questions Interface (QUESTIONS)-Interface for municipalities to respond to DRA questions on real

estate transactions. *Note: When the green notice "Pending Questions Available" is displayed, new questions have been posed to the user.*

3. Ratio Studies (RATIO STUDIO)-Location where users can perform Ratio Studies and view results.

4. Reporting Interface (REPORTS)-Location where all reports can be viewed from. *Note: reports can be downloaded as PDF, MS Word and MS Excel.*

5. Settings (SETTINGS AND PROPERTY CODES)-Location where users can enter general information about the municipality. Municipal Administrative users can create subaccounts from this location.

6. Utilities Interface (UTILITIES)-Location where users can upload municipal CAMA files

The six (6) major program functions can be found on the home screen. Users are automatically taken to the home screen upon successful login to the system.

Verification of Real Estate Transactions (Verify)

The verification process is broken down into four basic steps:

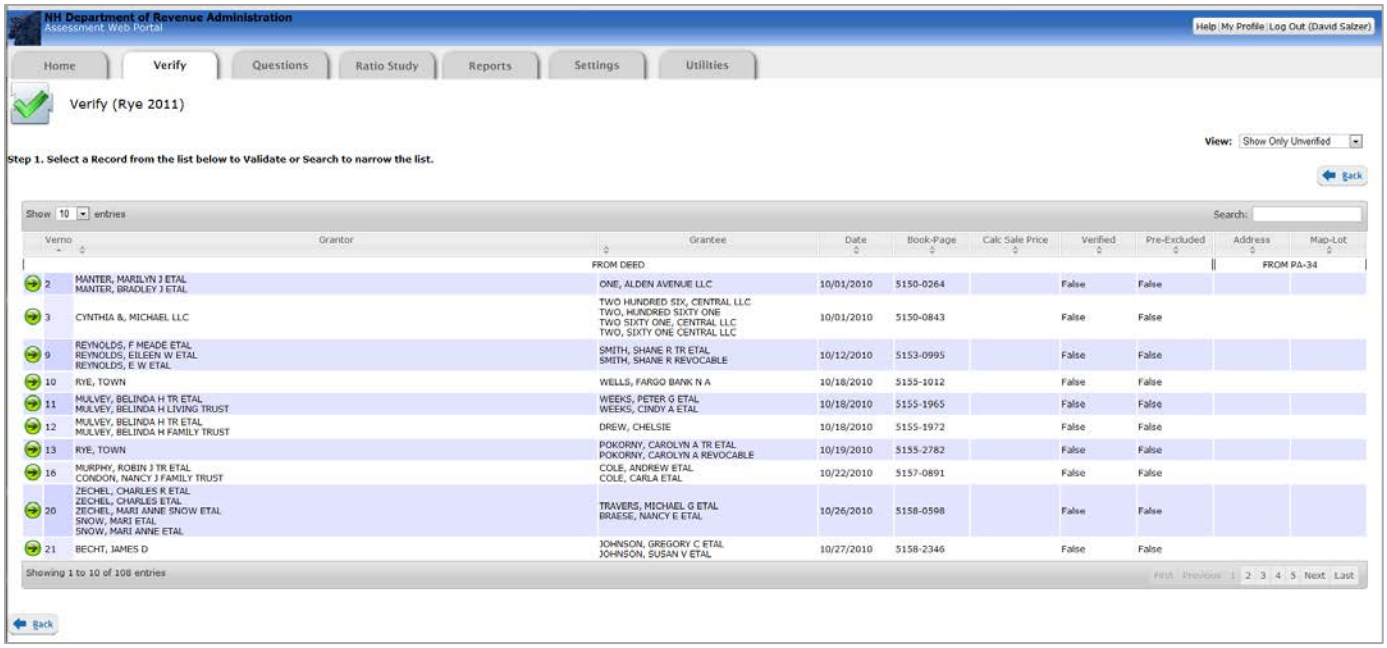
1. Select a real estate transaction to verify
2. Assign a CAMA record to the transaction
3. Verify CAMA information, include or exclude sale
4. Review and document attachment

These four steps quickly and logically take the municipal user through the entire process of record verification. Once the user finishes the four step process sales are placed in a "holding bin". Once in the

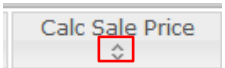
"bin" they can be edited by the municipality. Once the sales are completed municipal users can "empty the holding bin", thereby releasing sales to DRA.

Verification Step 1-Select a Transaction

Verification Step 1 is the initial process in verifying real estate transaction records. All transaction to be verified by the municipality are displayed in Verno order. Basic information is presented from the County Registry of Deeds Grantor/Grantee Index and PA-34 forms (when available). To select a record to validate click the green arrow button to the left of each record.



Sorting Columns-Columns are sortable in ascending and descending order by selecting the arrows at the top of each field.



Searching for Records-The search field in the upper right hand corner will query all records for the criteria entered. It is not necessary to qualify your search with the type of item you are searching on. For example: To search by "Book & Page" simply begin entering the value in the search bar, and results will automatically come up based on what is entered.

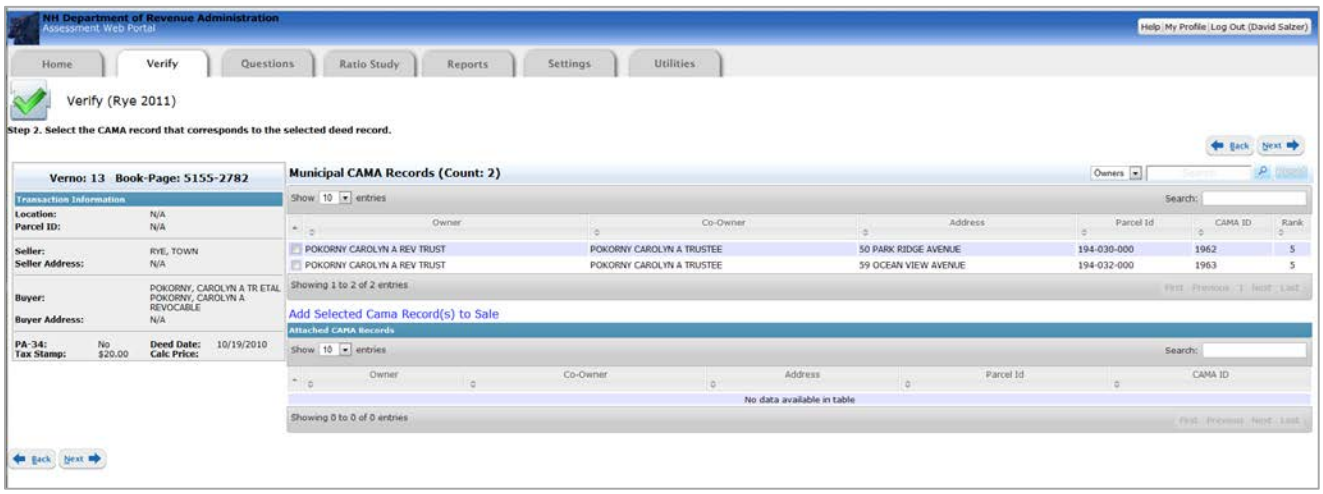
Changing Views-In addition to records ready for verification, users can view "Verified Records" or "Pre-excluded records".

Note: Sales are pre-excluded if they have no consideration or minimum consideration. Additionally the following deed types are pre-excluded: CEM DEED,COLL DEED,COMMISNRS DEED,CON EASE,CONFIRM DEED,CONFIRM DEED ETC,CONFIRM FORECLOSE,CONFIRM QUIT,CONSRVATN EASEMENT,CORR

DEED,CORR FID DEED ETC,CORR FORECLOSE,CORR MFG HOUSING,CORR QUIT,CORR QUIT ETC,CORR QUITCLAIM,CORR WTY,CORRECT QUITCLAIM,CORRECT WARRANTY,DEED RELEASE,DEED/UN MTGE,EASE,EASEMENT,EASEMENT & AGREE,EASEMENT AGRT,EASEMENT DECLARATN,EASEMENT ETC,EASEMENT RELEASE,EXR DEED,FID & QUIT,FID & QUIT ETC,FID DEED,FID DEED ETC,FIDUCIARY,FORCLSRE,FORE DEED,FORECLOSE,FORECLOSE ETC,LICENSE,NOTICE CONDEMN,NOTICE LEASE,NOTICE OF LEASE,NOTICE OF TRANSFER,R OF WAY,REFUND NOTICE,REL DEED,RELEASE DEED,R ELEASE EASEMENT,RELEASE R O W,REVENUE NOTICE,RIGHT & EASEMENT,SELECTMAN DEED,TAX DEED, TAX LIEN,TAX REDMT,TR DEED,TRUSTEES DEED.

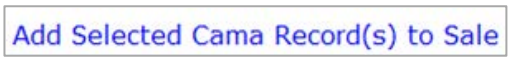
Verification Step 2-Assigning a CAMA Record

Verification Step 2 is the process of correlating the real estate transaction to a specific record(s) in the municipalities CAMA data. This process allows the system to prepopulate CAMA and land use code information in the next step.

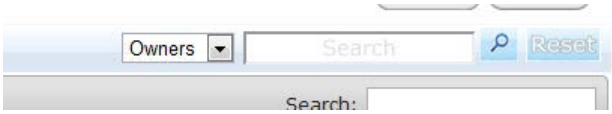


CAMA Matching-The system uses a series of algorithms to find the best possible match for the transaction in the CAMA database. Matches are ranked in the rightmost column. To select a CAMA record, simply select the checkbox to the left of the record and select the next button.

Selecting Multiple CAMA Records-To select multiple CAMA records for a multi-parcel sale select the desired records by clicking the checkboxes to the left of each record. Then click the blue text below the CAMA records screen that reads "Add selected Cama Record(s) to Sale". The records will appear in the panel below. When the correct records have been chosen select the next button.

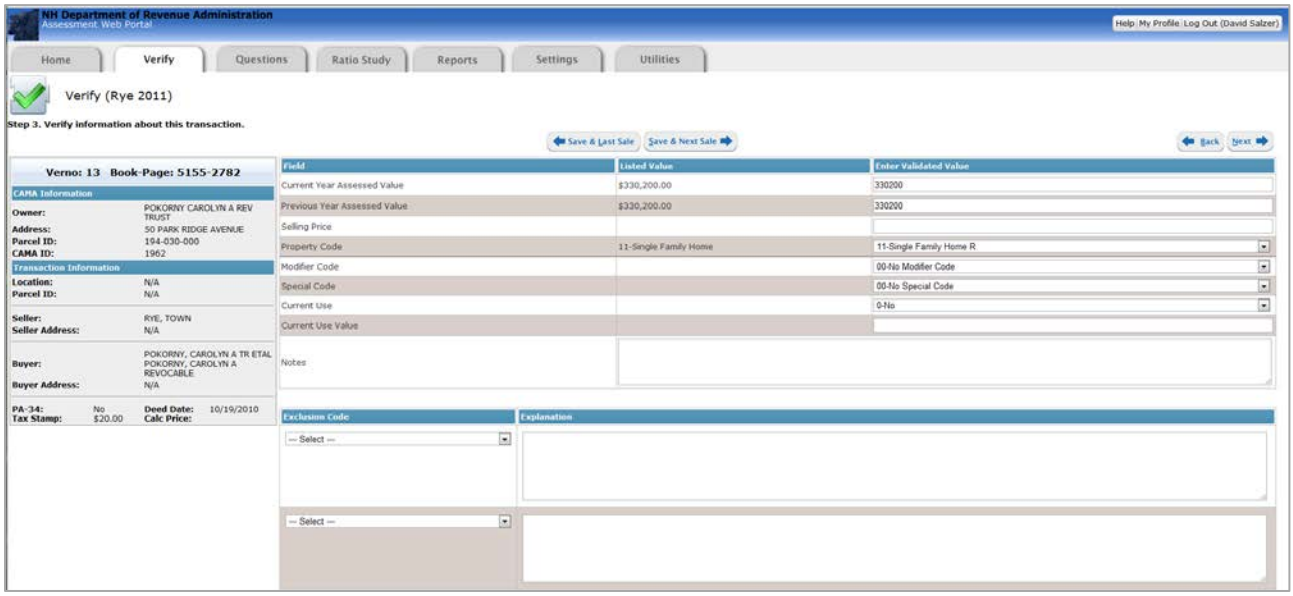


Manually Locating a CAMA Record-If the correct CAMA record does not appear in the table, users can search by either the *Owners Name* or *Address* in the search bar at the top of the screen.



Verification Step 3-Verify CAMA Information, Include or Exclude

Verification Step 3 allows users to enter critical information about the property; Assessed Value (current and previous year), Selling Price, Land Use Code(s) and Current Use information. Additionally users can make notes about the sale. Values displayed on this page are pre-populated from deed and CAMA information. Users can overwrite any values that are pre-populated. Once all information about the sale has been entered and exclusion codes have been selected (if applicable) select the next button.



Exclusion Codes-Users have the ability to add up to two exclusion codes for each transaction. Some codes require explanations, if one of these codes is selected and additional comments are not added the system will not allow the user to move forward with the process.

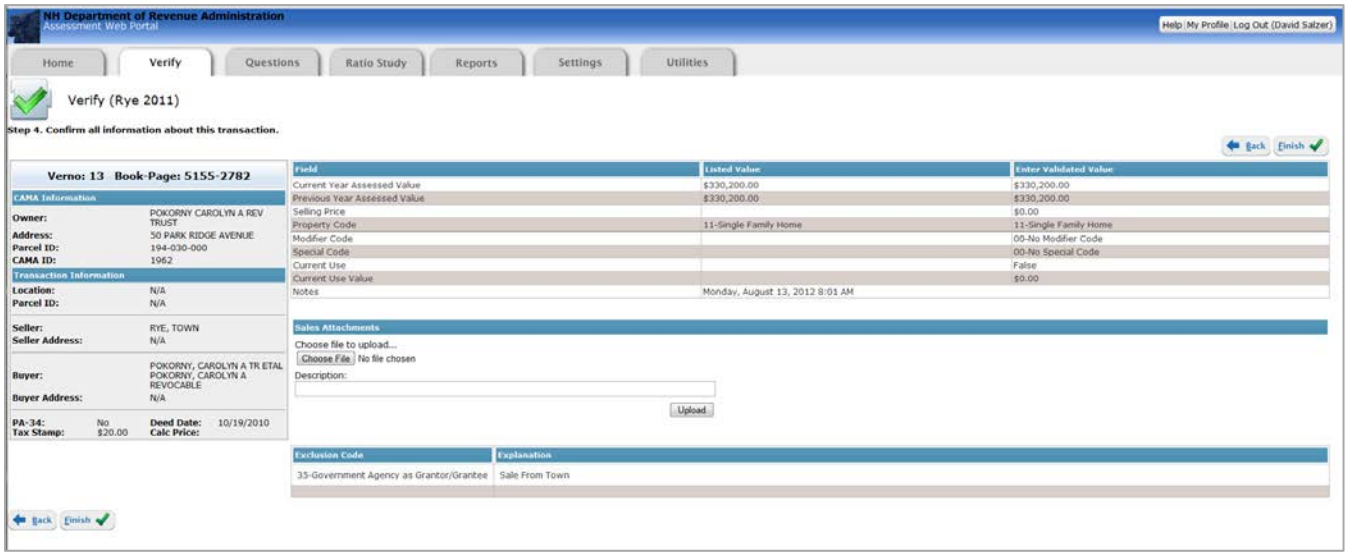
Note: The following exclusion codes require an explanation; 21, 25, 47, 52, 56, 66, 67, 68, 69, 70, 77, 89, 99.

Multi Parcel Sales-If a multi parcel sale the assessed value displayed will be a summation if the selected CAMA records.

Note: The selling price is back calculated from the Tax Stamp Amount provided by the County Registry. The value provided is rounded to the nearest dollar; therefore any calculations based on that value might deviate slightly from the actual selling price.

Verification Step 4-Review and Document Attachment

Verification Step 4 allows users review the information that has been entered about the transaction and provides an opportunity for the attachment of documents and photos. If the users has no attachments, simply review the information and select Finish to return to *Validation Step 1*. Selecting Finish will place the validated record in the "Bin" which means it can be opened and re-edited. Sales in the bin cannot be reviewed by DRA.

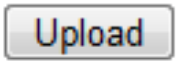


Attaching Documents and Photos-To attach documents and photos:

1. "Choose File" button which will allow users to browse there computer for the desired file.

2. After browsing for the correct file and selecting "open" the file name will appear to the right of the "Choose File" button.

3. Provide a short description of the file you are uploading. Please note that files cannot be uploaded without a description.

4. Select the upload button to complete the process. 

Questions

The Questions Interface was designed as a tool for DRA and municipalities to correspond about specific transactions. This section of the program works much like a message board. A notification in green on the home screen stating "Pending Questions Available" will be visible if DRA has posed questions to the municipality regarding certain vernos. To view the questions users can select the Questions button or tab to go to the Questions Home Screen.

By default questions are minimized. To expand a questions select on the green plus sign to the far left of each record.

After expanding the record, the questions posed by DRA will be visible. To respond simply select the "Add Reply" link on the bottom right of the question.

Jump to Sales Information-To view the data about the sale select the "Sale Record" link in blue on the far right of the record.

Mark as Unread-To leave the question in an "unread" status, select the "Mark as Unread" button at the bottom right of the record.

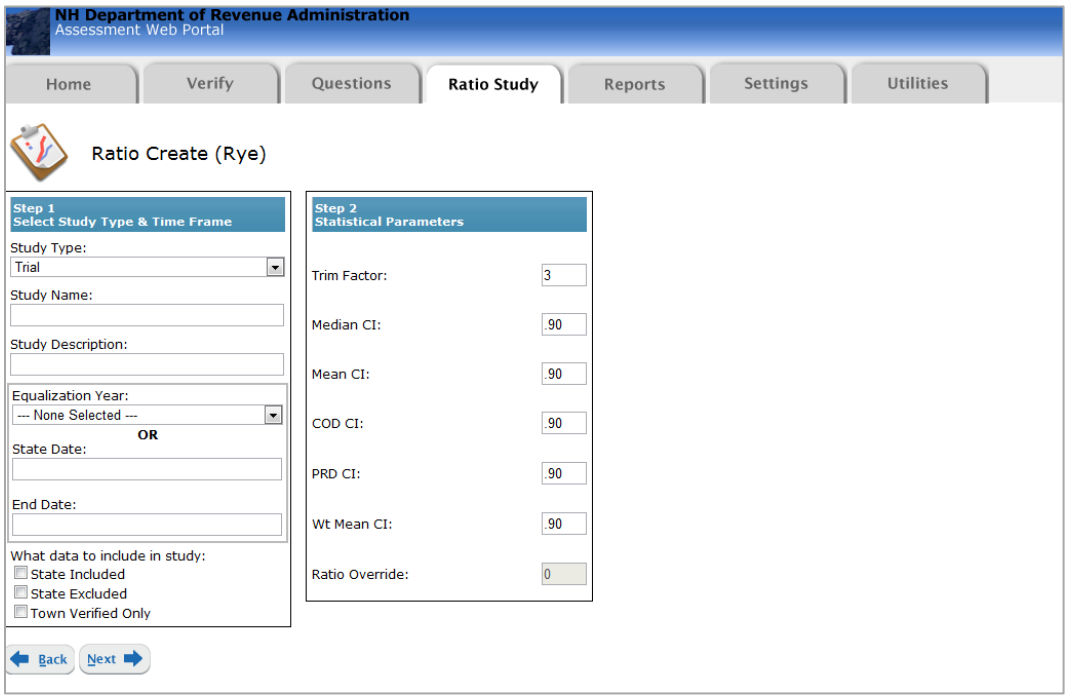
Question Status- Questions can have two different types of statuses; Pending and Complete. A pending status means that DRA has not concurred that the question has been answered fully. Once a question is answered to DRA's satisfaction they will change the status to Complete.

Ratio Studio

The Ratio Studio is the location where users can create and view the results of ratio studies. After selecting the Ratio Studio button or tab users will be presented with two options; *Create a Ratio Study* or *View the Results of an Existing Study*.

Creating a Ratio Study

When creating a ratio study users are presented with numerous options. Once the options have been chosen, select the Next button.



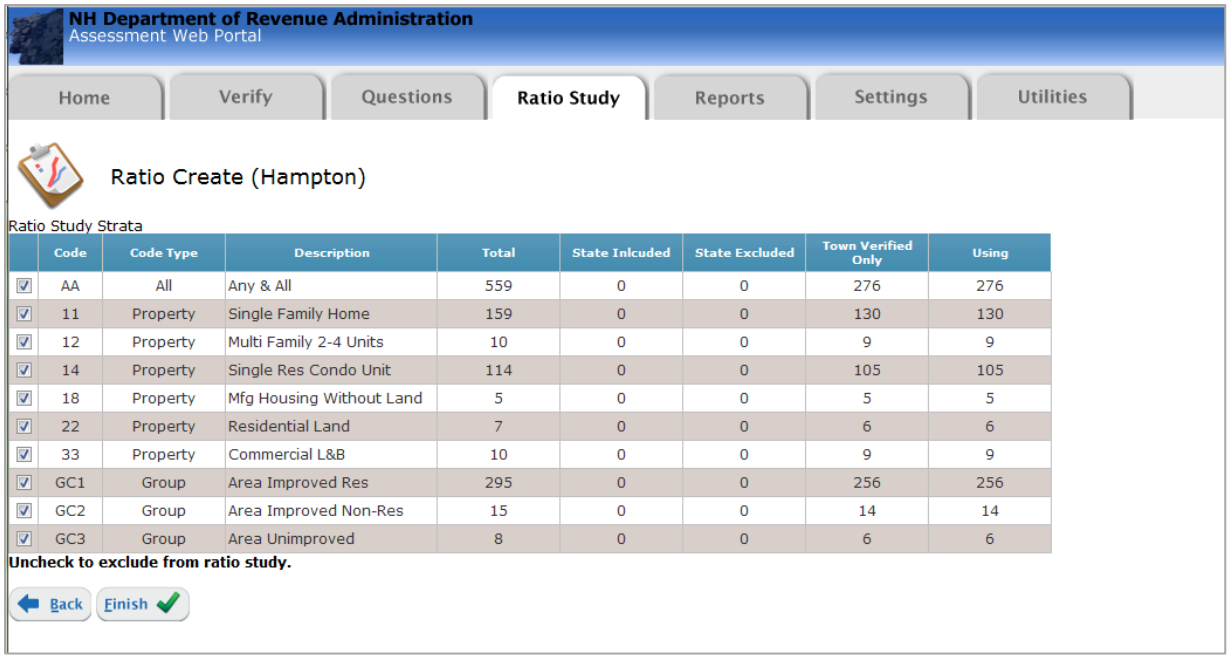
Study Type-This is either a "Trial" or "Scratch". There is no true difference between the types of studies. The monikers are provided as an indicator to the user weather the study has validity or not.

Study Name-The desired name for the Ratio Study.

Study Description-A brief description of the Ratio Study.

Study Time Range-Users can either select a full Equalization year (10/1-9/30) or define a *Start* and *End date* for the study.

Following the selection of Ratio Study parameters, users are brought to the "Strata Screen". The strata screen provides users with the opportunity to select which specific property Strata's they would like included in the study.



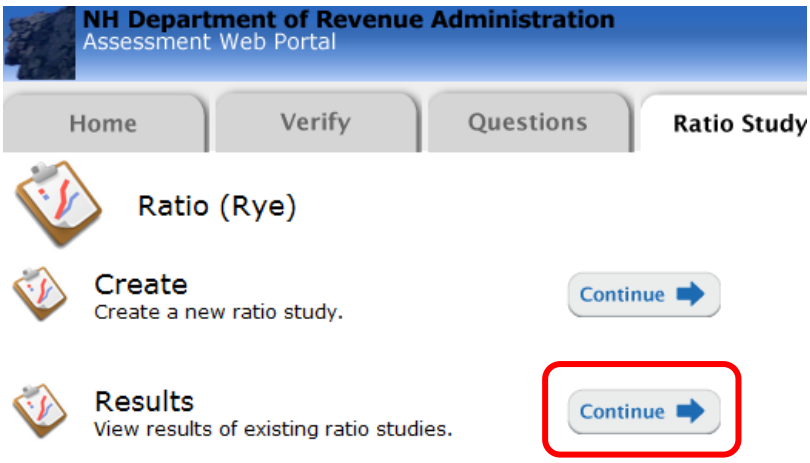
	Code	Code Type	Description	Total	State Inlcuded	State Excluded	Town Verified Only	Using
☑	AA	All	Any & All	559	0	0	276	276
☑	11	Property	Single Family Home	159	0	0	130	130
☑	12	Property	Multi Family 2-4 Units	10	0	0	9	9
☑	14	Property	Single Res Condo Unit	114	0	0	105	105
☑	18	Property	Mfg Housing Without Land	5	0	0	5	5
☑	22	Property	Residential Land	7	0	0	6	6
☑	33	Property	Commercial L&B	10	0	0	9	9
☑	GC1	Group	Area Improved Res	295	0	0	256	256
☑	GC2	Group	Area Improved Non-Res	15	0	0	14	14
☑	GC3	Group	Area Unimproved	8	0	0	6	6

By default, all strata are selected for the ratio study. To deselect strata, select the checkbox on the far left of the table. Once the correct strata have been chosen, select the *Finish* button to run the study.

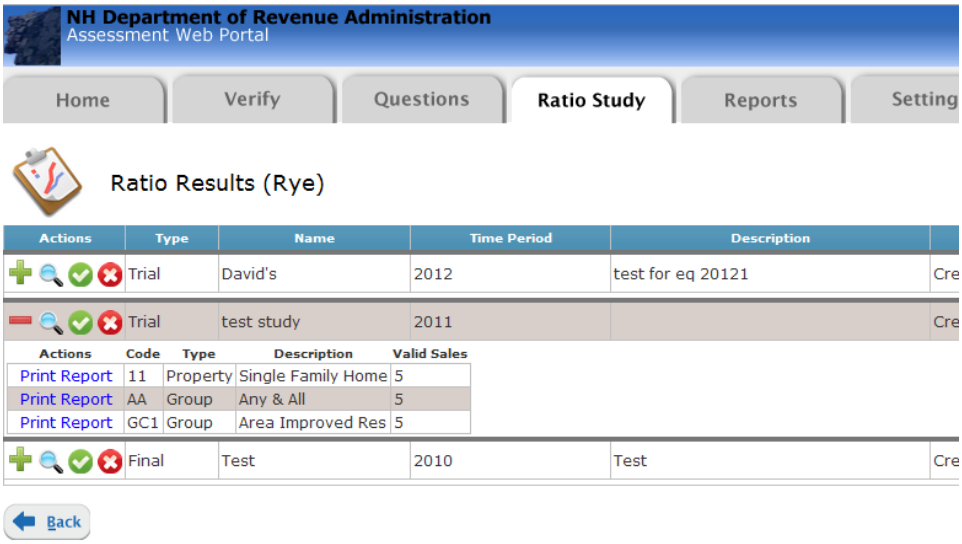
Clicking finish will put the ratio study in the queue for processing and move you to the ratio study results page automatically. Because each strata requires 20,000+ iterations it may take up to 5 minutes to complete your ratio study. You will be notified via e-mail when your ratio study is complete. Alternately just refresh on the ratio study results page by pressing F5 every few minutes until your results appear. In the event that your results do not appear please contact T2 to see if there was an error in processing.

Viewing an Existing Ratio Study

To view an existing ratio study click the ratio study tab and select the continue button to the right of results:

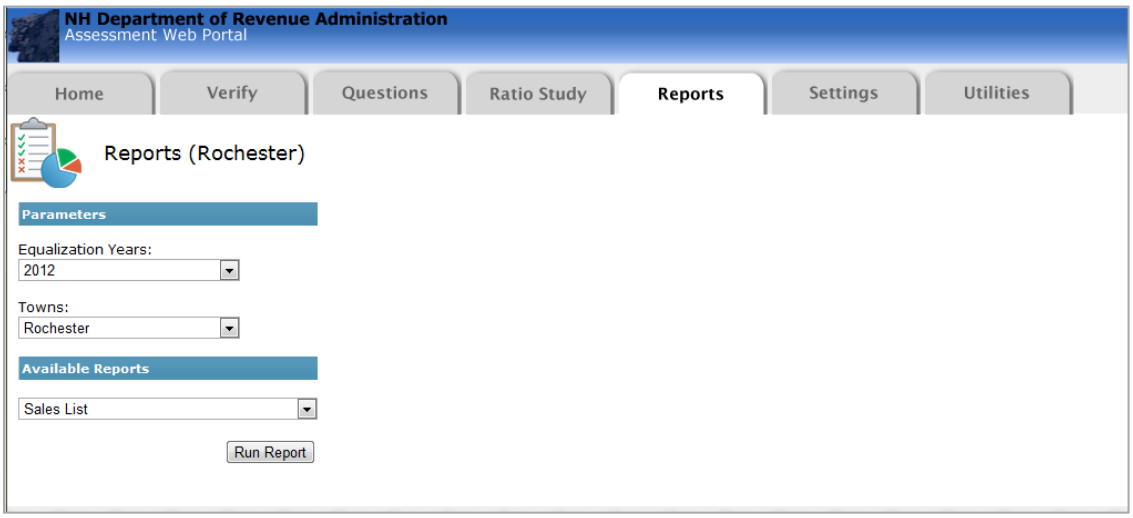


From here you will see all available studies in the results screen. Simply click on the green plus to expand the study and "Print Report to view the report for each strata. Clicking on the magnifying glass will expand

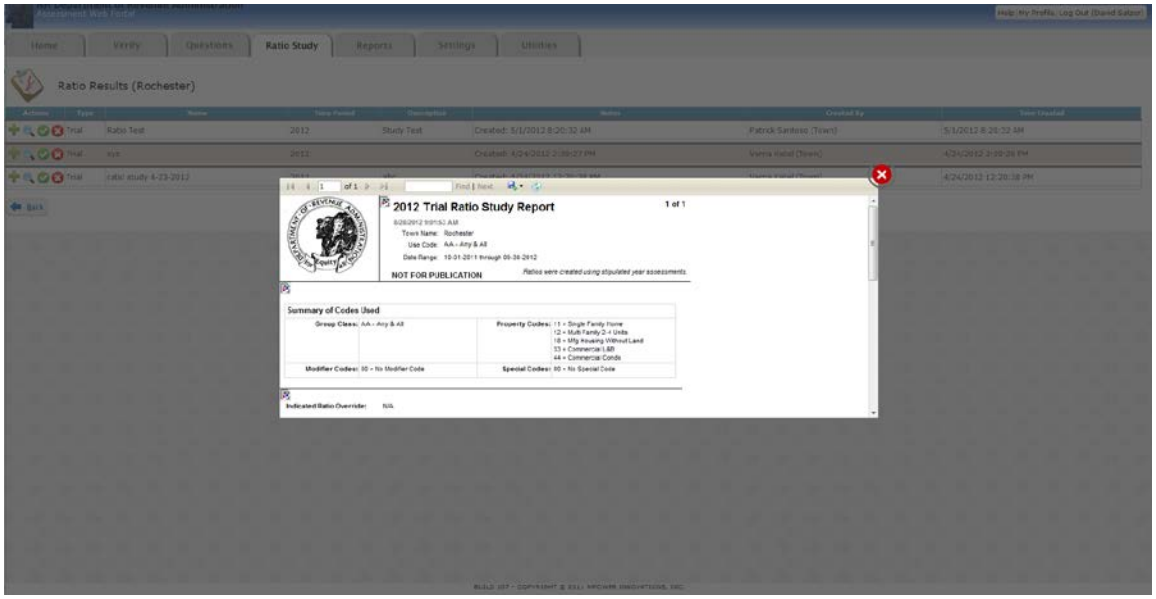


Reports

The reports section of the program is where all data can be exported into reports that can be saved as a PDF, MS Excel or MS Word. To go to the Reports Home users can select the Reports button or tab.



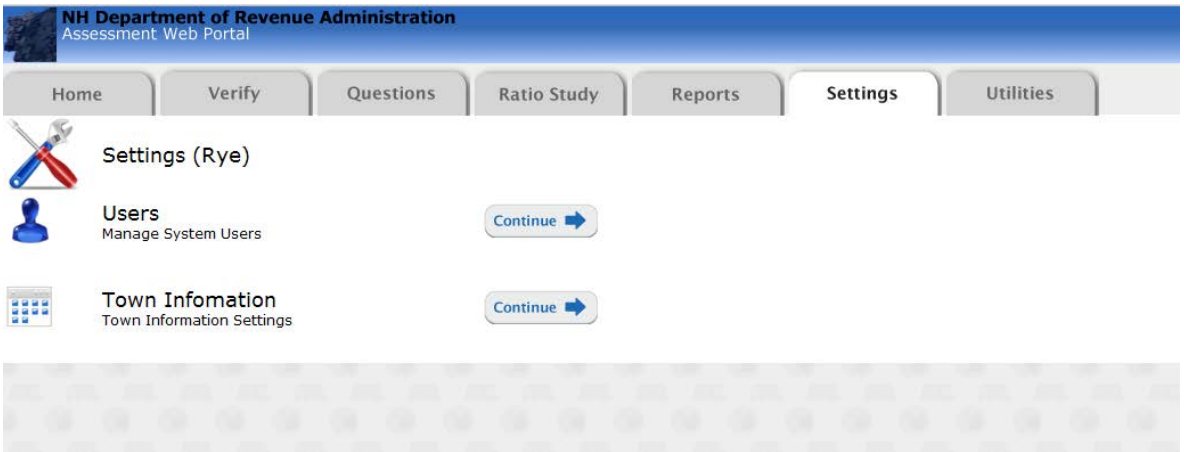
Municipal users cannot select different Equalization Years of Municipalities. The only available option for municipal users is to select the desired report. Note: When selecting a ratio study report, users will be re-directed to the Ratio Study Home to view results. All reports will open in a modal (black out) window.



Users can view the report in the modal window, and export by selecting the Disc key at the top of the report. After selecting the button the option for export to PDF, Excel or Word will be displayed. To close the report select the red circle with a white "X" in the upper right hand corner.

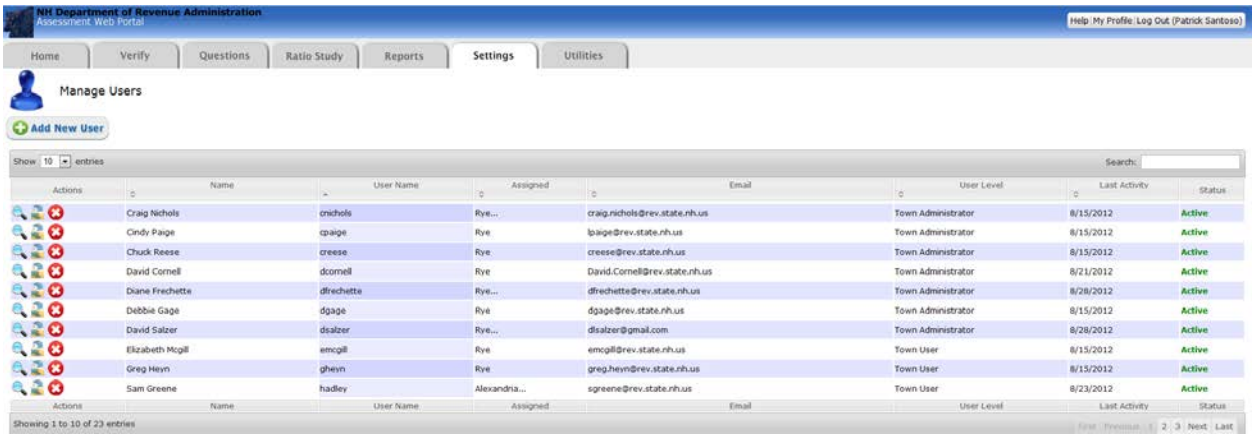
Settings

The settings tab is where new town users may be added. It is also is where towns are required to annually update their town information.



Managing Town Users

To begin click continue to the right of the user's label. You will now be looking at a list of all users which have access to your town. You should see your DRA monitor listed as an active town user as well. This is so they may assist you with the Equalization process as needed.



Managing existing users:

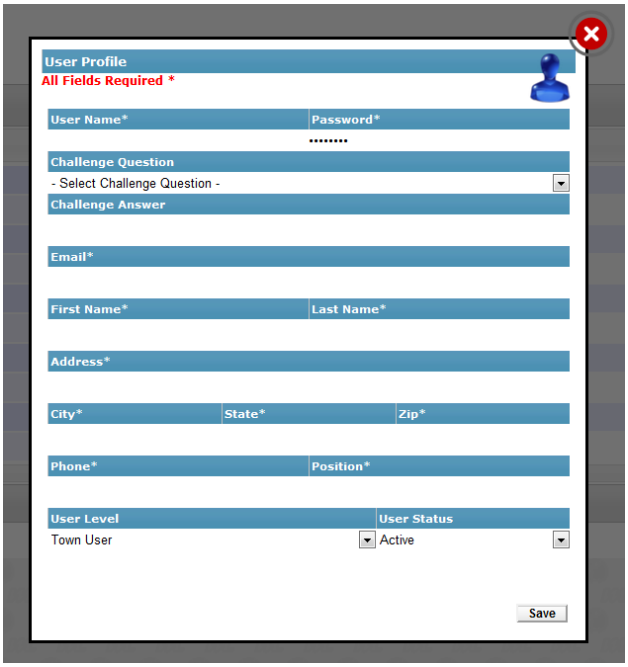
- Users use the icons to the left of the user's name to edit the user settings
- To Modify a user's information click the magnifying glass and make edits as appropriate
- To delete the user click the red X
- To reset the users password click the lock with arrows icon. *Note: this will send an e-mail to the user with their current password.*
- *Note: You may switch a town user's status to inactive to restrict them from accessing the system, but saving their user account to be reactivated at a later time.*

Adding a New User

DRA will provide you with a town administrator account which is capable of creating additional town accounts. You may add users as appropriate to give your staff the required access.

User Levels: Town administrators within the program may upload CAMA data and create additional users. Town users may not upload CAMA data or create new users.

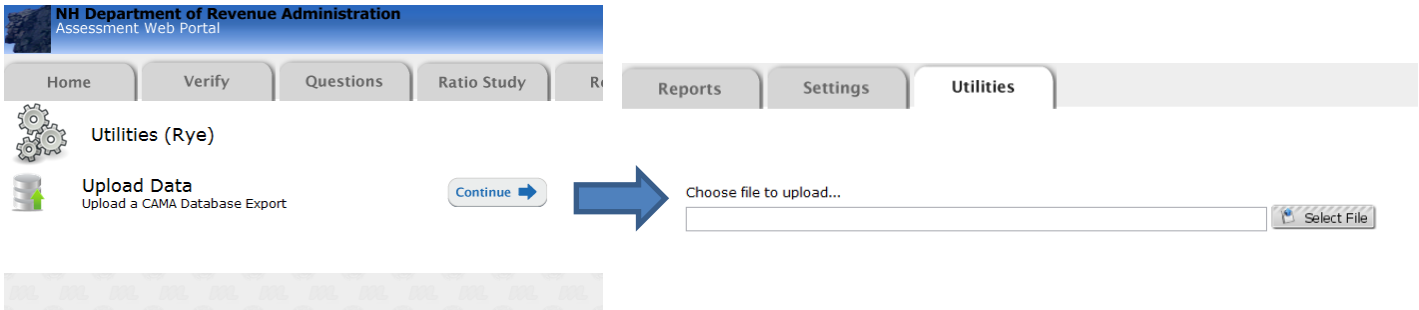
To create a new user click the new add new user button to bring up the add new user menu



You will be prompted to provide all of the required contact information for each new user. Remember passwords must be 8 characters long; contain a capital letter, a number, and a symbol. (Example password that meets requirements: Password99!)

NOTE: You do not need to assign a challenge question and answer during account creating – they will be prompted to give one at first login.

Remember to write down the password and username to provide your new user.

Utilities

The utilities section allows town users to upload their CAMA database export. Clicking on the continue button will bring up a file upload interface. Click "Select File" and browse for your CAMA export file and click OK