Assessor Training

Module 2

Mass Appraisal

Team Management

Assessors are part of the **financial team** for their cities and towns.

Cooperation and coordination between all financial officials in local government is **essential to fiscal stability**.

As a financial team member, you need to:

- **Understand** duties of other finance officers
- **Communicate** with others by report and in person
- **Meet deadlines** and inform others of issues and concerns

Financial Team

A "financial team" fosters the efficient operation of finance departments as a **unit** to share information and develop joint solutions throughout the annual budget process and fiscal cycle.

Team members should include:

- Chief executive officer
- Assessors
- Collector
- Treasurer
- Accounting officer
- Finance committee representative

Note: Team membership may vary by time of year or issue.

Chief Revenue Officer

Assessors are the **chief revenue officers** of their cities and towns.

Personal property is movable property. It's anything that can be subject to ownership, except land.

Real property is immovable property - it's land and anything attached to the land (such as a building).

Your role in revenue collection for your city or town is to:

- Assess taxes on owners of real and personal property
- Assess excises in lieu of personal property taxes on motor vehicles, boats and farm animals and machinery
- Commit special assessments and betterments and delinquent municipal charges that are liens on real estate as part of the tax


Start
Value Property
Determine New Growth
Set the Tax Rate
Commit Betterments & Special Assessments
Commit Overdue Charges
Assess & Commit Property Taxes
Abate & Exempt Taxes
Manage Overlay
Assess & Administer Local Excises
Assessors' Duties

Computer Assisted Mass Appraisal system (CAMA)

- Every assessor relies on CAMA to ensure that all properties are valued uniformly and equitably
- CAMA should be updated annually with **all** data that affects values

Note: Valuation systems must have the capability of implementing and identifying any market changes or conditions instantly.

Researching Sales Data

Sources

- Registry of Deeds
- Real Estate Brokers
- Online Services
- Real Estate Publications
- Interview Buyers or Sellers
- Multiple Listing Service (MLS)

To understand the current market conditions, the assessor should collect all sales data that has occurred in the community.

You determine market value by:

- Using the most current sales data available to develop up-to-date values using acceptable Mass Appraisal methodology
- Recording an exact snapshot of each property at the time of its sale

What is a "Valid" (or Arm's Length) Sale?

An **arm's length transaction** allows the market to ensure that both parties are acting in their own self-interest and are not subject to any pressure or duress from the other party.

Requirements of an arm's length sale:

- Willing seller & buyer (not under compulsion to sell or buy)
- Readily open to the general public on the open market
- Both seller and buyer are knowledgeable, unrelated parties
- The property exchanging hands has been on the open market for a reasonable period of time

What is an Invalid (or *"Non-Arm's Length) Sale?*

A **non-arm's length transaction** is a purchase in which there is a relationship or business affiliation between the seller and the buyer of the property.

Examples of non-arms length sales include:

- Sales within a family 
- Foreclosure
- Paper Transaction (convenience)
- Charitable Organization 

- Court Order 
- Sale to an Abutter
- Affordable Housing (deed rider)

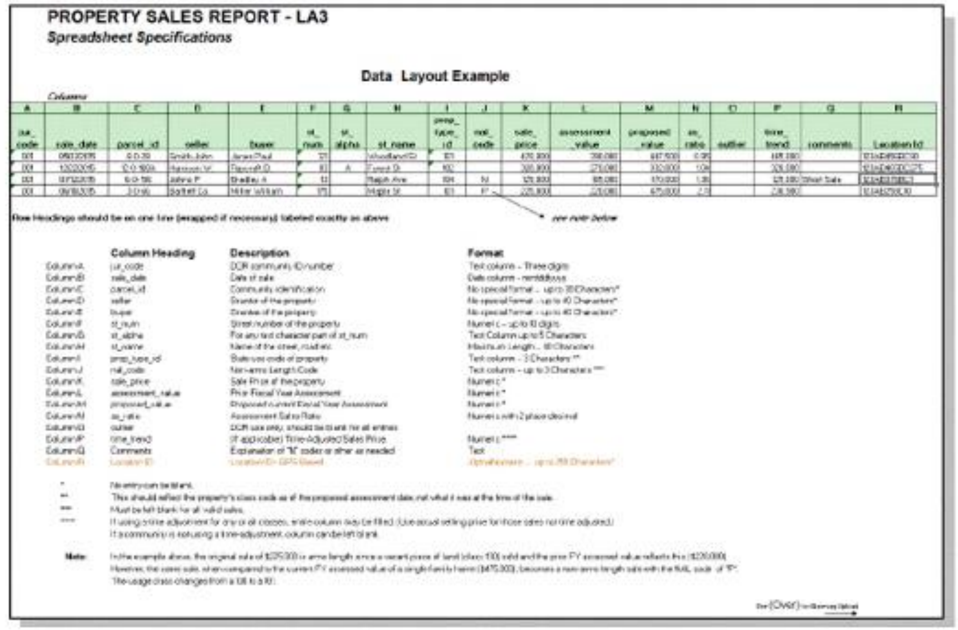
Sales Database & Maps

You must create a sales database using CAMA that includes the following:

- Location
- Sale Price & Sale Date
- Type of Property
- Lot size
- Building measurements
- Identify on Property Maps
- Grade and Condition

Preparing the Annual Final Sales Report (or **"LA3" Sales Report**)

- All sales over $1,000 in value are included onto the LA3
- The LA3 Sales Report is annually submitted to the **Bureau of Local Assessment**
- The report includes <u>both</u> **arm length** and **non-arm length** sales and proposed assessments



"Everything flows from the LA3!"

Key Metric: Assessment Sales Ratio or "ASR"

The Assessment Sales Ratio is a measurement representing the *percentage* of the assessed value to a market value (arm's length) sale price.

$$\frac{\text{Assessment}}{\text{Sale Price}} = \text{ASR}$$

Ratio studies are used to measure the relationship of assessments to market value.

Example: Assessment Sales Ratio or "ASR"

As an example:

- *January 1, 2017 is the assessment date for fiscal year 2018.*
- *The assessed value of a property is $500,000.*
- *Sale price of this property was $510,000 and it was an arms length sale.*

*The **assessment sale ratio** is calculated by taking $500,000 divided by $510,000 .*
The ASR is .9804 or 98 %

Timeframe: Statistical Analysis Period for the LA3 Sales Report

- Assessment Date is January 1st
- Time Period is "Calendar Year"
- Sale Coding to identify Valid Sales and Non-Valid Sales

As an example:

January 1, 2017 is the assessment date for fiscal year 2018, which officially begins on **July 1, 2017**. This means that calendar year 2016 sales are analyzed for the fiscal year 2018 values.

Note: Any sale that is **not** arms-length will be identified on the LA3 sales report but will **not** be included in the final statistical analysis.

Overview of Tax Maps

Mapping is a vital land valuation tool!

All land in every community is required to be specifically identified on the assessor's tax maps.

Tax Map Requirements:

- Each parcel needs to be identified (using numbering scheme) and correctly recorded in the assessor's database
- Every parcel must have associated legal deed documents to account for every square foot of land in the community
- **Accurate** parcel size and dimensions are critical in valuing land

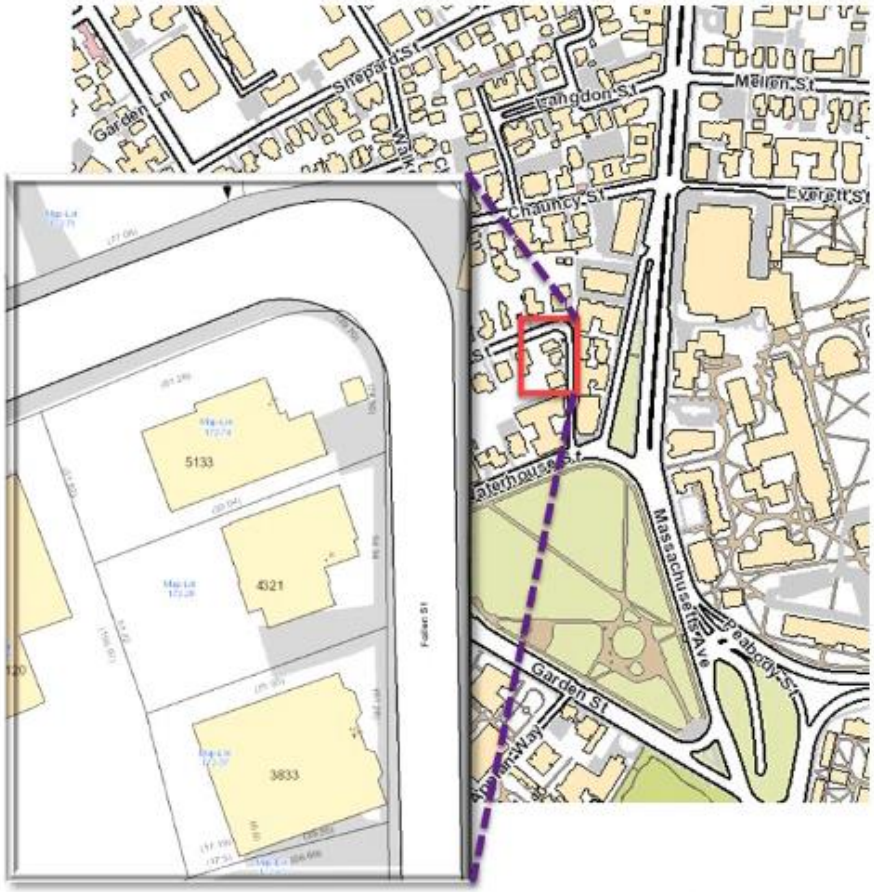
Note: Tax maps should be **updated annually** to reflect any changes.

Tax Map Maintenance

As an assessor, you are responsible for the maintenance and update of the tax maps for your community.

- Parcel ID System
  - A unique number for each parcel
  - Map-Lot or Map-Block-Lot system
- Detailed Parcel Information
  - Every parcel
  - Display land area

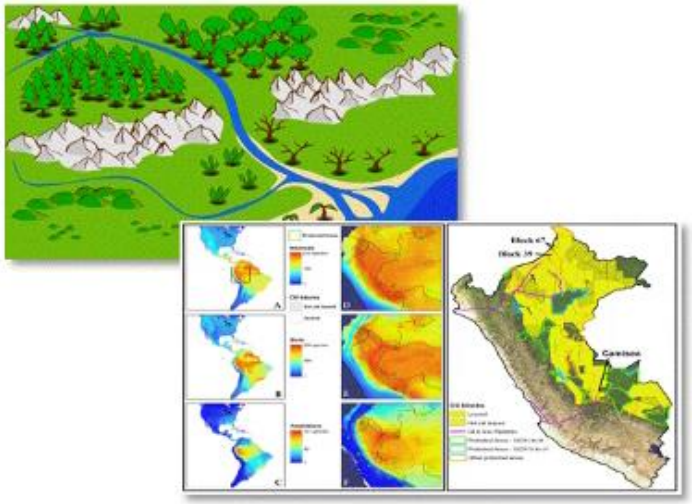
Note: If any lots are added, deleted, or amended, tax maps NEED to be updated.



Ideal Tax Maps

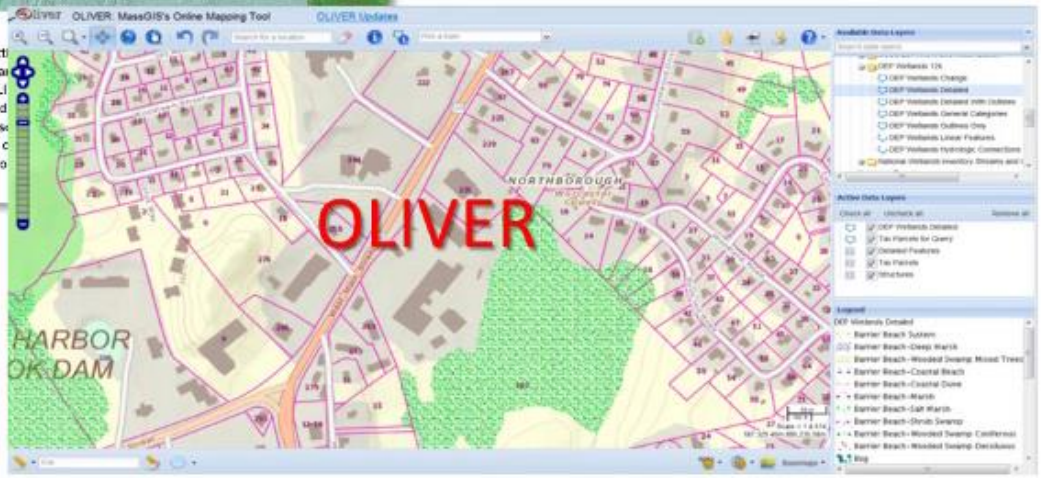
Tax map data items include:

- Street names
- Road frontage
- Other dimensions
- Zoning boundaries
- Building footprints
- Easements & Rights-of-Ways (ROWs)
- Land features – topo, wetlands, etc.



Mass GIS Interactive Mapping Tool (OLIVER)

MassGIS is the state's "one stop shop" for interactive maps and geospatial data for Massachusetts.



Note: ArcGIS Online is another resource for additional ready-made maps and web services

GIS Standard

Tax Maps - Key Takeaways

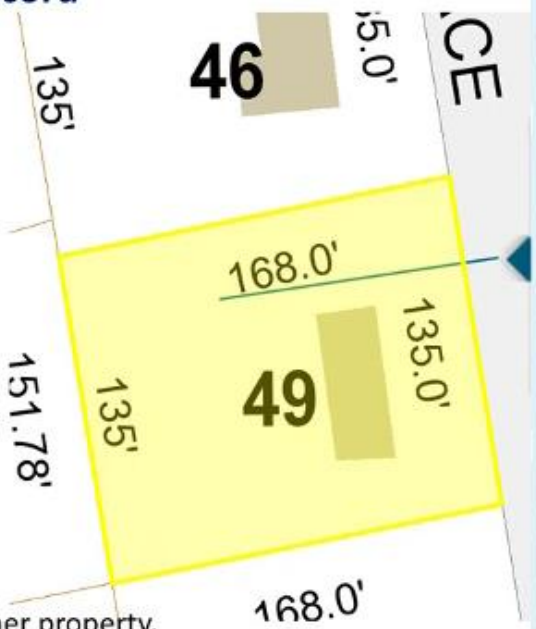
- Assessing maps should **always** contain every parcel in the community
- Maps need to be updated **annually**
- Parcel **size** and **dimensions** are vital for accurate maps
- Each parcel has a **unique ID** assigned to it
- The **more** detail on the map, the better!

Property Record Card (PRC)

- Every parcel is assigned an ID number
  (in this example, it's listed as **4575**)
- Every parcel ID is assigned a ***Property Record Card***
- Every Property Record Card has a unique Parcel Number
  (in this example, **0042-0049-000**)

Major components:

- Prior and current values
- Parcel ID
- Legal ownership and sale dates
- Land information
- Building style and permit history
- Inspection dates and notes



Parcel #: 0042-0049-000

ID	4575
ParcelNumber	0042-0049-000
GisFullNumber	0042-0049-000
CamaFullNumber	0042-0049-000
Owner s Name	JOY BYRON E
Location	21 DOANE TR
Street Name	DOANE TR
Street Number Index	21
Street Number	21
Map	42
Map Cut	N/A
Block	49
Block Cut	N/A
Lot	N/A
Lot Cut	N/A
Unit	N/A
Unit Cut	N/A
Building No	1

Zoom to

Note: While a property can "appear" to be similar to another property, the detailed information collected might indicate significant differences that could result in a much different assessed value.

Property Record Cards - Land Data Required

Land Data includes:

- The exact size of the parcel
- Segmentation (is it all “buildable”?)
- The Neighborhood identification
- Influence factors – water views, topography issues, wetlands, heavy traffic conditions, etc.

Property Record Cards – Building Data

Building data includes:

- Sketch (calculating building area)
- Style
- Story height
- Year built
- Grade
- Condition
- Features, e.g., # of rooms, bedrooms, baths, fireplaces, finished basement, outbuildings

Property Inspections

Certification Standards requires that
all real properties be inspected

at least once
every 10 years.

Inspection Options: Cyclical Inspections

Advantages of conducting Cyclical inspection method:

- The most **cost effective** method
- **Costs are spread out** over a longer period of time
- **Minimizes** the need to hire additional field **staff**
- **Inspection cycles** usually run from **5 to 10 years**

Inspection Options: Full Measure and List

The advantages of conducting a Full Measure and List include:

- The inspection cycle **is typically very short** (usually from 1 to 2 years)
- It is the **most costly** method used to inspect properties but the results are immediate!
- This project is **time consuming** and often done by hiring private contractors

New Construction Data -"New Growth"

As an assessor, you are required to:

- Keep track of new construction and enter this "**new growth**" data into the CAMA system, including ***new buildings***, ***remodeling*** and ***demolitions***
- **Collect , *inspect and track*** this data annually
- Record data as of **January 1** (or **June 30th**, if community has adopted ***Chapter 653***)
- Assess even *partially* completed building permits as "% complete" as of the assessment date

Note: Assessors should always coordinate information with the Building Department when identifying new projects and their scope of details.

New growth is an additional annual increase to the tax levy limit based on new construction and other allowable growth in the tax base that is not the result of property valuation or changes in the real estate market.

Example: "Percent Complete"

Finished Bldg. Value: **$200,000**

% complete amount: **60%**

Partial Assessment Value: ($200,000 X .60) = **$120,000**

Data Quality Analysis ("DQ")

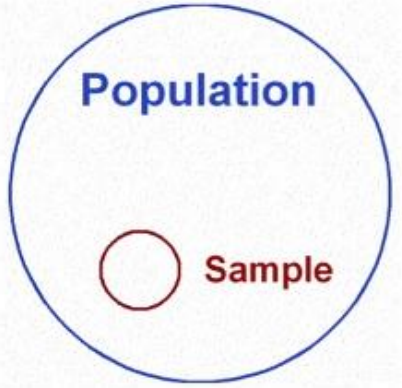
A **data quality analysis** is a tool to determine the quality of the existing property data and assess the scope of data collection or verification required as part of a mass appraisal program.

Data Quality Analysis is:

- **Not mandatory** for assessors' offices
- It's used to determine **the overall quality** of existing data
- And, it's used to assess the scope **of future data collection** that may be required, as a result.

Note: Before the official start of the 5-year certification analysis, an assigned DOR field representative is required to drive through the town and conduct their own Data Quality Study.

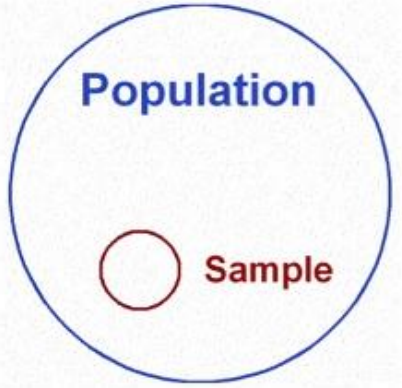
Data Quality Sample



Data Quality Study sample requirements:

- 2% to 5% of all total properties is required
- Parcels are randomly selected
- Samples will consist of all styles, grades, home ages, and neighborhoods
- Property classes that must be reviewed:
  - Residential Class
  - Commercial Class
  - Industrial Class

Data Quality Sample



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  - Industrial Class

Example: Typical use of a DQ Statistical Analysis

Identify **"Old to New" (or OTN) value differences**

Current house assessment: **$325,000**

Newly revised house assessment: **$350,000**

Value Difference: **$25,000**

Percentage of Value Difference / Original Assessments = % Change

25,000 / 325,000 X 100 = 7.7% "OTN" value difference

Data Quality Corrective Action Chart

>10%

If the value impact is greater than 10% of value, the community needs to consider conducting a full data collection program.

5-10%

Inconsistencies (generally for fluctuations between 5% and 10%) should initiate a 5-year cyclical inspection program.

< 5%

If the value impact is less than 5%, the assessors should continue their ongoing maintenance program and continue with the 5-10 year inspection program.

Summary for Property Inventory Data

Key Takeaways:

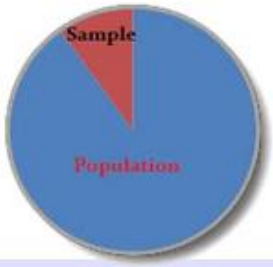
- Every parcel has a designated **Property Record Card**
  - The PRC identifies a unique mapping ID number and lists all the real property descriptive details to help determine building value
- **Property inspections** are mandated *at least once every 10 years*
- **New Construction Data** ("new growth") must be identified on an ongoing basis and values for new construction must be updated annually
- If an assessor decides to change the current CAMA system (referred to as a "**conversion**") - it is required to update the CAMA system and conduct a comprehensive full field review or a DOR-approved **desktop review** to ensure all the assessing data is accurately transferred
- **Data Quality Analysis** helps determine the quality of the existing data and can reveal if existing data is acceptable or needs updating.

Sales Analysis Requirements during Certification

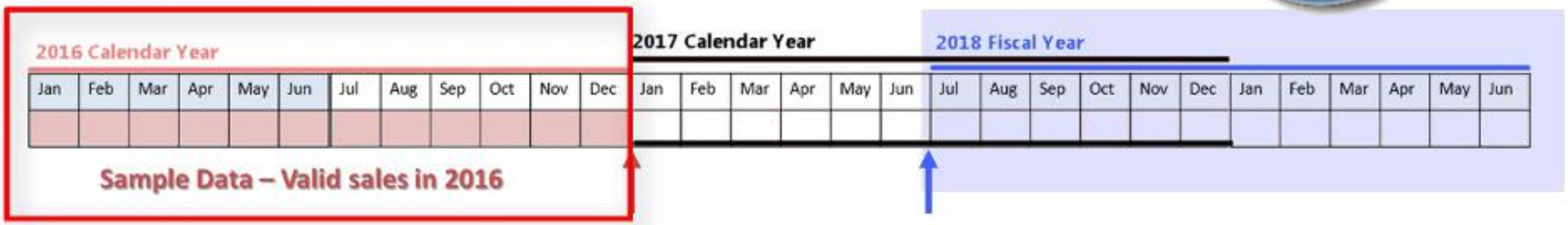
Things to consider when reviewing and analyzing sales data include:

- Analysis Period
- Sample Size
- Time Adjustments
- Ratio Studies
- Certification Statistical Standards
- Sales Stratification

Analysis Period Criteria



DOR requires **specific sample sizes** of qualified sales **to ensure an accurate statistical analysis** that reflects the current market.



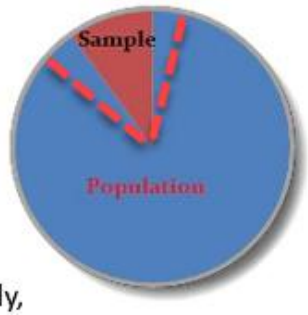
For FY2018:

- Fiscal year 2018 begins July 1, 2017
- The assessment date is January 1, 2017
- Sales within the preceding 12 month period (e.g., all valid sales in calendar year 2016) are used

Note: There must be enough sales in each property class.

Analysis Period Adjustment Options

To meet required sample size criteria, DOR provides some options to adjust the statistical analysis period.

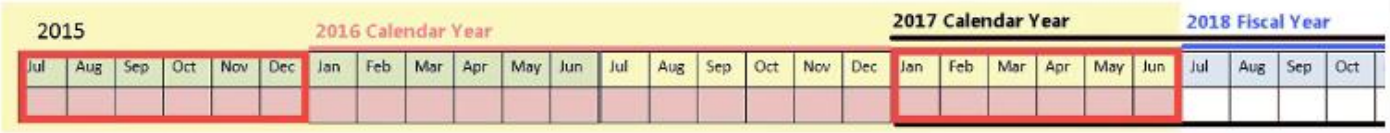


To achieve the required sample size, for each property class (e.g., Single family, two-family, etc.) you must have either **2%** of total number of valid sales **or** 10 sales -- **whatever number is greater.**

If there is not enough sales data for each class:

✓ Increase sample selection range to 2 years (**24 months**) of sales data using one of the following options:

1. **Add sales data from previous calendar year**
   - Using FY18 sales analysis example, include sales data for calendar year 2015 (along with calendar year 2016 for 24 month total)
2. **Add 6 month of sales data from previous calendar year, and 6 months from subsequent calendar year**
   - Using FY18 sales analysis example, include the last 6 months of 2015, all 2016, and the first 6 months of 2017.



Note: If a 2nd year of sales is necessary, the same time period must be used for the other property classes that need it as well. If there still isn't enough sales data, proceed with 24 month data analysis. (**No need to add a third year of data.**)

General Rule: Determining Number of Sales Needed for LA3

Number of valid Sales Requirement (for EACH property class):

- Sales of 2% of total number of parcels

  OR

- Minimum of 10 sales

(whichever number is greater)

General Rule:

- **> 500** If there are more than 500 total parcels for a given property class:
  - **Number of sales required is 2%**
- **≤ 500** If there are 500 or less total parcels for a given property class:
  - **10** sales are needed

Note: Often, a 2nd year of sales data is required. (However, if data requirements are still not reached, a 3rd year is **not** needed. **Analysis can proceed with available data.**)

Property Classes included in Analysis

Sales analysis is required for **all property classes and their sub-classes**:

- ✓Single family (101)
- ✓ Residential condos (102)
- ✓ Two-family (104)
- ✓ Three-family (105)
- ✓ Apartments (111-112)
- ✓ Residential land (130-132)
- ✓ Commercial (300s)
- ✓ Industrial (400s)
- ✓ Mixed-use (013-031)

Note: If any class or sub-class requires more than the initial 1 year of sales data, then **the same 24-month time period** has to be used for all.

Property Tax Classification coding will be addressed in more detail in Module 4

Sales Ratio Study - Calculating Sale Ratios

Sales Ratio Study uses statistical methods to measure the relationship between a property's **assessed value** and its **sale price** by grouping individual sales according to property type and geographic area.

Assessment Sales Ratio (ASR)

$$\frac{\text{Current Assessed Value}}{\text{Sale Price}}$$

Example:

$$\frac{\$\ 375{,}000}{\$\ 400{,}000} = 93.8\% = \text{ASR}$$

Stratification Studies

- Style
- Size
- Age
- Neighborhood
- Sale Price Quartiles
- ...

Time Adjustments

Monthly time adjustments may be needed if the real estate market is changing at a significant pace.

The decision to implement time adjustments can be determined by:

1. **The Inflation/Deflation Rate**
   or
2. **A Monthly Trend Factor**

Example: **Sample Data – Valid sales in 2016**

2016 Calendar Year												2017 Calendar Year												2018 Fiscal Year					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
90%						85%					80%																		

ASRs

Overall inflation rate of **10%** is indicted

Assessment Level Criteria

ASR ratios less than 100% → properties are **below** **market value**

ASR ratios more than 100% → properties are **above** **market value**

Allowable DOR guideline **ASR range** = ***90% -110%***

Median Assessment Sales Ratio (ASR)

- DOR recognizes **the median assessment sales ratio** rather than **the average** assessment sales ratio.
- The **median ASR** is the MIDDLE assessment sales ratio, ranked from low to high, for a group of sales (i.e., sold properties with similar characteristics)

#	1	2	3	4	5	6	7	8	9	10
ASRs	90.8	91.7	92.5	92.9	94.3	96.1	96.9	99.4	102.1	107.5

125.1

Average would be **98.2%**

$$\frac{(94.3 + 96.1)}{2} = \frac{190.4}{2} = 95.2\% = \text{Median ASR}$$

Requirements and Statistical Standards

Sales Ratio studies for all classes are required and you must strictly adhere to DOR guidelines.

Note: Median ASRs for all classes and sub-classes must be within 5% of the *predominant* class overall median ASR.

The predominant class is always the class with the most parcels (which is almost always single family homes)

Example:

If the overall single family (the predominant class) median ASR is **97%**...

...then all other classes need to be in the range of **92% - 102%** { (97 **-5**) or (97 **+ 5**) }

***Note**: Median ASRs for all classes need to be between **90% -110%**, while only sub-classes can go below 90% .*

Sales Stratification into Subgroups

When sales are sufficient, statistics analysis is required not only for the class as a whole, but for the subgroups as well.

"101's" (single families):
By Neighborhood
By Style
By Age
By Sale Price and Date

"102s" (condos):
By Complex
By Sale Price
By Date

Remember: Statistical analysis for subgroups still needs to meet DOR statistical guidelines!!

What are COD's (Coefficient of Dispersion)?

CODs measure the uniformity of data;
that is, how sale prices from within the same sample vary from the median ASR.

Depending on the property class, acceptable CODs may fluctuate.
The acceptable range for CODs is **10% - 20%**

COD guidelines can be found in the DOR Certification Standards Booklet.

Sample Listing

- **CODs up to 10%** allowed for single families and condos
- **CODs up to 12%** allowed for two and three families
- **CODs up to 15%** allowed for apartments
- **CODs up to 20%** allowed for other classes

Best Practice:

Conduct comprehensive sales ratio studies at the beginning and at the end of the analysis process.

Example: Determining Assessment Uniformity Using CODs

CODs determine the amount that all ASRs vary **from the median** of a specific group. The COD shows the deviation amount.

Example:

If a group has 5 sales and all have an ASR of 95%, then the overall Median ASR is 95%.

Since the COD measures how likely the ASRs deviate from the median (95%) and all ASRs are the identical to the median, there is no deviation. Therefore, the COD = 0.

#	1	2	3	4	5
ASRs	95.0	95.0	95.0	95.0	95.0

Example: Determining Assessment Uniformity Using CODs

CODs determine the amount that all ASRs vary **from the median** of a specific group. The COD shows the deviation amount.

Example: But if the ASR has an overall median is 95 but the range is 75-110%, the COD = 10.5 (would be too high for the single family class!)

#	1	2	3	4	5
ASRs	75.0	80.0	95.0	98.0	110.0

Sample	ASR	Dispersion	COD
Sale 1	75%	0.20	
Sale 2	80%	0.15	
Sale 3	**95%**	0.00	
Sale 4	98%	0.03	
Sale 5	110%	0.15	
Median	95%	0.53	11.2%

Sum of dispersion

COD % = ((.53/5)/.95) *100

Summary – Determine Analysis Period and Identify Data Pool

- For certification analysis, the assessment date is **January 1** preceding the fiscal year.
  - For example, for **FY2018**, the date of assessment is **January 1, 2017**
- The sales data used for the analysis is from the the full calendar year preceding the assessment date for the fiscal year.
  - For example, for FY2018, calendar year 2016 sales are analyzed

Researching Sales Data

Sources

- Registry of Deeds
- Real Estate Brokers
- Online Services
- Real Estate Publications
- Interview Buyers or Sellers
- Multiple Listing Service (MLS)

To understand the current market conditions, the assessor should collect all sales data that has occurred in the community.

You determine market value by:

- Using the most current sales data available to develop up-to-date values using acceptable Mass Appraisal methodology
- Recording an exact snapshot of each property at the time of its sale

Verifying Sales Data

- Inspect your sales!!

- Send questionnaires

- MLS info on the listing sheet

It's important to note that all property attributes need to be <u>fully identified at the time of sale</u> because all the value data will be based on this particular property's sale date.

What is a "Valid" (or Arm's Length) Sale?

An **arm's length transaction** allows the market to ensure that both parties are acting in their own self-interest and are not subject to any pressure or duress from the other party.

Requirements of an arm's length sale:

- Willing seller & buyer (not under compulsion to sell or buy)
- Readily open to the general public on the open market
- Both seller and buyer are knowledgeable, unrelated parties
- The property exchanging hands has been on the open market for a reasonable period of time

What is an Invalid (or *"Non-Arm's Length) Sale?*

A **non-arm's length transaction** is a purchase in which there is a relationship or business affiliation between the seller and the buyer of the property.

Examples of non-arms length sales include:

- Sales within a family 
- Foreclosure
- Paper Transaction (convenience)
- Charitable Organization 

- Court Order 
- Sale to an Abutter
- Affordable Housing (deed rider)

CAMA Data Validity is Critical

The more accurate the data

...

the more accurate the values.

Staff and vendors must have the skills to:

- Perform quality property inspections
- Enter quality data accurately and consistently

Knowledge Checks

Note: This quick self-assessment Quiz is for your use only. Your responses are not tracked.

True or False ?: Conducting an "in house" staff cyclical inspection program is a cost efficient way to conduct the project. 2 of 3

Correct

That's correct! Most communities can keep costs down by completing it with their available field workers to help save costs.

- ✓ True
- False

Previous Continue

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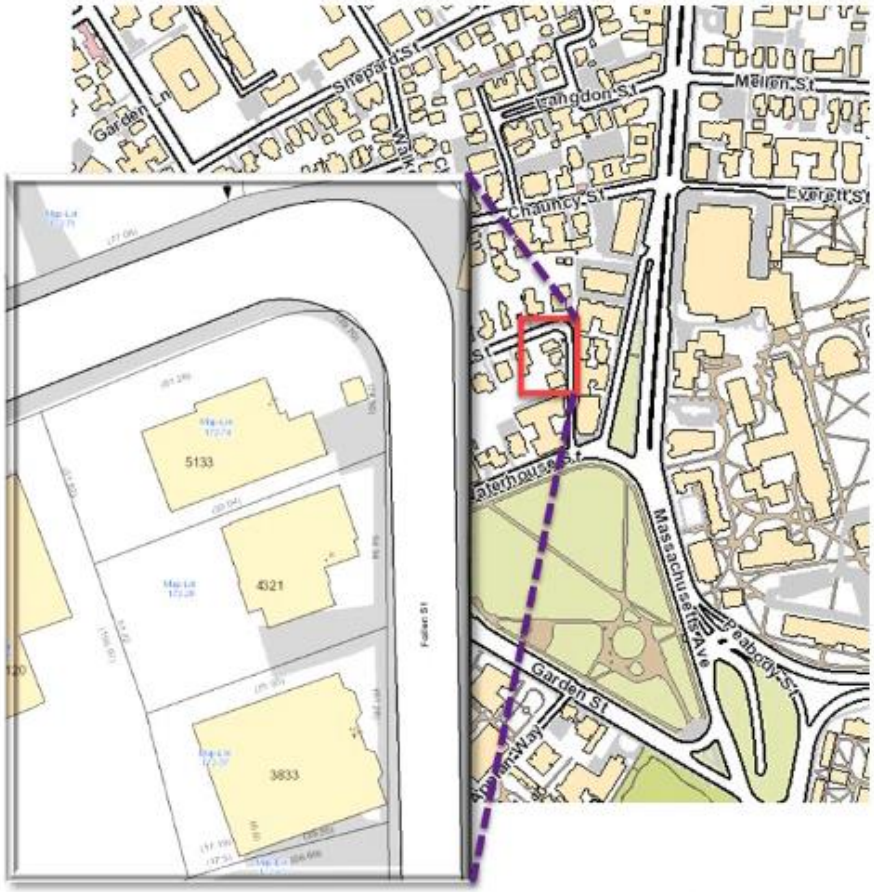


Valuation Methods

There are **3** main **property valuation methods**:

1. **Sales Comparison Approach**
2. **Cost Approach**
3. **Income Approach**

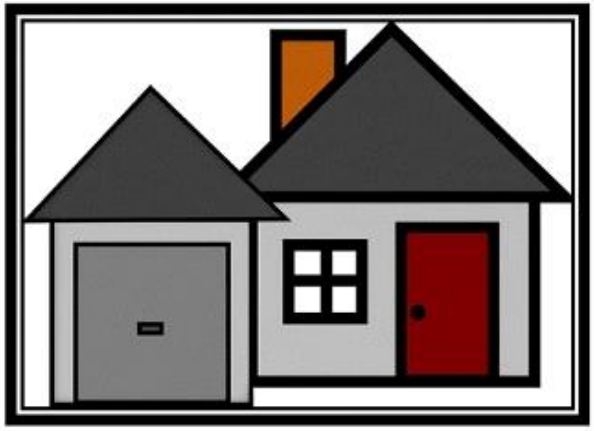
Valuation Method for Residential Properties

This class is most often valued by valid *Sales Comparison Approach*:

Building Costs = RCNLD
or "Replacement Cost New Less Depreciation"

Total Value = RCNLD + Market Land Value

Residential Properties



Valuation of a Single Family Home - Example

In 2017, Replacement construction Cost New is $ 250,000 (RCN)

Less Depreciation - $25,000 (LD)

RCNLD = $225,000

Next: ADD in Market Land Value at $175,000

FOR **TOTAL PROPERTY VALUE** equal to **$400,000**

Land Valuation (Vacant and Improved Land)

Methods to determine **land valuation** include:

1. Analyze **vacant land sales** to determine what the overall ***indicated land value*** is (**best** method if available)
2. Land Residual Analysis (**2nd best** method)

Land Residual Method:

Sale Price – RCNLD = Indicated Land Value

(Improvement cost – Depreciation)

Example: Land Residual Analysis

Sale Price: **$400,000**
RCNLD: ***minus $225,000***
***Equals Indicated* land value: $175,000**

Then compare this to the current assessed land value of **$170,000**.

The ratios (assessed land value/indicated land value) is:
$170,000 divided by $175,000 = 97.1%

Note: The land residual ratios for all valid sales are analyzed by neighborhood.

Commercial & Industrial Properties

- Commercial and industrial properties are generally bought and sold on investors' expectations.

  *Note: Due to the nature of investor speculation and other factors, commercial and industrial **sales information** is often unreliable.*

- Acceptable Valuation Methods:
  - **Sales** Comparison Approach
  - **Cost** Approach (already discussed for residential use)
  - **Income** Approach

Note: DOR requires that you use **at least 2 of these methods** for valuation of commercial & industrial properties!!

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Income Approach

Market rent is *capitalized* into an income value.

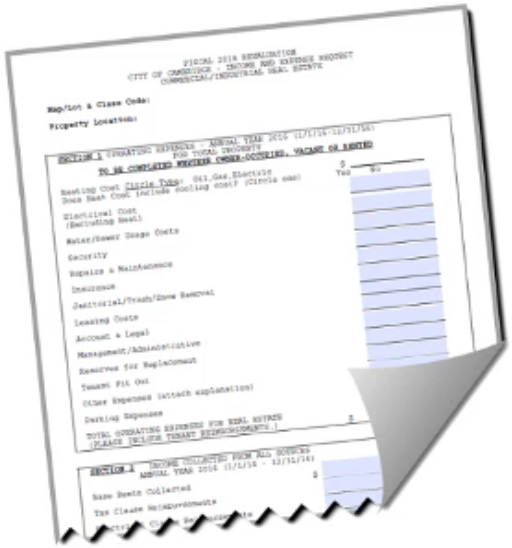
Data to be collected and analyzed:

- **Rental rates**
- **Vacancy**
- **Expense information**
- **Capitalization rates**

Assessors have the authority to collect income data by requesting the information under Massachusetts General Laws Chapter 59, §38D.

Note: Information acquired under MGL Chapter 59 section 38D must be kept confidential.

Income and Expense Forms (I&E Forms)



- **I&E Forms** typically <u>sent out</u> by the assessors in **January**

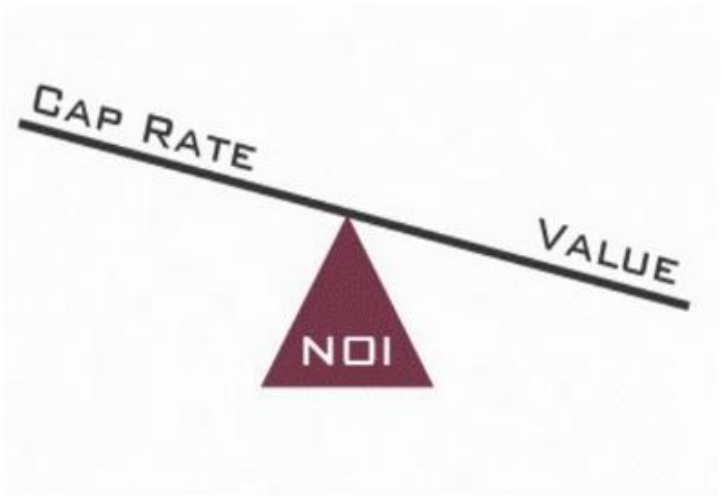
> **Note:** Rent, vacancy, and expenses reported on the returned I&E forms should be considered as the overall market numbers.

- In addition to I&E Forms, **other resources** include:
  - Resend questionnaire
  - Conduct on-site interviews
  - Talk with local real estate brokers
  - Regional publications and local online resources for leasing/sales information

- **Cap Rate information** can be gathered from:
  - The market extraction ("IRV")
  - Annual regional publications such as Loopnet or CoStar

Income Approach

What is a Capitalization Rate?
Any rate used to convert an estimate of future income to an estimate of market value; the ratio of net operating income to market value. Most commonly known as simply the *cap rate*.



Cap Rates are calculated by dividing the annual net income of a property by the purchase price

Net Income (NOI) divided by Sales Price = Overall Cap Rate

Example: $10,000 (NOI) /Sold for $100,000 = 10% Cap Rate

Investment Risk:

A **low cap rate** applied to a property would indicate **less risk**

A **high cap rate** would indicate a **higher risk**

Income Approach Calculations

Potential Gross Income	**PGI**
Vacancy and Collection Losses	**- Losses**
Allowable Expenses	**- Expenses**
Net Operating Income	**= NOI**

NOI / Capitalization Rate = **Total Value**

Income Approach Formula (IRV)

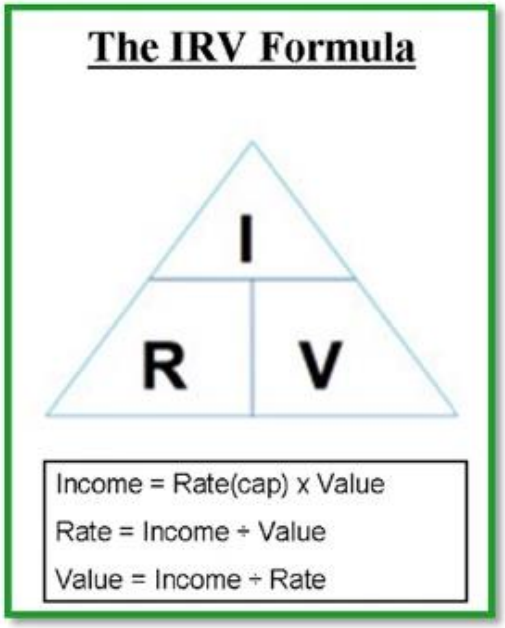
I / R = V

I = **income** (NOI)

R = Capitalization **rate**

(The rate of return expected on the investment)

V = **value**



Example: Income Approach

- **Net Income** (NOI) = **$50,000** per year
- **Rate of return** on similar investments (Cap Rate)= **10%**

$50,000 / 0.10 = $500,000 (estimated property **value**)

Income / Rate = Value

Lesson 7: Reassessment Programs

All Massachusetts communities are now on a **5-year** reassessment/certification cycle.

Every 5th year, DOR conducts a comprehensive review and certifies all values.

Assessors must:

- Understand the objectives and expectations of DOR's certification process
- Develop a reassessment program to meet certification requirements
- Prepare a workplan to document program components, personnel and timetables to accomplish the plan and submit to the DOR

Note: Values are adjusted every year to reflect market conditions, regardless of whether your community is in a certification year.

Interim Year Expectations: An Example

Assessment Sales Ratio (ASR)

$$\frac{\text{Current Assessed Value}}{\text{Sale Price}}$$

The initial sales analysis indicates the following overall ASR for:

- ✓ Single family class at **75%**
- ✓ Condominium class at **70%**
- ✓ Vacant land class at **95%**
- ✓ Multi family class at **96%**

Note: *Sale ratios show that increases to the* ***single family*** *and* ***condo classes*** *are needed to be between* ***90 - 110%*** *AND within* ***5%*** *of each other.*

Property class allowances can be found in the **DOR Certification Standards Booklet.**

Sample Listing

- **CODs up to 10%** allowed for single families and condos;
- **CODs up to 12%** allowed for two and three families;
- **CODs up to 15%** allowed for apartments;
- **CODs up to 20%** allowed for mixed-use, commercial, industrial, and vacant residential land

Be Prepared for your Revaluation

1. **CAMA system** - Accurate and up to date

2. **Personnel** - Both in-house staff and contractors, if applicable

3. **Funding** - Anticipate resources needed and funding required to get the job done

Note: DOR recommends that funds needed to complete the entire revaluation process be secured up to **2 years** in advance.

Use of Outside Contractors

Regardless of getting any professional assistance…

the local **Board of Assessors** is still responsible to make sure that all values are at full and fair cash value.

Note: If an outside contractor is hired, an appropriate procurement contract is required (Mass General Laws, Chapter 30B) and used to specify all aspects that the contractor is responsible for.

Securing Funding for Certification

The Bureau of Local Assessment recommends adequate funds be secured up to 2 years before the actual certification year.

The Uniform Procurement Act

MGL Chapter 30B

The Inspector General's office provides guidance regarding any procurement issues.
(617)-727-9140

Choosing a Contractor

Review their familiarity with:

- The community itself and its area
- Your CAMA system
- Other communities they previously worked in and having similar complexities

Contact previous customers!

A **WORKPLAN** is an important tool for success!

The DOR Workplan helps you:

- **Define** specific certification tasks
- **Manage** the limited personnel and financial resources
- **Monitor** all the stages in progress

Note: WORKPLAN sample is in Course 101 Handbook

Summary

1. DOR conducts a 5-year certification review and looks at all the factors involved to successfully complete it

2. Interim year adjustments are still required from the assessors

3. Components that make up a Workplan with all its elements should be carefully prepared and made clear who is responsible for each portion