

spatial est

The spatialest[®] ethos

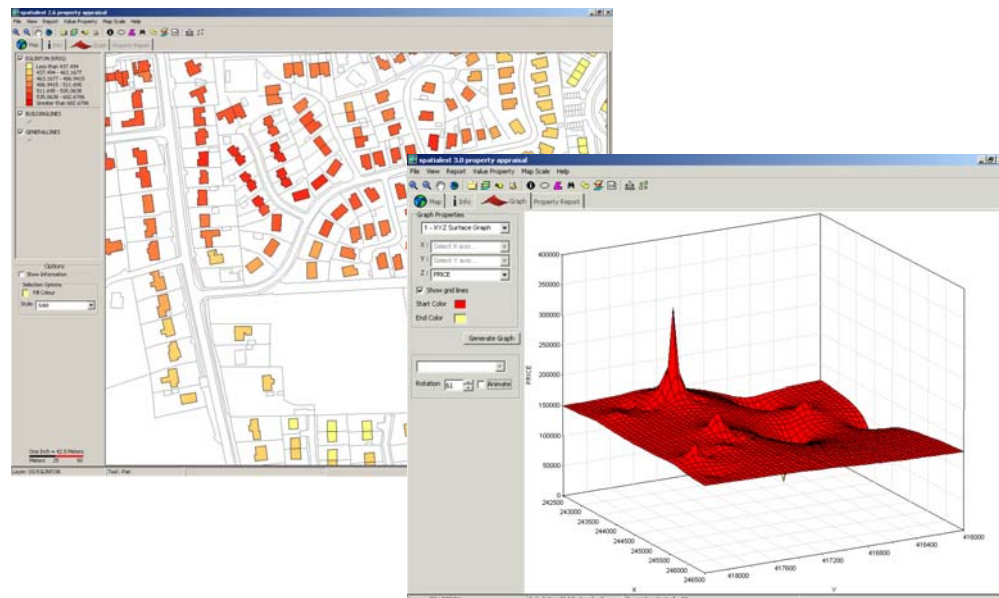
The spatialest[®] ethos is based upon the use of Geographic Information Systems (GIS) to improve the predictive quality of models within the assessment or appraisal process. By using GIS as the hub of the analytical process spatialest[®] will identify Highly Similar, Locally Proximate comparables. By using a map output and a list of the pertinent property characteristics creates an easily explainable output.

Highly Similar + Locally Proximate = Easily Explainable

This is what makes spatialest unique. No other CAMA or GIS vendor offers the same level of innovation or integration.

Using Geography

Working spatially offers quite unique benefits. Users can interact with map based information more easily than tabular data. Consequently the users can interpret sophisticated spatial information and recognise patterns and trends which might not have been apparent within a purely aspatial environment. With spatialest[®] software users can see how models have worked quickly and easily within a map based system. 'Hot spots' of property value or the influence of geographic features such as water frontage or proximity to highways can be immediately recognised and accounted for.



Users may review a comparison between historical estimates and current estimates to assess the relative impact, both statistically and geographically, of the new assessments. For example, is there a particular region, neighbourhood or property type which has been under or over valued. Is there a particular reason for this?

Due to its geographic core spatialest® can assist within the general process of appeals. The provision of a map containing the appellants' property, the comparables used to determine the assessed value and a summary of property attributes and model parameters will often be enough to satisfy or dissuade most appellants. The report will also allow the assessor to quickly familiarise themselves with the area, the comparables used and the model parameters.

Cindy Domenico
Boulder County Assessor
Mailing Address
P.O. Box 471
Boulder, CO 80306-0471
www.boulderasessor.org

2005 NOTICE OF VALUATION
Residential Property



May 1, 2005
Office Location
1333 Pearl Street, 2nd Floor
Boulder, CO 80502
Phone: 303-441-4830
Fax: 303-441-4996
Office Hours: 8:00 - 5:00, Mon-Fri

*****AUTO**5-DIGIT 80501
MONTANO FLORENCIO V & DIANE L
1715 SUMAC ST
LONGMONT, CO 80501-7186

Location & Legal Description
001715 SUMAC ST
LOT 28 BLK 3 MEADOWLARK 2 PROPERTY ADDRESS: 001715 SUMAC ST LONGMONT

STR: 28 3N 69 Tax Area: 0680 Nhd: 202

PROPERTY DESCRIPTION
Land: 1 Lot(s)
1992 2 - 3 STORY
Bathrooms: 1-Full 2-Three Quarter 1-Half
Main living area: 988 SF
Upper living area: 711 SF
Basement area: 980 SF of which 250 SF are finished

Copyrighted photos courtesy of 9503-B

Account Number R0097213 Access PIN 246972

PROPERTY VALUE			
	Current Actual Value as of: 6/30/2004	Prior Actual Value as of: 6/30/2002	+ or - Change
Residential	\$234,000	\$262,600	-\$28,600

PROPERTY TAX ESTIMATE
- The Assessor estimates the value of property. The property value is multiplied by the assessment percentage (set by law) to arrive at your assessed value. Your taxes are set when that assessed value is multiplied by a mill levy set this fall by school boards, county commissioners, city councils, and special district directors.


If no special levies or bonds are added and no exemptions are in place, we estimate your total taxes for this year (2005 payable 2006) will be approximately

Your tax bill last year (2004 payable 2005) was	\$1,588.52
	\$1,406.51

Go to www.boulderasessor.org for a more detailed description of your property and a complete listing of all the sales in your area. Use your Account Number and Access PIN to obtain information on your property. Refer to the attached Appeal Form for definitions of property characteristics.

MARKET COMPARISON GRID
- Your property has been valued using mass appraisal techniques. These three comparable properties support your 2005 actual value.
- Listed below are the most significant attributes that contribute to the value of your property.

	Your Property	
Property Address	001715 SUMAC ST	
Account Number	R0097213	
Sale Date	06-Jan-2004	
Sale Price	\$218,500	
Time-Adjusted Sale Price	\$219,763	
Total Above Grade Living Area	1,699 SQ FT	
Year Built	1992	
Quality	AVERAGE	
Bathrooms	1-F 2-T 1-H	
Finished Basement Area	250 SQ FT	





	Comparable 1	Comparable 2	Comparable 3
Property Address	001730 SUMAC ST	001722 SUMAC ST	001713 TULIP ST
Account Number	R0097256	R0097258	R0097261
Sale Date	06-Jan-2004	13-Nov-2003	23-May-2003
Sale Price	\$218,500	\$220,000	\$218,500
Time-Adjusted Sale Price	\$219,763	\$220,374	\$220,202
Total Above Grade Living Area	1,663 SQ FT	1,408 SQ FT	1,392 SQ FT
Year Built	1992	1992	1992
Quality	AVERAGE	AVERAGE	AVERAGE
Bathrooms	2-F 1-H	1-F 1-T 1-H	1-F 1-T
Finished Basement Area	0 SQ FT	0 SQ FT	0 SQ FT

MARKET COMPARISON MAP
- The map at right shows the location of your property and the comparable sold properties listed above.
- Residential property, by law, must be valued solely by the *market approach*. Market value is based on sales prices of homes with similar location, size, age, and other attributes. Your property has been compared to similar single-family homes that sold during an 18-month period from January 1, 2003 through June 30, 2004. By law, if there were not enough sales during that time period, a 5-year period may be used.
- Sales prices within this study period were *time adjusted* to the end of the period, June 30, 2004, as if they were sold on that date. The *time adjusted sales price* reflects market conditions on that date.



Sample Report

This means that the core data provided in the report can be enough to allow the assessor to immediately dismiss the appeal or to initiate analysis to validate the assessed value. Individual reports can be generated for every property automatically to allow users to access this information without having to

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generate a model as the report can be stored and can be reviewed as an HTML file or a PDF without having to access the spatialest® software directly. The information can be made accessible via standard browser technology thus providing a corporate resource quickly and easily.

Core benefits of spatialest®

- Appraise using a location sensitive model
- Visually review and incorporate influences such as Golf courses or lake frontage
- Calibrate the model, stratify or remove outliers geographically and statistically
- Review location of comparables and their characteristics
- Create reports with estimated values, a location map, model statistics and the location and attribute information of the comparables used to generate the estimates
- Visualize and understand patterns and trends
- Incorporate and accommodate for patterns and trends
- Provide an intuitive interface for CAMA modelling
- Facilitate the management of appeals and review of comparables

Some Frequently Asked Questions

Included below are a series of frequently asked questions regarding the spatialest® product.

- **Is spatialest a CAMA system?**

No. Our understanding of a CAMA system 'per se' is a database which manages property and land information – a Cadastral Management system. Changes in property characteristics, land ownership, parcel maintenance and so forth are key processes in a CAMA system. spatialest® is a modelling toolset. Consequently the absence of a 'CAMA' system does not inhibit the spatialest® process as long as a database containing property information is available.

- **If spatialest isn't a CAMA system, what do we get?**

spatialest® will create and manage estimates of property value (or rental value) based on the comparable sales (or rental) approach. This information can then be reported and mailed to the client or posted on the web. spatialest® is an analytical toolset capable of incorporating geography within analysis. This isn't easily done within normal regression processes without encountering issues such as a lack of representative sales per 'neighbour'.

- **CAMA systems take an eternity to implement. Does spatialest take as long?**

No. Because of the flexibility of the software spatialest® will require a fraction of time normally required for a CAMA implementation.

- **What data can be used with spatialest?**

spatialest® can utilise a series of various data including direct access to database information and spatial data, such as ESRI shape files, MapInfo data and so forth. ASCII data may also be imported.

- **How does spatialest® integrate?**

spatialest® integrates at the database level thereby obviating unnecessary costly duplication of effort but maintaining database and user integrity.

- **Does spatialest® need a database?**

spatialest® loads SQL Server during installation on the local system. All model and analytical processes are recorded and managed on this local system. Once the exploratory analysis is complete the generated results are uploaded to the main server.

- **What training is required?**

Training courses are available in spatialest®. The 'Introduction to spatialest®' course lasts for 3 days after which the user will be proficient in the complete application.

- **Is spatialest® the same as ArcGIS?**

Unlike spatialest®, ArcGIS or other mainstream GIS products, have not been designed for the appraisal process and so they do not have a valuation component. spatialest® is unique in that it uses GIS to generate estimates of property value which makes it a very specialized toolset. While spatialest does offer basic GIS functionality it is not designed to be a generic GIS application such as ArcGIS.

- **Do I need to be proficient in GIS to use spatialest?**

No. spatialest® requires the user to have only a basic knowledge of GIS which is covered in Day 1 of the 'Introduction to spatialest®' training course. One of the great advantages of spatialest® is that the appraiser can quickly and easily incorporate their 'local' knowledge of the market area in the appraisal process without the need for complicated GIS procedures.

- **I already have a GIS component in my CAMA system – how does spatialest® differ?**

spatialest® is the only GIS based appraisal software with a patented valuation algorithm. Other products are able to query and update the property database via a GIS interface, however, none use GIS to produce an estimate of value. In this respect the effects of real geographic entities such as Lake Frontage, golf courses and so forth, are incorporated in the analysis. This is something that cannot be achieved by purely visualization methods.

- **Can the NOV's be customized?**

Yes. The NOV's in spatialest can be customized to present any information the Assessors' Office holds in its property (CAMA) database. Ancillary data such as Ortho imagery may also be included.

- **Does spatialest need SPSS?**

No. spatialest EDA® (Exploratory Data Analysis) is a statistical toolset containing all the standard functionality required for data cleansing and regression analysis, comprising a 'Stat Wizard' and wrapped up in an intuitive interface so that valid analysis can be performed quickly and easily.

Find out More

If you would like us to visit with you to demonstrate our product please contact us. (info@spatialest.com)

You might also wish to talk with some of our users. References and contacts are available on request.

There is also a wealth of information on the spatialest product available online at: www.spatialest.com

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