

WISCONSIN ASSESSORS PILOT PROGRAM

Valuebase Pilot Results

What Worked, What Didn't,
and How Assessors Can Use It

2 Hours | Real Pilots | Real Data | Real Outcomes

ALL ABOUT ME

Jake Parkinson



Recovering Assessor, Valuebase

- Past President, Utah Assessors Association
- Past President, Utah Chapter IAAO
- Past President, Utah Coalition of Appraisal Professionals
- 15 Years at Tooele County, Utah
- Fee Appraiser & Mass Appraiser
- Former IAAO USPAP Chair & IAAO U40 Original
- 2017 IAAO Member of the Year
- I Make a Mean Chocolate Chip Cookie

All About Me

Jake Parkinson

Assessor = Oppressor



ALL ABOUT Valuebase



Valuebase



Founded in 2023



Funded by tech giants



Assessment tools, built by assessors



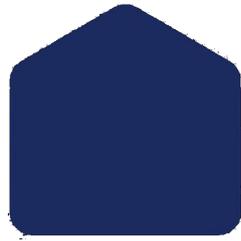
Embedded in the industry



OpenAI



Center for
Appraisal Research
& Technology



Valuebase

**We work alongside
your existing CAMA system
—not against it.**

CAMA: System of Record + Tax Administration

The Foundation of
Administrative Workflow.



System of record: Ownership, characteristics, property cards



Admin workflow: Notices, billing, exemptions



Compliance outputs: Forms, exports, reporting



Operational plumbing: Integrations, security, permissions, auditing

CAMA runs the administrative machine.

Valuebase

Valuation Engine +
Equity/Defensibility Layer



Market valuation engine:
How values actually get set



Equity diagnostics:
Ratio studies, outliers, fairness



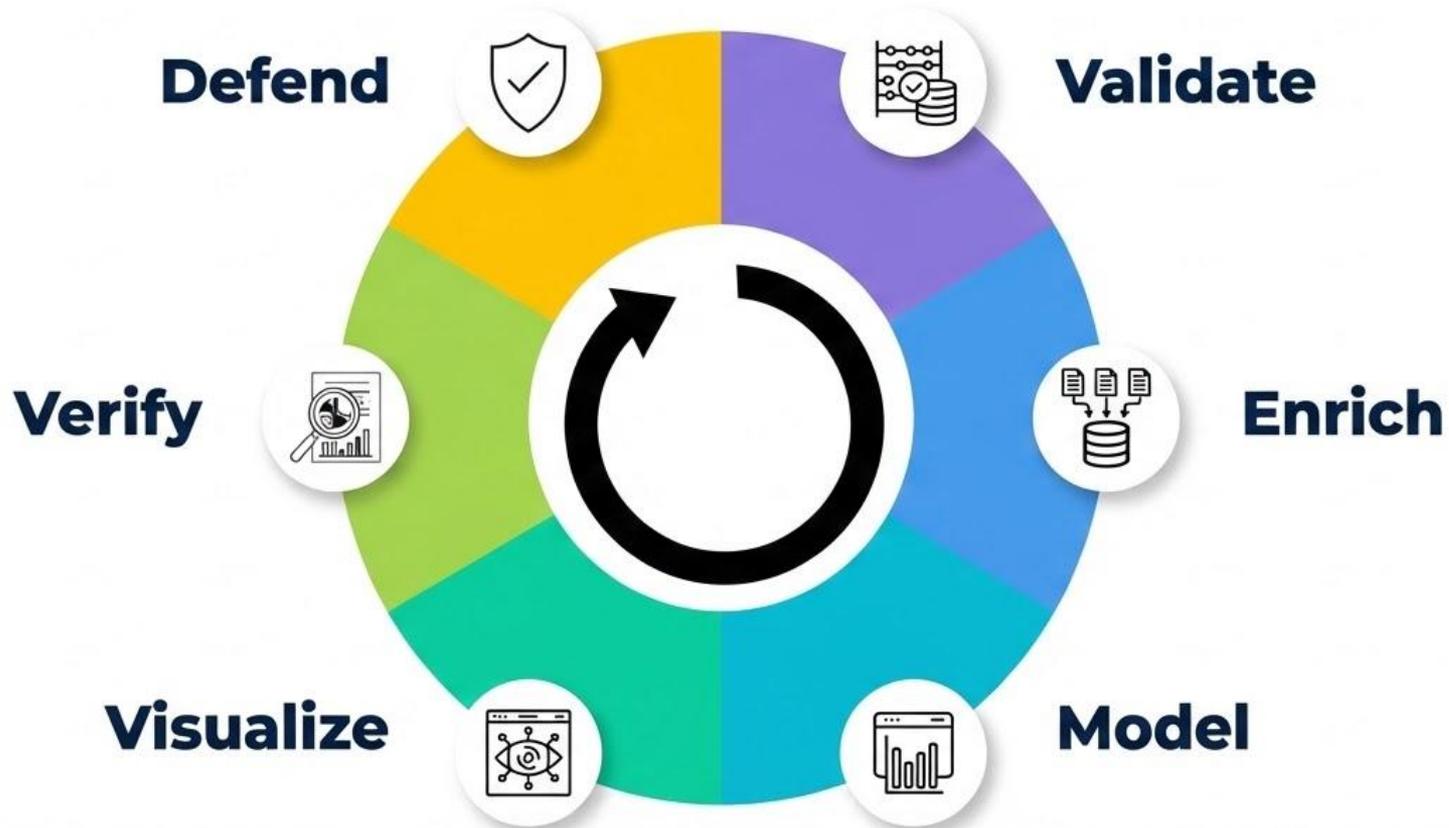
Land + comp intelligence:
Better comps, better land modeling/verification



Defensibility: Appeal season:
explain “why this value” fast
and consistently

CAMA runs administration. Valuebase runs valuation.

VALUEBASE ASSESSMENT INTELLIGENCE PLATFORM



Common Assessment Pain Points

Sales Validation

Scrubbing under compressed timelines with limited staff and inconsistent transaction data

Land Instability

Rural-urban mixes, inconsistent land tables, and propagating errors throughout value models

Late Equity Discovery

Equity issues surfacing after notices go out — triggering appeals and public backlash

Staffing Constraints

Experience gaps, retirements, and the expectation to do more with fewer resources

Public Scrutiny & Appeals

Pressure for transparency, defensible values, and open-records compliance

Rapid Value Changes

Markets moving faster than annual cycles, leaving assessments lagging and exposed



Valuebase

Do your best assessment work
—without burning out.

TODAY'S AGENDA

10–15 min

Opening & Session Framing

Credibility, expectations, and removing vendor skepticism

15–20 min

Reality on the Ground

Common assessment pain points — sales, land, equity, staffing, scrutiny

15 min

Pilot Overview

What we tested, who participated, and how we used your data

25–30 min

Land Comes First — LEAs & Validation

The most impactful valuation challenge and how we tackled it

20 min

Data Enrichment: Fixing Inputs at Scale

Parcel tagging, land size verification, uniform adjustments

25 min

Valuation Validation

A second look — not a second guess. Ensemble modeling in plain English

20 min

Visualization & Daily Workflows

Real usability: comps, outliers, equity checks, appeals support

15 min

Pilot Results & Lessons Learned

What worked, what didn't, what assessors changed

10 min

Implementation Reality Check

Timeline, data needs, training, early challenges

20–30 min

Open Discussion & Q&A

Appeals, transparency, ratio impacts, workflow concerns

What This Is NOT



A CAMA Replacement

Valuebase works alongside your existing CAMA system — not against it



Black-Box Mass Appraisal

Every output is explainable, auditable, and grounded in your data

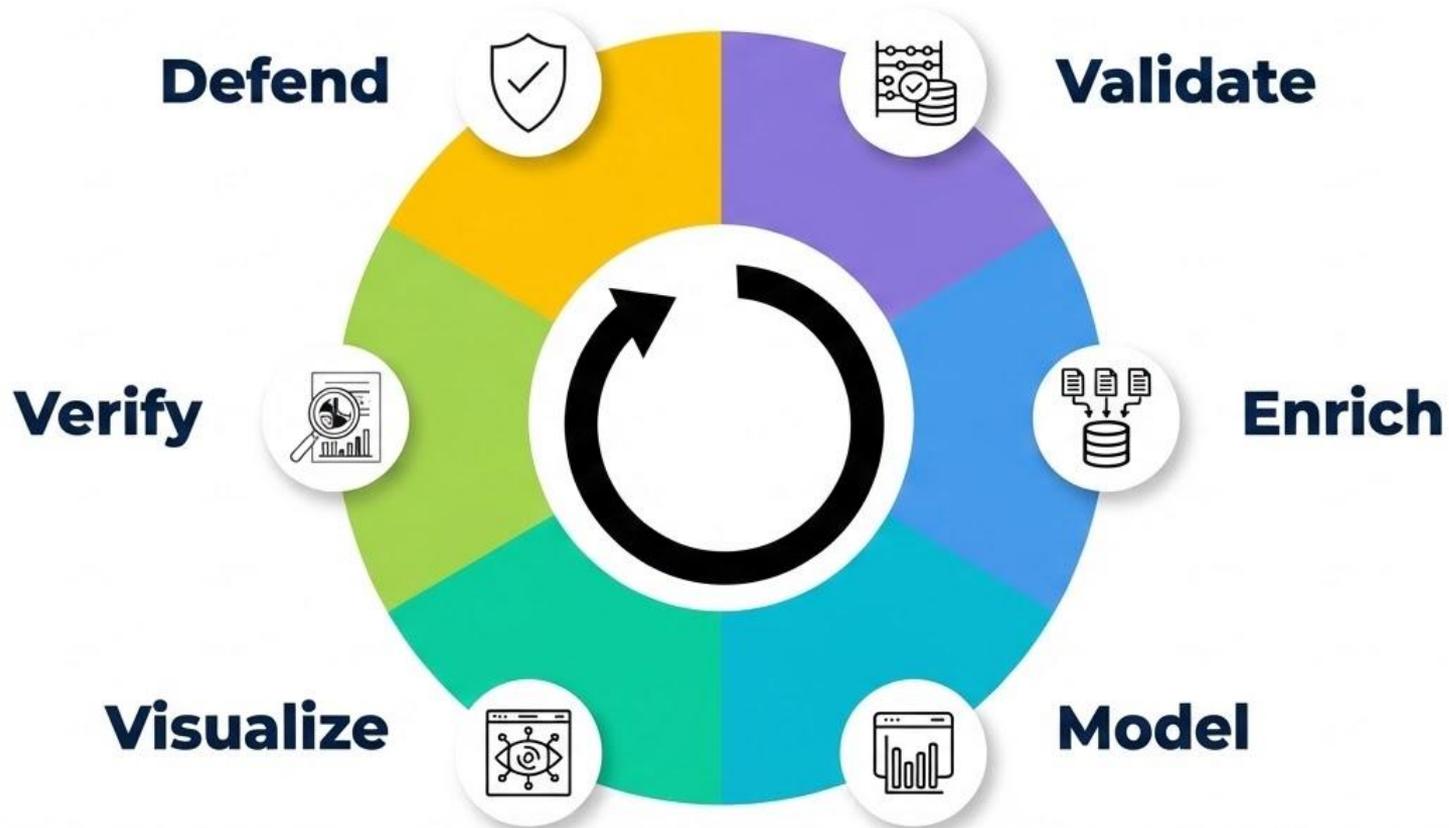


Additional Unused Reporting

Built for the decisions you're already making, in workflows you already use

Everything shown today is designed to help assessors find problems faster, defend values more confidently, and save staff time.

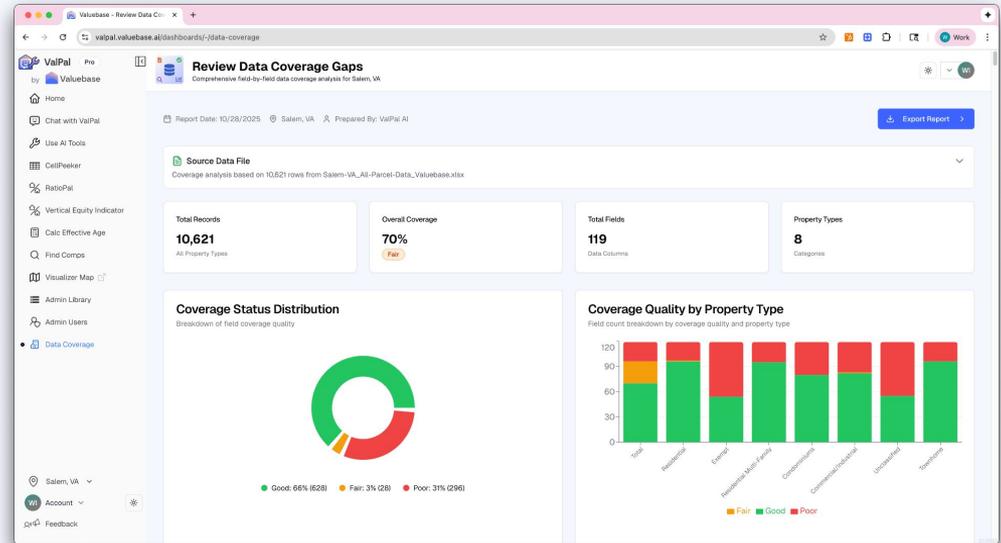
VALUEBASE ASSESSMENT INTELLIGENCE PLATFORM



Data Validation

Data Coverage Report: See What's Missing Before It Costs You

- **Spot Weak Data Instantly:** See where your dataset is thin or incomplete, before it impacts valuation accuracy.
- **Prove Data Quality:** Quantify coverage and completeness to build confidence with auditors and stakeholders.
- **Focus Data Cleanup Improvements:** Target specific areas that drive the biggest accuracy gains.



Quality Grading Using AI

- We use algorithms and LLMs to help correct inconsistent building quality grading and condition grading
- Significantly improves equity in our models and your cost approach.



Identifying Data Gaps & Inconsistencies



- Pinpoint missing or incomplete records.
- Highlight inconsistencies across data sources.
- Reveal areas requiring further investigation.



Sales Data Cleaned Automatically—Faster, Smarter, Consistent.

- AI to detect problem with sales & asks you to double check
- Save hours of manual cleanup
- Ensure consistent, defensible valuations

Review Invalid Sales
Review and validate sales marked invalid by the modeling system.

Pending Review 12 Sales to review

Confirmed Invalid 0 Correctly flagged

Overridden 0 Made valid

Review Progress 0.0% Complete

Total Invalid Sales 12 Flagged by system

Review These Invalid Sales for Tooele, UT
Review sales flagged as invalid by the modeling system. Confirm or override invalidation decisions, then export a report.
Last Updated: 10/10/2025

- Modify invalidation reasons if needed
- Click "Override" to reject invalidation
- Click "Confirm Review" when reviewed and ready

Filter Settings

Invalidated Reason: All Reasons

Property Type: All Property Types

Search ID/Key: Search...

Sale Year Range Drag dots to set year range. Showing the 1 year from 2025 to 2025. max: 2025

0 of 12 • 0% Complete • Export Report • List Actions...

Sale ID	Property Key	Sale Price	Sale Date	Dataset
-	81-188-0-0022	\$405,000	2025-01-08	Residential_Lif
Reason Sale is Invalid (1/1)				
Possible Multi-Parcel x				
				Override as Valid Sale
				Confirm as Invalid Sale
-	81-188-0-0044	\$405,000	2025-01-08	Residential_Lif
Reason Sale is Invalid (2/2)				
				Override as Valid Sale



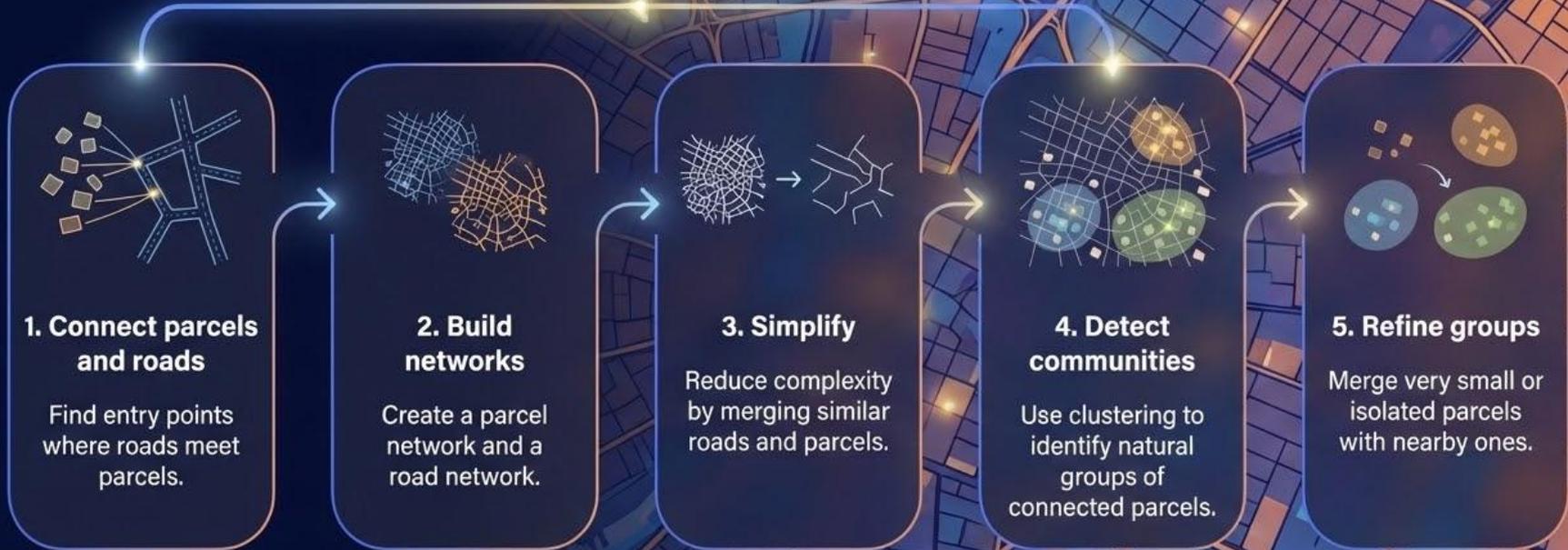
Data Enrichment

Land Comes First

*"If land is wrong,
everything else
is noise."*

- › Land errors propagate downstream into every improvement value
- › Land Economic Areas (LEAs) reveal true market behavior
- › Data layers: sales density, soil, boundaries, amenities

New LEA Algorithm



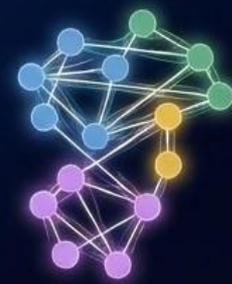
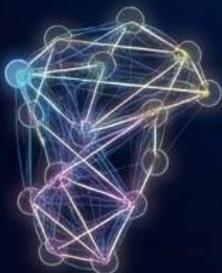
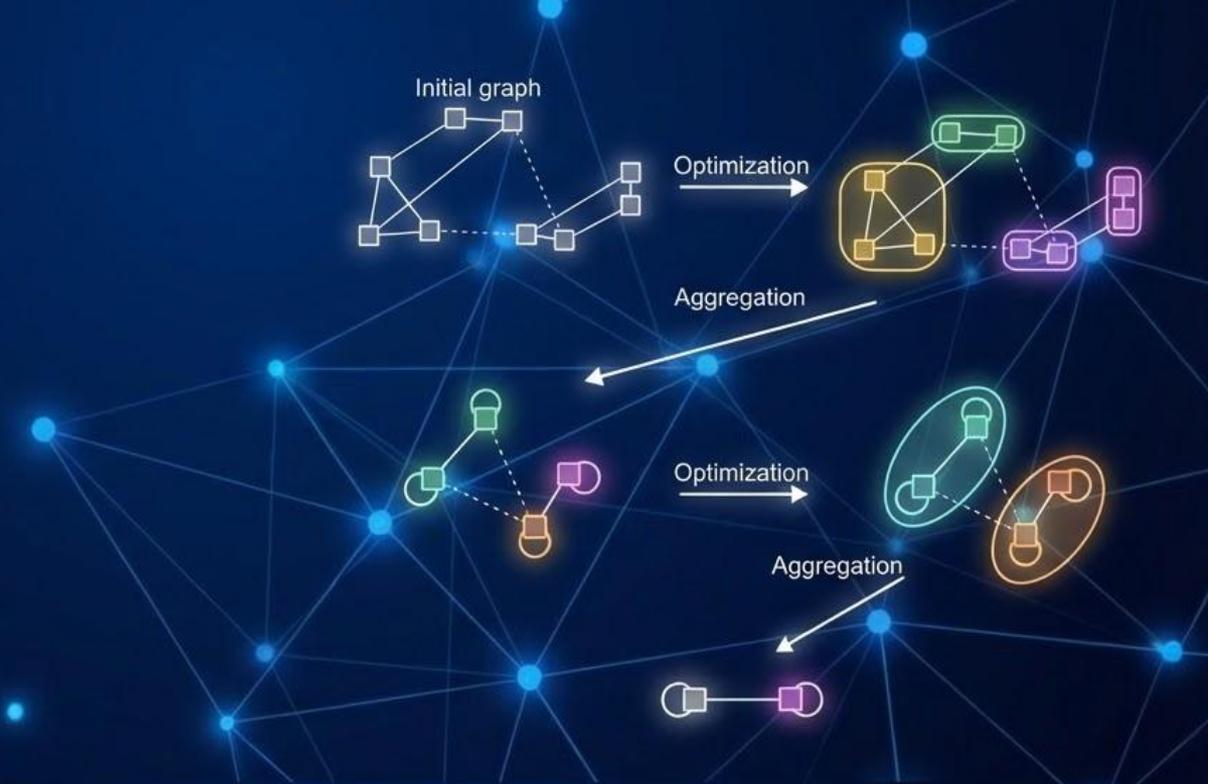
Graph-based approach

1. Link parcels to road network
2. Run Louvain algorithm to find connected neighborhoods
3. Automatic corrections
4. Merge based on combined land table performance
5. Manual corrections



Louvain Algorithm

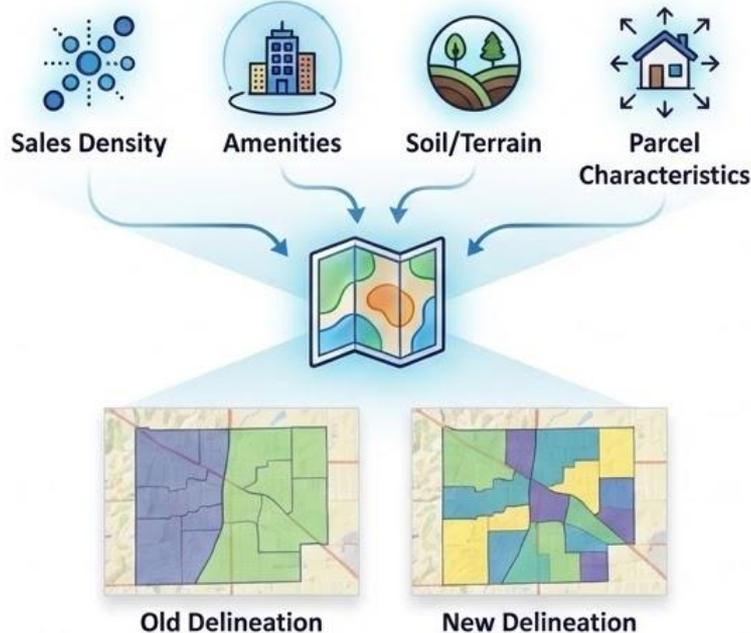
1. Optimize graph of parcels
2. Find clusters
3. Optimize graph of clusters
4. Find cluster-clusters
5. Optimize reduced clusters



2
3

What They Are & What Assessors Gain

What Are LEAs?



Visually mapped & exportable. Compare 'Old' vs. 'New' delineations.

What Assessors Gain



Clear Visualization

See exactly how land values behave across your jurisdiction



Unstable Table Detection

Identify land tables producing inconsistent results before appeals do



Improved Consistency

Uniform land value inputs across similar market areas



Defensibility

Visual and statistical evidence to support land rate decisions

Data Enrichment: Fixing Inputs at Scale

*This is the work assessors know they need to do — but never get to.
Valuebase uses AI to do the heavy lifting.*

Waterfront

Identify all waterfront-adjacent parcels automatically from imagery and GIS

Road Influence

Flag busy-street proximity and transportation corridor impacts on value

Shape & Topography

Rectangularity scoring, irregular lots, topographic disadvantages

Flood Zones

Overlay flood zone data for consistent risk-based adjustments

This supports assessor judgment — it doesn't replace it.

AI-Powered Parcel Tagging for Smarter, Fairer Valuations



Identifies **corner lots**, **road frontage** & **streetlights**



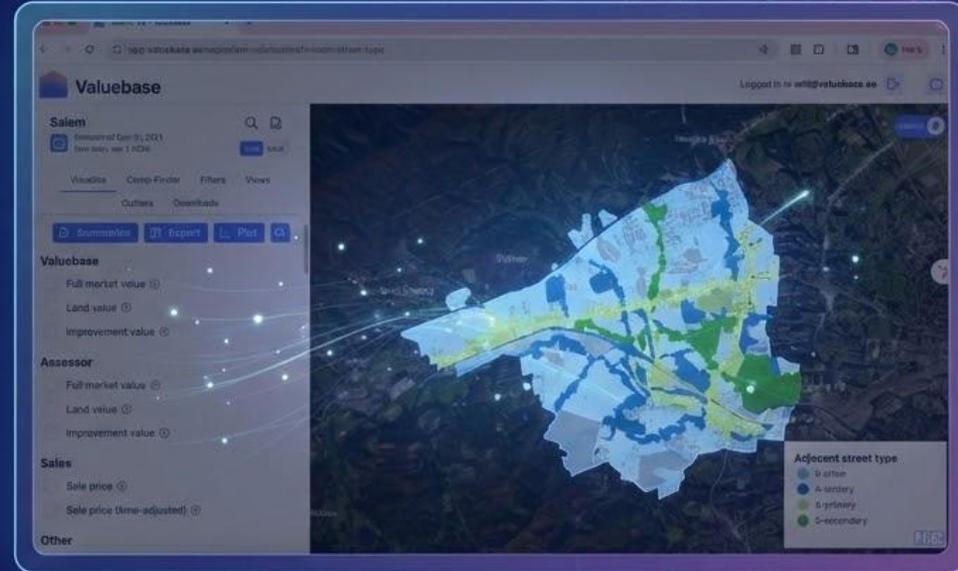
Tags **parcel shape**, **rectangularity** & **topography**



Flags **flood zones** automatically



Enables consistent adjustments across all parcels



More accuracy. More equity. Less manual guesswork.





Valuebase

AI-Driven Ensemble Modeling

www.valuebase.ai



Our validation modeling approach



We used an ensemble approach to models.



This is a standard practice, that harnesses “wisdom of crowds” to get great modeling results.



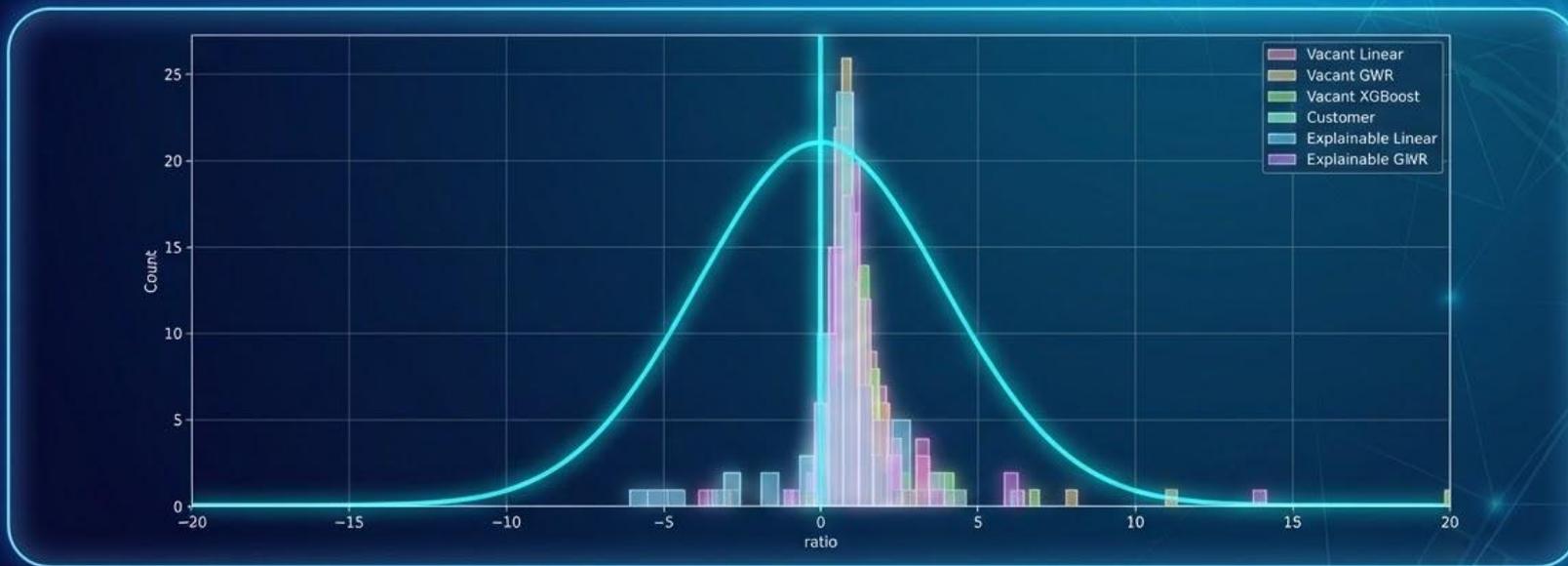
We built out 9 different models.



Our validation modeling approach



Our validation modeling approach



When you take the median estimate of all 9 models, you get great results:
a nice normal distribution centered on a ratio of 1.



Valuebase

VISUALIZATION

Clarity through GIS: Seeing the Full Picture of Your Data



Identify Trends & Patterns:

Instantly spot spatial relationships and market shifts not visible in spreadsheets.



Enhance Communication:

Use clear, compelling maps to explain complex value changes to stakeholders.



Streamline Workflows:

Integrate GIS with other tools for faster, more informed decision-making.

www.valuebase.ai

Visualizer: Turn Data Into Clarity



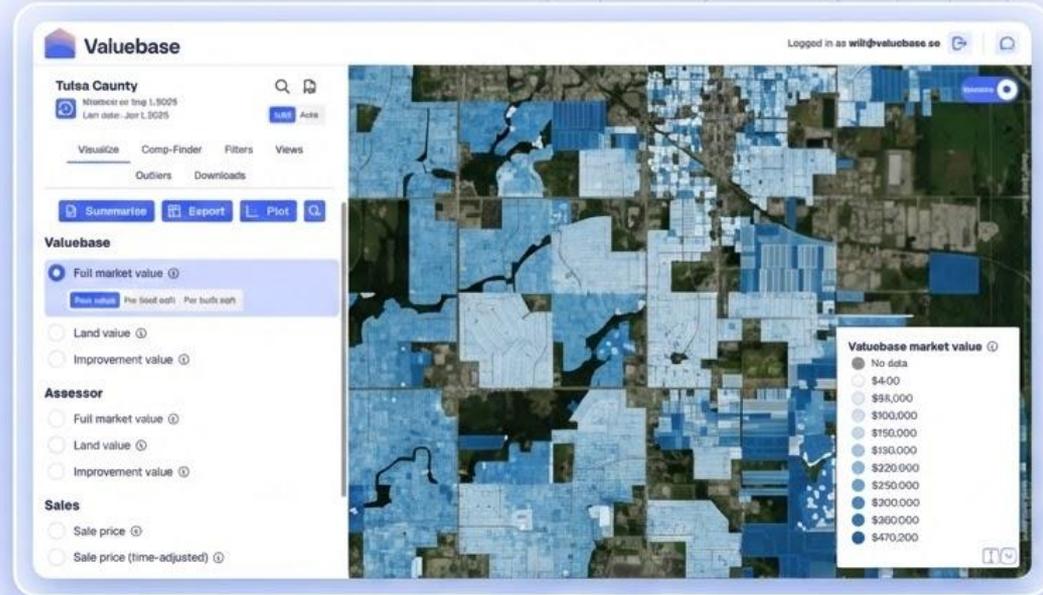
Expose Hidden Inequities Instantly – See every sales ratio on one screen so you can spot unfair assessments before taxpayers do.



Stop wasting hours hunting for comparables - AI surfaces the best matches with adjustments done for you.



Catch Outliers Before They Blow Up Your Roll - Flag bad data, inconsistent appraisals, and problem properties before they end up in front of the appeals board.



DEFENSE

Data-Driven Defensibility for Assessments & Appeals



Defensible Valuations:
Backed by transparent,
auditable data and
methodologies.



Appeals Support:
Quickly generate
comprehensive evidence
packages.



Regulatory Compliance:
Align with IAAO standards
and USPAP guidelines.

Smarter Comps. Automated Adjustments. Defensible Reports.

Stop wasting hours hunting and tweaking comps. Let AI surface the best matches and draft the adjustments for you.



Find the Right Comps Fast – Automatically surface the best matches in seconds



Adjustments Done for You – AI applies consistent, explainable adjustments.



Defensible Comp Reports – Auto-generate full forms with Google Street View images and model-backed adjustments



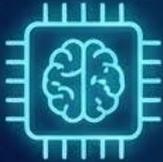
Equity & Appeals Support – Instantly pull equity comps when fairness is challenged

Feature	Subject	10% Adjustment	Comparable Sale #1	Comparable Sale #2	Comparable Sale #3				
Address	2661 E WHEELING AVE E		1915 S WALKER BLVD E	1017 S WALKER BLVD E	2201 S WALKER BLVD E				
Proximity to subject			0.08 mi SE	0.08 mi SE	0.38 mi SE				
Sale price	\$804,000		\$499,000	\$770,000	\$1,080,000				
<ul style="list-style-type: none"> Sale date Land occupant area Neighborhood Land area Year built Flooding year built Building quality/area Building condition class Finished area 	<ul style="list-style-type: none"> July 04, 2005 Three Oaks International Airport WED 16,987 sqft 981 0 - Very Good 0 - Average Zablr apt 	<ul style="list-style-type: none"> November 02, 2004 Three Oaks International Airport IRE 14,286 sqft 1958 0 0 - Very Good 0 - Average 0.836 sqft 	<ul style="list-style-type: none"> March 1, 2004 Three Oaks International Airport IRE 16,200 sqft 1900 0 0 - Very Good 0 - Average 4,761 sqft 	<ul style="list-style-type: none"> July 1, 2004 Three Oaks International Airport IRE 16,817 sqft 1900 0 0 - Very Good 0 - Average 4,761 sqft 	<ul style="list-style-type: none"> Adjustment Net adjustment (total) Adjusted sales price 	<ul style="list-style-type: none"> -43,200.00 +0.00 +0.00 -66,000.00 +10,781.25 +0.00 +0.00 +0.00 -48,106.10 -48,106.10 80% 47.6% 	<ul style="list-style-type: none"> +18,557.50 +0.00 -116,254.45 +11,073.61 +0.00 +0.00 +0.00 -48,000.00 -48,000.00 84% 70.7% 	<ul style="list-style-type: none"> -68,886.26 +0.00 -116,079.62 -87,070.66 +0.00 +0.00 +0.00 -48,000.00 -48,000.00 86.0% 86.0% 	<ul style="list-style-type: none"> \$288,800 \$273,400 \$637,990

Comps Made Clear. Adjustments Made Easy.

ValPal Toolbox

AI-Powered Tools for Streamlined Assessments & Analysis



AI-Powered Analysis:

Leverage machine learning for deeper data insights and trend identification.



Automated Workflows:

Streamline repetitive tasks and increase operational efficiency.



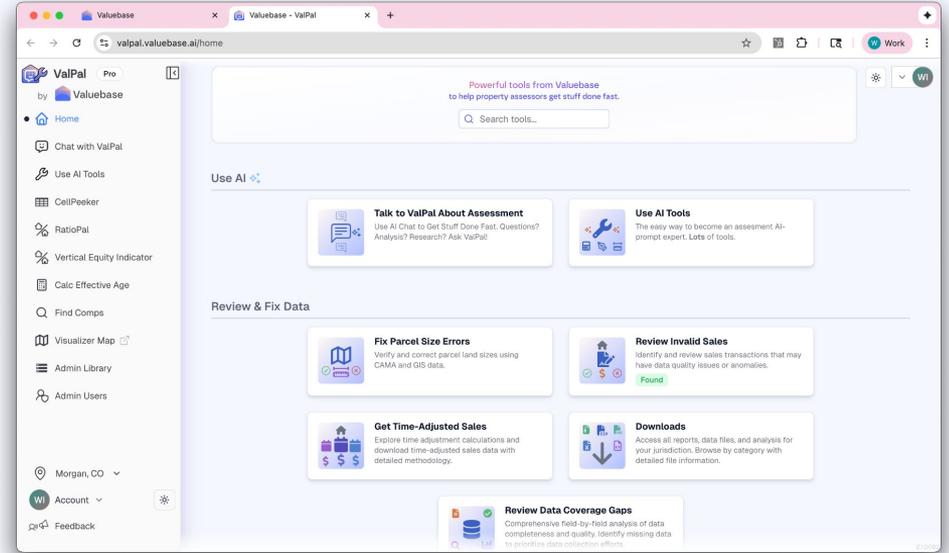
Defensible Insights:

Generate robust, data-backed reports for confident decision-making.

VaiPal: Your Office's AI—Trained on Your Playbook

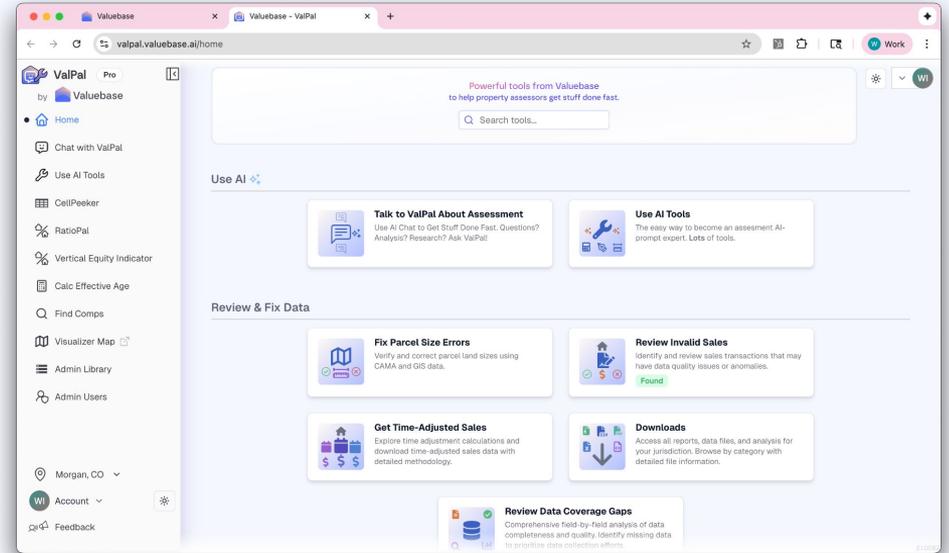
- **Grounded in Your Data** – Trained on IAAO standards, state codes, and your office's manuals so answers are relevant and reliable.
- **Appeals Defense** – Instantly flag USPAP/Fannie violations in 1004s and arm your staff with defensible answers.
- **Smarter Comps & Ratio Studies** – Auto-adjusted comp grids and one-click ratio studies (COD, PRD, VEI) for faster, consistent analysis.

Cited. Consistent. Defensible.



WI Reference Library

- Trained on the education sessions over the week.
- Ask questions, run analysis and code.
- It has context on your specific use cases!
- Here's how to use it.





Valuebase

The Microsoft Excel logo, consisting of a white 'X' inside a green rounded square, which is itself centered on a larger, semi-transparent green rounded square.

X

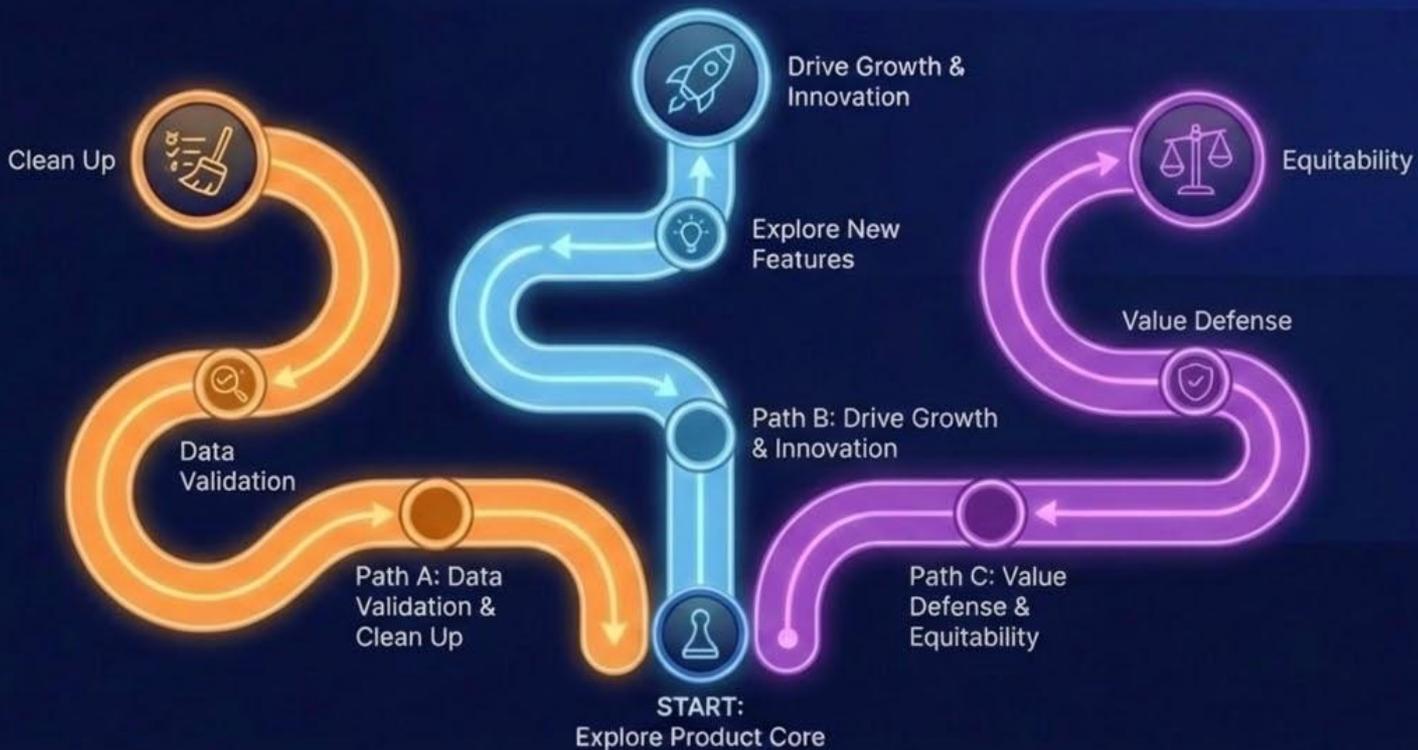
How you use Excel vs Excel's capability



Valuebase

Choose Your Own Adventure with Valuebase

You decide how to use the product.





Valuebase

Free Tools:

jake@valuebase.ai

801.898.0462

www.valuebase.ai



Pilot Overview: What We Tested & Why

SCOPE: Participating Wisconsin jurisdictions

DATA: Assessor-provided — no proprietary magic inputs

GOALS: Validate land · Identify equity risks · Test daily usability

Key Framing: The goal was usefulness, not theoretical perfection.

A Second Look— Not a Second Guess

*"Think of this as a smoke detector,
not an autopilot."*

Valuation Validation

Ensemble Modeling

Multiple models checked against each other — not a single black box

Value Ranges

Point estimates plus confidence bands, not just one number

Flag for Review

Identify parcels that deserve a second look before notices go out

Confidence in Compliance

Clear visibility into which values are most defensible

Visualization & Daily Assessor Workflows

01

Finding Comparable Sales

Quick comp lookup with visual map interface — faster than digging through CAMA export files

02

Visual Outlier Identification

Spot anomalous parcels that stand out from neighborhood trends before they become appeals

03

Pre-Notice Equity Checks

Run equity analysis before notices go out — catch CHD issues, not after the fact

04

Appeals & Open Records Support

Pull visual comp grids and adjustment explanations for board hearings and public records requests

05

Works With Excel & CAMA

Complements your existing tools — CSV exports, PDF reports, not a rip-and-replace

What Worked.



LEA Delineation:

New land areas identified meaningful market differences assessors weren't capturing in existing neighborhood codes



Parcel Tagging at Scale:

Waterfront, road, and shape tagging completed on thousands of parcels in hours — not months of field work



Ratio Improvement:

Enhanced ratio statistics surfaced equity gaps by land market area, not just county-wide averages



Second-Opinion Valuations:

Ensemble model flagged 8–12% of parcels for review — concentrated the assessor's attention where it mattered most



Assessor Adoption:

Staff who engaged with results made changes — the tool worked best when paired with local context and expertise

What Didn't Work As Expected

Data Gaps Slowed Everything Down

Missing year built, incomplete land codes, and inconsistent sales validation fields required cleanup before modeling. Garbage in, noise out.

Change Takes a Champion

Jurisdictions with one engaged staff member got 10x more value than those waiting for consensus. Pick the willing.

Expectations Around Speed

Not instant magic. Value becomes visible within a cycle — not overnight. Set this expectation early.

One Size Doesn't Fit All Jurisdictions

Urban vs. rural areas needed different parameter settings. Local assessor input was essential to calibrate correctly.

Implementation Reality Check

01 DATA REQUIREMENTS

Assessor-provided parcel data, sales history, and GIS boundaries. No proprietary third-party feeds required.

02 TYPICAL TIMELINE

Initial deliverables within 4–6 weeks of data receipt. Full workflow integration within one assessment cycle.

03 TRAINING APPROACH

Start with willing staff. Self-selection works better than mandated rollout. Build champions first.

04 EARLY CHALLENGES

Data cleanup is the first bottleneck. Plan for it. The cleaner the input, the faster the value.

05 WHEN VALUE APPEARS

Equity improvements visible in first ratio run. Land table insights available in the first report set.

This is not instant magic. It is measurable improvement within a cycle.

Open Discussion & Q&A

Let's dig into what matters most to you:

- Appeals and defensibility — how does this hold up in board hearings?
- Transparency and open records — what can and can't be shared?
- Ratio impacts — how quickly can I expect improvement?
- Workflow integration — what does day-to-day use actually look like?
- Wisconsin-specific concerns — what do our statutes require?