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Monthly Dossier from Nexval.Al's Research Lab



September 16, 2025

### From the Editor's Desk

In our last edition, we examined how AI can help mortgage teams keep operations running during **climate-driven disruptions.** This time, we've taken that same operational lens and applied it to another area where timing and precision have an outsized impact - REO.

Foreclosure and REO activity doesn't rise evenly across the country. A surge in one state can be hidden by stability in another, and national averages rarely show the full picture.



For servicers, asset managers, and property preservation companies, relying on broad trends can mean missing the early signs of local spikes costing weeks or even months on a disposition timeline.

In this edition, we look at how AI can surface emerging REO clusters before they appear in public reports, forecast time-to-disposition with county-level accuracy, and speed up property preservation decisions by classifying images and routing work to the right crews without delay.

We also highlight lessons from other industries that have already built location-specific Al systems and how those approaches can be applied in mortgage operations.

Rather than chasing every data point, the focus is on isolating the metrics that matter for your portfolio and turning them into faster, more informed decisions that protect timelines and asset value.

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### Welcome to the Nexval.ai's Zine Dot Al

#### What is Zine Dot AI?

At Nexval.ai, we envisioned a future where mortgages were effortless. Inspired by our AI, we crafted a name that harmonized simplicity with innovative technology. Thus, Zine Dot AI was born - a pioneering platform that transforms the mortgage journey, harnessing the power of advanced AI to make the complex, simple

#### How will Zine Dot AI make a difference for you?

This dossier is your roadmap to mortgage industry leadership, providing expert insights and analysis to ensure you're always at the forefront of emerging trends and opportunities.

#### Each issue will deliver:



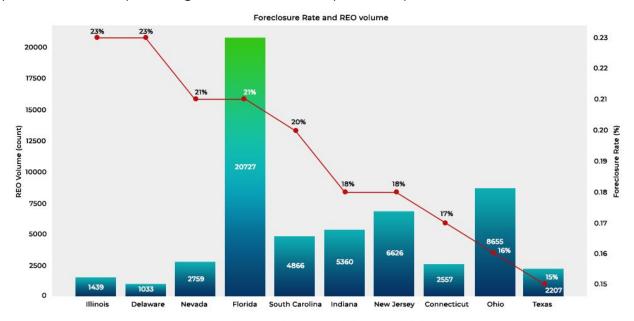
Ready to make smarter decisions, stay ahead, and seize new opportunities? Let's dive in together!

## Al Spotlight:

## **Local REO Patterns - Data-Driven Strategy by Region**

Foreclosure and REO trends don't move in lockstep across the country. In July 2025, Nevada, Florida, Maryland, South Carolina, and Illinois recorded the **highest foreclosure rates** in the nation. But when you look at completed foreclosures (REOs) - Texas (377), California (360), and Florida (241) topped the list.

For servicers, asset managers, and investors, that gap between foreclosure rate and REO count matters. Relying on national averages or headline foreclosure stats can lead to misallocated resources - especially with REO timelines averaging 645 days in Q2 2025. A delayed or generic response can drive up holding costs, increase compliance exposure, and cut into sale recoveries.



Source: ATTOM Data Solutions – Foreclosure Market Reports

#### Where AI Fits

Al models trained on regional foreclosure patterns and property-level market data can:

- Identify regional risk clusters: Combine public datasets (e.g., ATTOM foreclosure filings) with proprietary servicing data to pinpoint where new REOs are most likely to appear.
- Predict time-to-disposition: Use historical timelines and local court data to forecast REO processing durations by county or state.
- Optimize task allocation: Match preservation crews, legal resources, and marketing efforts to the highest-probability liquidation zones.
- Automate market monitoring: Continuously ingest updates from foreclosure auction sites, MLS feeds, and county recorder data to alert asset teams to fresh REO inventory.

#### The Competitive Edge in Going Local

Al's value here isn't just about speed - it's about **granularity.** Nevada's foreclosure rate may be

high, but Florida's REO volume could represent the larger portfolio exposure. Al that can instantly distinguish between the two helps decision-makers:

Prioritize the right markets for property

- preservation investment.
  - Decide where to deploy faster disposition
- tactics vs. longer-term holding strategies.
   Adjust auction and marketing plans as
- conditions shift.

REO disposition success increasingly depends on reacting to local market signals rather than national headlines. Al can help surface those signals faster - and connect them directly to operational decisions.

If your REO or loss mitigation strategy still starts with a one-size-fits-all playbook, there's a growing risk you're missing market-specific opportunities. **Nexval.ai** can help design Al models that work at the zip code level, not just the state level.

# Al in Action: Automating REO Pipeline Decisions

Once an REO is confirmed, every day before preservation starts or legal paperwork is filed adds holding costs and increases the chance of damage or market loss. Yet in many servicing operations, those first steps still depend on someone spotting the update in a report and manually kicking off the work. That delay is where most of the avoidable cost sits and it's the gap AI is built to close.

#### Where the Gaps Are

- Slow start on work orders Preservation crews often get their
  first assignments days after an REO
  is confirmed, pushing back every
  other step.
- Manual resource juggling -Assigning legal teams, appraisers, and marketing vendors still happens over email chains and spreadsheets in many operations.
- Generic task timelines Schedules don't account for local court delays, seasonal auction patterns, or market slowdowns, leading to wasted effort and missed windows.

#### How AI Closes the Gap

Al-enabled REO pipeline tools can cut that lag by:

- Auto-assigning vendors the moment a property's REO status is recorded.
- Matching the right vendor to the right job using past performance data filtered by ZIP code, property type, and task type.
- Adjusting timelines automatically based on local court schedules, market activity, and even weather data.

Flagging high-risk assets first so properties with vandalism potential or rapid depreciation get priority treatment.

#### The Operational Payoff

Teams using AI here are seeing:

- Faster turnarounds from REO confirmation to the first preservation order.
- Smarter resource use by balancing vendor workloads across regions.
- Fewer compliance misses thanks to built-in, location-specific deadline tracking.

Al in this role isn't replacing the asset manager - it's giving them a head start, so when a property hits the REO list, the first steps happen automatically instead of waiting for someone to hit "send" on an email.

If you're thinking how your REO processes could benefit from this level of automation, Nexval.ai can help design Al workflows that work with your existing systems and data. Schedule a walkthrough.

## Al in Property Preservation Photo QC: Reducing Review Bottlenecks

In property preservation, photo documentation isn't just a record the trigger for repairs, insurance claims, compliance updates, and vendor instructions. For every new assignment, dozens of inspection images may need to be reviewed before a single task can be scheduled.

When this review is manual, delays are inevitable. Images arrive in mixed order - front exteriors, interiors, close-ups of roof or foundation damage - often with duplicates. A reviewer must sort, interpret, and document each one, which slows down decision-making and pushes back field deployment.









Al-Powered Image Classification Process

During

**Property Feature Detection** 

The operational impact is tangible:

- Extended repair timelines Damage can worsen while waiting for review and approval.
- Inconsistent quality control –
   Interpretation of damage and scene classification varies between reviewers.
- Vendor scheduling inefficiencies –
   Preservation crews may be dispatched
   without complete or prioritized
   instructions.

Automated photo classification changes this workflow. Using AI-driven image analysis, **incoming photos can be sorted**  by property area, scene type, and visible damage before they reach the reviewer. This allows urgent repairs to be identified immediately, while non-critical issues are queued without affecting priority tasks.

With Nexval.ai's **PreservAl**, property preservation companies can cut review times, standardize quality checks, and ensure damage is addressed before it impacts asset value.

## **Tech Brief**

### **Building AI Pipelines for Region-Specific REO Decisions**

Managing REO portfolios at scale demands systems that can detect and respond to local surges before they affect timelines, costs, and compliance. Al models can support this - but only if they're fed accurate, geo-granular data and run on infrastructure designed for regional precision.

# 1. Multi-Source County-Level Data Integration

Foreclosure filings alone don't provide the full picture. County court dockets, MLS listings, property tax records, and preservation vendor updates all carry signals that help forecast REO activity.

#### **Best Practice:**

- Ingest public and proprietary datasets into a data lake using a schema-on-read approach to allow flexible integration.
- Apply geocoding to normalize addresses for matching across sources.
- Use parallelized micro-batch processing for frequent updates without system slowdowns.

#### 2. Geo-Specific Model Training

State averages mask local variations. REO prediction models need to operate at the **zip code or census tract level** to capture real patterns.

#### **Best Practice:**

- Partition training data by geography to avoid blending unrelated trends.
- Apply feature hashing for highcardinality location variables.
- Incorporate auxiliary datasets climate records, unemployment trends, permit data - for better accuracy.

#### 3. Automated Resource Prioritization

Regional spikes require rapid resource reallocation for preservation, legal, and marketing work.

#### **Best Practice:**

- Connect AI forecasts to dispatch and task management systems.
- Use scoring logic to weigh liquidation probability, property condition, and carrying costs.
- Implement optimization algorithms that balance crew travel time with expected ROI.

#### 4. Continuous REO Market Monitoring

Local REO markets can shift daily with new auction results or property status changes.

#### **Best Practice:**

- Deploy API integrations and scrapers for daily auction and MLS updates.
- Use change data capture (CDC) to limit downstream processing to only updated records.
- Trigger incremental model scoring when fresh data arrives instead of reprocessing full datasets.

#### 5. Region-Focused SLA Tracking

Service timelines vary by county court speed, vendor availability, and local regulations.

#### **Best Practice:**

- Build dashboards with geo-filters tied to SLA metrics such as foreclosure-topreservation start and listing-to-sale time.
- Configure Al-driven alerts when a county or zip breaches SLA thresholds.

Regional REO performance depends on how quickly data moves from intake to action. Al models trained and deployed with local context in mind can direct crews, guide legal processes, and adjust marketing timelines without waiting for national reports.

At Nexval.ai, we apply the same principles outlined in this Tech Brief to our REO workflows - using AI to audit property preservation images, detect key property features, and generate valuation-ready datasets. Schedule a walkthrough.



# **Industry Report Digest**

- In the final week of August, overall mortgage application volume decreased by 1.2% despite a decline in mortgage rates. The 30-year fixed rate fell to 6.64%, its lowest point since April 2025. While refinance applications saw a modest increase of 1% (driven primarily by FHA and VA loans), the Purchase Index dropped by 3% after a four-week growth streak, indicating a slowdown in homebuying activity. The refinance share of total applications rose to 46.9%, and the FHA and VA shares also increased, likely due to their lower interest rates compared to conventional loans.
- Global Desk's August 12, 2025, report indicates that **U.S. mortgage rates** are expected to gradually decline, with some experts forecasting a drop to around 6% by 2026. This potential relief for homebuyers is driven by key economic factors, including cooling inflation, a slowing economy, and the possibility of the Federal Reserve cutting interest rates. While some analysts, like the National Association of Home Builders (NAHB), are optimistic about rates dipping below 6%, Berkshire Hathaway's analysts are more cautious, projecting rates will remain between 6.5% and 7% through the end of 2025. Currently, the average 30-year fixed mortgage rate is at 6.63%. Experts advise potential homebuyers to consider their financial readiness and the impact of rising home prices, suggesting that waiting for rates to fall might not be the best strategy for everyone, as the savings from a lower rate could be offset by a higher home price.
- A potential interest rate cut by the Federal Reserve in September 2025 is not a certainty, despite market predictions. The primary argument against a cut is that inflation, measured by the Fed's preferred Personal Consumption Expenditures index, remains consistently above its 2%

- target, hovering between 2.6% and 2.9% in 2025. While tariffs and currency fluctuations complicate this measurement, inflation is still not where the Fed wants it to be. Additionally. the labor market remains solid, with the unemployment rate holding steady at 4.2%, close to the estimated natural rate of 4.3%. While economic forecasts predict a slight rise in unemployment by mid-2026, the current data doesn't justify a shift to easier monetary policy.
- The U.S. Department of Labor's Employment and Training Administration has issued guidance to states on how to use existing grants to bolster Al literacy and training for the public workforce. This new guidance is part of a broader federal effort to carry out a presidential executive order focused on AI education. It encourages states and local workforce development boards to use Workforce Innovation and Opportunity Act funding to support AI training for various programs, including those for youth and dislocated workers. According to department officials, this initiative is a direct response to the creation of new, high-paying jobs that are being generated by AI, many of which do not require a four-year degree.
- The Trump administration's plan to take Fannie Mae and Freddie Mac public faces significant problems and has left analysts baffled. A key issue is the aggressive timeline, as experts question if such a complex and sizable stock offering can be completed before the end of 2025. Two major financial and legal hurdles involve the Treasury Department's large stake in senior preferred shares, which could lead to litigation if dissolved or converted, and a massive \$181 billion capital shortfall the companies must address. Meeting this capital requirement could take a decade and would make the firms unattractive to investors by dragging down their return on equity. Furthermore, there is a risk that catering too much to investors could destabilize the housing market and lead to higher mortgage rates for American homeowners.

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# Al Across Industries John Deere's See & Spray Precision Agriculture

**John Deere's See & Spray** technology has reduced herbicide use for farmers by targeting only the weeds that need treatment. The value - lower costs, faster application, and healthier crops driven by Al's ability to make localized decisions in real time.

The system uses a network of high-resolution cameras and computer vision models mounted on sprayer booms. As equipment moves through the field, the AI scans each plant, distinguishes crops from weeds, and applies herbicide only where needed. Every action is logged and geotagged, creating detailed weed-pressure maps for future planning.





#### **How See & Spray Works:**

- Computer vision: Models trained on millions of plant images differentiate crops from invasive weeds in varying light and growth stages.
- Real-time edge processing: Images are analyzed instantly on the machine, enabling decisions without slowing operations.
- GPS-linked mapping: Each spray is geotagged, building a localized data layer for long-term weed management.
- Dynamic application rates: Herbicide volume adjusts based on weed density per section of land.

#### What REO Teams Can Learn

The takeaway for mortgage operations is the power of precision at the local level.

See & Spray doesn't blanket entire fields - it focuses resources where they'll have the most impact. REO teams can apply the same principle by:

- Using property and zip-code-level data to decide where to deploy preservation crews first.
- Prioritizing inspections in areas with the highest foreclosure or vandalism risk.
- Adjusting disposition timelines based on regional demand and holding costs.

Just as farmers save money and increase yields by acting surgically, mortgage teams can reduce expenses and speed up REO turnover by targeting their highestimpact actions to the right locations at the right time.

## **Upcoming Events to Add to Your Calendar!**

The 2025 Five Star Conference & Expo | September 29-October 1, 2025 |
 Omni Dallas Hotel | Dallas, TX

The Five Star Conference and Expo remains one of the mortgage industry's most influential gatherings - bringing together servicers, lenders, government agencies, law firms, investors, and service providers from across the U.S. It's an opportunity to hear directly from industry decision-makers and explore solutions shaping today's mortgage market.

**Faizi Shahidi, SVP of Operations & Account Management at Nexval.ai,** will be on-site to discuss AI-enabled process models in servicing, loss mitigation, and REO workflows. If you'd like to arrange time during the conference, you can **pick a slot here** and a meeting can be set anywhere at the venue - even over a quick coffee.

 Alta One, New York | October 7-October 10, 2025 | The New York Hilton Midtown | New York, NY

**ALTA ONE** is the American Land Title Association's flagship event, designed for professionals who work across the title, settlement, and escrow ecosystem to address regulatory changes, fraud risks, and the operational realities of today's market. It's a forum for candid conversations and shared strategies from leaders across the title ecosystem.

Faizi Shahidi will be on-site to discuss Al-driven title workflows and process optimization. If title operations are on your agenda, **book a time** here to connect during the event - whether at the venue or over a quick coffee.



Faizi Shahidi

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At Nexval.ai, we leverage AI to deliver customized solutions tailored to your industry's unique needs.

We're not just about technology - we're about partnership. We collaborate with your team to understand your processes and goals. ensuring a seamless transition and ongoing optimization.

Partner with us as **Affiliates** to bring Al-driven automation and cloud solutions to servicers-reducing costs. improving compliance, enhancing borrower experiences, and creating new revenue opportunities for your business.

Our expertise spans mortgage and financial services, with a focus on automation, IT, BPO, customer service, risk management, and AIdriven process optimization.

Let's transform your business with intelligent automation and datadriven strategies.



Innovation meets insight: Curated mortgage intelligence for an industry in constant motion. Let's mortgage-better with Al.

#### Let's Connect:

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