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MLS Constraints on Listing and Sales Data: Law, Policy and Consequences for Developers, Appraisers, MLS Organizations and Society

With Emphasis on California

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Abstract

This paper surveys the federal, California, and industry rules that govern multiple listing service (MLS) data, with emphasis on California. It covers MLS contracts and National Association of Realtors policy, antitrust law, copyright, computer-access statutes, and California contract law. It sets out the exposures, risks, and opportunities these create for software developers who publish statistical models, for appraisers, for MLS organizations, and for homeowners and taxpayers.

This article is not meant to provide legal advice. Please consult an attorney for legal issues.

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1 Summary

This paper explains the rules governing the use of multiple listing service (MLS) data, with an emphasis on California, and what those rules mean for software developers, appraisers, MLS organizations, and the public.

Those rules are set mainly by contract. No federal or California statute governs MLS data. Each MLS writes its own data license within National Association of Realtors (NAR) policy, and in November 2026 NAR widened what an MLS may require of the people who use its data.

The law limits these contracts less than is often assumed. Copyright does not protect facts such as prices and sale dates, but a license can still restrict how a licensee uses those facts. Antitrust law helps a licensee mainly when an MLS applies its rules unequally.

A developer's safest course is therefore to get the intended use of the data approved in writing, and to stop using the data on a written demand from the MLS while any disagreement is resolved.

The consequences of MLS rules reach beyond the MLS and its licensees. Mortgage appraisal, property-tax appeals and public knowledge of home prices all depend on MLS sale data, and no study has measured what restricting that data costs.

The paper is organized around the four problems a developer with a data license faces: a claim for breach of contract, a claim for copyright infringement, a claim under a computer-access statute, and loss of the data feed. After an overview of what each group stands to lose or gain, the paper describes the MLS, the rules that bind its data, the new rules on AI and the case for those rules. It then turns to the law that limits those rules: federal and California law, intellectual property and the computer-access statutes. Next come the practical parts: a compliance posture, a protocol for keeping MLS data apart from AI tools, a protocol for appraisers, and what happens if a dispute reaches court. The paper ends with the effects on homeowners and taxpayers, the open questions, and definitions of the terms used.

2 Scope and perspective

This paper is written from the position of a software developer in California who receives listing and sales data under an MLS data license and publishes statistical models built from that data. The paper asks two questions: what constraints bind that developer, and what defenses the developer has if an MLS brings a civil claim. The paper then explains what the same law means for appraisers, MLS organizations, and homeowners and taxpayers.

A developer's position differs from the one most MLS commentary describes. Most antitrust writing concerns MLS rules that favor one kind of broker over another. A developer with a data license faces a different set of problems, mostly four: a claim for breach of contract, a claim for copyright infringement, a claim under a computer-access statute, and the loss of the data feed. Antitrust law is treated as one of several limits on what an MLS can do about those four problems.

Four cautions apply throughout the paper:

- This paper is a survey of law and policy, not legal advice, and no attorney has reviewed the paper. A reader with a legal question should consult an attorney and should not rely on this paper.
- Each MLS writes its own rules and license. NAR's model rules are only a baseline, and the agreement the user signs is what controls.
- Several matters described here are in active litigation or have been changed by recent policy. Each statement about such a matter carries its date.
- The central court opinions were read in full; the other opinions were read only at the passages cited. Conclusions that rest on the passages alone are stated conditionally, and a full reading could change them. The section "Sources and method" lists which opinions were read in full.

3 Possible exposures, risks and opportunities

The law described in this paper affects four groups: developers, appraisers, MLS organizations, and homeowners and taxpayers. Each group engages with the same law from a different perspective. For each group, this section sets out three things. An exposure is a legal claim the group could face. A risk is an uncertain outcome that could harm the group. An opportunity is a position the law leaves open to the group. The authorities for each statement are given in the sections that follow.

3.1 Developers

A developer faces four possible legal claims. The first is a claim for breach of the data license, if the developer uses the data outside the use the license permits. The second is a copyright claim over listing photographs and remarks, which the MLS can bring once the MLS has registered them. The third is a claim under California Penal Code § 502 or the federal computer-access statute, if the developer keeps accessing the data after the MLS has withdrawn permission. The fourth is liability for the MLS's attorney fees, where the license has a fee clause.

Beyond these claims, a developer faces several risks. The biggest is losing the data feed, which ends the product regardless of the dispute's legal merits. The wording of a license may leave open whether aggregates, coefficients and graphs count as licensed "data," and a broad "machine learning" clause may reach ordinary regression. A developer who obtains licensed data, or output made

from licensed data, through a licensee without signing the license can be liable for causing the licensee's breach. Sending listing records to an outside artificial-intelligence (AI) or cloud service carries an additional risk. The next license the developer signs may adopt NAR's November 2026 policies. Finally, a state court may award the MLS nominal damages and an injunction without proof that the MLS lost anything.

The law also leaves a developer several opportunities. Statistics computed from facts have been treated as unprotected by copyright, and published valuations built with judgment may be the developer's own copyrighted work. NAR's permitted-use wording names "appraisals, or other valuations of real property." A written approval from the MLS turns an uncertain reading of the license into an agreed term. Where the wording of a license is open to more than one reading, a court will admit evidence from outside the contract (extrinsic evidence) of what the parties understood. The Ninth Circuit has said that a business using a product as an input is a consumer of that product for antitrust purposes. However, the court said so in a case brought by a rival listing service, not by a data user.[1] Public records can also support a price series that needs no license at all.

3.2 Appraisers

An appraiser who uses MLS data beyond appraisal assignments faces the same contract and computer-access claims as a developer. An appraiser also answers for the truth of information the appraiser places in an MLS,[2] and can be disciplined or lose MLS participation under the service's rules.

The main risk for an appraiser comes from the way NAR policy limits use of MLS data: to "activities authorized under a Participant's licensure(s) or certification." California's licensing law defines appraisal as "the act or process of developing an opinion of value for real property,"[3] so publishing statistics may fall outside the activity that an appraiser's license authorizes. (Federal banking regulation and property-tax assessment define appraisal in their own terms; the addendum gives each definition.) An appraiser's access to an MLS is also less secure than it used to be. In 2025, NAR repealed its policy on nonmember access, leaving each MLS to decide whether to admit appraisers. *Palsson*, the leading California case on MLS access, states its access rule for brokers and salespersons, not for appraisers. And when an MLS removes its seller-concession field, an appraiser finds comparable sales harder to verify.

The law also creates openings for appraisers. California's own statute defines an MLS as a facility of "agents and appraisers" used "to prepare market evaluations and appraisals."[4] The amendment that added appraisers to that definition may remove one support for *Derish*, the case that allowed an MLS to exclude people who hold no real estate license. Lending guidance treats MLS data as an important source for comparable-sale research: Fannie Mae requires appraisers to name the sources actually used, and Federal Housing Administration (FHA) guidance recommends the local MLS and public records. A federal court of appeals has found that an agent or appraiser cannot work in an area without that area's MLS, and that the MLS therefore had market power, although the MLS still won the case.[5] Finally, an appraiser who is an MLS participant stands closer than a data vendor does to the California cases that require fair procedure before exclusion.

[1] *The PLS.com v. National Association of Realtors*, 32 F.4th 824, 833 (9th Cir. 2022).
[2] Civ. Code § 1088.
[3] Bus. & Prof. Code § 11302(b).
[4] Civ. Code § 1087.
[5] *Reifert v. South Central Wisconsin MLS Corp.*, 450 F.3d 312, 317, 321 (7th Cir. 2006).

3.3 MLS organizations

An MLS faces claims under the federal Sherman Act and California's Cartwright Act over rules that exclude or discriminate, with treble damages and attorney fees. The Federal Trade Commission (FTC) can act against an MLS under Section 5 of the FTC Act, as the FTC did in *Realcomp*. Denying access on a discriminatory basis can create liability under the Fair Housing Act.[6] A court can hold license terms void under Bus. & Prof. Code § 16722. And if the MLS sues to enforce a license and loses, a reciprocal fee clause can make the MLS pay the user's attorney fees.

The risks for an MLS begin with copyright. Copyright in the database is thin, and no infringement suit can be brought until the work is registered. The suits filed in 2025 and 2026 over mandatory listing rules could narrow MLS rule-making generally. A use restriction that is broader than needed invites the antitrust scrutiny that a neutral restriction avoids. If a local MLS adopts one of NAR's optional policies, the adoption is the local MLS's own agreement, not a rule NAR imposed.[7] Trade-secret protection for widely shared data is untested in California. State legislatures have also begun to regulate listing practices.

The law also gives an MLS openings. Contract terms appear generally to survive copyright preemption, so a license can restrict uses that copyright alone could not. Click-through terms can transfer photograph copyrights to the MLS.[8] NAR's 2026 policies allow an MLS to take a copyright interest, set feed eligibility criteria and adopt a permitted-use rule. Licensed analytics and controlled AI access offer new revenue. And rules that are "reasonable, objective, and applied equally" are the hardest rules to challenge.

3.4 Society: homeowners and taxpayers

Homeowners and taxpayers are not parties to MLS licenses, so they face no legal claims in the sense used here. They do face risks in four areas:

- *Privacy.* Interior photographs and price history persist after a sale, the right to opt out belongs to the seller, and privacy statutes fit listing data poorly.
- *Mortgage loans.* Appraisals depend on MLS data that no lending statute secures. Fields removed from the MLS weaken comparable-sale analysis, and more loans are made on appraisal waivers and models.
- *Taxes.* A change in ownership generally sets a new base-year value. An owner appealing an assessment can inspect the comparable sales the assessor relied on, but has no right to MLS data.
- *The economy.* Commissions and related costs come to about $170 billion a year, and no one has measured what data restrictions cost.

The same law also protects homeowners and taxpayers in several ways. Sellers control whether a listing and its photographs appear online. Under antitrust law, a concerted restriction on information that consumers want can be condemned without proof of higher prices, where the restriction's effect on competition is shown.[9] Published statistical models give owners a means to test asking prices, appraisals and assessed values. Aggregate statistics carry the least privacy cost of any use of the data. And the federal rule on automated valuation models sets quality standards for the

[6] 42 U.S.C. § 3606.
[7] *REX v. Zillow*, No. 24-685 (9th Cir. 3 Mar 2025), mem. at 3, unpublished.
[8] *Metropolitan Regional Information Systems v. American Home Realty Network*, 722 F.3d 591, 602 (4th Cir. 2013).
[9] *FTC v. Indiana Federation of Dentists*, 476 U.S. 447, 461–462 (1986).

models lenders use.

4 What an MLS is and where its authority comes from

An MLS is a private cooperative of competing brokers, and its power over data comes from contract, not statute. No federal or California agency was found that licenses an MLS or approves an MLS's data rules.

The one statute that defines an MLS is California Civil Code § 1087. Under that section, an MLS is "a facility of cooperation of agents and appraisers, operating through an intermediary that does not itself act as an agent or appraiser." An MLS is one "that may be used by agents and appraisers, pursuant to the rules of the service, to prepare market evaluations and appraisals of real property." The statute thus recognizes appraisal and market evaluation as MLS purposes. The statute grants no right of access, however: use is "pursuant to the rules of the service."

The next section, § 1088, adds three duties. A listing may be placed only as "authorized or directed by the seller." The agent or appraiser who enters the information is responsible for its accuracy. And the MLS must keep listing information accessible "for no less than three years."

Within these statutory limits, authority over MLS data runs through three levels of documents:

Level	Instrument	Binding on
National	NAR's *Handbook on Multiple Listing Policy* (policy statements and model rules)	MLSs owned by Realtor associations; mandatory items are marked "M"
Local	The MLS's own rules and regulations	Its participants and subscribers
Individual	Participation agreement, subscriber agreement, data license	The signing party

At the national level, NAR policy admits appraisers. Policy Statement 7.9 of the Handbook[10] defines a participant as one who holds a broker's license or is "licensed or certified by an appropriate state regulatory agency to engage in the appraisal of real property." The same statement limits use: MLS information "is strictly limited to the activities authorized under a Participant's licensure(s) or certification." Subscribers include "licensed and certified real estate appraisers affiliated with an MLS Participant."

An appraiser who is a participant therefore holds MLS data for appraisal activity. Whether publishing statistical models counts as appraisal activity under that wording depends on the particular rules and license. Nothing found settles the question.

Sources: Civ. Code §§ 1087, 1088 (read in the Legislature's official bulk file, stamped 15 November 2026). NAR Handbook on Multiple Listing Policy, January 2025[11]. The 2026 Handbook is member-gated and was not opened.

[10] NAR, *Handbook on Multiple Listing Policy* (January 2025).

[11] https://www.nar.realtor/sites/default/files/2025-01/PDF-HMLP-2025-Handbook-on-Multiple-Listing-Policy-2025-01-23.pdf

5 The layers of constraint

The previous section showed that an MLS's authority runs from NAR policy, through local rules, down to the agreement each user signs. Of these three levels, the signed agreement is the one that counts in court. NAR policy still matters, because local MLSs copy NAR's wording into the agreements they write. In November 2026, NAR adopted four policies that broaden what a local MLS may include in those agreements.

5.1 NAR's November 2026 policies

NAR announced on 8 November 2026 that four MLS policy recommendations were "considered and adopted at NAR NXT 2026." Three of the four policies bear on data:

- *Copyright Protection of MLS Data* (optional, with a revision of Policy Statement 7.85). Under this policy an MLS may take a share of the copyright in listing content, to support enforcement. In NAR's words, an MLS may take "up to a 50% copyright interest in certain listing content," subject to "quarterly copyright registration requirements," and participants keep "the right to opt-out."
- *Permitted use of MLS data.* Under this policy, use of MLS data must follow the participation agreement or data licensing agreement and stay within named purposes. In NAR's words, the use must be "connected to providing real estate brokerage services, preparing appraisals, or other valuations of real property."
- *MLS Data Feed Services* (optional). Under this policy a local MLS may set eligibility criteria for feeds of other participants' listings. In NAR's words, the criteria must be "reasonable, objective, and applied equally to all participants."

The fourth policy sets experience requirements for members of MLS committees. No source opened for this paper stated the effective dates or the policy numbers for the four policies. To confirm whether a given MLS has adopted the two optional policies, check that MLS's own rules.

An earlier package of NAR changes dates from November 2025. NAR then adopted 18 changes, mostly repeals, effective January 2026. One of those changes repealed Policy Statement 7.55, on access by nonmember brokers and appraisers, which leaves the question of their access to each MLS.

5.2 Two readings of the permitted-use wording

The permitted-use policy can be read in a way that helps a developer and in a way that does not. The policy names "appraisals, or other valuations of real property," and that wording helps a developer whose models serve valuation. The wording does not, however, cover publication of those models by itself. A local MLS may also write a narrower clause than NAR's, and the clause the user signs controls.

5.3 Rules that govern listing brokers, not data users

Other NAR rules bind the brokers who list and sell property, not the people who use MLS data. Those rules matter in this paper only as background and as the subjects of antitrust cases discussed later. Three sets of such rules are relevant:

- *Clear Cooperation* (Policy Statement 8.0, adopted November 2019). The rule reads: "Within one (1) business day of marketing a property to the public, the listing broker must submit the listing to the MLS for cooperation with other MLS Participants." MLSs had until 1 May 2020 to implement Clear Cooperation, and the rule remains in force.
- *Multiple Listing Options for Sellers* (announced 25 March 2025). Implementation was due by 30 September 2025. This policy adds exemptions for listings with delayed marketing and leaves Clear Cooperation unchanged.
- *No compensation offers in the MLS* (Policy Statement 8.11). Local adoption was required by 17 August 2024 under the *Burnett* settlement, in which NAR pays $418 million over four years. The district court gave final approval to the settlement on 26 November 2024, and the Eighth Circuit affirmed on 19 August 2026.

One consequence of these broker rules reaches data users. Broker-compensation fields were removed from MLS data, and some MLSs also removed their seller-concession fields. Models built on data from those MLSs cannot use those fields.

Sources: NAR release, 8 Nov 2026[12]; NAR MLS risk-mitigation page[13]; NAR, Multiple Listing Options for Sellers[14]; NAR on the Eighth Circuit ruling[15]; NAR Handbook, January 2025.

6 Display, feed and technical rules

Beyond permitted use, NAR policy includes rules on displaying listings to the public. These display rules do not authorize analysis of MLS data or publication of models. A developer who also shows listings on a website must meet the display rules. A developer who publishes only aggregates is outside the display rules, but is still bound by the data license.

6.1 Internet Data Exchange (IDX), Policy Statement 7.58

Internet Data Exchange (IDX) lets a participant display other participants' listings on websites the participant controls. The January 2025 Handbook sets these terms for IDX display:

Requirement	Handbook wording
Refresh	"not less frequently than every twelve (12) hours"
Attribution	Displays "must identify the listing firm, and the email or phone number provided by the listing Participant"
Sold data	An MLS must make available "sold listing data starting from January 1, 2012"
Retrieval limit	Any limit an MLS sets may not be "fewer than five hundred (500) listings or fifty percent (50%) of the listings available for IDX display, whichever is less"

[12] https://www.nar.realtor/newsroom/national-association-of-realtors-announces-approval-of-four-mls-policy-recommendations-at-nar-nxt

[13] https://www.nar.realtor/about-nar/policies/mls-policy/mls-risk-mitigation

[14] https://www.nar.realtor/newsroom/nar-introduces-new-mls-policy-to-expand-choice-for-consumers

[15] https://www.nar.realtor/news/real-estate-news/appeals-court-rules-with-nar-sitzer-burnett-settlement-remains-intact

The retrieval limit in the last row is a floor on how tightly an MLS may limit a consumer's search, not a cap on what the participant may show. Local rules add further terms: required disclaimers, a ban on showing confidential fields, and a ban on altering other brokers' listings.

6.2 Virtual Office Websites (VOW), Policy Statement 7.91

The policy on Virtual Office Websites (VOW) came from the federal antitrust case *United States v. National Association of Realtors*, in which the final judgment was filed on 18 November 2008. The court's decree in that case expired on 18 November 2018. The January 2025 model rules nevertheless still mark the VOW sections as mandatory.

6.3 Technical standards

NAR policy also governs how MLS data is delivered. Policy Statement 7.90 requires association-owned MLSs to implement the Real Estate Standards Organization (RESO) standards. Those MLSs must "keep current by implementing new releases of RESO Standards within one (1) year from ratification." The RESO standards in use stood as follows in November 2026:

Standard	Status in November 2026
RETS (Real Estate Transaction Standard)	RESO describes RETS as "A deprecated legacy method of data transport that RESO discontinued certifying in 2018." Some MLSs still run RETS.
RESO Web API	The Web API is the current standard for transporting data. RESO certifies Web API Core 2.0.0.
Data Dictionary 2.0	Data Dictionary 2.0 is currently certified.
Data Dictionary 2.1	RESO's dictionary site says that version 2.1 "was approved on October 5, 2026," but another RESO page still lists version 2.1 as in process. The sources conflict.

For a developer, these standards have one legal consequence. The fields in a feed and the method of transport are the MLS's choice, and a move from RETS to the Web API can change which fields a licensee receives. What the licensee may do with those fields is decided by the license, not by the standard.

Sources: NAR Handbook, January 2025; U.S. v. NAR case page[16]*; RESO certification page*[17]*.*

7 AI and analytics restrictions

The newest MLS rules concern artificial intelligence. MLSs now treat AI tools' use of their data as a licensing question, and they enforce their position through contract. As of November 2026, no court decision was found on AI training or on scraping listing data in a suit brought by an MLS. One suit alleged AI training, and that suit ended without a ruling.

[16] https://www.justice.gov/atr/case/us-v-national-association-realtors
[17] https://www.reso.org/certification/

7.1 What MLSs are restricting

Four practices drive the new rules: bulk collection of photographs and remarks, use of listing data to train models, agents pasting listing data into consumer AI tools, and automated access to member systems.

Some of the new restrictions appear to be aimed mainly at generative AI and large-scale model training, but their wording can also reach statistical models fitted by regression. Metro MLS's rule, as quoted by NAR on 15 July 2026, reads: "Metro MLS data may not be used for AI training or machine learning in any way without Metro MLS's express written permission." The rule continues: "This includes AI-related derivative datasets." A clause that bans "machine learning in any way" covers more than large language models. Whether a given license reaches regression depends on how that license defines its terms. No court has decided whether such a clause reaches ordinary regression, so this reading is provisional. The question is listed again in the section "Open questions and what to watch."

Bright MLS is reported to offer a licensing addendum for AI training, but no published text of the Bright MLS rule was found.

7.2 The nearest lawsuit: alleged, not decided

The closest any MLS has come to litigating AI use is a 2025 suit in California. REcore, an affiliate of California Regional MLS (CRMLS), sued CoStar and Homes.com in San Bernardino Superior Court on 21 October 2025. The suit was a contract claim over license fees, and the complaint alleged that "CoStar used CRMLS listing data to train AI models." Two days later, the parties announced a renewed agreement, and the court dismissed the suit with prejudice. No court ruled on the AI allegation. The suit still shows the form such a dispute is likely to take: a contract claim, with AI use pleaded as use beyond the scope of the license.

7.3 Three distinct uses of data

Licenses and the new NAR policies do not always separate these uses of data, and a developer should keep them apart. The separation is a matter of analysis: fitting a regression is technically a form of model training, and a license may use one word for all three uses. The three uses are these:

- *Statistical modeling* (statistical estimation). The parameters of a specified model are estimated from facts, and the outputs are coefficients, curves and aggregates. Licenses often do not address this use, or reach the use only through broad "machine learning" or "derived data" wording. ("Derived data" is a license term for material produced from licensed data. The term has no fixed legal meaning and takes its meaning from the license.)
- *Training a general model.* Listing content shapes model weights, and those weights persist after training. Licenses increasingly prohibit this use without a separate license.
- *Inference by a third-party AI service.* The data is sent to an outside provider to be read or summarized. Whether this use is permitted turns on four separate questions: whether the transfer is authorized at all, whether that provider may receive the data, whether the provider may retain or reuse the data, and whether the provider may train on the data.

The third use carries a compliance risk that is separate from any question about publication. A provider's promise not to retain the data, or not to train on the data, does not by itself authorize sending the data to that provider. A license may bar disclosure to third parties, require the MLS's

approval of service providers, or forbid sublicensing. Sending listing records to an outside AI service is a transfer to a third party, regardless of what is published afterward.

7.4 Governed access

While MLSs restrict uncontrolled AI use, some MLS vendors now offer controlled AI access through the Model Context Protocol (MCP), an open standard for connecting AI tools to data sources. FBS released a Flexmls MCP server on 24 April 2026, and Cotality released an MCP server for Trestle on 19 October 2026. Repliers offers its API as MCP tools. In each case, access runs under the subscriber's own credentials and permissions.

These MCP servers answer individual queries. They do not license bulk extraction or model fitting, and they leave the permitted-use question where the license puts that question.

Sources: NAR, 15 July 2026[18]*; Real Estate News, 21 Oct 2025*[19]*; HousingWire on the dismissal*[20]*; RISMedia, 23 Oct 2025*[21]*. The dismissal rests on trade-press reports read in search results; the court record was not opened. Bright MLS and the vendor releases rest on trade-press reports.*

8 Kinds of statistical models, and why the kind matters

The previous section separated statistical modeling from AI training. Statistical modeling itself also needs separating, because "statistical model" covers outputs that the law treats differently. A market index, a fitted price relationship, and a value for a named property are three different things, and none of them is, for that reason alone, an automated valuation model. (In general usage, an automated valuation model is a computerized system that produces a value with no appraiser's judgment between the data and the result. Federal mortgage regulation has its own definition, tied to use by mortgage originators and secondary market issuers.) This section sets out the kinds of output, ordered from the most general to the most specific. These kinds are categories of analysis, not mutually exclusive classes: one model can fall under more than one kind, depending on how it is used.

The technique does not decide the kind. A regression method such as MARS can serve an appraiser's own analysis, a published study, or an automated valuation model. What decides the kind is who makes the judgments, who relies on the result, and which field's rules apply. An appraiser who chooses the data, examines the fit and owns the conclusion is doing appraisal analysis, whatever the method. The same method running unattended, with its output relied on as a value, is an automated valuation model in the general sense, whether or not the federal mortgage rule applies to that model.

"License" has two senses in what follows. An MLS data license is a contract. A state appraiser's license is a professional credential. Each is named where it appears.

The six kinds of output, and the position of each under regulation and under copyright and contract, are these:

- *Market statistic or index.* This kind returns a figure for an area and period, such as a median price, a count or a price index. A market statistic is not an opinion of value for a property,

[18] https://www.nar.realtor/news/aexperience/make-it-a-policy-to-protect-mls-data-from-ai-misuse
[19] https://www.realestatenews.com/2025/10/21/crmls-venture-sues-costar-homes-com-over-unpaid-fees
[20] https://www.housingwire.com/articles/recore-dismisses-breach-of-contract-suit-against-costar-homes-com/
[21] https://www.rismedia.com/2025/10/23/crmls-co-star-renew-agreement-legal-action-dismissed/

so the statistic falls outside the statutory definition of appraisal.[22] Statistics computed from facts have been treated as unprotected by copyright.[23] Whether such statistics are licensed "data" depends on the license. No decision was found on whether statistics computed from licensed data are themselves licensed "data," so this point too is provisional.

- *Fitted relationship.* This kind returns coefficients, adjustment rates, or curves for property characteristics, not a value for any property. The regulatory position is the same as for a market statistic: a fitted relationship states how price varies with a characteristic, not what a property is worth. A method and its coefficients are not protected by copyright as such.[24] A "derived data" or "machine learning" clause in a license may still reach them by contract.
- *Value estimate for an identified property.* This kind returns a figure for one address, produced by the model without an appraiser. Such an estimate is closer to an opinion of value. No authority found decides whether offering the estimate is appraisal activity, and this paper did not research professional appraisal standards. Valuations that reflect judgment may be the maker's own copyrighted work.[25] Permitted-use wording that names "valuations" fits this kind of output most naturally.
- *Appraisal that uses a model.* This is an appraiser's opinion of a property's value, reached with the model's help. The work is appraisal, and a state appraiser's license is required for federally related appraisal activity.[26] This is the use NAR policy names for an appraiser participant: activity under the participant's state license or certification.
- *Mass appraisal.* This kind returns values across groups of properties, particularly for property-tax assessment. Mass appraisal is "The process of valuing a group of properties as of a given date and using common data, standardized methods, and statistical testing."[27] Mass appraisal may employ automated statistical techniques. Whether a model falls within the federal rule on automated valuation models depends on the model's use in covered mortgage-credit or securitization determinations, not simply on whether the model values one property or many. The copyright and license position of mass appraisal is not examined in this paper.
- *Automated valuation model under the federal rule.* This kind returns a value for a consumer's principal dwelling that secures a mortgage. A model is within the rule only when "used by mortgage originators and secondary market issuers" for that purpose.[28] The data used by such a model is governed by the lender's or vendor's own data licenses.

The kind of output has consequences in four areas:

- *Appraisal licensing.* The first two kinds return no opinion of a property's value. The third kind does return a value, and that is where the question of an appraiser's license would arise.
- *MLS permitted-use rules.* NAR's 2026 wording covers use "connected to providing real estate brokerage services, preparing appraisals, or other valuations of real property." An index or a fitted relationship is one step removed from a valuation, so the fit of those two kinds with NAR's wording is the least certain.
- *The federal rule on automated valuation models.* The rule applies based on use in mortgage lending, not on technique. The same regression is outside the rule when published for study

[22] Bus. & Prof. Code § 11302(b) ("the act or process of developing an opinion of value for real property").

[23] *BanxCorp v. Costco*, 978 F. Supp. 2d 280, 286 (S.D.N.Y. 2013); *New York Mercantile Exchange v. IntercontinentalExchange*, 497 F.3d 109, 110 (2d Cir. 2007).

[24] 17 U.S.C. § 102(b).

[25] *CCC Information Services v. Maclean Hunter*, 44 F.3d 61, 67 (2d Cir. 1994); *CDN v. Kapes*, 197 F.3d 1256, 1260 (9th Cir. 1999).

[26] Bus. & Prof. Code § 11320.

[27] International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property* § 2 (rev. 2025).

[28] 89 Fed. Reg. 64538, 64571 (7 Aug 2024).

and inside the rule when a mortgage originator uses it to value collateral. That statement concerns only when one regulation attaches. The statement is not a general definition of an automated valuation model.

- *Privacy.* An index over many sales reveals no household's transaction, provided small groups are suppressed. A value for a named address concerns one household's home.

A general-purpose AI model trained on listing content differs from all six kinds. The preceding section treats such models.

9 The case for MLS restrictions

The sections so far have described what MLS rules say. This section asks why an MLS restricts its data at all. An MLS has real interests in controlling its data, and the law recognizes several of those interests. A restriction that serves one of these interests, and is applied equally to all users, is the kind most likely to be upheld. This section states the MLS's case at its strongest; the sections that follow set its limits.

9.1 The interests an MLS can assert

An MLS can point to seven interests that support restricting its data.

The first interest is that the cooperative creates the data's value. Government studies credit the MLS with real benefits. "The use of an MLS can substantially reduce transaction costs."[29] MLSs "provide important benefits to consumers by aggregating data on homes for sale."[30] The data exists only because competing brokers agree to contribute their listings to a common pool.

The second interest follows from the first: brokers who contribute listings may be protected against others who use the pool without contributing (free-riding). Antitrust law accepts preventing free-riding as a justification in principle. In *Realcomp*, however, the court rejected that justification on the facts, because the MLS "has not demonstrated a connection between the website policy and the prevention of free-riding."[31] A restriction that is connected to the prevention of free-riding stands differently. California's test asks whether a rule relates "to a legitimate purpose" and is "reasonably necessary to accomplish that purpose and narrowly tailored to do so."[32]

The third interest is that an association may hold its users to reasonable rules. An association may withhold its services from one "who refuses to comply with its reasonable rules."[33] An association may also recover its costs: nonmembers "may be charged a reasonable fee for use of the service consistent with the per-capita costs of operation."[34] The Seventh Circuit upheld a rule against using MLS information to solicit other members' clients, as a way "to prevent agents from improperly using multiple listing services as a data bank of potential customers."[35] Limiting access to licensees has been upheld by reference to the licensing scheme and the purpose of the service.[36]

[29] FTC & DOJ, *Competition in the Real Estate Brokerage Industry* (Apr. 2007).
[30] Government Accountability Office, GAO-05-947 (2005).
[31] *Realcomp II, Ltd. v. FTC*, 635 F.3d 815, 835 (6th Cir. 2011).
[32] *Marin County Board of Realtors v. Palsson*, 16 Cal.3d 920, 939 (1976).
[33] *United Multiple Listing Service v. Bernstein*, 134 Cal.App.3d 486, 489–490 (1982).
[34] *Palsson* at 940.
[35] *Reifert v. South Central Wisconsin MLS Corp.*, 450 F.3d 312, 321 (7th Cir. 2006).
[36] *Derish v. San Mateo-Burlingame Board of Realtors*, 136 Cal.App.3d 534, 540–541 (1982).

The fourth interest is that some listing content is protected expression. Photographs are copyrightable, and an MLS can acquire rights in photographs through its terms of use.[37] Where a user resold copies that were "a perfect substitute" for the MLS's own material, the MLS prevailed.[38]

The fifth interest is that sellers entrust the MLS with information. A listing enters the MLS only as "authorized or directed by the seller."[39] NAR's rules bar display of confidential fields such as "showing instructions, and property security information," and give sellers a right to keep a listing or an address off the internet.[40] An MLS that cannot control how its data is used downstream cannot keep those promises to sellers.

The sixth interest is accuracy, which depends on control. The agent or appraiser who places information in an MLS answers for the truth of that information.[41] An MLS can argue that data copied into systems the MLS does not supervise goes stale or is altered, and that the resulting errors are then attributed to the MLS and its members.

The seventh interest is that a license is a bargain, and the licensee agreed to its terms. "Contracts ... generally affect only their parties,"[42] and restrictions accepted by promise "are self-imposed."[43] A licensee who wants a wider use can ask for that use, and the MLS may charge for it.

MLSs make two further arguments that have force, although no authority for either was found. The first is that licensing revenue helps pay for the service. The second is that new uses, especially AI training, were not contemplated when most licenses were written, so an MLS may reasonably require that such uses be negotiated.

9.2 What makes a restriction defensible

The seven interests above say why an MLS may restrict its data; NAR policy and the cases also say how a restriction should be written. NAR's 2026 feed policy states the standard an MLS should meet: criteria that are "reasonable, objective, and applied equally to all participants." The cases point the same way. A restriction is strongest when it has these four features:

- The restriction serves one of the interests above, and the MLS can show the connection.
- The restriction is applied to every licensee on the same terms, including the MLS's own products and its members' products.
- The restriction is no wider than the interest requires.
- The restriction is written into the license in clear words.

Equal application strengthens an MLS's position, but equal application does not make a restriction lawful by itself. The antitrust question still turns on the market concerned, the effect on competition, the justification offered, and the connection between that justification and the restriction.

9.3 Where the case weakens

The same authorities that support the MLS's case also show where it weakens. The case is weaker in five situations:

[37] *Metropolitan Regional Information Systems v. American Home Realty Network*, 722 F.3d 591, 602 (4th Cir. 2013).
[38] *Supermarket of Homes v. San Fernando Valley Board of Realtors*, 786 F.2d 1400, 1409 (9th Cir. 1986).
[39] Civ. Code § 1088(a).
[40] NAR, *Handbook on Multiple Listing Policy* (January 2025), Policy Statement 7.58 and Model Rules § 18.3.1.
[41] Civ. Code § 1088(b).
[42] *ProCD v. Zeidenberg*, 86 F.3d 1447, 1454 (7th Cir. 1996).
[43] *Cohen v. Cowles Media*, 501 U.S. 663, 671 (1991).

- *When the restriction is not connected to its stated purpose.* A justification fails when the restriction does not serve that justification, as in *Realcomp*.
- *When the restriction protects brokers from price competition. Realcomp* found "no meritorious pro-competitive justification for protecting cooperating brokers from pressure to lower costs."[44]
- *When the restriction covers facts as such.* The MLS's copyright does not reach prices, dates and property characteristics, so a restriction on those facts rests on contract alone.
- *When the output does not substitute for the listing.* The MLS prevailed in *Supermarket of Homes* against copies that replaced the MLS's own product. A published index or a fitted relationship does not display a listing and does not replace one. Whether that difference matters under a given license is undecided.
- *When the output is an aggregate.* Aggregates engage the MLS's privacy and accuracy interests least. A statistic over many sales discloses no seller's confidential field, and repeats no listing error in a form that can be traced to a listing.

The practical conclusion is the one already drawn for developers in the section on exposures, risks and opportunities. The MLS's case is strongest for photographs, remarks, confidential fields and redistribution of records, and weakest for aggregate statistics. Between those two ends lies the value estimate for an identified property, where both sides have arguments and no court has ruled.

10 Federal law

The previous section weighed the interests an MLS can assert. This section turns to the federal law that limits what an MLS may do to protect those interests. Federal antitrust law limits MLS rules that harm competition, and the leading federal cases concern rules that discriminate among brokers. No federal decision was found that applies antitrust law to a neutral restriction on what a data licensee may publish. One other federal statute, the Fair Housing Act, names MLSs directly.

10.1 The Sherman Act and private remedies

The Sherman Act is the main federal antitrust statute. Section 1 of the Act provides: "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States ... is declared to be illegal."[45] A person "injured in his business or property by reason of anything forbidden in the antitrust laws" recovers "threefold the damages by him sustained" and attorney's fees.[46] A court can also grant an injunction under § 26.

10.2 An MLS is a joint venture of competitors and may hold market power

Section 1 applies only to agreements, so the first question is whether an MLS rule is an agreement. Courts and enforcers treat MLS rules as agreements among competing brokers. A second question is whether a given MLS holds market power, meaning enough control of its market to restrain competition. That question is one of fact about the MLS's own market: the share of brokers who take part, the alternatives open to those brokers, and the area the MLS serves.

Four authorities describe an MLS in these terms:

[44] *Realcomp* at 836.
[45] 15 U.S.C. § 1.
[46] 15 U.S.C. § 15(a).

- A federal district court: "MLSs are joint ventures among competing brokers to share their clients' listings."[47]
- The FTC and the Department of Justice: "The MLS is a local or regional joint venture of real estate brokers ... who pool and disseminate information on homes available for sale."[48]
- The Seventh Circuit, of one MLS: "it is impossible to perform the tasks of a real estate agent or appraiser in the relevant geographic area without using [it]. Thus, it possesses sufficient market power to restrain competition."[49] The court's sentence names appraisers, although no appraiser was a party. The MLS won the case, because the broker who sued could not show harm to competition, and "no licensed real estate agent was denied access."[50]
- The Ninth Circuit: the associations that own an MLS "are not a single entity, and so their joint venture is not immune from scrutiny under section 1."[51] In the same case, *Freeman*, the court held that fixing MLS support fees was price fixing.[52]

When a rule comes from NAR, the agreement may be found at the local MLS that adopts it. In an unpublished decision, the Ninth Circuit held that an optional NAR rule that each MLS "independently chose whether to adopt" does "not establish a Section 1 agreement by itself."[53] NAR's 2026 copyright and feed policies are optional. If courts follow that unpublished reasoning, a challenge to one of those policies would therefore target the local MLS that adopts it, not NAR.

10.3 The rule of reason for MLS rules

Once courts treat an MLS rule as an agreement, they judge it under the rule of reason, which weighs the rule's harm to competition against its legitimate purpose. For membership and access rules, the Fifth Circuit stated: such rules "must be reasonably necessary to the accomplishment of the legitimate goals and narrowly tailored to that end."[54] The Eleventh Circuit added that such requirements "can, under a rule of reason analysis, violate the antitrust laws."[55]

10.4 *Realcomp II v. FTC*

The leading application of the rule of reason to MLS restrictions on the flow of listing data is *Realcomp II, Ltd. v. FTC*.[56]

Realcomp was an association of real estate boards in southeastern Michigan with about 14,000 member brokers. The association operated the largest MLS in Michigan[57] and did not dispute that the MLS had market power.[58] Realcomp's website policy kept exclusive-agency listings and other nontraditional listings out of the feeds Realcomp sent to public websites.[59] Yet the brokers whose listings were left out paid the same as everyone else: "Every Realcomp member, including those

[47] *United States v. National Association of Realtors*, No. 05 C 5140, Mem. Op. at 22 (N.D. Ill. 27 Nov 2006).
[48] FTC & DOJ, *Competition in the Real Estate Brokerage Industry* 10 (Apr. 2007).
[49] *Reifert v. South Central Wisconsin MLS Corp.*, 450 F.3d 312, 317 (7th Cir. 2006).
[50] *Reifert* at 318–321.
[51] *Freeman v. San Diego Association of Realtors*, 322 F.3d 1133, 1150 (9th Cir. 2003).
[52] *Freeman* at 1147.
[53] *REX v. Zillow*, No. 24-685 (9th Cir. 3 Mar 2025), mem. at 3, unpublished.
[54] *United States v. Realty Multi-List*, 629 F.2d 1351, 1375 (5th Cir. 1980).
[55] *Thompson v. Metropolitan Multi-List*, 934 F.2d 1566, 1580 (11th Cir. 1991).
[56] *Realcomp II, Ltd. v. FTC*, 635 F.3d 815 (6th Cir. 2011).
[57] *Realcomp* at 819–820.
[58] *Realcomp* at 828–829.
[59] *Realcomp* at 822–823.

who offer alternative business models, pays the same quarterly membership fees."[60]

The case passed through five stages. The Federal Trade Commission (FTC) issued its complaint on 10 October 2006. An administrative law judge dismissed the complaint on 10 December 2007. The Commission reversed the judge in an opinion dated 2 November 2009. The Sixth Circuit denied Realcomp's petition for review on 6 April 2011, and the Supreme Court denied review on 11 October 2011.

The Sixth Circuit applied the full rule of reason "without reaching the question of whether to apply quick-look analysis."[61] The court upheld the Commission's findings that the website policy had likely and actual anticompetitive effects.[62] The court then rejected both of Realcomp's justifications for the policy. The first was prevention of free-riding, meaning brokers benefiting from the MLS without paying for that benefit. The court held: "Realcomp has not demonstrated a connection between the website policy and the prevention of free-riding."[63] Sellers under exclusive-agency contracts still paid a listing broker, and that broker paid Realcomp. The second justification was protecting cooperating brokers from price pressure, which the court held was no justification at all: "Realcomp offers no meritorious procompetitive justification for protecting cooperating brokers from pressure to lower costs."[64]

Two features limit how far *Realcomp* reaches. The decision was made under Section 5 of the FTC Act, not under the Sherman Act, and the record showed unequal treatment of one class of listings.

10.5 *FTC v. Indiana Federation of Dentists*

A Supreme Court case is also often cited in MLS disputes, although the case did not involve an MLS. In *FTC v. Indiana Federation of Dentists*,[65] dentists agreed to withhold x-rays that their patients' insurers requested, and the Supreme Court upheld the FTC's order against the agreement. Two passages from the opinion are used in MLS cases:

- Proof of actual detrimental effects "can obviate the need for an inquiry into market power, which is but a 'surrogate for detrimental effects'."[66]
- "A concerted and effective effort to withhold (or make more costly) information desired by consumers ... is likely enough to disrupt the proper functioning of the price-setting mechanism of the market that it may be condemned even absent proof that it resulted in higher prices."[67]

10.6 Who can sue: antitrust injury

Not everyone harmed by an MLS rule can sue under the antitrust laws. A plaintiff must show "injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful" (antitrust injury).[68]

[60] *Realcomp* at 820.
[61] *Realcomp* at 826.
[62] *Realcomp* at 831, 834.
[63] *Realcomp* at 835.
[64] *Realcomp* at 836.
[65] *FTC v. Indiana Federation of Dentists*, 476 U.S. 447 (1986).
[66] *Indiana Federation of Dentists* at 460–461.
[67] *Indiana Federation of Dentists* at 461–462.
[68] *Brunswick Corp. v. Pueblo Bowl-O-Mat*, 429 U.S. 477, 489 (1977).

The most recent published Ninth Circuit opinion on an MLS rule that this paper found addresses who has that kind of injury. The case is *The PLS.com v. National Association of Realtors*.[69] The plaintiff, PLS.com, ran a rival listing service for privately marketed listings; PLS.com was not an appraiser or a data licensee. The district court had dismissed the complaint, and the Ninth Circuit reversed on the pleadings alone.

The Ninth Circuit made three points about antitrust injury:

- A plaintiff need not allege harm to home buyers and sellers. Harm to the real estate agents who buy listing services "may suffice."[70]
- "Businesses that use a product or service as an input to provide another product or service can be consumers for antitrust purposes."[71]
- The antitrust laws still protect competition, "not competitors"; a competitor has standing "only when the claimed injury flows from acts harmful to consumers."[72]

The court held that PLS.com "adequately alleged a per se group boycott," but left the district court to decide at later stages whether to apply per se analysis or the rule of reason.[73] The court's reasoning rested on a mandatory NAR policy and on market power that the defendants did not seriously dispute.[74]

10.7 Data users' antitrust counterclaims

A data user whom an MLS sues may answer with an antitrust claim of its own (a counterclaim). The closest examples involve a website operator, American Home Realty Network, which two MLSs sued over listing content. The operator counterclaimed under Section 1 of the Sherman Act in both courts, with these results:

Court	Ruling
Regional MLS of Minnesota v. American Home Realty Network[75]	The court denied the MLS's motion to dismiss the Sherman Act counterclaim.
Same case, 9 F. Supp. 3d 1032, 1034 (D. Minn. 2014)	The court held that the allegations "adequately state claims of antitrust violations" against two brokerages.
MRIS v. American Home Realty Network[76]	The court dismissed the Section 1 counterclaims.
Same case, Doc. 295 at 5 (D. Md. 30 Dec 2013)	The court found "No plausible basis for Sherman Act § 1 … claims against MRIS based on the refusal to deal and group boycott allegations."

The two cases show that a counterclaim can survive a motion to dismiss, but only with specific allegations of an agreement and of harm to competition. The Maryland case ended in summary judgment for NAR, and reportedly for the MLS as well. No final judgment for a data user was found.

[69] *The PLS.com v. National Association of Realtors*, 32 F.4th 824 (9th Cir. 2022), cert. denied, 143 S. Ct. 567 (2023).
[70] *PLS.com*, 32 F.4th at 832–33 (slip op. at 11, 13–14).
[71] *PLS.com* at 833 (slip op. at 13).
[72] *PLS.com* at 832 (slip op. at 11–12).
[73] *PLS.com* at 837 (slip op. at 21).
[74] *PLS.com* slip op. at 17–19.
[75] *Regional MLS of Minnesota v. American Home Realty Network*, 960 F. Supp. 2d 958, 977 (D. Minn. 2013).
[76] *MRIS v. American Home Realty Network*, 948 F. Supp. 2d 538, 564 (D. Md. 2013).

10.8 Limits of related doctrines

Beyond a counterclaim, a data user might try three other antitrust arguments. Each has limits:

- **Illegality as a contract defense.** A licensee sued for breach might argue that the contract itself violates the Sherman Act. The Supreme Court has said: "As a defense to an action based on contract, the plea of illegality based on violation of the Sherman Act has not met with much favor in this Court."[77] The Court entertains the defense "where its rejection would be to enforce conduct that the antitrust laws forbid."[78]
- **Concerted refusals to deal.** In a case about a news cooperative, the Supreme Court held that the cooperative's by-laws, "on their face, and without regard to their past effect, constitute restraints of trade."[79]
- **Essential facilities.** Some lower courts require a firm that controls a facility competitors cannot do without to share the facility (the essential-facilities doctrine). The Supreme Court has "never recognized such a doctrine" and found "no need either to recognize it or to repudiate it."[80] *Trinko* concerned a single firm, whereas an MLS acts by agreement among its members.

10.9 Section 5 of the FTC Act

Realcomp was decided under a different statute, Section 5 of the FTC Act, which provides: "Unfair methods of competition in or affecting commerce ... are hereby declared unlawful."[81] Only the FTC enforces Section 5; a private party cannot sue under it. In applying Section 5, the Commission may consider "public values beyond simply those enshrined in the letter or encompassed in the spirit of the antitrust laws."[82]

The FTC has used Section 5 against MLSs. In 2006 the FTC brought actions against several MLSs over rules on exclusive-agency listings; according to the FTC and the Department of Justice, "each policy had the effect of discouraging brokers from using exclusive agency listings."[83] *Realcomp* came from that group of actions. The FTC's policy statement on Section 5, dated 10 November 2022, remains on the FTC's list of policy statements, with no note that it has been rescinded. For a developer, Section 5 is a ground for a complaint to the FTC, not a claim or defense in court.

10.10 Government decrees and guidance

Besides the FTC, the Department of Justice (DOJ) has acted on MLS and NAR rules through court decrees, settlements and guidance. The table gives the status of each matter:

[77] *Kelly v. Kosuga*, 358 U.S. 516, 518 (1959).
[78] *Kaiser Steel Corp. v. Mullins*, 455 U.S. 72, 81–82 (1982).
[79] *Associated Press v. United States*, 326 U.S. 1, 12 (1945).
[80] *Verizon Communications v. Trinko*, 540 U.S. 398, 411 (2004).
[81] 15 U.S.C. § 45(a)(1).
[82] *FTC v. Sperry & Hutchinson*, 405 U.S. 233, 244 (1972).
[83] FTC & DOJ, *Competition in the Real Estate Brokerage Industry* 64 (Apr. 2007).

Matter	Status
United States v. NAR, No. 05 C 5140 (N.D. Ill.), Final Judgment entered 18 Nov 2008	The Final Judgment barred rules that restrict a broker's virtual office website from providing listing information the broker may give customers by other means.[84] The judgment has expired: "This Final Judgment shall expire ten years from the date of its entry."[85]
DOJ's 2020 settlement with NAR	DOJ withdrew from the settlement in July 2021. The D.C. Circuit ruled for DOJ in *National Association of Realtors v. United States*[86]. The Supreme Court denied review on 13 January 2025.
DOJ on Clear Cooperation	In a footnote to a statement of interest in *Nosalek v. MLS PIN* (D. Mass., March 2025), DOJ's Antitrust Division said the Division "has not taken a position that such policies standing alone ... are anticompetitive." This footnote is known from trade-press reports; the filing itself was not opened.
Antitrust Guidelines for Collaborations Among Competitors (2000)	The guidelines were withdrawn on 11 December 2024. DOJ and the FTC opened a joint inquiry on 23 February 2026. No replacement guidelines were found.

In the 2008 case, the government's reasoning is on the record: "As an association of competitors with market power, NAR's adoption of policies that suppress new and efficient competition ... violates Section 1."[87]

10.11 Fair Housing Act

The one federal statute that names MLSs is the Fair Housing Act: "It shall be unlawful to deny any person access to or membership or participation in any multiple-listing service, real estate brokers' organization or other service ... relating to the business of selling or renting dwellings ... on account of race, color, religion, sex, handicap, familial status, or national origin."[88] The regulation under the Act gives as an example "setting different fees for access to or membership in a multiple listing service" on a prohibited basis.[89] The Fair Housing Act is therefore a rule against discriminatory access to an MLS. The Act does not regulate how MLS data is used.

[84] Final Judgment § IV, *United States v. National Association of Realtors*, No. 05 C 5140 (N.D. Ill. 18 Nov 2008).
[85] Final Judgment § X, *United States v. National Association of Realtors*, No. 05 C 5140 (N.D. Ill. 18 Nov 2008).
[86] *National Association of Realtors v. United States*, No. 23-5065 (5 Apr 2024).
[87] Competitive Impact Statement at 3 (12 June 2008).
[88] 42 U.S.C. § 3606.
[89] 24 C.F.R. § 100.90(b)(1).

10.12 Current private litigation

The active front in MLS antitrust law is private litigation over mandatory listing rules, and several of these suits are in California. The table gives the status of each suit as of November 2026; the status rests partly on trade-press reports.

Case	Court	Status
PLS.com v. NAR	C.D. Cal.	Refiled 1 July 2025 after a tolling agreement. Trial is set for 27 September 2027.
Top Agent Network v. NAR	N.D. Cal.; 9th Cir. No. 21-16494	The Ninth Circuit vacated the dismissal on 28 August 2023 for reconsideration under *PLS.com*. On remand the district court held that a per se group boycott was adequately alleged (22 July 2024). The plaintiff voluntarily dismissed the case without prejudice in January 2025.
Compass v. NWMLS	W.D. Wash.	The motion to dismiss was denied in March 2026. The case settled on 31 August 2026.
Compass v. Zillow	S.D.N.Y.	A preliminary injunction was denied in February 2026. The case was dismissed without prejudice on 18 March 2026.
Zillow v. MRED and Compass	N.D. Ill.	Filed May 2026. Sent to arbitration on 17 September 2026.
MLS declaratory suits against Compass	S.D.N.Y.	Filed October 2026 by CRMLS and by a group of other MLSs, nine plaintiffs in all. On 19 November 2026 the judge declined to change the briefing schedule and directed Compass to file its motions by 3 December 2026. Pending.
Compass v. CRMLS	C.D. Cal.	Filed 16 October 2026. Pending.
Compass v. 15 MLSs	Several districts	Announced 12 November 2026 against MLSs in eight states, six of them in California. Pending.

10.13 What this means for a data licensee

Taken together, the federal authorities give a data licensee three conclusions:

- The federal authorities help a licensee where a data rule is applied unequally, or where a rule favors products of the MLS or its members over an outside competitor. That is the pattern of *Realcomp*.
- The federal authorities help little against a use restriction applied equally to every licensee. That is why NAR's 2026 feed policy uses the words "reasonable, objective, and applied equally."
- *PLS.com* treats a business that uses a product as an input as a consumer of that product, and a data licensee could argue from that holding. But the plaintiff in *PLS.com* was a rival listing

service, and any plaintiff would still have to show harm to competition, not only harm to the plaintiff.

Sources: U.S. Code at govinfo.gov; Realcomp opinion[90]*; PLS.com opinion*[91]*; REX v. Zillow memorandum*[92]*; FTC & DOJ 2007 report*[93]*; 2008 Final Judgment*[94]*; Competitive Impact Statement*[95]*; 2006 order denying dismissal*[96]*; Top Agent Network memorandum*[97]*; Supreme Court docket 24-417*[98]*; DOJ/FTC inquiry*[99]*; FTC policy statements*[100]*; Inman on the DOJ footnote*[101]*; Real Estate News on the NWMLS settlement*[102]*; RISMedia on the 12 Nov 2026 suits*[103]*. Federal Reporter page numbers for* PLS.com *are taken from later court orders that cite the same passages; slip-opinion pages are given beside them. The* Thompson *pinpoint is derived from the Sixth Circuit's citation of the same passage. The Commission's 2009* Realcomp *opinion was not opened.*

11 California law

Federal law is only half of the picture for a California developer. No California statute was found that regulates how an MLS licenses its data or what a licensee may do with it. The only MLS-specific statutes found are Civil Code §§ 1086–1089.5, which define an MLS and set duties on accuracy and record retention. The rest of California's law on the subject comes from general antitrust, unfair-competition, contract and association law, taken in that order below.

11.1 Cartwright Act and *Palsson*

California's antitrust statute is the Cartwright Act. The Act reaches any "combination of capital, skill or acts by two or more persons" to "create or carry out restrictions in trade or commerce."[104] "Any person who is injured in his or her business or property" may recover three times the damages sustained, an injunction, and a mandatory attorney's fee.[105] A contract that violates the Act "is absolutely void and is not enforceable at law or in equity."[106] The limitation period is four years.[107]

The leading California case on MLS access under the Cartwright Act is *Marin County Board of Realtors v. Palsson*.[108] The California Supreme Court held that a board of Realtors violated the Act "by

[90] https://www.opn.ca6.uscourts.gov/opinions.pdf/11a0084p-06.pdf
[91] https://cdn.ca9.uscourts.gov/datastore/opinions/2022/04/26/21-55164.pdf
[92] https://cdn.ca9.uscourts.gov/datastore/memoranda/2025/03/03/24-685.pdf
[93] https://www.justice.gov/sites/default/files/atr/legacy/2007/05/08/223094.pdf
[94] https://www.justice.gov/atr/case-document/file/505736/dl
[95] https://www.justice.gov/atr/case-document/file/505766/dl
[96] https://www.justice.gov/atr/case-document/file/505796/dl
[97] https://cdn.ca9.uscourts.gov/datastore/memoranda/2023/08/28/21-16494.pdf
[98] https://www.supremecourt.gov/docket/docketfiles/html/public/24-417.html
[99] https://www.justice.gov/opa/pr/justice-department-and-federal-trade-commission-seek-public-comment-guidance-business
[100] https://www.ftc.gov/legal-library/browse/policy-statements
[101] https://www.inman.com/2025/03/20/doj-signals-clear-cooperation-alone-may-not-be-anticompetitive/
[102] https://www.realestatenews.com/2026/08/31/compass-nwmls-settle-16-month-legal-battle
[103] https://www.rismedia.com/?p=480649
[104] Bus. & Prof. Code § 16720.
[105] Bus. & Prof. Code § 16750(a).
[106] Bus. & Prof. Code § 16722.
[107] Bus. & Prof. Code § 16750.1.
[108] *Marin County Board of Realtors v. Palsson*, 16 Cal.3d 920 (1976).

limiting its membership to persons primarily engaged in the real estate business and by denying nonmembers access to its multiple listing service."[109]

The court reached that holding in several steps. The court first rejected a per se rule and applied the rule of reason.[110] The court then found that the board had economic power. The board had three-fourths of the county's active residential brokers, its MLS carried 35 percent of county dollar sales, and a nonmember competed against "this colossus."[111] Because of that power, the board's freedom as an association to exclude people gave way: an association's freedom to exclude yields when the association "has the power to shape and influence the economic environment of its particular market."[112] The court then stated the test for a membership rule. Such a rule must relate "to a legitimate purpose" and be "reasonably necessary to accomplish that purpose and narrowly tailored to do so."[113] On access, the court held: "Access must be granted to all licensed salesmen and brokers who choose to use the service."[114] Finally, as guidance for the decree, the court said that "nonmembers may be charged a reasonable fee for use of the service consistent with the per-capita costs of operation."[115]

Palsson has five limits that matter to a developer or an appraiser:

- The access holding of *Palsson* names licensed brokers and salespersons. Appraisers and data vendors do not appear in the opinion.
- A later case, *Derish v. San Mateo-Burlingame Board of Realtors*,[116] held that "it is not improper to deny access to persons who are not licensed real estate brokers or sales agents." The plaintiffs in *Derish* were homeowners, and the court said *Palsson* does not reach "unlicensed members of the general public."[117]
- *Derish* relied in a footnote on the 1982 text of Civil Code § 1087, which defined an MLS as "a facility of cooperation of agents."[118] The section now reads "agents and appraisers." The *Derish* footnote therefore no longer supports excluding appraisers. This conclusion is an inference; no court has said so.
- Harm to one person is not enough. A California court of appeal held that "A showing of only individual detriment is insufficient."[119] *Palsson* itself adds that a restraint is not tolerated "merely because the victim is just one merchant."[120]
- No California or Ninth Circuit decision was found that applies *Palsson* to an appraiser's access or to a term restricting data use.

Later California cases follow *Palsson*. *People v. National Association of Realtors*[121] held that a members-only residential MLS "constitutes a group boycott." A second decision in the same matter, 155 Cal.App.3d 578, 584 (1984), found "an illegal tying arrangement" in policies for an investment MLS. *Glendale Board of Realtors v. Hounsell*[122] applied the *Palsson* access rule to another board. The

[109] *Palsson* at 924.
[110] *Palsson* at 930–934.
[111] *Palsson* at 935.
[112] *Palsson* at 937.
[113] *Palsson* at 939.
[114] *Palsson* at 938.
[115] *Palsson* at 940.
[116] *Derish v. San Mateo-Burlingame Board of Realtors*, 136 Cal.App.3d 534, 536 (1982).
[117] *Derish* at 540.
[118] *Derish* at 540 n.4.
[119] *Feldman v. Sacramento Board of Realtors*, 119 Cal.App.3d 739, 747–748 (1981).
[120] *Palsson* at 935.
[121] *People v. National Association of Realtors*, 120 Cal.App.3d 459, 467 (1981).
[122] *Glendale Board of Realtors v. Hounsell*, 72 Cal.App.3d 210, 211–213 (1977).

rule of reason under the Cartwright Act is set out in *In re Cipro Cases I & II*[123].

11.2 Unfair Competition Law

A claim under the Cartwright Act is often joined with a claim under California's Unfair Competition Law. Business and Professions Code § 17200 prohibits unlawful, unfair or fraudulent business acts. A private plaintiff must have "suffered injury in fact and ... lost money or property as a result."[124] The remedies are an injunction and restitution,[125] not damages. The limitation period is four years.[126]

Between competitors, "unfair" means "conduct that threatens an incipient violation of an antitrust law, or violates the policy or spirit of one of those laws ... or otherwise significantly threatens or harms competition."[127] A claim that a practice is "unfair" therefore depends on the antitrust theory behind the claim.

11.3 Contract interpretation

Antitrust law limits what a license may say; contract law decides what a license does say. A data license is read under the general rules of the Civil Code, and those rules decide most disputes over a license's scope. The main rules are these:

Rule	Authority
The aim is the "mutual intention of the parties as it existed at the time of contracting"	Civ. Code § 1636; *Bank of the West v. Superior Court*[128]
Clear and explicit language governs	§ 1638
Intention is taken "from the writing alone, if possible"	§ 1639
"The whole of a contract is to be taken together"	§ 1641
Words carry their "ordinary and popular sense" unless used technically	§ 1644
A contract may be explained by the "circumstances under which it was made"	§ 1647
An ambiguous promise is read as the promisor believed the promisee understood the promise	§ 1649
Remaining uncertainty is read against the party who caused the uncertainty	§ 1654

A court will also admit evidence from outside the contract (extrinsic evidence) to show a meaning the words can bear. The California Supreme Court put the test this way: the question "is not whether it appears to the court to be plain and unambiguous on its face, but whether the offered

[123] *In re Cipro Cases I & II*, 61 Cal.4th 116, 146 (2015).
[124] Bus. & Prof. Code § 17204.
[125] Bus. & Prof. Code § 17203.
[126] Bus. & Prof. Code § 17208.
[127] *Cel-Tech Communications v. Los Angeles Cellular*, 20 Cal.4th 163, 187 (1999).
[128] *Bank of the West v. Superior Court*, 2 Cal.4th 1254, 1264 (1992).

evidence is relevant to prove a meaning to which the language of the instrument is reasonably susceptible."[129] Correspondence in which a licensee described the intended use of the data is evidence of that kind.

One federal district-court decision suggests how a court may treat a data license that supports two readings. In *Digital Envoy v. Google*,[130] the license allowed use "to develop indices, services, or applications that are provided to third parties" but barred sharing the database "(in any form)."[131] The licensee, Google, kept the data on its own computers and gave third parties only the results, which is close to the position of a developer who publishes statistics.[132] The court found the license reasonably susceptible to both parties' readings and denied summary judgment on the contract claim, adding that the licensee's reading appeared the more reasonable.[133] The scope question was never decided. Later orders barred damages under the license's limitation-of-liability clause, and the parties dismissed the case by agreement on 24 April 2006.[134] No California decision was found on analytics, statistics or models built from licensed data.

11.4 Other contract doctrines

Beyond the rules for reading a license, several other contract doctrines can decide a dispute between an MLS and a licensee. The table gives each doctrine, the authority for the doctrine and the doctrine's effect:

Doctrine	Authority	Effect
Illegal terms	Bus. & Prof. Code § 16722; *Mailand v. Burckle*[135]	A term that violates the Cartwright Act is void; the rest of the contract stands if the term can be separated (severed)
Unconscionability	Civ. Code § 1670.5; *Armendariz v. Foundation Health*[136]	Unfairness in how the contract was made (procedural) and in its terms (substantive) "must both be present," on a "sliding scale"
Liquidated damages	Civ. Code § 1671(b)	A clause fixing damages in advance is valid unless the challenger shows the clause was unreasonable when made
Waiver	*Waller v. Truck Insurance Exchange*[137]	Waiver is "The intentional relinquishment of a known right after knowledge of the facts," and requires clear and convincing proof
Estoppel	Evid. Code § 623; *City of Long Beach v. Mansell*[138]	Estoppel has four elements, including reliance on the other party's conduct
Attorney fees	Civ. Code § 1717(a)	A one-sided fee clause runs both ways

[129] *Pacific Gas & Electric v. G.W. Thomas Drayage*, 69 Cal.2d 33, 37 (1968).
[130] *Digital Envoy v. Google*, 370 F.Supp.2d 1025 (N.D. Cal. 2005).
[131] *Digital Envoy* at 1028–1029.
[132] *Digital Envoy* at 1028–1029.
[133] *Digital Envoy* at 1032–1033.
[134] *Digital Envoy, Inc. v. Google, Inc.*, No. 5:04-cv-01497 (N.D. Cal.), orders of 8 Nov 2005 (Doc. 366) and 28 Mar 2006 (Doc. 415); stipulated dismissal of 24 Apr 2006 (Doc. 442).
[135] *Mailand v. Burckle*, 20 Cal.3d 367, 384 (1978).
[136] *Armendariz v. Foundation Health*, 24 Cal.4th 83, 114 (2000).
[137] *Waller v. Truck Insurance Exchange*, 11 Cal.4th 1, 31 (1995).
[138] *City of Long Beach v. Mansell*, 3 Cal.3d 462, 489 (1970).

Doctrine	Authority	Effect
Injunction	Civ. Code § 3422	An injunction is available where money "would not afford adequate relief"
Limitation	Code Civ. Proc. § 337(a)	Four years on a written contract

Of these doctrines, waiver and estoppel matter when an MLS knew of a use and let it continue. Waiver is hard to prove. The MLS's conduct must be "so inconsistent with an intent to enforce the contractual right as to lead a reasonable factfinder to conclude that the party had abandoned it."[139]

A further question is whether an MLS must prove that a breach caused it harm, and the authorities divide. Civil Code § 3360 allows nominal damages for a breach that causes "no appreciable detriment." *Elation Systems v. Fenn Bridge* (Cal. Ct. App. 22 Nov 2021) held that a trial court "should have awarded nominal damages" on a proven breach. An older line of California cases says "a breach of contract without damage is not actionable."[140] The Ninth Circuit has required "appreciable and actual damage."[141] A developer sued in federal court can therefore argue *Aguilera*; in state court, the recent authority favors the MLS.

11.5 Fair procedure before exclusion

Contract law governs the terms of a license; a separate body of California common law governs how an MLS may exclude a person. That common law requires fair procedure before a private body with power over a person's livelihood excludes the person. *Pinsker v. Pacific Coast Society of Orthodontists*[142] requires "some meaningful opportunity to respond." *Potvin v. Metropolitan Life*[143] limits the duty to bodies whose power is "so substantial that the removal significantly impairs" a person's practice.

The fair-procedure doctrine reaches some people who are not members of the body. *Potvin* concerned a physician on an insurer's list of providers. *Palm Medical Group v. State Compensation Insurance Fund*[144] applied the doctrine to an applicant to a provider network. The doctrine has limits, however: in *Yari v. Producers Guild*[145] the court refused to apply the doctrine.

Realtor bodies fall within the fair-procedure doctrine. *Palsson* called board membership "a practical economic necessity."[146] *United Multiple Listing Service v. Bernstein*[147] upheld an expulsion made after notice. No case was found applying the doctrine to a data licensee or vendor.

A statute may also apply. Corporations Code § 7341 bars expulsion of a member of a nonprofit mutual benefit corporation unless it is done in good faith and fairly. The statute's safe harbor is 15 days' notice and a hearing. Whether an MLS participant is a "member" under § 7341 depends on that MLS's legal form and bylaws.

[139] *Quach v. California Commerce Club* (Cal. 25 July 2024), slip op. at 25–26.
[140] *Patent Scaffolding v. William Simpson Construction*, 256 Cal.App.2d 506, 511 (1967).
[141] *Aguilera v. Pirelli Armstrong Tire*, 223 F.3d 1010, 1015 (9th Cir. 2000).
[142] *Pinsker v. Pacific Coast Society of Orthodontists*, 12 Cal.3d 541, 555 (1974).
[143] *Potvin v. Metropolitan Life*, 22 Cal.4th 1060, 1071 (2000).
[144] *Palm Medical Group v. State Compensation Insurance Fund*, 161 Cal.App.4th 206, 217 (2008).
[145] *Yari v. Producers Guild*, 161 Cal.App.4th 172 (2008).
[146] *Palsson* at 938.
[147] *United Multiple Listing Service v. Bernstein*, 134 Cal.App.3d 486, 489–490 (1982).

11.6 Anti-SLAPP statute

If an MLS sues a developer over published statistics, California's anti-SLAPP statute (against strategic lawsuits against public participation) may offer an early defense. Code of Civil Procedure § 425.16 allows early dismissal of a claim arising from speech "in connection with a public issue or an issue of public interest." The statute does not exclude breach-of-contract claims.[148]

How well the statute fits published market statistics is uncertain. *FilmOn.com v. DoubleVerify*[149] asks "what functional relationship exists between the speech and the public conversation about some matter of public interest." In *FilmOn.com*, reports "generated for profit, exchanged confidentially, without being part of any attempt to participate in a larger public discussion" did not qualify. Section 425.17(c) also exempts some commercial speech about a seller's own goods or services. Free public research therefore stands a better chance under the statute than a paid, private report does. No decision on housing statistics was found.

11.7 Appraisal licensing

A developer who publishes market statistics may also ask whether the developer needs an appraiser's license. In the words of the statute, publishing market statistics is not appraisal: " 'Appraisal' means the act or process of developing an opinion of value for real property."[150] A license is required for "federally related real estate appraisal activity" and for use of the appraiser title.[151] Statistics published without an opinion of value for a property therefore fall outside § 11302(b) as written. No decision on the point was found.

This reading of the statute cuts two ways for a developer. On one side, the reading suggests that no appraiser's license is needed to publish aggregate statistics. A tool that returns a value for an identified property is a different question, and professional appraisal standards were not researched here. On the other side, the same reading weakens any argument that publishing statistics is "appraisal" within an MLS's permitted-use clause.

11.8 Trade secrets

The last body of California law an MLS might invoke is trade-secret law. A trade secret must derive value "from not being generally known" and be the subject of reasonable efforts to keep the information secret.[152] No California decision was found treating MLS data as a trade secret.

Statutes were read in the Legislature's official bulk file (downloads.leginfo.legislature.ca.gov, stamped 15 November 2026). Opinions were read with official page numbers at Harvard's Caselaw Access Project, and recent ones as court slip opinions. Reporter citations for Elation *(71 Cal.App.5th 958) and* Quach *were not confirmed.*

12 Intellectual property: what an MLS can and cannot own

Copyright protects the expression in a listing, such as the wording of the remarks and the photographs, but not the facts the listing reports. That distinction between expression and facts de-

[148] *Navellier v. Sletten*, 29 Cal.4th 82, 92 (2002).
[149] *FilmOn.com v. DoubleVerify*, 7 Cal.5th 133 (2019).
[150] Bus. & Prof. Code § 11302(b).
[151] Bus. & Prof. Code § 11320.
[152] Civ. Code § 3426.1(d).

cides most copyright questions a statistical modeler meets. The distinction does not decide the contract questions, which the license governs separately.

12.1 The statute

The federal Copyright Act sets the limits of what an MLS can own. Six provisions of the Act matter most here:

Provision	Text
17 U.S.C. § 102(b)	"In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery"
§ 103(b)	Copyright in a compilation "extends only to the material contributed by the author of such work ... and does not imply any exclusive right in the preexisting material"
§ 101	"A 'derivative work' is a work based upon one or more preexisting works ... or any other form in which a work may be recast, transformed, or adapted"
§ 204(a)	A transfer of ownership must be "in writing and signed by the owner of the rights conveyed"
§ 411(a)	"No civil action for infringement of the copyright in any United States work shall be instituted until preregistration or registration of the copyright claim has been made"
§ 412	An owner gets no statutory damages or attorney's fees for infringement that began before registration, except within a three-month grace period after first publication

12.2 Facts, compilations, photographs and remarks

A listing record contains several kinds of material, and copyright treats each kind differently. The starting point is the facts. "Facts are not copyrightable."[153] A sale price, a closing date, a room count and a lot size are all facts.

The MLS database as a whole is a compilation of those facts, and its protection is weak. "The copyright in a factual compilation is thin."[154] That thin copyright covers only the original selection and arrangement of the facts, not the facts themselves.

Photographs, unlike facts, are protected, and an MLS can acquire rights in listing photographs through its terms of use. "An electronic agreement may effect a valid transfer of copyright interests under Section 204 of the Copyright Act."[155] That decision went no further than photographs. The district court's order enjoined "only AHRN's use of MRIS's photographs — not the compilation itself or any textual elements,"[156] and the Fourth Circuit did not rule on the compilation or the text.

[153] *Feist Publications v. Rural Telephone*, 499 U.S. 340, 344 (1991).
[154] *Feist* at 349.
[155] *Metropolitan Regional Information Systems v. American Home Realty Network*, 722 F.3d 591, 602 (4th Cir. 2013).
[156] *MRIS* at 594.

An MLS can acquire a photograph's copyright only from the person who owns that copyright (the chain of title). A transfer must be signed "by the owner of the rights conveyed" (17 U.S.C. § 204(a)). The broker who submits a listing often is not that owner: a photographer or a photo studio may own the photographs and license them to the broker.[157] NAR's 2026 copyright policy lets an MLS take up to a 50% interest in listing content. Where the participant only licenses the photographs, that policy therefore conveys nothing in them.

NAR's term "listing content" is also wider than what copyright protects. NAR defines listing content to include "pricing information, and other details or information related to listed property" as well as photographs and narratives.[158] A price is therefore listing content under that definition, and under any license that adopts the definition, even though copyright does not protect the price.

The listing remarks fall between facts and photographs. Original descriptive text is protected under general principles of copyright, but no appellate decision on MLS remarks was found.

Even where copyright protects listing material, an MLS must register the material before suing. An MLS cannot sue for infringement until the Copyright Office has registered the work.[159] For an automated database, a group registration covers "updates covering a three-month period."[160] That three-month period may explain why NAR's 2026 copyright policy speaks of quarterly registration. Without timely registration, an MLS has no claim to statutory damages or attorney fees.[161]

The one Ninth Circuit decision found on MLS copyright is *Supermarket of Homes v. San Fernando Valley Board of Realtors*[162]. In that case a broker sold copies of pages from the board's multiple listing book and "copied the entire work verbatim."[163] The court affirmed judgment for the board and rejected the broker's fair-use defense, because the copies were "a perfect substitute" for the original.[164] The court noted that "the informational nature of multiple listing materials superficially favors a fair use finding."[165] The decision predates *Feist*, however, and concerns wholesale copying, not statistical use.

12.3 Statistical models and their outputs

The question that matters most to a developer is whether a statistical model built from MLS data belongs in any part to the MLS. No decision was found holding that statistics, indices, or models built from licensed data are derivative works, or that they are "derived data" under a license. The neighboring cases, however, point in a consistent direction.

Under those cases, a new work is derivative only if it takes protected expression from the earlier one. "A work is not derivative unless it has been substantially copied from the prior work."[166] A derivative work "must substantially incorporate protected material from the preexisting work."[167]

[157] *VHT v. Zillow*, 918 F.3d 723 (9th Cir. 2019) (a photo studio's claim over listing photographs it licensed to brokers); *Stross v. Redfin*, No. 17-50046 (5th Cir. 9 Apr 2018), slip op. at 8, unpublished (a photographer's claim, turning on the scope of the MLS sublicense).
[158] NAR, *Handbook on Multiple Listing Policy* (January 2025), Policy Statement 7.86.
[159] *Fourth Estate Public Benefit Corp. v. Wall-Street.com*, 586 U.S. 296, 299 (2019).
[160] 37 C.F.R. § 202.3(b)(5).
[161] 17 U.S.C. § 412.
[162] *Supermarket of Homes v. San Fernando Valley Board of Realtors*, 786 F.2d 1400 (9th Cir. 1986).
[163] *Supermarket of Homes* at 1409.
[164] *Supermarket of Homes* at 1409.
[165] *Supermarket of Homes* at 1409.
[166] *Litchfield v. Spielberg*, 736 F.2d 1352, 1357 (9th Cir. 1984).
[167] *Micro Star v. FormGen*, 154 F.3d 1107, 1110 (9th Cir. 1998).

If that test is applied to a statistical model, a coefficient or an adjustment curve incorporates no photograph and no remark.

Courts have also treated statistics and prices computed from facts as unprotected. Four decisions illustrate the point. The first two are copyright holdings; the last two concern misappropriation and index licensing.

Case	Holding
BanxCorp v. Costco[168]	"The averages are unprotectable because they are uncopyrightable facts"
New York Mercantile Exchange v. IntercontinentalExchange[169]	Use of the exchange's settlement prices was not infringement, "because enforcing the copyright here would effectively accord protection to the idea itself"
NBA v. Motorola[170]	The defendants lawfully "expend their own resources to collect purely factual information"
Dow Jones v. International Securities Exchange[171]	Trading options on funds that track an index does "not infringe on any intellectual-property interest" in the index

A valuation made with judgment differs from a computed statistic and can be the modeler's own copyrighted work. In *CCC Information Services v. Maclean Hunter*[172], the used-car valuations at issue "were neither reports of historical prices nor mechanical derivations of historical prices or other data. Rather, they represented predictions." The court held the valuations protected. The Ninth Circuit reached the same result for coin prices that "are compilations of data chosen and weighed with creativity and judgment."[173] Both decisions concerned published price guides compiled with judgment and selection. Neither decision makes a single numerical estimate protectable merely because judgment produced the estimate. Originality is still required, and the underlying facts and method stay outside copyright.

Two conclusions follow from these cases. They are this paper's analysis, not holdings of any court. First, a published aggregate or model statistic is unlikely to infringe copyright in the listings the model was fitted on. Second, published valuations that embody the developer's own judgment may be the developer's protectable work, which an MLS does not own merely because MLS data was an input. That protection does not extend to the method. Copyright excludes any "procedure, process, system, method of operation" (17 U.S.C. § 102(b)), so a regression method and its coefficients are not protected as such. However, the developer's code and written explanation are protected. A license can change any of these results by contract.

12.4 Fair use and machine analysis

The conclusions above concern what a published output contains. A second question concerns what was copied while the model was built, and the two questions must be kept apart. The cases

[168] *BanxCorp v. Costco*, 978 F. Supp. 2d 280, 286 (S.D.N.Y. 2013).
[169] *New York Mercantile Exchange v. IntercontinentalExchange*, 497 F.3d 109, 110 (2d Cir. 2007).
[170] *NBA v. Motorola*, 105 F.3d 841, 854 (2d Cir. 1997).
[171] *Dow Jones v. International Securities Exchange*, 451 F.3d 295, 299 (2d Cir. 2006).
[172] *CCC Information Services v. Maclean Hunter*, 44 F.3d 61, 67 (2d Cir. 1994).
[173] *CDN v. Kapes*, 197 F.3d 1256, 1260 (9th Cir. 1999).

above answer the first question. The second question arises whenever photographs or remarks, as distinct from factual fields, are copied into a system for analysis, even if nothing of the photographs or remarks appears in the output. Fitting a regression to prices, dates, and property characteristics copies no protected expression and therefore does not raise the second question.

Where protected text or images are copied for analysis, the defense is fair use. The Copyright Act weighs four factors, which include "the purpose and character of the use" and "the effect of the use upon the potential market for or value of the copyrighted work."[174] In one leading case, copying books to build a search function was "a transformative use, which augments public knowledge ... without providing the public with a substantial substitute."[175]

Courts that have ruled on copying for the training of artificial-intelligence models have reached different results. Three rulings show the range:

Case	Court and date	Result
Thomson Reuters v. ROSS Intelligence	No. 25-2153 (3d Cir. 29 Sept 2026), affirming partial summary judgment (D. Del. 11 Feb 2025) on an interlocutory appeal	"[W]e hold that ROSS's use was not fair."[176] A competitor used the plaintiff's editorial headnotes to write training questions for a rival legal search engine.
Bartz v. Anthropic	787 F. Supp. 3d 1007 (N.D. Cal. 2025)	The court held the training use to be fair use, but did not excuse keeping pirated library copies. No appellate ruling was found.
Kadrey v. Meta Platforms	788 F. Supp. 3d 1026 (N.D. Cal. 2025)	The court gave summary judgment for Meta on the record presented, and said the ruling does not make such training lawful in general. No appellate ruling was found.

ROSS is the only appellate decision on AI training that this paper found, and the decision has clear limits. *ROSS* is a Third Circuit decision, not binding in California, and concerns copying of protected editorial text to train a competing product that does not generate text. The decision does not hold that training a model on factual data infringes. The court said the developer could freely have copied the underlying judicial opinions; the ruling covers only the publisher's own headnotes.[177]

Three points in *ROSS* would still matter to an MLS. The developer aimed to replace the plaintiff's product. The court recognized a developing market for licensing such text as AI training material. And access obtained against the plaintiff's terms of service counted against the developer.[178] A petition for rehearing by the panel and the full court was filed on 3 November 2026 and had not been ruled on as of 20 November 2026, so the decision is not final. An MLS would compare the facts of *ROSS* to the position of a developer who builds a competing product from listing remarks.

[174] 17 U.S.C. § 107.
[175] *Authors Guild v. Google*, 804 F.3d 202, 207 (2d Cir. 2015).
[176] *ROSS* slip op. at 27.
[177] *ROSS* slip op. at 10 n.5, 20.
[178] *ROSS* slip op. at 6, 21 n.9, 26.

12.5 Copyright misuse

A developer sued for infringement may also argue copyright misuse. Misuse bars enforcement of a copyright when the owner uses it to restrain competition beyond the rights the copyright grants. The Ninth Circuit adopted the misuse defense in *Practice Management Information Corp. v. American Medical Association*[179]. In that case, the AMA "misused its copyright by licensing the CPT to HCFA in exchange for HCFA's agreement not to use a competing coding system." Misuse "need not be a violation of antitrust law."[180]

The Seventh Circuit raised the misuse idea in a case about property-assessment data, without deciding the question. "To try by contract or otherwise to prevent the municipalities from revealing their own data, especially when ... the complete data are unavailable anywhere else, might constitute copyright misuse."[181] That statement is dictum, meaning a remark not needed for the decision. The statement describes an attempt to use a copyright in database software to lock up public-domain property facts that the copyright owner did not collect. A multiple listing service owned the company seeking the data.[182] The same opinion cuts the other way on contracts. A copyright owner "can by contract limit copying beyond the right that a copyright confers," and the licenses in that case failed only because the company seeking the data had not signed them.[183]

On the passages read, the misuse defense is narrow in the Ninth Circuit. Four authorities show how narrow:

- The Ninth Circuit has said: "We have thus applied the doctrine sparingly."[184]
- In *Altera*, the court held that "Copyright misuse is not a defense to the state law claims asserted by Altera."[185] Those claims were tort claims against a competitor that led customers to break their license. The court said misuse is a defense to copyright infringement, and no infringement had been alleged.
- A federal district court has described misuse as "only a defense, not a basis for affirmative relief."[186]
- *Supermarket of Homes* rejected a misuse argument against an MLS board.[187]

12.6 Does copyright law preempt the license?

A developer may also argue that federal copyright law overrides (preempts) the license itself. On the authorities read, that argument probably fails. Section 301(a) preempts state-law rights "equivalent to any of the exclusive rights within the general scope of copyright." The developer would argue that a contract claim over uncopyrightable facts is such a right. Where the license contains a real promise, the cases read suggest the argument usually fails. Four authorities support that view:

- "Most courts have held that the Copyright Act does not preempt the enforcement of contractual rights."[188]

[179] *Practice Management Information Corp. v. American Medical Association*, 121 F.3d 516, 520 (9th Cir. 1997).
[180] *Lasercomb America v. Reynolds*, 911 F.2d 970, 978 (4th Cir. 1990).
[181] *Assessment Technologies v. WIREdata*, 350 F.3d 640, 646–47 (7th Cir. 2003).
[182] *Assessment Technologies* at 642.
[183] *Assessment Technologies* at 646.
[184] *Apple v. Psystar*, 658 F.3d 1150, 1157 (9th Cir. 2011).
[185] *Altera Corp. v. Clear Logic*, 424 F.3d 1079, 1090 (9th Cir. 2005).
[186] *MRIS v. AHRN*, 948 F. Supp. 2d 538, 568 (D. Md. 2013).
[187] *Supermarket of Homes* at 1408.
[188] *Altera* at 1089.

- "A copyright is a right against the world. Contracts, by contrast, generally affect only their parties ... so contracts do not create 'exclusive rights'."[189]
- An implied promise to pay for use of an idea is not preempted.[190]
- California courts test each promise separately.[191]

Three authorities point the other way, but each has limits. *Best Carpet Values v. Google*[192] found preemption of an implied-in-law claim where there was no actual promise.[193] *X Corp. v. Bright Data*[194] held state-law scraping claims preempted, but that decision is one district order about public content. *ML Genius Holdings v. Google*[195] is a non-precedential summary order from another circuit.

12.7 The First Amendment

A developer might finally invoke freedom of speech. "The creation and dissemination of information are speech within the meaning of the First Amendment."[196] *Sorrell*, however, struck down a state statute. Against a private license the First Amendment gives little help: "any restrictions that may be placed on the publication of truthful information are self-imposed."[197]

Statutes were read in the U.S. Code at govinfo.gov. Opinions were read with reporter page numbers at Harvard's Caselaw Access Project or as court slip opinions. Page numbers for Assessment Technologies *are from the printed page scan, because the Caselaw Access Project's page labels for that case are wrong. The F. Supp. 3d citations for* Bartz *and* Kadrey *are as given in the Third Circuit's opinion.*

13 Computer-access statutes

Copyright and contract are not the only claims an MLS can bring. Federal and California statutes also make certain computer access unlawful. A licensee who uses data outside the license may face more risk under California's computer statute than under the federal statute, although that point is unsettled. Under both statutes, liability is clearest when a user continues to access the data after a written demand to stop.

13.1 Federal: Computer Fraud and Abuse Act (CFAA, 18 U.S.C. § 1030)

The Supreme Court narrowed the federal statute in *Van Buren v. United States*[198]. "An individual 'exceeds authorized access' when he accesses a computer with authorization but then obtains information located in particular areas of the computer — such as files, folders, or databases — that are off limits to him."[199] Misusing data that a person is entitled to obtain falls outside that definition.

The Court left one question open. The Court did not decide whether the inquiry "turns only on technological (or 'code-based') limitations on access, or instead also looks to limits contained in

[189] *ProCD v. Zeidenberg*, 86 F.3d 1447, 1454 (7th Cir. 1996).
[190] *Montz v. Pilgrim Films & Television*, 649 F.3d 975, 977 (9th Cir. 2011).
[191] *Kabehie v. Zoland*, 102 Cal.App.4th 513, 517–518 (2002).
[192] *Best Carpet Values v. Google*, 90 F.4th 962 (9th Cir. 2024).
[193] *Best Carpet* slip op. at 21.
[194] *X Corp. v. Bright Data*, No. C 23-03698 WHA (N.D. Cal. 9 May 2024).
[195] *ML Genius Holdings v. Google*, No. 20-3113 (2d Cir. 10 Mar 2022).
[196] *Sorrell v. IMS Health*, 564 U.S. 552, 570 (2011).
[197] *Cohen v. Cowles Media*, 501 U.S. 663, 671 (1991).
[198] *Van Buren v. United States*, 593 U.S. 374 (2021).
[199] *Van Buren* at 396.

contracts or policies."[200] An MLS could therefore still argue that a license term marks certain data off limits.

A Ninth Circuit case, *hiQ Labs v. LinkedIn*[201], concerned public data and the statute's separate "without authorization" clause. "It is likely that when a computer network generally permits public access to its data, a user's accessing that publicly available data will not constitute access without authorization."[202] *hiQ* is a preliminary-injunction ruling. The court noted that claims for breach of contract "may also lie."[203] The decision says little about data behind a member login, which is where MLS data sits.

A third case, *Facebook v. Power Ventures*[204], suggests where the line of liability may fall. The defendant "violated the CFAA and California Penal Code section 502 only after it received Facebook's cease and desist letter and nonetheless continued to access Facebook's computers without permission."[205]

13.2 California: Penal Code § 502

California's statute is broader in its words. Section 502(c)(2) reaches a person who "knowingly accesses and without permission takes, copies, or makes use of any data." An owner or lessee who "suffers damage or loss" may sue for compensatory damages and an injunction.[206] The action must be brought "within three years of the date of the act complained of, or the date of the discovery of the damage, whichever is later."[207]

In one decision, the Ninth Circuit read § 502 to cover misuse after a valid login, and a court could apply that reading to data used outside a license. The Ninth Circuit concluded that "the term 'access' as defined in the California statute includes logging into a database with a valid password and subsequently taking, copying, or using the information in the database improperly."[208] The people who logged in were a police officer and telephone-company employees, paid to pull confidential records. Those people's limits came from law and employer policy, not a contract. The court dealt only with § 502(c)(2). The court did not say whose permission counts, or whether a contract can withhold permission, and noted that California case law on the point was "undeveloped."[209]

Christensen was decided before *Van Buren*. Since *Van Buren*, the Ninth Circuit has cited *Christensen* once on § 502, for the point that the federal and California statutes "are different" in certain ways.[210] That later case was about who "accessed" a computer, not about misuse after a valid login. Federal district courts still apply *Christensen* to § 502(c)(2) claims. In one such case, a competitor used customers' valid credentials, allegedly in violation of the customers' contracts. The court mostly dismissed the federal claim and let the § 502 claim go forward.[211] No California appellate decision citing *Christensen* was found.

[200] *Van Buren* at 390 n.8.
[201] *hiQ Labs v. LinkedIn*, 31 F.4th 1180 (9th Cir. 2022).
[202] *hiQ* slip op. at 40.
[203] *hiQ* slip op. at 41.
[204] *Facebook v. Power Ventures*, 844 F.3d 1058 (9th Cir. 2016).
[205] *Power Ventures* at 1062.
[206] Penal Code § 502(e)(1).
[207] Penal Code § 502(e)(5).
[208] *United States v. Christensen*, 828 F.3d 763, 789 (9th Cir. 2016).
[209] *Christensen* at 777, 783, 790.
[210] *Amazon.com Services, LLC v. Perplexity AI, Inc.*, No. 26-1444 (9th Cir. 4 Aug 2026), slip op. at 17.
[211] *WalkMe Ltd. v. Whatfix, Inc.*, No. 23-cv-03991-JSW (N.D. Cal. 21 Mar 2024), read at the relevant passage only.

A recent decision of the California Court of Appeal reads § 502 more narrowly in one setting. In *Teran v. Superior Court*, a former adviser to a sheriff's department was charged with e-mailing public court decisions. The court held that § 502(c)(2) "does not apply in circumstances where, as here, only purely public court records have been shared."[212] The court accepted that the statute penalizes unauthorized taking, copying and use of data. But the court said the permission requirement applies only where the computer's owner "has some dominion over, or right to control, the uses made of that data," and that an owner's policies and login warnings cannot make using purely public data a crime.[213] The California Supreme Court denied review on 17 September 2025. *Teran* does not decide how § 502 applies to a private database used under a license, and does not mention *Christensen*.

These cases address four different situations, and the situations should be kept apart because the cases treat them differently:

- public information held on another's computer (*hiQ*; *Teran*);
- access under valid credentials, followed by use the owner did not permit (*Christensen*, a case about insiders; also the question *Van Buren* left open);
- access to areas a user is not entitled to enter (*Van Buren*); and
- access after permission is revoked (*Power Ventures*).

13.3 What follows

For a licensee, the cases on the two statutes sort conduct from safest to most exposed:

- Access under the licensee's own valid credentials, within the feed provided, is the safest case under both statutes.
- Credential sharing and automated collection from a member interface, rather than the licensed feed, move toward the exposed case.
- Continued access after a written revocation is the exposed case under both statutes.
- Separately, under § 502, using validly obtained data in a way the license forbids carries a risk that the federal statute does not.

Sources: Van Buren, preliminary print[214]*; hiQ slip opinion*[215]*; Supreme Court of California conference results, 17 Sept 2025*[216]*. Federal Reporter page numbers for* hiQ *could not be determined, so slip-opinion pages are given. The official citation of* Teran *is taken from a later California Supreme Court opinion; its pinpoints are to the slip opinion.*

14 A cautious compliance posture

The law described so far leaves the license in control, so a developer's safest course is practical. That course is to get the intended use written into the license, and until then to publish nothing that reproduces listing content. The steps below follow from the law above, but none of the steps guarantees that an MLS will agree.

[212] *Teran v. Superior Court* (2025) 112 Cal.App.5th 371, slip op. at 21.
[213] *Teran* slip op. at 13, 16–18.
[214] https://www.supremecourt.gov/opinions/20pdf/593us2r42_n7ip.pdf
[215] https://cdn.ca9.uscourts.gov/datastore/opinions/2022/04/18/17-16783.pdf
[216] https://supreme.courts.ca.gov/sites/default/files/supremecourt/default/documents/cr091725.pdf

14.1 Read the agreement for six things

The first step is to read the data license and the MLS rules for six kinds of clauses:

1. The definition of the licensed data, and whether it includes derived data, analytics, or statistics.
2. The permitted-use clause, and whether that clause names appraisal, valuation, research or publication.
3. Any clause on machine learning, AI, model training or automated processing.
4. Any clause on transfer to third parties, including service providers.
5. Display rules, if listings or photographs are shown.
6. Termination, audit, notice-and-cure, fee, venue and arbitration clauses.

14.2 Design choices that lower exposure

The second step is to design the product so its outputs and data handling carry as little exposure as possible. Each design choice below lowers a particular exposure:

Choice	Why it helps
Publish aggregates, model statistics and adjustment curves, not listing records	These outputs reproduce no protected expression and are hard to describe as redistribution of the data
Suppress figures for small groups of sales	An aggregate over very few sales can reveal a single listing
Keep photographs and remarks out of published output	Photographs and remarks are the fields in which copyright is strongest
Use only public remarks, and only as the license allows	IDX rules and most licenses bar confidential fields from display
Do not send listing records to an outside AI or cloud service unless the license allows that transfer and that provider, and the provider's contract bars retention and training	A transfer to a third party is a separate breach from publication, and a provider's promise not to retain the data does not authorize the transfer
Fit models inside the licensed environment and under the developer's own credentials	This choice lowers the exposure that comes from unauthorized access, shared credentials and automated collection. The choice does not settle whether a given use of the data is permitted by the license or by Penal Code § 502
Keep a record of what was computed, from which feed, under which license version	The record shows compliance, and is evidence if a dispute arises

The section "A protocol for keeping MLS data apart from AI tools" below turns the rows on AI services and credentials into working rules.

14.3 Ask before publishing

The third step is to ask the MLS before publishing. A written request to the MLS that describes the output, together with a written answer, converts an uncertain reading of the license into an agreed

term. NAR's 2026 permitted-use wording names "appraisals, or other valuations of real property," which gives an MLS a basis in national policy to approve a valuation use. A request also creates a good-faith record. Where a dispute is already possible, legal advice on the request is worth getting before sending it.

14.4 Stop on written notice

The fourth step applies if the MLS objects, because continued access after a written revocation is the most exposed case under both computer statutes. If an MLS revokes permission in writing, the developer should stop accessing the data while the disagreement is resolved. Stopping access does not concede the contract question.

14.5 Independent sources

A developer can also reduce dependence on the MLS altogether. A model built on public records owes nothing to an MLS license. In California, however, public records are thinner than often assumed. Three features of California's public records set the limits:

- A county "may impose" a documentary transfer tax by ordinance, at "fifty-five cents ($0.55) for each five hundred dollars ($500)" of the consideration or value conveyed, "exclusive of the value of any lien or encumbrance remaining thereon at the time of sale." The recorded document must show the tax amount.[217] Where a county imposes the tax and the transfer is taxable, the sale price can be inferred from the tax. The method is not reliable for every transfer: cities may add their own tax, a remaining lien is excluded, and transfers such as gifts, inheritances and deeds securing a debt are exempt.[218]
- The assessor keeps a two-year list of transfers that includes the sale price "where it is known by the assessor," and the list is open to inspection.[219] This requirement does not apply to counties that had fewer than 50,000 people at the 1970 census.
- Property characteristics, listing dates, photographs and remarks are not in these records.

Public records can therefore support a price series. Public records cannot replace the property detail an MLS holds.

15 A protocol for keeping MLS data apart from AI tools

A developer who uses an AI assistant to write code can keep the assistant from ever reading a listing record. The developer should build the system so that this separation does not depend on the assistant's good behavior. The protocol in this section is a suggested practice. The protocol is the author's proposal, not a standard published by an MLS or required by any authority cited in this paper, and the protocol does not replace the terms of a license.

The protocol rests on one fact about hosted AI tools: whatever the tool reads is sent to the tool's provider. Sending listing records to a provider is a transfer to a third party, and the license decides whether that transfer is allowed. The safe design is therefore one in which the AI tool cannot read listing records at all.

[217] Rev. & Tax. Code §§ 11911(a), 11932.
[218] Rev. & Tax. Code §§ 11911(b), 11921, 11930.
[219] Rev. & Tax. Code § 408.1.

15.1 Three classes of material

The protocol sorts a developer's material into three classes, and each class gets a different answer to the question whether an AI tool may read the material:

Class	Examples	May an AI tool read it?
Listing records	Rows of the listing tables, photographs, remarks, exports and backups of them, any file with one row per sale	No
Aggregates	Counts, medians, fill rates, fit statistics, with small groups suppressed	Yes, if the license does not treat them as licensed data
Code and configuration	Programs, queries, table and field names, settings without passwords	Yes

15.2 The rules

The following thirteen rules keep listing records out of the AI tool's reach:

1. **Give the MLS database its own server.** Run the database in its own container or on its own machine, on its own port, with its own storage volume. Do not share that server with other projects' databases.
2. **Do not expose the port.** Bind the database port only to the local machine or a private network. No listing database should accept connections from the public internet.
3. **Use two database accounts.** An administrative account, used only by the developer's own programs, can read listing records. A second, read-only account for the AI tool can read only aggregate views and tables that hold no listing content.
4. **Build the aggregate views with a minimum group size.** A view that returns a price or size figure for a group of very few sales can reveal one listing. Suppress the figures for small groups; a floor of ten sales is a reasonable starting point. A floor of ten is not a guarantee, however: a distinctive property, or repeated queries over overlapping groups, can still reveal a sale.
5. **Keep the administrative password out of reach.** Store the password where the AI tool cannot read the password: not in the code repository, and not in a file inside the folders the tool works in. Change the password if the tool ever sees it.
6. **Run the AI tool in an operating-system-enforced sandbox.** The sandbox, not an instruction to the tool, should deny the tool three things: network access to the database host and port; commands that enter the database container; and reading of the folders that hold exports, backups, photographs, and per-sale output files.
7. **Divide the work.** The AI tool writes programs and the commands to run those programs. The developer runs anything that touches listing records, in a terminal outside the sandbox. Programs written for this purpose print counts and summaries, not rows.
8. **Treat per-sale outputs as listing records.** A model run that writes one line per sale, with an address or a price, produces listing content. Store such output where the tool cannot read the output.
9. **Check the provider's terms and the license together.** Even for aggregates, confirm that the license permits use of an outside service, and that the provider's contract bars keeping inputs

(retention) and training on inputs.

10. **Test the barriers.** Keep a script that tries each forbidden action from inside the sandbox (connecting to the database, reading an export, entering the container) and confirms that each action fails. Run the script after any setup change.
11. **Keep records.** Record which account ran which query, what the AI tool was permitted to read, and the outcome of each barrier test. These records show compliance and provide evidence if a dispute arises.
12. **Plan for a breach of the rules.** If listing records are shown to an AI tool, take these steps before contacting anyone: stop, record what was exposed and when, change the passwords involved, check what the provider's terms say about retention, and review the license's notice requirements, with an attorney if possible.
13. **Keep up to date with changing policies.** The rules on both sides change. At least each quarter, and whenever a notice arrives, review four things: the MLS's rules and license terms, including any AI, machine-learning or derived-data clause; NAR policy changes and whether the MLS has adopted them; the AI provider's terms on retention and training, and any change of the model or service used; and court decisions on the open questions listed in this paper. Record the date of each review and what changed. A use that was permitted when the system was built may not be permitted after a policy change, and the protocol's settings should then be changed to match.

15.3 How the layers fit

The thirteen rules work as five layers of protection, each at a different level of the system:

Layer	Measure	What it prevents
Network	Separate server and port, bound to the local machine	Connection by any program that is not meant to reach the data
Database	Read-only account limited to aggregate views	Reading of listing rows even by a program that does connect
Files	Exports, backups, photographs and per-sale outputs in folders the sandbox denies	Reading of listing content outside the database
Operating system	Sandbox on the AI tool's commands	Reliance on the tool to follow an instruction
Procedure	The developer runs listing-level jobs; barriers are tested and logged; policies are reviewed on a schedule	Gradual erosion of the other layers, and rules that change after the system is built

Each layer covers a failure of another layer. A database account limited to aggregates still matters if the sandbox is misconfigured, and the sandbox still matters if a password leaks.

15.4 Limits of the protocol

The protocol has four limits. First, the protocol controls what an AI tool can read; the protocol does not decide whether a use of the data is permitted. Aggregates that never reach an AI provider may still be restricted by a "derived data" or "machine learning" clause.

Second, field names, table structures and error messages can carry listing content. A query error that echoes a row, or a log that prints a row, defeats the separation, so programs should be written so that they do not print rows.

Third, a sandbox applies only to the commands the AI tool runs. A sandbox does not cover what the developer pastes into a conversation with the tool.

Fourth, the protocol does not address security against outside attackers, which an MLS license may also require.

16 A protocol for appraisers

An appraiser usually reaches MLS data through the MLS's own system and a set of exported comparable sales, not through a database of the appraiser's own. An appraiser's risks are the same kind as a developer's, but they arise in different places: a shared login, an export left outside the workfile, or listing records pasted into an AI assistant. Like the developer's protocol, the appraiser's protocol is the author's proposal, not a standard published by an MLS, a regulator, or a professional body. This paper did not examine professional appraisal standards, which may add requirements.

16.1 The rules

The following fourteen rules apply the same separation to an appraiser's practice:

1. **Know which agreement governs.** An appraiser holds MLS data under a participation or subscriber agreement, and NAR policy limits use to "the activities authorized under a Participant's licensure(s) or certification."[220] Work done for an appraisal assignment is the clearest case of permitted use.
2. **Use your own credentials only.** Do not share a login with an assistant, a trainee, or a software vendor unless the MLS rules allow it.
3. **Keep exports in the workfile.** Comparable-sale exports, listing sheets and photographs taken from the MLS belong with the assignment they were pulled for. Do not pool them into a general collection for later, unrelated use without checking the agreement.
4. **Do not paste listing records into a consumer AI tool.** Listing records include remarks, photographs, listing sheets, and exported sales tables. Pasting them into an AI tool sends them to the tool's provider, which is a transfer to a third party.
5. **Use AI tools on your own material.** Some uses of an AI tool need no listing record: drafting and editing the appraiser's own narrative, checking arithmetic on figures already in the report, and explaining a method. Where a figure from a sale is needed, type the figure, not the listing.
6. **Prefer a connection the MLS provides.** If an MLS or its vendor offers AI access under the subscriber's credentials, that route keeps use within the MLS's rules. Check which uses the MLS permits for that route.
7. **Keep confidential fields confidential.** MLS rules bar showing instructions, security information and owner or occupant contact details from public display. These fields do not belong in a report exhibit or an AI prompt.
8. **Name and verify sources.** Fannie Mae requires the appraiser to report the specific data

[220] NAR, *Handbook on Multiple Listing Policy* (January 2025), Policy Statement 7.9.

and verification sources for each comparable sale. FHA requires verification through public records and the parties to the transaction, and does not accept MLS records alone.[221]

9. **Verify concessions directly.** Where an MLS has removed its seller-concession field, confirm concessions with a party to the sale and record the source.
10. **Protect the client's information, too.** An appraisal file contains client and borrower information that is confidential, regardless of any MLS rule. The same caution about AI tools applies to that information.
11. **Treat work beyond assignments as a developer would.** A published market study, a statistical model or a data product built from MLS data is a different use from an appraisal assignment. Before starting such work, read the agreement for that use, ask the MLS in writing where the wording is open, and follow the developer's protocol above.
12. **Record what was sent where.** Note in the workfile any use of an AI tool and what material the tool was given. If you sent listing records by mistake, record what you sent and when, and seek advice before contacting the MLS.
13. **Stop on written notice.** If an MLS withdraws permission in writing, stop the use while the question is resolved. An appraiser who is an MLS participant may have rights to notice and a chance to respond before exclusion, as discussed under California law above.
14. **Keep up to date with changing policies.** Read the MLS's rule changes and notices as they are issued, and check at least each quarter for new terms on AI tools, data exports and permitted use. Check the terms of any AI tool in use for changes to how the tool keeps or uses what is typed into it. Follow changes in lender and agency guidance on data and verification sources. Note the date of each check in a practice file.

16.2 The two protocols compared

The two protocols differ because developers and appraisers store MLS data differently. The table compares the protocols point by point:

Point	Developer	Appraiser
How MLS data is held	A licensed feed loaded into the developer's own database	The MLS's system, and exports kept with assignments
Main AI risk	A coding assistant reading the database or its exports	Listing records pasted into an assistant
Main control	Separate server, restricted database account, operating-system sandbox	Habit and record: what is pasted, what is kept, where
Clearest permitted use	The use the license names	An appraisal assignment under the appraiser's state license or certification
Use needing a written answer first	Publishing models and statistics	Published studies, models and data products beyond assignments
Keeping current	Scheduled review of MLS rules, NAR policy, AI provider terms and case law	Reading MLS notices, AI tool terms and lender guidance as they change

[221] Fannie Mae, *Selling Guide* B4-1.3-07; HUD Handbook 4000.1, § II.D.4.c.iii(C) (rev. 12 Aug 2026).

17 If it comes to civil litigation

If an MLS dispute reaches court, the developer's best defense is the wording of the license itself. The doctrines that sound strongest in commentary, antitrust and copyright preemption, are the hardest doctrines to win on. This section first takes the claims an MLS can bring, then the reach of the contract defenses, then the claims a developer can bring. The strength assessments in this section rate the authorities in this paper in general terms; they do not predict the outcome of any dispute.

17.1 Claims an MLS can bring

An MLS has eight possible claims against a developer. For each claim, this subsection states what the MLS must show, what defenses the developer has, and how strong those defenses are.

The first claim is breach of the data license. The MLS must show a contract and a breach of one of the contract's terms. Whether the MLS must also show damage is disputed.[222] The developer has three defenses. The main defense is that the use falls within the permitted-use wording, read under Civ. Code §§ 1636–1654 and *PG&E*; this defense turns wholly on the wording. A second defense is waiver or estoppel, where the MLS knew of the use, but waiver is hard to prove.[223] A third defense is that the term is void under Bus. & Prof. Code § 16722 (illegality), which is a narrow ground.

The second claim is copyright infringement. The MLS must show a registered copyright[224] and copying of protected expression. The developer can answer that the material taken is fact,[225] that the outputs incorporate no protected expression,[226] and that statistics are facts.[227] Fair use, copyright misuse and lack of registration are further defenses. These defenses are strong for factual fields and aggregate outputs, and weaker for photographs and remarks. Misuse is a narrow defense.[228]

The third claim arises under the federal computer statute, 18 U.S.C. § 1030. The MLS must show unauthorized access, or access to areas the user is not entitled to enter. For a civil action, the MLS must also show conduct involving one of the factors the statute lists, most commonly a loss "aggregating at least $5,000 in value" in one year.[229] The developer's defenses are strong: access was by valid credentials within the feed,[230] access stopped on written revocation,[231] or the loss does not reach the threshold.

The fourth claim arises under California Penal Code § 502. The MLS must show taking, copying, or use of data "without permission," and that it is the owner or lessee of the data "who suffers damage or loss."[232] The developer can answer that the license permitted the use, and that access stopped

[222] *Elation Systems v. Fenn Bridge* (Cal. Ct. App. 22 Nov 2021); *Aguilera v. Pirelli Armstrong Tire*, 223 F.3d 1010, 1015 (9th Cir. 2000).
[223] *Waller v. Truck Insurance Exchange*, 11 Cal.4th 1, 31 (1995).
[224] 17 U.S.C. § 411(a).
[225] *Feist Publications v. Rural Telephone*, 499 U.S. 340, 344 (1991).
[226] *Litchfield v. Spielberg*, 736 F.2d 1352, 1357 (9th Cir. 1984); *Micro Star v. FormGen*, 154 F.3d 1107, 1110 (9th Cir. 1998).
[227] *BanxCorp v. Costco*, 978 F. Supp. 2d 280, 286 (S.D.N.Y. 2013).
[228] *Apple v. Psystar*, 658 F.3d 1150, 1157 (9th Cir. 2011).
[229] 18 U.S.C. § 1030(g), (c)(4)(A)(i)(I).
[230] *Van Buren v. United States*, 593 U.S. 374, 396 (2021).
[231] *Facebook v. Power Ventures*, 844 F.3d 1058, 1062 (9th Cir. 2016).
[232] Penal Code § 502(c)(2), (e)(1).

on written revocation. These defenses are less certain than under the federal statute, because § 502 may reach misuse after a valid login.[233]

The fifth claim enforces contract penalties or fines. Where a license sets the damages in advance (a liquidated-damages clause), the MLS must show that the clause is valid. The developer can answer that the clause was unreasonable when made,[234] but the developer, as the party challenging the clause, carries the burden of proof.

The sixth claim can reach a person who never signed the license: inducing a licensee to break the license. The MLS must show a valid license between the MLS and someone else, and that the defendant knowingly caused the licensee's breach. The defenses are that no valid agreement was proved, or that the licensee's use was permitted. This claim poses a real exposure for someone who never signed. In *Altera*, a competitor that obtained the output of licensed software from licensees, was held liable, and the $30.6 million verdict was affirmed.[235]

The seventh claim is trade-secret misappropriation. The MLS must show secrecy, reasonable efforts to keep the data secret, and misappropriation. The developer can answer that the data is shared with a large membership and partly displayed to the public. The question is open; no California decision was found.

The eighth claim seeks an injunction, a court order to stop the use. The MLS must show that money would not give adequate relief.[236] The developer can answer that publishing aggregates causes no harm, or that the MLS delayed. The outcome depends on the facts.

Each of these claims must be brought within the time limits. The limitation periods are four years for a written contract,[237] three years under Penal Code § 502(e)(5) and two years under 18 U.S.C. § 1030(g).

17.2 How far the contract defenses go

Because the contract claim is usually the central claim, the reach of the contract defenses matters most. Those defenses are, in order of importance, interpretation of the license, illegality of a term, and copyright preemption or misuse.

Interpretation comes first. Three questions of wording carry most disputes about published models. No decision was found answering any of the three, so each question turns on the particular license:

1. Does the definition of licensed "data" or "content" reach aggregates, coefficients and graphs derived from it?
2. Does a clause on "derived" or "derivative" works reach statistical output, or only works that reproduce listing content? Copyright law's own meaning requires incorporation of protected material.[238] A license may define the term more broadly.
3. Does permitted-use wording that names appraisals or valuations cover a statistical valuation model and the model's publication? California defines appraisal as "developing an opinion

[233] *United States v. Christensen*, 828 F.3d 763, 789 (9th Cir. 2016); compare *Teran v. Superior Court* (2025) 112 Cal.App.5th 371 (§ 502(c)(2) does not apply where only purely public court records were shared).
[234] Civ. Code § 1671(b).
[235] *Altera Corp. v. Clear Logic*, 424 F.3d 1079, 1081–83, 1089–92 (9th Cir. 2005).
[236] Civ. Code § 3422.
[237] Code Civ. Proc. § 337(a).
[238] *Micro Star v. FormGen*, 154 F.3d 1107, 1110 (9th Cir. 1998).

of value for real property,"[239] which published statistics are not.

Where the wording of a license supports two readings, evidence from outside the contract (extrinsic evidence) is admissible,[240] and a court may refuse to decide the question on the papers, as the court did in *Digital Envoy*. What the parties said to each other about the intended use then matters.

Illegality, the second defense, is narrow. Under California law a term that violates the Cartwright Act is void, and a severable remainder of the contract survives.[241] Federal courts are reluctant to apply this defense.[242] In either court the developer must first prove the antitrust violation.

Preemption and misuse, the third pair of defenses, rarely defeat a contract claim. A real promise appears generally to survive copyright preemption.[243] In *Altera* misuse was held to be "not a defense to the state law claims," and a court would probably treat a contract claim the same way, at least where the MLS does not also sue for copyright infringement.[244]

17.3 Claims the developer can bring

A developer can also bring claims against an MLS. Four claims are possible, and for each this subsection states what the developer must show, the main obstacles, and an assessment.

The first is a claim under California's Cartwright Act.[245] The developer must show a combination, an unreasonable restraint under the rule of reason, and injury to business or property. The obstacles are substantial. *Palsson*'s access rule names real estate licensees; the courts hold that "individual detriment is insufficient";[246] and no case extends *Palsson* to data-use terms. The outcome is uncertain, but treble damages and mandatory attorney fees make the claim serious if the facts support the claim.

The second is a claim under Section 1 of the Sherman Act.[247] The developer must show concerted action at the MLS that adopted the rule,[248] harm to competition, and an injury of the kind the antitrust laws are meant to prevent (antitrust injury).[249] The cases are divided: counterclaims against an MLS for refusal to deal were dismissed in *MRIS*, but survived a motion in *Regional MLS of Minnesota*. The outcome is uncertain, and the claim is stronger where the rule favors the MLS's products or those of its members. *PLS.com* treats a business that uses a product as an input as a consumer of that product, although the plaintiff in *PLS.com* was a rival listing service.

The third is a claim under the Unfair Competition Law.[250] The developer must show lost money or property, and conduct that threatens competition.[251] This claim follows the antitrust theory and gives no damages, so the claim adds only an injunction and restitution.

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[239] Bus. & Prof. Code § 11302(b).
[240] *Pacific Gas & Electric v. G.W. Thomas Drayage*, 69 Cal.2d 33, 37 (1968).
[241] Bus. & Prof. Code § 16722; *Mailand*.
[242] *Kelly v. Kosuga*, 358 U.S. 516, 518 (1959); *Kaiser Steel Corp. v. Mullins*, 455 U.S. 72, 81–82 (1982).
[243] *Altera Corp. v. Clear Logic*, 424 F.3d 1079, 1089–90 (9th Cir. 2005); *ProCD v. Zeidenberg*, 86 F.3d 1447, 1454 (7th Cir. 1996).
[244] *Altera* at 1090.
[245] Bus. & Prof. Code §§ 16720, 16750.
[246] *Feldman v. Sacramento Board of Realtors*, 119 Cal.App.3d 739, 747–748 (1981).
[247] 15 U.S.C. §§ 1, 15, 26.
[248] *REX v. Zillow*, No. 24-685 (9th Cir. 3 Mar 2025), mem. at 3, unpublished.
[249] *Brunswick Corp. v. Pueblo Bowl-O-Mat*, 429 U.S. 477, 489 (1977).
[250] Bus. & Prof. Code § 17200.
[251] *Cel-Tech Communications v. Los Angeles Cellular*, 20 Cal.4th 163, 187 (1999).

The fourth is a claim to fair procedure. The developer must show that the MLS holds power over the developer's livelihood and gave the developer no meaningful chance to respond. Courts have applied the fair-procedure doctrine to members and to some non-members,[252] but not yet to a data licensee, so the claim is unsettled. An appraiser who is an MLS participant is closer to these cases than an outside vendor. Corp.Code § 7341 may also apply to a participant who is a "member."

The MLS will answer any antitrust claim with a justification: protecting contributed content and holding licensees to equal terms. Under *Realcomp*, the justification must connect to the restriction.[253] A neutral use restriction, applied equally, is therefore much harder to attack than the unequal rule in *Realcomp*.

17.4 Practical points

Four practical points apply whichever side brings the claim:

- A fee clause runs both ways,[254] which raises the cost of losing for each side.
- Check arbitration, venue, and notice-and-cure clauses before responding. A feed dispute between a portal and an MLS was sent to arbitration in 2026.
- An MLS that has not registered its copyright cannot sue for infringement yet, and late registration forfeits statutory damages and fees.[255]
- Preserve records relevant to an anticipated dispute, and communications with the MLS are not privileged. These two points are general rules, stated here without authority; how they apply in a given dispute is a question for an attorney.

18 How changes in the MLS landscape reach homeowners and taxpayers

MLS data rules are written by and for brokers. Still, the data those rules govern is also the raw material of mortgage appraisals, property-tax assessments and public knowledge of prices. Changes to MLS rules therefore reach people who never sign an MLS agreement. This section takes those people in turn: homeowners, as to privacy, fair access to the market and mortgage loans; taxpayers, as to mortgage insurance and property-tax assessment; and the economy as a whole.

18.1 Homeowners: privacy

A listing puts a home's address, interior photographs, price history, and sometimes occupancy details into a shared database. The owner's control over that record is limited, and it comes mostly from MLS rules, not statute. The protections that exist are these:

[252] *Potvin v. Metropolitan Life*, 22 Cal.4th 1060, 1071 (2000); *Palm Medical Group v. State Compensation Insurance Fund*, 161 Cal.App.4th 206, 217 (2008).
[253] *Realcomp* at 835.
[254] Civ. Code § 1717(a).
[255] 17 U.S.C. §§ 411(a), 412.

Protection	Source	What it does
Seller must authorize the listing	Civ. Code § 1088(a)	"A listing may not be placed in a multiple listing service unless authorized or directed by the seller in the listing"
Opt-out from internet display	NAR Policy Statement 7.58	Listings are included in IDX except those "for which a seller has affirmatively directed that their listing or their property address not appear on the Internet"
Confidential fields	NAR Model Rules § 18.3.1	"Confidential fields intended only for other MLS Participants and users (e.g., showing instructions, and property security information) may not be displayed"
Owner and occupant contact details	NAR Model Rules § 18.3.13 (optional)	Display of names, phone numbers and e-mail addresses "is prohibited" where the MLS adopts the rule
Photographs	NAR Policy Statement 7.93	Photographs may be required "except where sellers expressly direct that photographs of their property not appear in MLS compilations"

These protections leave three gaps.

The first gap is that listing content persists after a sale. No federal or California statute was found that requires removing interior photographs after closing. California law points the other way: the MLS must keep listing information "for no less than three years."[256] NAR's advice to a new owner is that "buyers can call the listing agent to request that photos are removed." The opt-out belongs to the seller, not to the buyer who later lives in the home.

The second gap is that privacy statutes fit listing data poorly. The California Consumer Privacy Act covers information that "could reasonably be linked, directly or indirectly, with a particular consumer or household," including a "postal address."[257] The Act excludes information "lawfully made available from federal, state, or local government records" and information made public by the consumer.[258] The Act applies only to an entity "organized or operated for the profit or financial benefit of its shareholders or other owners" that meets a size test.[259] Whether an association-owned MLS, or a small licensee, is a covered business is therefore uncertain. No agency guidance or decision on listing data was found.

The third gap is that sale prices are not private. No restriction on publishing sale prices was found. Where a county imposes documentary transfer tax, a recorded deed shows the tax amount, from which the price can often be inferred.[260]

The new MLS policies on AI touch privacy only indirectly. Those policies restrict who may use listing content, which limits the spread of interior photographs into outside systems. But the poli-

[256] Civ. Code § 1088(c).
[257] Civ. Code § 1798.140(v)(1).
[258] Civ. Code § 1798.140(v)(2).
[259] Civ. Code § 1798.140(d).
[260] Rev. & Tax. Code §§ 11911, 11932.

cies are written to protect the interests of the MLS and of brokers, and they give the homeowner no right of their own.

Of all uses of MLS data, published aggregate statistics raise the least privacy concern, provided small groups are suppressed so that no figure reveals one household's sale.

18.2 Homeowners: fair access to the market

Privacy is not the only interest a homeowner has in MLS rules; homeowners also have an interest in fair access to the housing market. The Fair Housing Act makes it unlawful "to represent to any person because of race ... that any dwelling is not available for inspection, sale, or rental when such dwelling is in fact so available."[261] The Act also bars discriminatory denial of MLS access.[262]

Listings marketed privately to selected buyers are the subject of the current litigation over the Clear Cooperation Policy. Whether private listings harm sellers or protected groups is disputed, and the evidence is weak. The studies found are industry-sponsored and reach opposite results; none was opened at its source, so their figures are not repeated here. No statement by the Department of Housing and Urban Development on private listings was found.

States have begun to legislate on private listings. Washington's SSB 6091, signed 16 March 2026 and effective 11 June 2026, prohibits "real estate brokers from marketing residential properties to an exclusive group of prospective buyers or real estate brokers." Wisconsin's 2025 Act 69, effective 1 January 2027, requires a listing firm to market a property on a public website within one business day unless the owner opts out. Neither law regulates data use. No California bill of this kind was found.

18.3 Homeowners: mortgage loans

A homeowner who borrows against a home meets MLS data a third way, through the appraisal. A mortgage appraisal is built on comparable sales, and in many markets the MLS is a principal source of comparable sales. Three bodies of rules treat the MLS as an ordinary source without requiring its use:

- **Fannie Mae.** "Data and verification source(s) for each comparable sale must be reported on the appraisal report form. Examples of data sources include, but are not limited to, a multiple listing service, deed records, tax records ..." The appraiser must name the specific source and not use "broad categories, such as 'public records'."[263] The MLS is listed as one example; the guide does not require use of the MLS.
- **FHA.** "Two sources are recommended for researching prior sales and transfers: local MLS and local public records at a minimum."[264] FHA also requires more than MLS data. "The Appraiser must verify transactional data via public records and the parties to the transaction ... MLS records and property site visits alone are not acceptable verification sources."[265]
- **Federal appraisal law.** Federal regulators must require that appraisals for federally related transactions "be performed in accordance with generally accepted appraisal standards" and be written.[266] A State certified appraiser is required for transactions of $1,000,000 or more,

[261] 42 U.S.C. § 3604(d).
[262] 42 U.S.C. § 3606.
[263] Fannie Mae, *Selling Guide* B4-1.3-07.
[264] FHA, *Single Family Housing Appraisal Report and Data Delivery Guide* (2024).
[265] HUD Handbook 4000.1, § II.D.4.c.iii(C) (rev. 12 Aug 2026).
[266] 12 U.S.C. § 3339.

and State licensed appraisers may perform most one-to-four-unit residential appraisals.[267] A separate statute makes it unlawful "to engage in any act or practice that violates appraisal independence."[268] The regulations exempt a residential transaction with "a transaction value of $400,000 or less" from the requirement of an appraisal by a certified or licensed appraiser.[269] The exemption does not remove the duty to value the collateral: the institution "shall obtain an appropriate evaluation of real property collateral that is consistent with safe and sound banking practices," and the regulator may still require an appraisal.[270] Loans sold to Fannie Mae or Freddie Mac, or insured by the FHA, follow those bodies' own appraisal rules.

None of these provisions mentions MLS data. The law relies on MLS data without securing access to it.

Two recent changes show how MLS decisions reach borrowers. The first change is the removal of fields after the 2024 settlement. Two kinds of information must be kept apart here. The settlement barred offers of compensation to buyer brokers on the MLS. The settlement did not bar seller concessions to buyers, such as help with closing costs, and each MLS decided whether to keep a concessions field. Some MLSs removed the field. The Appraisal Institute reported that "many MLSs removed the concessions field complicating the appraisers' search for accurate details and adding time to the assignment." The Institute's guidance warned that how commissions are paid "will no longer be transparent in public records or MLSs." A seller concession changes the effective price of a comparable sale, so the absence of concession data affects the valuation of the next home.

The second change is valuation growth without a new appraisal. Four things are distinct here and should not be run together: an appraisal by a licensed or certified appraiser, an evaluation by the lender, an appraisal waiver, and an automated valuation model. Eligibility for appraisal waivers has widened. In October 2024, the Federal Housing Finance Agency raised the loan-to-value limit for appraisal waivers on purchase loans "from 80 percent to 90 percent," and to 97 percent with an inspection. Fannie Mae's version of the waiver relies on a prior appraisal in Fannie Mae's own database. Separately, since 1 October 2025, a federal rule has set quality standards for automated valuation models.

That rule defines its subject for its own purposes. Under the rule, an automated valuation model is "any computerized model used by mortgage originators and secondary market issuers to determine the value of a consumer's principal dwelling collateralizing a mortgage."[271] The rule's five standards are confidence in the estimates, protection against data manipulation, avoidance of conflicts of interest, random sample testing, and compliance with nondiscrimination laws.[272] A statistical model published for study is not within the rule's definition unless a lender or issuer uses the model to value collateral.

Each of these valuation methods rests on records of earlier sales, so the terms governing the use of sale data affect all of them. How much those terms matter has not been measured: no empirical study was found of appraisal accuracy or cost when MLS data is restricted, and nothing found shows lenders relying on independently published models.

[267] 12 U.S.C. § 3342.
[268] 15 U.S.C. § 1639e(a).
[269] 12 C.F.R. § 34.43(a)(1). This is the rule of the Office of the Comptroller of the Currency for the institutions it supervises.
[270] 12 C.F.R. § 34.43(b), (c).
[271] 89 Fed. Reg. 64538, 64571.
[272] 89 Fed. Reg. at 64572.

Federal policy on appraisal bias has also shifted. On 10 July 2025, the Department of Housing and Urban Development announced "the termination of burdensome policies" introduced under the Property Appraisal and Valuation Equity task force. The Federal Reserve still posts the 2024 interagency guidance on reconsideration of value. That guidance does not address data access.

18.4 Taxpayers: the public stake in mortgage valuation

The effects of MLS rules on mortgage valuation reach taxpayers as well as borrowers. Taxpayers stand behind part of the mortgage market through federal mortgage insurance, so errors in collateral valuation are partly a public cost. The size of that stake is shown by one figure: the Federal Housing Administration insured "more than 8.4 million forward mortgages totaling over $1.7 trillion" at 30 September 2026, and the capital ratio of its insurance fund "stood at 10.29 percent."[273] No government figure for the total agency-backed share of mortgages was found.

18.5 Taxpayers: property-tax assessment

Taxpayers also meet sale data through property-tax assessment. In California a change in ownership generally sets a new tax base. Full cash value is "the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred."[274] Full cash value is the fair market value on the date of the purchase or change in ownership, and "shall be known as the base year value."[275] The purchase price is strong evidence of that value, but not always the value itself. The price is "rebuttably presumed" to be the full cash value where the terms "were negotiated at arms length between a knowledgeable transferor and transferee."[276] Statutory exclusions apply to some transfers and were not examined here.

Assessors have three sources of sale information of their own:

- Every person must make available to the assessor "details of property acquisition transactions."[277]
- The assessor keeps a two-year list of transfers that includes "where it is known by the assessor, the consideration paid" and is "open to inspection by any person."[278] The list requirement does not apply to a county "with a population of under 50,000 people, as determined by the 1970 federal decennial census."
- The State Board of Equalization's handbook mentions multiple listings once, as a fallback: "in the absence of other comparable sales data, the appraiser may consider multiple listings and other public listings of asking prices," which "should not be considered as direct evidence" of value.

The owner has statutory rights to part of this information. On request the assessor must permit an assessee "to inspect or copy any market data in the assessor's possession," meaning information "relating to the sale of any property comparable to the property of the assessee, if the assessor bases an assessment of the assessee's property, in whole or in part, on that comparable sale or sales." For each such sale the assessor must give "the names of the seller and buyer …, the location

[273] FHA, *Annual Report to Congress on the Mutual Mortgage Insurance Fund*, fiscal year 2026.
[274] Cal. Const. art. XIII A, § 2(a).
[275] Rev. & Tax. Code § 110.1(a), (b).
[276] Rev. & Tax. Code § 110(b).
[277] Rev. & Tax. Code § 441(d)(1).
[278] Rev. & Tax. Code § 408.1.

of that property, the date of the sale, and the consideration paid."[279] The assessee may also inspect the records "relating to the appraisal and the assessment of the assessee's property," though not records that relate to the property or business affairs of another.[280] Property characteristics kept by the assessor are a public record. They include "the year of construction of improvements to the property, their square footage, the number of bedrooms and bathrooms of all dwellings, the property's acreage, and other attributes."[281]

Section 408 applies in every county and has no population limit. A further section, limited to "a county with a population that exceeds 4,000,000," goes wider: in such a county, records the assessor is required by law to keep "are public records and shall be open to public inspection."[282]

These rights fall short of MLS access in three ways. First, the market data is limited to the comparable sales the assessor relied on, not the sales an owner might prefer. Second, in an appeal, comparable sales must be near in time to the valuation date, a requirement that "does not include any sale more than 90 days after the valuation date."[283] Third, the public record holds no listing history, photographs, remarks or condition detail, and homeowners have no right of access to an MLS.[284] Published market statistics and adjustment models add an independent source to what the assessor must disclose.

18.6 The economy: transaction costs and efficiency

Beyond individual homeowners and taxpayers, MLS rules affect the cost of buying and selling homes across the economy. Government studies agree on two points, one favorable to the MLS and one not:

- An MLS lowers the cost of finding a buyer: "The use of an MLS can substantially reduce transaction costs."[285]
- The cooperative structure of an MLS can dampen price competition among brokers: "While MLSs provide important benefits to consumers by aggregating data on homes for sale ... the cooperative nature of the MLS system can also in effect discourage brokers from competing with one another on price."[286]

The sums involved are large. "In 2024, the BEA estimates that commissions and related costs totaled about $170 billion dollars, or 0.6 percent of US GDP."[287]

Evidence on the effect of the 2024 settlement on those costs is limited and mostly theoretical. The three studies found are these:

[279] Rev. & Tax. Code § 408(d).
[280] Rev. & Tax. Code § 408(e)(1), (3).
[281] Rev. & Tax. Code § 408.3(a), (b). The assessor may charge a fee related to the cost of providing the information, § 408.3(c)(1).
[282] Rev. & Tax. Code § 408.2(a), (e).
[283] Rev. & Tax. Code § 402.5.
[284] *Derish v. San Mateo-Burlingame Board of Realtors*, 136 Cal.App.3d 534, 536 (1982).
[285] FTC & DOJ, *Competition in the Real Estate Brokerage Industry* (Apr. 2007).
[286] Government Accountability Office, GAO-05-947 (2005).
[287] Federal Reserve FEDS Note, 12 May 2025.

Study	Type	Finding
Grochulski & Wang, Richmond Fed Economic Brief 24-08 (Mar 2024)	Model	Cost-based compensation "may increase U.S. homebuyers' welfare by more than $30 billion per year"; total social surplus rises by "about $800 million per year"
Buchak, Matvos, Piskorski & Seru, NBER Working Paper 32855 (Aug 2024, rev. Oct 2025)	Calibrated structural model	"Lower commissions raise the value of housing as a durable asset and tend to increase house prices ... most gains accrue to current homeowners, with limited benefits for prospective buyers"
Banerjee & Paciorek, FEDS Note (12 May 2025)	Empirical, largely pre-settlement data	"No significant effects of the adoption of these policies on rates" (state buyer-agreement rules and rebate bans)

No government or academic study was found that measures commissions after the settlement or that values listing-data transparency itself. That absence matters for this paper's subject: no measurement was found of how choices about who may analyze and publish MLS data affect appraisal quality, loan performance, or market efficiency.

Sources: NAR Handbook, January 2025[288]*; NAR, 23 May 2022*[289]*; Fannie Mae Selling Guide B4-1.3-07*[290]*; B4-1.4-10*[291]*; FHA appraisal report guide*[292]*; FHFA release, 28 Oct 2024*[293]*; AVM rule, 89 Fed. Reg. 64538*[294]*; Appraisal Institute, 24 Mar 2025*[295]*; Appraisal Institute interim guidance, July 2024*[296]*; HUD release 25-092*[297]*; FHA Annual Report FY 2026*[298]*; Assessors' Handbook § 501*[299]*; GAO-05-947*[300]*; Richmond Fed EB 24-08*[301]*; NBER w32855*[302]*; FEDS Note, 12 May 2025*[303]*; Washington SSB 6091*[304]*;*

[288] https://www.nar.realtor/sites/default/files/2025-01/PDF-HMLP-2025-Handbook-on-Multiple-Listing-Policy-2025-01-23.pdf
[289] https://www.nar.realtor/magazine/real-estate-news/off-the-market-doesn-t-always-mean-off-the-internet
[290] https://selling-guide.fanniemae.com/sel/b4-1.3-07/sales-comparison-approach-section-appraisal-report
[291] https://selling-guide.fanniemae.com/sel/b4-1.4-10/value-acceptance
[292] https://www.hud.gov/sites/dfiles/SFH/documents/SFH_POLI_APPR_RPT_FIN.pdf
[293] https://www.fhfa.gov/news/news-release/fhfa-announces-updates-to-enterprise-policies-on-appraisals-loan-repurchase-alternatives-and-pricing-notifications
[294] https://www.govinfo.gov/content/pkg/FR-2024-08-07/html/2024-16197.htm
[295] https://www.appraisalinstitute.org/insights-and-resources/insights/newsroom/presidents-message/2025-03-24-presidents-message
[296] https://www.appraisalinstitute.org/getmedia/af7b7c9a-d40d-4c9c-be62-f088b897a5db/AI-Interim-Guidance-on-the-NAR-Settlement-and-the-Valuation-Process_July-2024.pdf
[297] https://www.hud.gov/news/HUD-no-25-092
[298] https://www.hud.gov/sites/default/files/Housing/documents/2026FHAAnnualReportMMIFund.pdf
[299] https://www.boe.ca.gov/proptaxes/pdf/ah501.pdf
[300] https://www.gao.gov/assets/gao-05-947.pdf
[301] https://www.richmondfed.org/publications/research/economic_brief/2024/eb_24-08
[302] https://www.nber.org/papers/w32855
[303] https://www.federalreserve.gov/econres/notes/feds-notes/commissions-and-omissions-trends-in-real-estate-broker-compensation-20250512.html
[304] https://app.leg.wa.gov/billsummary?BillNumber=6091&Year=2025

Wisconsin 2025 Act 69[305]*. The California privacy statutes in this section were read on a mirror (california.public.law); the revenue statutes on assessment and transfer tax were read in the Legislature's file. HUD Handbook 4000.1*[306]*; IAAO Standard on Mass Appraisal*[307]*; ROSS docket*[308]*. Freddie Mac's guide and the VA handbook could not be opened.*

19 Open questions and what to watch

The law surveyed in this paper leaves several questions open. Five of those questions decide a developer's position, and no reported decision answers any of them:

1. Are aggregates, coefficients and graphs fitted on licensed data themselves "data" or "derived works" under a typical MLS license?
2. Does NAR's 2026 permitted-use wording, "appraisals, or other valuations of real property," cover publishing a statistical valuation model?
3. Does "machine learning" in an MLS rule reach ordinary regression?
4. Does *Palsson*'s rule of reason apply to data-use terms, and to appraisers?
5. Is Penal Code § 502 still broader than the federal computer statute after *Van Buren*?

Answers to some of these questions may come soon. The following five developments are worth following, and the table gives the reason for each:

Development	Why it matters
The Compass suits against MLSs, several in California federal courts	These suits will produce the first rulings on how much market power courts attribute to California MLSs
PLS.com v. NAR, trial set for 27 September 2027	The trial will produce a ruling on the merits of whether a mandatory MLS rule is a group boycott
Local adoption of NAR's 2026 copyright, permitted-use and feed policies	Once a local MLS adopts these policies, they become the terms of the next license
The DOJ and FTC inquiry on competitor collaborations, opened 23 February 2026	Any new guidance from the inquiry will address data sharing among competitors
Appellate rulings on AI training and fair use	*ROSS* is the only appellate decision this paper found, and *ROSS* went against the user. A petition for rehearing was filed on 3 November 2026

20 Addendum: Definitions

This addendum defines the terms as the paper uses them. Where a statute, regulation, or official body defines a term, the entry quotes that definition and names the source. Where no official

[305] https://docs.legis.wisconsin.gov/2025/related/acts/69
[306] https://www.hud.gov/sites/default/files/Housing/documents/40001-hsgh-Update-18.pdf
[307] https://www.iaao.org/wp-content/uploads/Standard_on_Mass_Appraisal.pdf
[308] https://www.courtlistener.com/docket/70622297/thomson-reuters-enterprise-centre-gmbh-v-ross-intelligence-inc/

definition was found or provided, the entry is marked "This paper's usage." Some terms have more than one official definition, each written for its own purpose; "appraisal" is the main example.

Terms taken from statistics have a general meaning, and each established field that uses those terms gives them special meanings of its own. Mortgage regulation, appraisal practice, property-tax assessment, MLS licensing, copyright law and the AI industry each have their own definitions and their own problems. A definition from one field can carry over to another, but not automatically. Carry the definition over with care, and only after checking that it is customary and appropriate for the new use. For that reason, the entries below name the field in which each definition applies. The following terms have their own meaning in more than one field:

Term	Fields in which the term has its own meaning
Appraisal	California licensing law; federal banking regulation; property-tax assessment
Automated valuation model	General usage in valuation; federal mortgage regulation
Mass appraisal	Property-tax assessment and professional standards
Statistical model, model training, machine learning	Statistics; the AI industry; an MLS license or rule, which may use the words more broadly or more narrowly
Derivative work, derived data	Copyright law; a data license
Access	The federal computer statute; the California computer statute
Market data	Property-tax assessment law; everyday usage
License	A contract for data; a state professional credential

The definitions themselves follow, grouped by subject.

20.1 The MLS and its data

The first group covers the MLS itself, the people who take part in an MLS, and the kinds of listings and data an MLS holds.

Term	Definition	Source
Multiple listing service (MLS)	"A facility of cooperation of agents and appraisers, operating through an intermediary that does not itself act as an agent or appraiser, through which agents establish express or implied contracts for compensation ... or that may be used by agents and appraisers, pursuant to the rules of the service, to prepare market evaluations and appraisals of real property"	Civ. Code § 1087

Term	Definition	Source
Participant	Under NAR's model, a participant is the principal or firm taking part in an MLS. NAR names two routes to eligibility: a person who holds "a current, valid real estate broker's license" and cooperates, or a person "licensed or certified by an appropriate state regulatory agency to engage in the appraisal of real property." Each MLS's own rules set the actual arrangements	NAR Handbook (Jan. 2025), Policy Statement 7.9
Subscriber	NAR's model bylaws, which an MLS may vary, define subscribers this way: "Subscribers (or users) of the MLS include non-principal brokers, sales associates, and licensed and certified appraisers affiliated with Participants"	NAR Handbook, model bylaws § 8
Internet Data Exchange (IDX)	IDX is the NAR policy that "gives MLS Participants the ability to authorize limited electronic display and delivery of their listings by other Participants" on websites, mobile apps and audio devices under the participant's control	NAR Handbook, Policy Statement 7.58
Virtual Office Website (VOW)	"A Participant's Internet website, or a feature of a Participant's website, through which the Participant is capable of providing real estate brokerage services to consumers with whom the Participant has first established a broker-consumer relationship"	NAR Handbook, model rules § 19.1(a)
Office-exclusive listing (one type of exempt listing)	An office-exclusive listing is a listing the seller declines to have disseminated. Such a listing "shall be filed with the service but not disseminated to the Participants"	NAR Handbook, model rules § 1.3
Delayed-marketing exempt listing	A delayed-marketing exempt listing is filed with the MLS and available to the MLS's participants, but "the seller has directed the listing broker to delay the public marketing of that listing through IDX and syndication"	NAR, Multiple Listing Options for Sellers (2025)
Clear Cooperation Policy	The Clear Cooperation Policy is the NAR rule that "within one (1) business day of marketing a property to the public, the listing broker must submit the listing to the MLS for cooperation with other MLS Participants"	NAR Handbook, Policy Statement 8.0
Listing record	A listing record is one listing as an MLS holds the listing: the listing's fields, photographs and remarks	This paper's usage

Term	Definition	Source
Listing content	NAR defines listing content as a term that "Includes, but is not limited to, photographs, images, graphics, audio and video recordings, virtual tours, drawings, descriptions, remarks, narratives, pricing information, and other details or information related to listed property." Listing content is a wider category than copyrightable expression: under this definition a price is listing content, although a price is not protected by copyright	NAR Handbook, Policy Statement 7.86
Remarks	Remarks are the free-text description in a listing. Public remarks are shown to consumers; other remarks are for participants only	This paper's usage
Confidential fields	Confidential fields are fields "intended only for other MLS Participants and users (e.g., showing instructions, and property security information)"	NAR Handbook, model rules § 18.3.1
Data feed	A data feed is an MLS's delivery of listing records in bulk to a participant or licensee	This paper's usage
Data license	A data license is the contract under which an MLS permits a person to receive and use the MLS's data	This paper's usage
Offer of compensation	An offer of compensation is an offer by the listing side to pay a buyer's broker. Such offers have been barred from the MLS since 17 August 2024	NAR Handbook, Policy Statement 8.11
Seller concession	A seller concession is a payment or credit from the seller to the buyer, such as help with closing costs. A seller concession is distinct from an offer of compensation	This paper's usage

20.2 Valuation

The second group covers valuation. Several of these terms, above all "appraisal," have different legal definitions in different fields, and each entry names the field.

Term	Definition	Source
Appraisal (California licensing law)	"The act or process of developing an opinion of value for real property." This definition applies for the purposes of the appraisers' licensing law, not for every legal purpose	Bus. & Prof. Code § 11302(b)
Appraisal (regulation of the Office of the Comptroller of the Currency)	"A written statement independently and impartially prepared by a qualified appraiser setting forth an opinion as to the market value of an adequately described property as of a specific date(s), supported by the presentation and analysis of relevant market information"	12 C.F.R. § 34.42(a)

Term	Definition	Source
Appraisal (assessment practice)	"The process of estimating the value of specific property at a stated time and place"	State Board of Equalization, Assessors' Handbook § 501 (2002)
Evaluation	An evaluation is the valuation that an institution supervised by the Office of the Comptroller of the Currency must obtain for certain transactions exempt from the appraisal requirement, namely those exempt under paragraphs (a)(1), (5), (7), (13) and (14). The regulation requires "an appropriate evaluation of real property collateral that is consistent with safe and sound banking practices"	12 C.F.R. § 34.43(b)
Appraisal waiver (value acceptance)	An appraisal waiver is an offer under which "an appraisal is not required" for a loan	Fannie Mae Selling Guide B4-1.4-10
Value acceptance + property data	"An option that requires interior and exterior property data collection to verify property eligibility prior to the note date. An appraisal is not required"	Fannie Mae Selling Guide B4-1.4-11
Federally related transaction	A federally related transaction is a real estate-related financial transaction that a federal regulator or a regulated institution "engages in or contracts for" and that "requires the services of an appraiser"	12 C.F.R. § 34.42(g)
Transaction value (for loans)	"For loans or other extensions of credit, the amount of the loan or extension of credit." The regulation defines transaction value separately for sales, leases and pooled loans	12 C.F.R. § 34.42(o)(1)
State certified appraiser (abbreviated)	A state certified appraiser is an individual who has met certification requirements that "currently meet the minimum criteria for certification issued by the Appraiser Qualifications Board of the Appraisal Foundation." The regulation adds examination and other conditions	12 C.F.R. § 34.42(l)
State licensed appraiser (abbreviated)	A state licensed appraiser is an individual "who has satisfied the requirements for licensing in a State or territory where the licensing procedures comply with title XI of FIRREA." The regulation adds a further condition	12 C.F.R. § 34.42(m)
Mass appraisal	"The process of valuing a group of properties as of a given date and using common data, standardized methods, and statistical testing"	International Association of Assessing Officers, Standard on Mass Appraisal of Real Property (rev. 2025)

Term	Definition	Source
Automated valuation model (general usage)	An automated valuation model is a computerized system that produces an estimate of value by an automated process, with no appraiser's judgment between the data and the result. A statistical technique is not an automated valuation model. A system built on a statistical technique becomes an automated valuation model when the system runs unattended and the system's output is relied on as a value	This paper's usage
Automated valuation model (federal mortgage regulation)	"Any computerized model used by mortgage originators and secondary market issuers to determine the value of a consumer's principal dwelling collateralizing a mortgage." This definition applies only in federal mortgage regulation: the definition decides when the federal quality-control rule attaches, not what the term means elsewhere	89 Fed. Reg. 64538, 64571
Valuation	A valuation is any estimate of the value of property, by whatever method. An appraisal is one kind of valuation, with its own legal definitions	This paper's usage
Statistical model	A statistical model is a mathematical representation of relationships among variables, estimated or specified using statistical methods. In this paper the term refers mainly to models relating sale prices to recorded property, location and transaction characteristics. A statistical model is a technique and the result of that technique; a statistical model is not, by that fact alone, an automated valuation model. Whether a system built on a statistical model is an automated valuation model depends on the field. In general usage, the answer depends on whether the system produces values with no appraiser's judgment in between. Under federal mortgage regulation, the answer depends on whether a mortgage originator or secondary market issuer uses the system	This paper's usage
Market statistic or index	A market statistic is a figure for an area and period computed from many sales, such as a median price or a price index. Every market statistic is an aggregate, but not every aggregate is an index	This paper's usage
Fitted relationship	A fitted relationship is the set of estimated parameters, functions, surfaces or other mathematical relationships produced by fitting a statistical model to observations, without a value for any particular property	This paper's usage
Value estimate for an identified property	A value estimate for an identified property is the figure a model returns for one named property	This paper's usage

Term	Definition	Source
Aggregate	An aggregate is a statistic or summary calculated from multiple observations and not reported as an individual transaction. Whether an aggregate conceals the individual transactions depends on the size of the group, the kind of statistic, and what can be identified from other available information	This paper's usage
Comparable sale	A comparable sale is a sale of another property used as evidence of the value of the property being valued	This paper's usage

20.3 Property tax

The third group covers the California property-tax terms used in the section on homeowners and taxpayers.

Term	Definition	Source
Full cash value (fair market value)	"The amount of cash or its equivalent that property would bring if exposed for sale in the open market under conditions in which neither buyer nor seller could take advantage of the exigencies of the other"	Rev. & Tax. Code § 110(a)
Base year value	The base year value is the full cash value on the applicable date, which is "the date on which a purchase or change in ownership occurs" or "the date on which new construction is completed." Uncompleted new construction "shall not acquire a base year value until completed"	Rev. & Tax. Code § 110.1(a), (b)
Market data (assessment)	"Any information in the assessor's possession ... relating to the sale of any property comparable to the property of the assessee, if the assessor bases an assessment of the assessee's property, in whole or in part, on that comparable sale or sales"	Rev. & Tax. Code § 408(d), which applies in every county. Section 408.2(d) repeats the definition for counties of more than four million people
Property characteristics	The statute says property characteristics include "the year of construction of improvements to the property, their square footage, the number of bedrooms and bathrooms of all dwellings, the property's acreage, and other attributes of or amenities to the property"	Rev. & Tax. Code § 408.3(b)
Documentary transfer tax	A documentary transfer tax is a tax that a county or city may impose by ordinance on a transfer of real property, measured by the consideration or value conveyed	Rev. & Tax. Code § 11911

20.4 Copyright

The fourth group covers copyright law, including two terms ("MLS compilation" and "chain of title") that the paper applies to MLS data.

Term	Definition	Source
Compilation	"A work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship." Copyright in a compilation covers the original selection, coordination or arrangement, not the facts compiled	17 U.S.C. §§ 101, 103(b)
MLS compilation	An MLS compilation is an MLS's database of listings, regarded as a compilation in the sense defined in the entry above	This paper's usage
Derivative work	"A work based upon one or more preexisting works ... or any other form in which a work may be recast, transformed, or adapted." "Derivative work" is a term of copyright law and is distinct from "derived data," which is a term of contract	17 U.S.C. § 101
Fair use	Fair use is a use of a copyrighted work that is not infringement. Fair use is judged on four factors, including "the purpose and character of the use" and "the effect of the use upon the potential market for or value of the copyrighted work"	17 U.S.C. § 107
Copyright misuse	Copyright misuse is a defense to an infringement claim, available where the owner has used the copyright "in a manner violative of the public policy embodied in the grant of a copyright"	*Lasercomb America v. Reynolds*, 911 F.2d 970, 978 (4th Cir. 1990)
Preemption	Preemption is the displacement of a state-law claim by federal copyright law. Preemption applies to rights "equivalent to any of the exclusive rights within the general scope of copyright" in works "that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103"	17 U.S.C. § 301(a)
Chain of title	The chain of title is the sequence of transfers of copyright ownership from the original owner to later owners. A transfer of ownership, other than by operation of law, requires a written instrument "signed by the owner of the rights conveyed or such owner's duly authorized agent." A nonexclusive license is not such a transfer	This paper's usage; 17 U.S.C. § 204(a)

20.5 Antitrust

The fifth group covers antitrust law, under which courts judge MLS rules that restrict competition.

Term	Definition	Source
Rule of reason	The rule of reason is the general antitrust test under which a restraint is judged by the restraint's purpose and its effect on competition in a market. Courts have stated the rule of reason in particular forms for MLS rules. The Fifth Circuit held that rules "must be reasonably necessary to the accomplishment of the legitimate goals and narrowly tailored to that end." The California Supreme Court held that a rule must relate "to a legitimate purpose" and be "reasonably necessary to accomplish that purpose and narrowly tailored to do so"	*United States v. Realty Multi-List*, 629 F.2d 1351, 1375 (5th Cir. 1980); *Marin County Board of Realtors v. Palsson*, 16 Cal.3d 920, 939 (1976)
Per se rule	The per se rule treats a kind of restraint as unlawful without inquiry into the restraint's effects	This paper's usage
Quick-look analysis	Quick-look analysis is an abbreviated form of the rule of reason, used where harm to competition is evident	This paper's usage
Antitrust injury	"Injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful"	*Brunswick Corp. v. Pueblo Bowl-O-Mat*, 429 U.S. 477, 489 (1977)
Group boycott	A group boycott is a category of concerted exclusionary conduct: an agreement among competitors not to deal with a person or class of persons. The legal treatment of a group boycott depends on the circumstances and the standard applied, and not every such refusal to deal is unlawful	This paper's usage
Free-riding	Free-riding is taking the benefit of what others paid to produce without sharing the cost	This paper's usage
Market power	Market power is the ability of a firm or group of firms to raise prices profitably, reduce output or otherwise restrict competition in a relevant market. Market power must be shown for the market concerned	This paper's usage
Relevant market	The relevant market is the product and the area within which competition is assessed. Market power cannot be judged until the relevant market is defined	This paper's usage
Joint venture	A joint venture is a common undertaking by separate firms. The FTC and DOJ describe an MLS as "a local or regional joint venture of real estate brokers ... who pool and disseminate information on homes available for sale"	FTC & DOJ, Competition in the Real Estate Brokerage Industry 10 (2007)

Term	Definition	Source
Treble damages	Treble damages are three times the damages sustained, recoverable by a successful antitrust plaintiff	15 U.S.C. § 15(a); Bus. & Prof. Code § 16750(a)

20.6 Contracts, computers and AI

The sixth group covers data licenses, the computer-access statutes, and the statistical and AI terms that MLS licenses and rules use.

Term	Definition	Source
License (two senses)	A license is either a contract granting permission to use data (a data license) or a state credential to practice a profession (an appraiser's or broker's license)	This paper's usage
Permitted use	A permitted use is a use of data that a license or MLS rule allows	This paper's usage
Derived data	"Derived data" is a license term for material produced from licensed data. The term has no fixed legal meaning and takes its meaning from the license. For any output, three separate questions arise: whether the output incorporates protected expression (a copyright question); whether the license treats the output as licensed data or derived data; and whether the license restricts the activity that produced the output	This paper's usage
Licensed data	Licensed data is the data a license covers, as that license defines the data. The license's definition may or may not reach outputs produced from the data	This paper's usage
MLS data	MLS data is the records and fields an MLS holds and supplies, whether or not those records and fields are protected by copyright	This paper's usage
Nominal damages	Nominal damages are a small sum awarded for a breach that caused "no appreciable detriment"	Civ. Code § 3360
Access (Penal Code § 502, as read in *Christensen*)	This entry gives a court's reading, not the statute's text. In the court's reading, access "includes logging into a database with a valid password and subsequently taking, copying, or using the information in the database improperly"	*United States v. Christensen*, 828 F.3d 763, 789 (9th Cir. 2016)

Term	Definition	Source
Exceeds authorized access (federal computer statute)	A user exceeds authorized access by accessing a computer with authorization and then obtaining information in "particular areas of the computer ... that are off limits." The test concerns where the user may go in the computer, not the purpose for which the user later uses information the user was permitted to obtain	*Van Buren v. United States*, 593 U.S. 374, 396 (2021)
Sandbox	A sandbox is a restriction, enforced by the operating system, on what a program may read, write or connect to	This paper's usage
Statistical estimation	Statistical estimation is estimating the parameters or functional relationships of a specified statistical model from observations	This paper's usage
Model training	Model training is using data to estimate or modify a model's parameters or other persistent internal state. A model trained for one specialized purpose, such as predicting sale prices, is trained in this sense	This paper's usage
General-purpose AI model training	General-purpose AI model training is training a model intended to perform a broad range of tasks, not a single narrowly specified task	This paper's usage
Machine learning	Machine learning is a family of computational methods through which systems learn patterns or relationships from data. The term includes many methods based on statistical estimation, including some forms of regression, although not every application of regression is ordinarily described as machine learning. A license or MLS rule may use the term more broadly or more narrowly, and the term then takes its meaning from that document	This paper's usage
Inference (by an AI service)	Inference is the application of an already trained model to supplied input, to produce a prediction, classification, summary, transformation or other output, without necessarily changing the model's parameters	This paper's usage

The table separates statistical estimation from model training, but that separation is an analytical tool, not a legal boundary. Statistical estimation is technically a form of model fitting, so a broadly worded machine-learning restriction may cover statistical estimation. Whether an activity is prohibited depends on the words of the MLS agreement or policy, not on the label this paper gives the activity. A clause barring machine learning "in any way" could reach ordinary regression.

20.7 Reading the citations

The last two groups help a reader follow the citations. The first of these groups explains terms used in describing court opinions:

Term	Meaning
Holding	A holding is what a court decided and needed to decide to reach the court's result
Dictum	A dictum is a statement in an opinion that was not needed for the result, and so does not bind later courts
Pinpoint	A pinpoint is the page of an opinion on which a quoted passage appears
Slip opinion	A slip opinion is an opinion as first issued by the court, before the opinion is printed in a reporter
Unpublished opinion	An unpublished opinion is an opinion the court has designated as not precedent
Pleading-stage ruling	A pleading-stage ruling is a decision on whether a complaint states a claim, made before any evidence is taken

20.8 Abbreviations

The second of these groups lists the abbreviations used in the paper:

Abbreviation	Meaning
AI	Artificial intelligence
CFAA	Computer Fraud and Abuse Act, 18 U.S.C. § 1030
CRMLS	California Regional Multiple Listing Service
DOJ	United States Department of Justice
FHA	Federal Housing Administration
FHFA	Federal Housing Finance Agency
FIRREA	Financial Institutions Reform, Recovery, and Enforcement Act of 1989
FTC	Federal Trade Commission
GAO	Government Accountability Office
HUD	Department of Housing and Urban Development
IDX	Internet Data Exchange
MCP	Model Context Protocol
MLS	Multiple listing service
NAR	National Association of Realtors
OCC	Office of the Comptroller of the Currency
RESO	Real Estate Standards Organization
RETS	Real Estate Transaction Standard
VOW	Virtual Office Website

21 Sources and method

Every quotation in this paper was checked against the named source. Case quotations carry the page on which each quotation appears, except for three recent California decisions that were read as slip opinions. The check had limits, and this section states those limits so readers can weigh them. The limits concern six matters:

- *Statutes.* Federal statutes were read in the U.S. Code (2024 edition) at govinfo.gov. The California statutes cited in the sections "California law," "Computer-access statutes" and "If it comes to civil litigation" were read in the Legislature's official bulk file, stamped 15 November 2026. The California statutes cited in the section on homeowners and taxpayers were read on a mirror site.
- *Opinions.* Reported cases were read with official page numbers at Harvard's Caselaw Access Project. Recent cases were read as court slip opinions, and are cited to slip-opinion pages where reporter pages could not be found. Twelve opinions were read in full: *Realcomp*, *Palsson*, *Derish*, *Hounsell*, *Bernstein*, *PLS.com*, *Altera*, *Reifert*, *Teran*, *ROSS*, *Digital Envoy* and *Assessment Technologies*. In *Christensen*, the parts on the computer statutes, the background, and the bribery section were read in full, and the rest of the opinion was skimmed. The other opinions were read at the quoted passage and the surrounding paragraphs, and the paper states what it draws from those opinions as what the passages suggest.
- *NAR policy.* Quotations of NAR policy are from the January 2025 *Handbook on Multiple Listing Policy* and from NAR's public releases. The 2026 Handbook is restricted to members and was not opened.
- *Litigation status and industry events.* Statements about the status of lawsuits and about industry events rest partly on reports in the trade press, which are named where used.
- *Negative findings.* Where the paper says "none found," a limited search found nothing. That kind of statement does not establish that nothing exists.
- *No review by an attorney.* The citations were checked as described above, without attorney review, and errors may remain. The paper is offered as research and commentary. The paper is not legal advice and should not be relied on as legal advice.

21.1 Version, license and AI assistance

This section records the paper's version, the terms on which the paper may be reused, and how AI systems were used to prepare the paper.

Version. This is version 1.1, dated 21 November 2026. It revises version 1.0, also dated 21 November 2026, which remains available beside this version.

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AI assistance. The paper was researched and drafted with the assistance of an artificial-intelligence system (Claude, made by Anthropic), working under the author's direction. That system located and read the sources, checked the quotations and citations as described above, and drafted the text. Two other systems reviewed drafts: ChatGPT, made by OpenAI, and Grok, made by xAI. Their criticisms were weighed, and checked against the sources where a criticism turned on one, before changes were made. The author directed the work, decided what the paper says, and is

responsible for the paper's content.

The table of authorities follows. In that table, a dagger (†) marks a citation detail that could not be confirmed at the source. The table includes full party names and a few decision years from general knowledge and should be checked like the rest of the table.

22 Table of authorities

22.1 United States Supreme Court

- *Associated Press v. United States*, 326 U.S. 1 (1945)
- *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477 (1977)
- *Cohen v. Cowles Media Co.*, 501 U.S. 663 (1991)
- *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991)
- *Fourth Estate Public Benefit Corp. v. Wall-Street.com, LLC*, 586 U.S. 296 (2019)
- *FTC v. Indiana Federation of Dentists*, 476 U.S. 447 (1986)
- *FTC v. Sperry & Hutchinson Co.*, 405 U.S. 233 (1972)
- *Kaiser Steel Corp. v. Mullins*, 455 U.S. 72 (1982)
- *Kelly v. Kosuga*, 358 U.S. 516 (1959)
- *Sorrell v. IMS Health Inc.*, 564 U.S. 552 (2011)
- *Van Buren v. United States*, 593 U.S. 374 (2021)
- *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004)

22.2 Federal courts of appeals

- *Aguilera v. Pirelli Armstrong Tire Corp.*, 223 F.3d 1010 (9th Cir. 2000)
- *Altera Corp. v. Clear Logic, Inc.*, 424 F.3d 1079 (9th Cir. 2005)
- *Amazon.com Services, LLC v. Perplexity AI, Inc.*, No. 26-1444 (9th Cir. 4 Aug 2026)
- *Apple Inc. v. Psystar Corp.*, 658 F.3d 1150 (9th Cir. 2011)
- *Assessment Technologies of WI, LLC v. WIREdata, Inc.*, 350 F.3d 640 (7th Cir. 2003)
- *Authors Guild v. Google, Inc.*, 804 F.3d 202 (2d Cir. 2015)
- *Best Carpet Values, Inc. v. Google LLC*, 90 F.4th 962 (9th Cir. 2024)
- *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*, 44 F.3d 61 (2d Cir. 1994)
- *CDN Inc. v. Kapes*, 197 F.3d 1256 (9th Cir. 1999)
- *Dow Jones & Co. v. International Securities Exchange, Inc.*, 451 F.3d 295 (2d Cir. 2006)
- *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (9th Cir. 2016)
- *Freeman v. San Diego Association of Realtors*, 322 F.3d 1133 (9th Cir. 2003)
- *hiQ Labs, Inc. v. LinkedIn Corp.*, 31 F.4th 1180 (9th Cir. 2022)
- *Lasercomb America, Inc. v. Reynolds*, 911 F.2d 970 (4th Cir. 1990)
- *Litchfield v. Spielberg*, 736 F.2d 1352 (9th Cir. 1984)
- *Metropolitan Regional Information Systems, Inc. v. American Home Realty Network, Inc.*, 722 F.3d 591 (4th Cir. 2013)
- *Micro Star v. FormGen Inc.*, 154 F.3d 1107 (9th Cir. 1998)
- *ML Genius Holdings LLC v. Google LLC*, No. 20-3113 (2d Cir. 10 Mar 2022) (summary order)
- *Montz v. Pilgrim Films & Television, Inc.*, 649 F.3d 975 (9th Cir. 2011)
- *National Association of Realtors v. United States*, No. 23-5065 (D.C. Cir. 5 Apr 2024), 97 F.4th 951 † (reporter citation from a brief)
- *National Basketball Association v. Motorola, Inc.*, 105 F.3d 841 (2d Cir. 1997)

- *New York Mercantile Exchange, Inc. v. IntercontinentalExchange, Inc.*, 497 F.3d 109 (2d Cir. 2007)
- *The PLS.com, LLC v. National Association of Realtors*, 32 F.4th 824 (9th Cir. 2022), cert. denied, 143 S. Ct. 567 (2023)
- *Practice Management Information Corp. v. American Medical Association*, 121 F.3d 516 (9th Cir. 1997)
- *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996)
- *Realcomp II, Ltd. v. FTC*, 635 F.3d 815 (6th Cir. 2011)
- *Reifert v. South Central Wisconsin MLS Corp.*, 450 F.3d 312 (7th Cir. 2006)
- *REX – Real Estate Exchange, Inc. v. Zillow, Inc.*, No. 24-685 (9th Cir. 3 Mar 2025) (unpublished)
- *Supermarket of Homes, Inc. v. San Fernando Valley Board of Realtors*, 786 F.2d 1400 (9th Cir. 1986)
- *Thompson v. Metropolitan Multi-List, Inc.*, 934 F.2d 1566 (11th Cir. 1991) † (pinpoint derived)
- *Thomson Reuters Enterprise Centre GmbH v. ROSS Intelligence Inc.*, No. 25-2153 (3d Cir. 29 Sept 2026)
- *Stross v. Redfin Corp.*, No. 17-50046 (5th Cir. 9 Apr 2018) (unpublished)
- *Top Agent Network, Inc. v. National Association of Realtors*, No. 21-16494 (9th Cir. 28 Aug 2023) (unpublished)
- *United States v. Christensen*, 828 F.3d 763 (9th Cir. 2016)
- *United States v. Realty Multi-List, Inc.*, 629 F.2d 1351 (5th Cir. 1980)
- *VHT, Inc. v. Zillow Group, Inc.*, 918 F.3d 723 (9th Cir. 2019)

22.3 Federal district courts

- *BanxCorp v. Costco Wholesale Corp.*, 978 F. Supp. 2d 280 (S.D.N.Y. 2013)
- *Bartz v. Anthropic PBC*, 787 F. Supp. 3d 1007 (N.D. Cal. 2025) † (citation as given by the Third Circuit)
- *Digital Envoy, Inc. v. Google, Inc.*, 370 F. Supp. 2d 1025 (N.D. Cal. 2005); later orders in No. 5:04-cv-01497
- *Kadrey v. Meta Platforms, Inc.*, 788 F. Supp. 3d 1026 (N.D. Cal. 2025) † (citation as given by the Third Circuit)
- *Metropolitan Regional Information Systems, Inc. v. American Home Realty Network, Inc.*, 948 F. Supp. 2d 538 (D. Md. 2013)
- *Regional Multiple Listing Service of Minnesota, Inc. v. American Home Realty Network, Inc.*, 960 F. Supp. 2d 958 (D. Minn. 2013); 9 F. Supp. 3d 1032 (D. Minn. 2014)
- *United States v. National Association of Realtors*, No. 05 C 5140 (N.D. Ill.) (order of 27 Nov 2006; Final Judgment of 18 Nov 2008)
- *WalkMe Ltd. v. Whatfix, Inc.*, No. 23-cv-03991-JSW (N.D. Cal. 21 Mar 2024)
- *X Corp. v. Bright Data Ltd.*, No. C 23-03698 WHA (N.D. Cal. 9 May 2024)

22.4 California courts

- *Armendariz v. Foundation Health Psychcare Services, Inc.*, 24 Cal.4th 83 (2000)
- *Bank of the West v. Superior Court*, 2 Cal.4th 1254 (1992)
- *Cel-Tech Communications, Inc. v. Los Angeles Cellular Telephone Co.*, 20 Cal.4th 163 (1999)
- *City of Long Beach v. Mansell*, 3 Cal.3d 462 (1970)
- *Derish v. San Mateo-Burlingame Board of Realtors*, 136 Cal.App.3d 534 (1982)
- *Elation Systems, Inc. v. Fenn Bridge LLC*, A159749 (Cal. Ct. App. 22 Nov 2021), 71 Cal.App.5th 958 † (reporter citation not confirmed)
- *Feldman v. Sacramento Board of Realtors*, 119 Cal.App.3d 739 (1981)

- *FilmOn.com Inc. v. DoubleVerify Inc.*, 7 Cal.5th 133 (2019)
- *Glendale Board of Realtors v. Hounsell*, 72 Cal.App.3d 210 (1977)
- *In re Cipro Cases I & II*, 61 Cal.4th 116 (2015)
- *Kabehie v. Zoland*, 102 Cal.App.4th 513 (2002)
- *Mailand v. Burckle*, 20 Cal.3d 367 (1978)
- *Marin County Board of Realtors, Inc. v. Palsson*, 16 Cal.3d 920 (1976)
- *Navellier v. Sletten*, 29 Cal.4th 82 (2002)
- *Pacific Gas & Electric Co. v. G.W. Thomas Drayage & Rigging Co.*, 69 Cal.2d 33 (1968)
- *Palm Medical Group, Inc. v. State Compensation Insurance Fund*, 161 Cal.App.4th 206 (2008)
- *Patent Scaffolding Co. v. William Simpson Construction Co.*, 256 Cal.App.2d 506 (1967)
- *People v. National Association of Realtors*, 120 Cal.App.3d 459 (1981)
- *People v. National Association of Realtors*, 155 Cal.App.3d 578 (1984)
- *Pinsker v. Pacific Coast Society of Orthodontists*, 12 Cal.3d 541 (1974)
- *Potvin v. Metropolitan Life Insurance Co.*, 22 Cal.4th 1060 (2000)
- *Quach v. California Commerce Club, Inc.*, S275121 (Cal. 25 July 2024) † (reporter citation not confirmed)
- *Teran v. Superior Court* (2025) 112 Cal.App.5th 371, review denied 17 Sept 2025
- *United Multiple Listing Service, Inc. v. Bernstein*, 134 Cal.App.3d 486 (1982)
- *Waller v. Truck Insurance Exchange, Inc.*, 11 Cal.4th 1 (1995)
- *Yari v. Producers Guild of America, Inc.*, 161 Cal.App.4th 172 (2008)

22.5 Federal statutes and regulations

- 12 U.S.C. §§ 3339, 3342; 15 U.S.C. § 1639e
- 15 U.S.C. §§ 1, 15, 26 (Sherman and Clayton Acts); § 45 (FTC Act)
- 17 U.S.C. §§ 101 (compilation, derivative work), 102(b), 103(b), 107, 204(a), 301(a), 411(a), 412
- 18 U.S.C. § 1030
- 42 U.S.C. §§ 3604, 3606 (Fair Housing Act)
- 12 C.F.R. §§ 34.42, 34.43(a)–(c); 24 C.F.R. § 100.90; 37 C.F.R. § 202.3(b)(5)
- Quality Control Standards for Automated Valuation Models, 89 Fed. Reg. 64538 (7 Aug 2024)

22.6 California statutes

- Business and Professions Code §§ 11302, 11320, 16720, 16722, 16726, 16750, 16750.1, 17200, 17203, 17204, 17208
- Civil Code §§ 1087, 1088, 1636, 1638, 1639, 1641, 1644, 1647, 1649, 1654, 1670.5, 1671, 1717, 1798.140, 3360, 3422, 3426.1
- Code of Civil Procedure §§ 337, 425.16, 425.17
- Corporations Code § 7341
- Evidence Code § 623
- Penal Code § 502
- California Constitution art. XIII A, § 2(a)
- Revenue and Taxation Code §§ 110, 110.1, 402.5, 408, 408.1, 408.2, 408.3, 441, 11911, 11921, 11930, 11932

22.7 Other states

- Washington SSB 6091, 2026 Laws ch. 57
- Wisconsin 2025 Act 69

22.8 Government reports and agency materials

- FTC & DOJ, *Competition in the Real Estate Brokerage Industry* (Apr. 2007)
- Government Accountability Office, *Real Estate Brokerage: Factors That May Affect Price Competition*, GAO-05-947 (Aug. 2005)
- Competitive Impact Statement, *United States v. National Association of Realtors* (12 June 2008)
- Fannie Mae, *Selling Guide* B4-1.3-07, B4-1.4-10, B4-1.4-11
- HUD Handbook 4000.1, *FHA Single Family Housing Policy Handbook* (rev. 12 Aug 2026); FHA, *Single Family Housing Appraisal Report and Data Delivery Guide* (2024)
- International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property* (rev. 2025)
- California State Board of Equalization, *Assessors' Handbook* § 501 (2002)
- FHA, *Annual Report to Congress on the Mutual Mortgage Insurance Fund*, fiscal year 2026

22.9 NAR policy

- *Handbook on Multiple Listing Policy* (January 2025): Policy Statements 7.9, 7.58, 7.85, 7.86, 7.90, 7.91, 7.93, 8.0, 8.11; Model Rules §§ 18.3.1, 18.3.13
- NAR release of 8 November 2026 on four MLS policy recommendations

22.10 Articles and studies

- Banerjee & Paciorek, "Commissions and Omissions: Trends in Real Estate Broker Compensation," FEDS Notes (12 May 2025)
- James S. Bradbury, "Revenge of the Realtors: The Procompetitive Case for Consolidating Multiple Listing Services," 90 U. Colo. L. Rev. 267 (2019)
- Greg Buchak, Gregor Matvos, Tomasz Piskorski & Amit Seru, "NAR Settlement, House Prices, and Consumer Welfare," NBER Working Paper 32855 (2024, rev. 2025)
- Borys Grochulski & Zhu Wang, Federal Reserve Bank of Richmond Economic Brief 24-08 (Mar. 2024)
- Karen Hoffman Lent & Kenneth Schwartz, "Challenging the Practices of Multiple Listing Services," N.Y.L.J. (17 June 2022)

Links to the sources opened appear under each section. The Bradbury and Lent & Schwartz articles are further reading and are not cited in the text.