

Environmental Wellness & Property Value

A Pilot Hedonic Pricing Study · Bay Area, Los Angeles & San Diego Markets

◆ HEADLINE FINDING ◆

Each 1-point increase in the Calmlier Index™ is associated with
~\$24,000 in additional home value

At median California home size · Pilot study, n=61 addresses · r=0.699 · R²=48.8%

0.699

Pearson Correlation
Score vs Price/SqFt

48.8%

Price Variance
Explained (R²)

+199%

Elite Sanctuary
Premium vs High Friction

Price Premium by Calmlier Score Band

Score Band	Range	Avg \$/SqFt	n	Premium	Implication
Elite Sanctuary	88–100	\$1,322	n=13	+199%	Estate-grade sanctuary
High-Recovery	75–87	\$813	n=14	+84%	Quality residential enclave
Balanced	60–74	\$671	n=15	+52%	Desirable suburban address
Stable	45–59	\$420	n=5	-5%	Standard suburban baseline
High Friction	<45	\$442	n=14	—	High noise/friction zone

METHODOLOGY NOTE

Pilot hedonic pricing study using OLS regression. Price/SqFt sourced from Redfin and PropertyShark neighborhood medians (2024-2025). Calmlier scores computed using the v18-log-decay-balanced-weights engine across 61 addresses spanning Bay Area, Los Angeles, and San Diego County. Controls include estimated home size and score band. Preliminary findings — formal study with individual transaction records in progress.

Comparison to Walk Score Research

Index	\$/Point	Measures	Markets	Source
Walk Score	\$3,000 / point	Walkability	15 US metros	Cortright, CEOs for Cities 2009
Calmlier Index™	~\$24,000 / point	Acoustic · Nature · Air · Stability	Bay Area, LA, SD	CalmCert™ Standards Body, 2026

Individual Pillar Correlations with Price/SqFt

Acoustic Restoration	 r = 0.72
Stability Audit	 r = 0.68
Natural Density	 r = 0.61
Atmospheric Purity	 r = 0.44

Calmlier Index: Hedonic Pricing Study — Full Methodology

Prepared by the CalmCert Standards Body · April 2026

SAMPLE CONSTRUCTION

61 residential addresses spanning three California metros: San Francisco Bay Area, Greater Los Angeles, and San Diego County. Addresses selected to span the full Calmlier score distribution (26-94) across five score bands. Street-level addresses used where available; city-centroid addresses excluded from regression analysis.

PRICE DATA

Neighborhood median price-per-square-foot sourced from Redfin Market Trends pages and PropertyShark neighborhood reports (Q4 2024 - Q1 2025). Individual transaction records not used in this pilot; a formal study using individual MLS transaction data is in preparation.

CALMLIER SCORES

All addresses scored using the Calmlier Index v18-log-decay-balanced-weights engine. Pillar weights: Acoustic Restoration 30%, Natural Density 30%, Stability 20%, Atmospheric Purity 20%. Scores reflect environmental conditions as of April 2026.

REGRESSION SPECIFICATION

Dependent variable:	Median price per square foot (\$/sqft)
Independent variable:	Calmlier composite score (0-100)
Method:	Ordinary Least Squares (OLS), simple and multiple specifications
Controls (multiple):	Estimated home age (years from 2025), bedroom count

FULL REGRESSION RESULTS

Metric	Simple Regression	Multiple Regression
Score coefficient	\$13.39/sqft per point	\$13.12/sqft per point
Intercept	\$118/sqft	\$142/sqft
R2	48.8%	51.3%
Pearson r	0.699	---
n	61 addresses	61 addresses

Dollar value per point (at median 1,800 sqft): ~\$24,108 (simple) / ~\$23,616 (controlled)

PILLAR CORRELATIONS WITH PRICE/SQFT

Acoustic Restoration	r = 0.72	<i>Quiet streets and topographic shielding consistently rewarded by buyers</i>
Stability Audit	r = 0.68	<i>Zoning permanence and absence of flight/highway projects protect long-term value</i>
Natural Density	r = 0.61	<i>Canopy and park proximity -- on-parcel trees add disproportionate value</i>
Atmospheric Purity	r = 0.44	<i>Non-linear effect -- below-average AQI imposes steep discount</i>

LIMITATIONS

This is a pilot study using neighborhood-level median price data rather than individual transaction records. Results should be interpreted as directional. A formal study using 300+ individual MLS transactions is in preparation. Geographic scope is currently limited to California. Score-to-value relationship may differ in other markets.

CONTACT

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