



Economic Stress Index™





About LegalShield



#1 Provider of subscription-based legal plans to households



1.8 million+ memberships paying monthly via credit card/ debit card/payroll deduction



49 year history and counting



47,000 small business accounts



6,900 broker & agency clients served by our dedicated B2B division



39 law firms in 50 states, Canada and the United Kingdom with a total of 900 lawyers, and a referral network of 4,600 lawyers, with average of 22 years experience



About the LegalShield Economic Stress Index

- ✓ The LegalShield Economic Stress Index is a suite of leading indicators of the economic and financial status of U.S. households and small businesses.
- ✓ The LegalShield Economic Stress Index is comprised of five sub-indices that are constructed from LegalShield's proprietary data, which reflect the demand for various legal services over the past 15+ years. Each time a LegalShield provider law firm receives a request from a LegalShield customer, the request is logged as an "intake" in one of roughly 70 unique areas of law (e.g., real estate) depending on the nature of the request.
- ✓ Each sub-index reflects the number of intakes in an area of law as a share of total intakes across all areas of law in a given quarter. In some instances, individual indices across multiple areas of law (e.g., bankruptcy, foreclosure, consumer/finance) are combined to produce a composite index (e.g., consumer financial stress).
- ✓ The sub-indices that comprise the LegalShield Economic Stress Index were selected because they tend to lead an existing economic indicator that sheds light on the health of the U.S. economy (i.e., the target economic indicator). In this way, the LegalShield Economic Stress Index provides actionable intelligence about the direction of the U.S. economy in the near term.



Advantages of the LegalShield Economic Stress Index



UNIQUE

The LegalShield Economic Stress Index is based on inquiries into specific legal services each month. To the best of our knowledge, there is no comparable data on the market.



PROPRIETARY

The LegalShield Economic Stress index is based on data collected through LegalShield's provider law firms in all 50 states, thereby offering information that is not accessible to the general public.



HIGH-FREQUENCY

The LegalShield Economic Stress Index is based on data collected on a near real-time basis, and can be refreshed on a weekly, monthly, or quarterly basis depending on the user's needs.



ROBUST

The LegalShield Economic Stress Index is based on intakes for more than 1.8 million memberships (including individuals and small businesses), providing a window into the experiences of families and businesses across the country at any given point in time.

Interpreting Each Component of the LegalShield Economic Stress Index

CONSUMER STRESS INDEX

Consumer spending accounts for more than two-thirds of U.S. economic activity. The flagship Consumer Stress Index tends to lead the Conference Board's Consumer Confidence Index by one to three months. The Consumer Stress Index also provides a useful "hard" data check on the Consumer Confidence Index and similar measures of consumer confidence that are based on "soft" survey data, as these measures are not always consistent with underlying economic conditions.

BANKRUPTCY INDEX

Bankruptcy data provide an important insight into the overall financial health of consumers and businesses. As witnessed during the Great Recession of 2008-09, an uptick in bankruptcies can foreshadow significant turmoil within the economy. The Bankruptcy Index tends to lead the trajectory of total bankruptcies by roughly one month, providing an early warning signal of an economic downturn.

FORECLOSURE INDEX

A rise in foreclosures often signals a worsening of household finances, as households typically delay payments on other debt obligations in order to pay their mortgages on time. The Foreclosure Index closely tracks foreclosures as reported each quarter by the Mortgage Bankers Association.

HOUSING CONSTRUCTION INDEX

The housing market, broadly defined, accounts for up to one-seventh of U.S. economic activity, and the amount of new residential construction (as measured by housing starts) can provide insights into consumers' confidence about their jobs and future income. The Housing Activity Index tends to lead U.S. Census data on housing starts (a key economic indicator) by 1–2 months — providing timely intelligence about near-term housing market health.

HOUSING SALES INDEX

The housing market accounts for a significant share of U.S. economic activity, and the pace of existing home sales can provide insights into consumers' confidence about their jobs and future income. The Housing Sales Index tends to lead existing home sales as published by the National Association of Realtors and offers an early look at emerging trends in the housing market.



Consumer Stress Index

The LegalShield Consumer Stress Index ticked down in July after rising the previous two months. Consumer stress has remained low over the pandemic thanks to government payments and protections, though stress may rise once these provisions end later this summer.

The LegalShield Consumer Stress Index ticked down (improved) 1.1 points in July to 60.8. Meanwhile, the Conference Board's Consumer Confidence Index was roughly unchanged at 129.1.

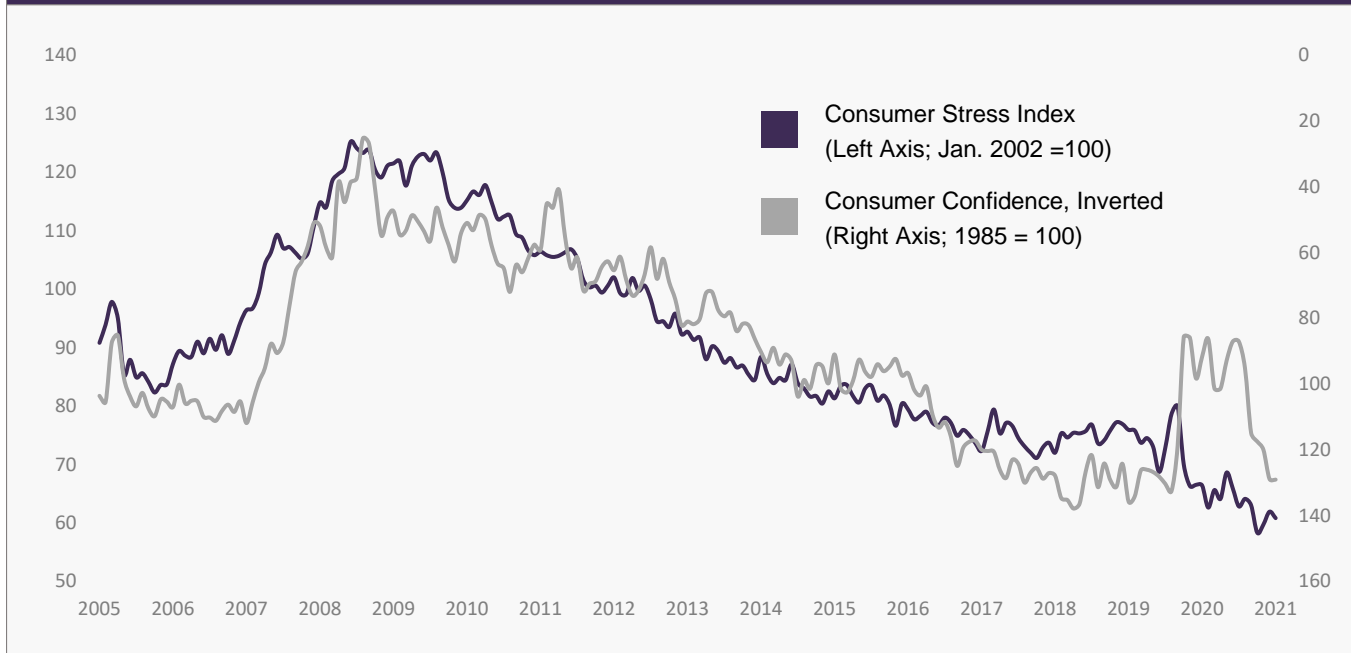
Although federal support measures have expired in some states, the combined effect of accumulated savings, loosening restrictions, solid job growth, and higher wages have led to robust consumer spending throughout the spring and summer. Higher consumer mobility and spending has propelled the recovery in industries most adversely impacted by the pandemic. For example, roughly half of the payroll gains in July came in industries that rely heavily on face-to-face interactions, including restaurants, hotels, salons, and retail. Workers in these industries also saw larger pay raises than other industries. Meanwhile, with most parents receiving the new child tax credits and schools set to require in-person attendance this fall, [back-to-school spending](#) is expected to grow by double-digits compared to 2019 levels to an all-time high.

Consumers have a lot of positive momentum, and most should remain on solid footing. However, when expanded unemployment insurance programs end in early September, an estimated [7.5 million beneficiaries](#) are expected to lose benefits. The labor market may see an influx of new workers who have been on the sidelines throughout the pandemic, but economists are split on whether the end of expanded UI will kickstart job growth, particularly in industries that have struggled to find enough workers. Meanwhile, recent sharp increases in the Consumer Price Index and rising inflation expectations for the coming year (4.8%, according to a New York Fed survey) could weigh on consumer confidence in the near term. The Delta variant also remains a threat to the ongoing consumer recovery, though further economic shutdowns appear unlikely.

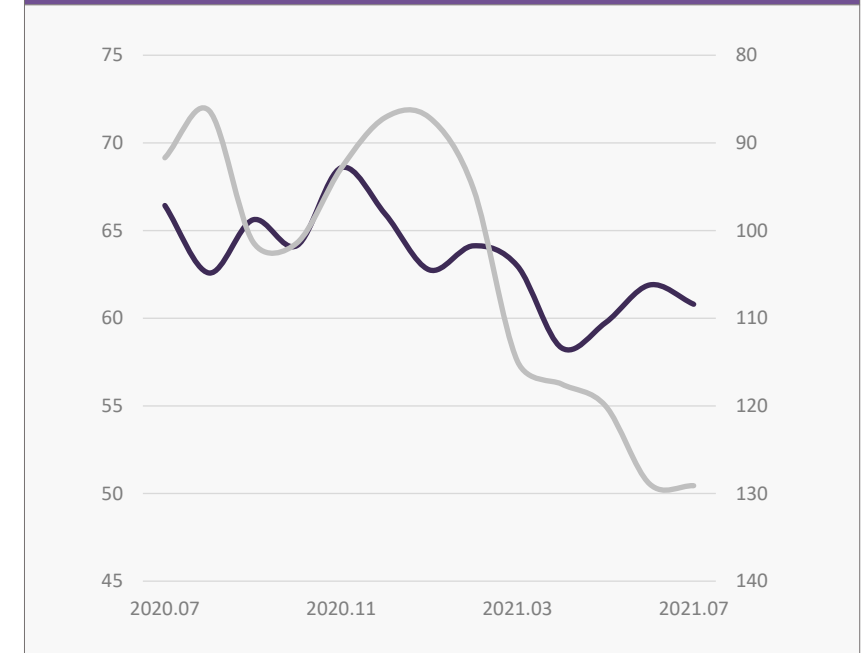
Overall, LegalShield data suggest that consumer stress will remain low in the near term, though the impact of expiring federal programs, inflation, and the ongoing pandemic on consumer welfare are key factors to monitor.

Consumer Stress Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Bankruptcy Index

The LegalShield Bankruptcy Index was mostly unchanged in July at the second-lowest reading ever. Bankruptcies should stay low in the near term but may rise once the impacts of federal protections ending materialize in the economy.

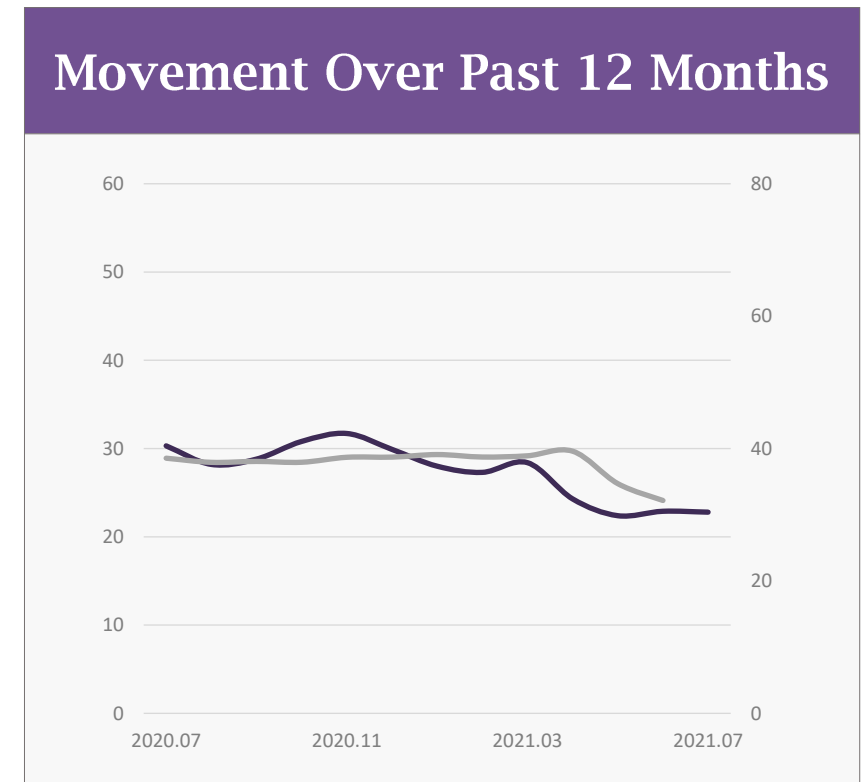
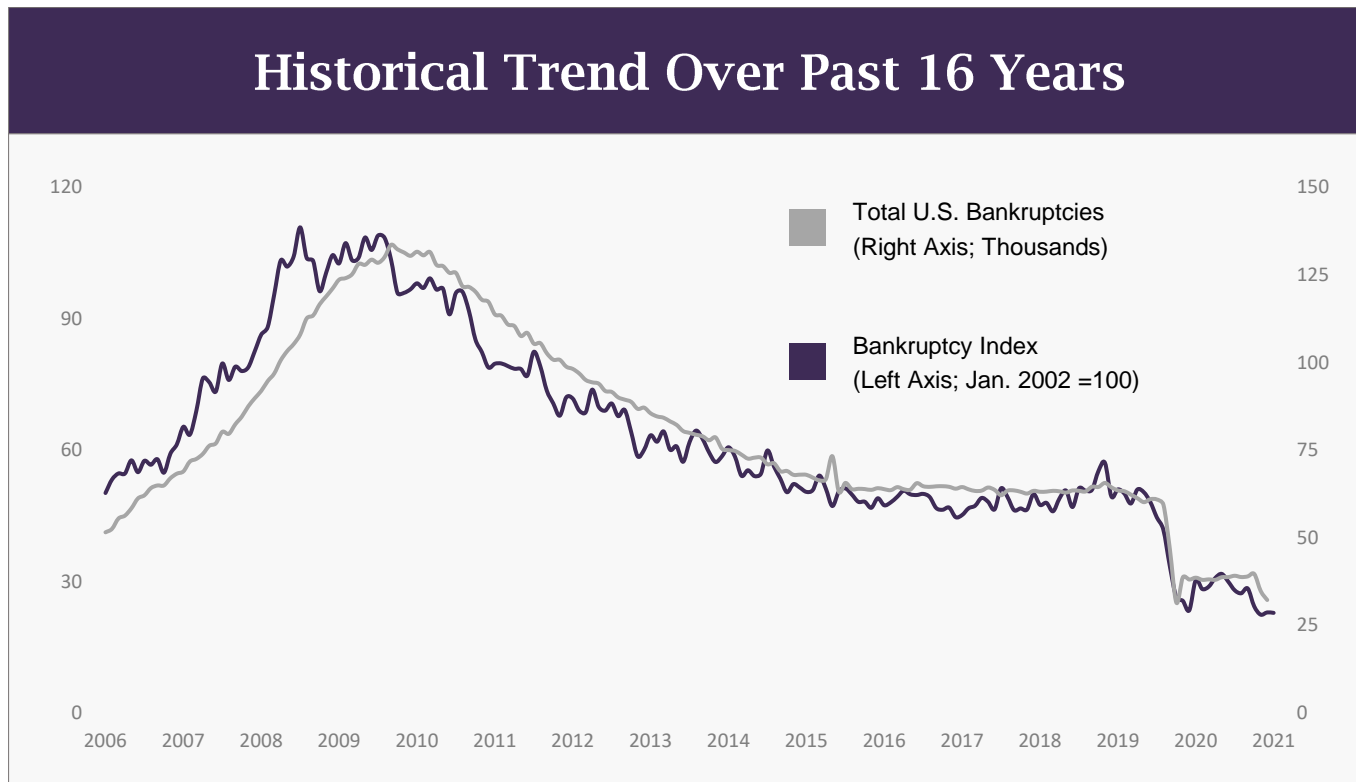
The LegalShield Bankruptcy Index ticked down (improved) 0.1 point to 22.8 in July. Meanwhile, total seasonally adjusted bankruptcy filings fell by 7.3% to 32,165 in June and were down 15% compared to last year.

Bankruptcies have remained low in large part because of government provisions like stimulus payments and federal moratoria on evictions and certain loan payments. Consumers have gradually returned to pre-pandemic routines and spending patterns, which has resulted in their feeling more comfortable taking on new debt. For example, [Equifax](#) reports that demand for auto loans and leases, credit cards, and personal loans were 39% higher in April compared to the year prior and 11% above the level recorded in April 2019. Despite increased demand for loans, consumers remain wary of taking on too much debt: a recent [survey](#) found that 58% of Americans receiving Advanced Child Tax Credits plan to save the extra money. Among respondents who intend to spend their money, most plan to pay bills or make purchases for their children.

However, with most consumer support measures expiring this summer, increased financial pressures could lead to more bankruptcy activity further down the road. As expanded unemployment insurance programs are phased out, new [research](#) shows that Americans owed more than \$140 billion in unpaid medical bills as of last year. Americans also owe an [estimated \\$20 billion in back rent](#), though the Biden Administration opted to extend the eviction moratorium for another two months to allow more time for states to distribute more than \$40 billion in unspent rent relief appropriated in the December and March federal relief bills. Relatedly, prior to the extension of the eviction moratorium, a Census Bureau survey found that 3.6 million people are at risk of eviction in the next two months.

In sum, while the expiration of federal support measures could lead to a change in fortune for some consumers later this year, bankruptcies should remain low in the near term.

Bankruptcy Index





FORECLOSURE

**FOR
SALE**

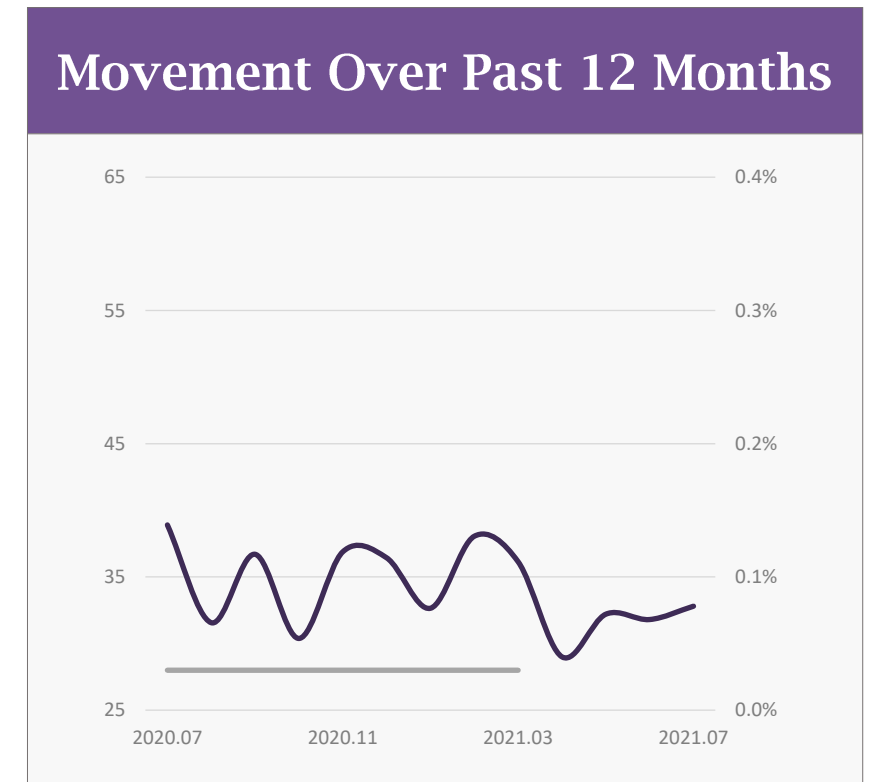
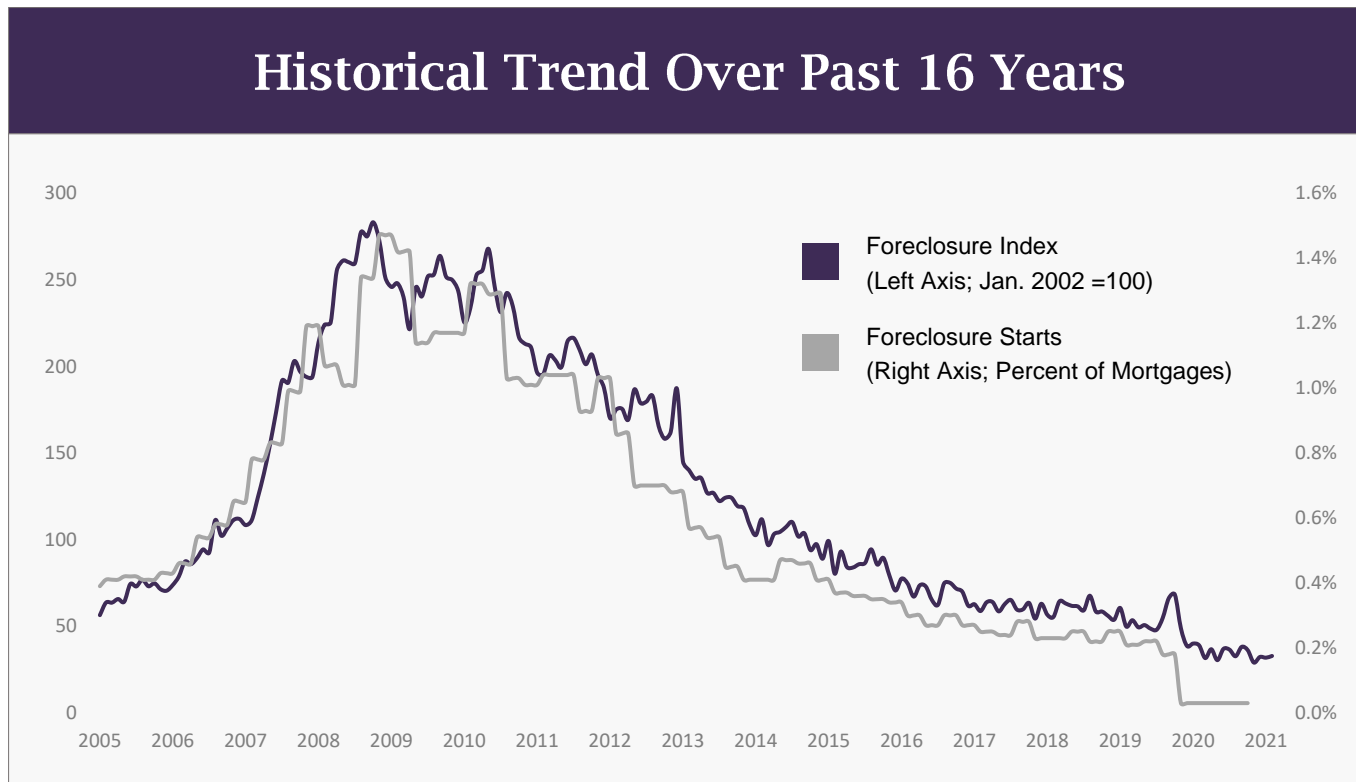
Foreclosure Index

The LegalShield Foreclosure Index ticked up in July but remains historically low. Despite the expiration of the foreclosure moratorium in July, a wave of foreclosures appears unlikely for the time being. Foreclosures should remain low in the near term, though debt collection efforts may begin in September.

The LegalShield Foreclosure Index increased (worsened) 1.0 point to 32.8 in July. Foreclosures have remained low thanks to government aid and the federal foreclosure moratorium. Attom reports that total foreclosure filings during the first half of 2021 were down 61% Y/Y and down 78% compared to two years ago. In another positive development, [Black Knight](#) reports that the national delinquency rate fell in June to its lowest level since the pandemic began. Though the foreclosure moratorium has technically expired and most private-sector mortgage forbearance programs will expire at the end of August, many of the protections for homeowners remain in place. Meanwhile, [a significant number of homeowners](#) are seriously delinquent on their loans (90+days) but not in forbearance, though this number is far below what was seen during the last housing crisis.

In an effort to avoid a foreclosure spike, several federal agencies, including the Department of Housing and Urban Development, are taking new steps to reduce monthly principal and interest payments for the homeowners at greatest risk of foreclosure. Further, agencies continue to require mortgage servicers to give borrowers the option to move missed payments to the end of the mortgage at no extra cost. Meanwhile, high and rising home prices mean that fewer homeowners are likely to be underwater on their mortgages. As a result of these factors, a wave of foreclosures appears unlikely for the time being.

Foreclosure Index





Housing Construction Index

The LegalShield Housing Construction Index ticked down in July but is still at the second highest level on record. While the housing market remains constrained by supply chain shortages, construction activity should remain strong over the remaining summer months.

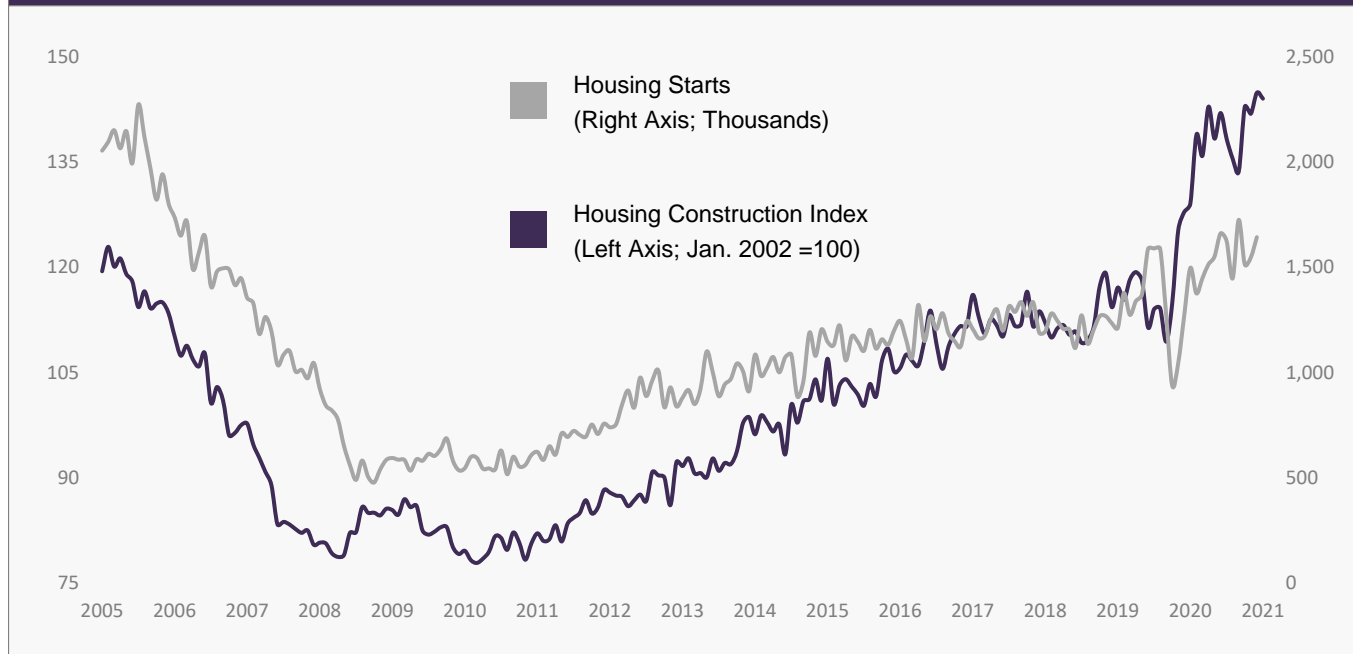
The LegalShield Housing Construction Index decreased 0.9 point to 144.0 in July. Housing starts rose 6.3% in June and were up 29% relative to year-ago levels. Meanwhile, single-family permits fell 6.3% in June. Builders have been constrained by supply-side issues relating to labor and materials.

- While framing lumber prices have fallen sharply in recent weeks, they remain elevated compared to pre-pandemic levels. Meanwhile, other key lumber products like oriented strand board (OSB) continue to increase building costs: per the [National Association of Home Builders](#), prices for OSB have risen 500% since January 2020. Overall, softwood lumber price changes from July 2020 to July 2021 are estimated to have added nearly [\\$30K](#) to the price of an average single-family home.
- Similarly, labor shortages are still plaguing the construction sector. Though the industry has reinstated nearly 80% of its workforce that was laid off as the pandemic began, Associated Builders and Contractors [estimate](#) that 430K construction workers will need to be hired this year and another million will need to be hired over the coming two years for housing supply to catch up with demand.

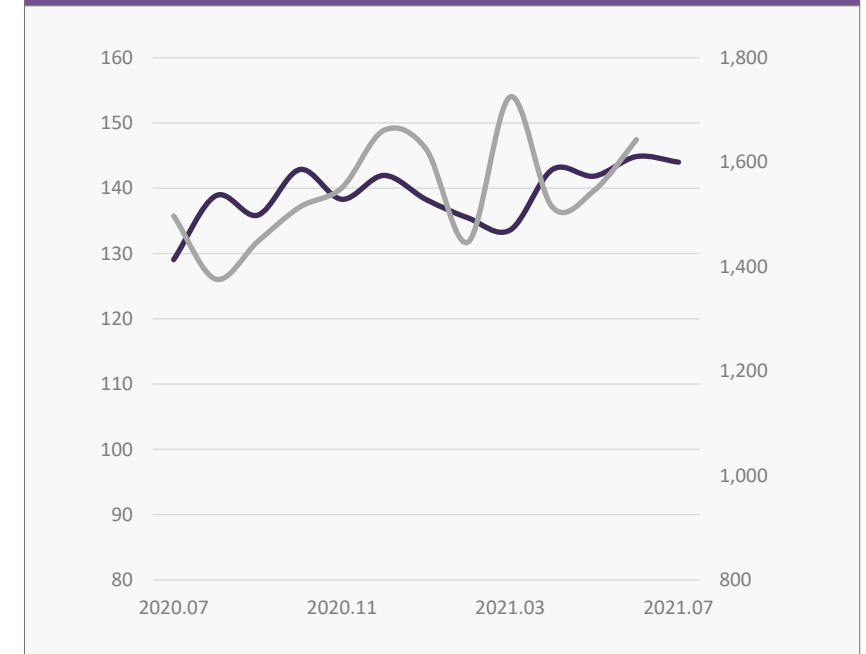
All told, robust housing demand is expected to buoy housing construction. While supply chain constraints are limiting homebuilders' ability to meet this demand, construction activity should remain at healthy levels in the near term.

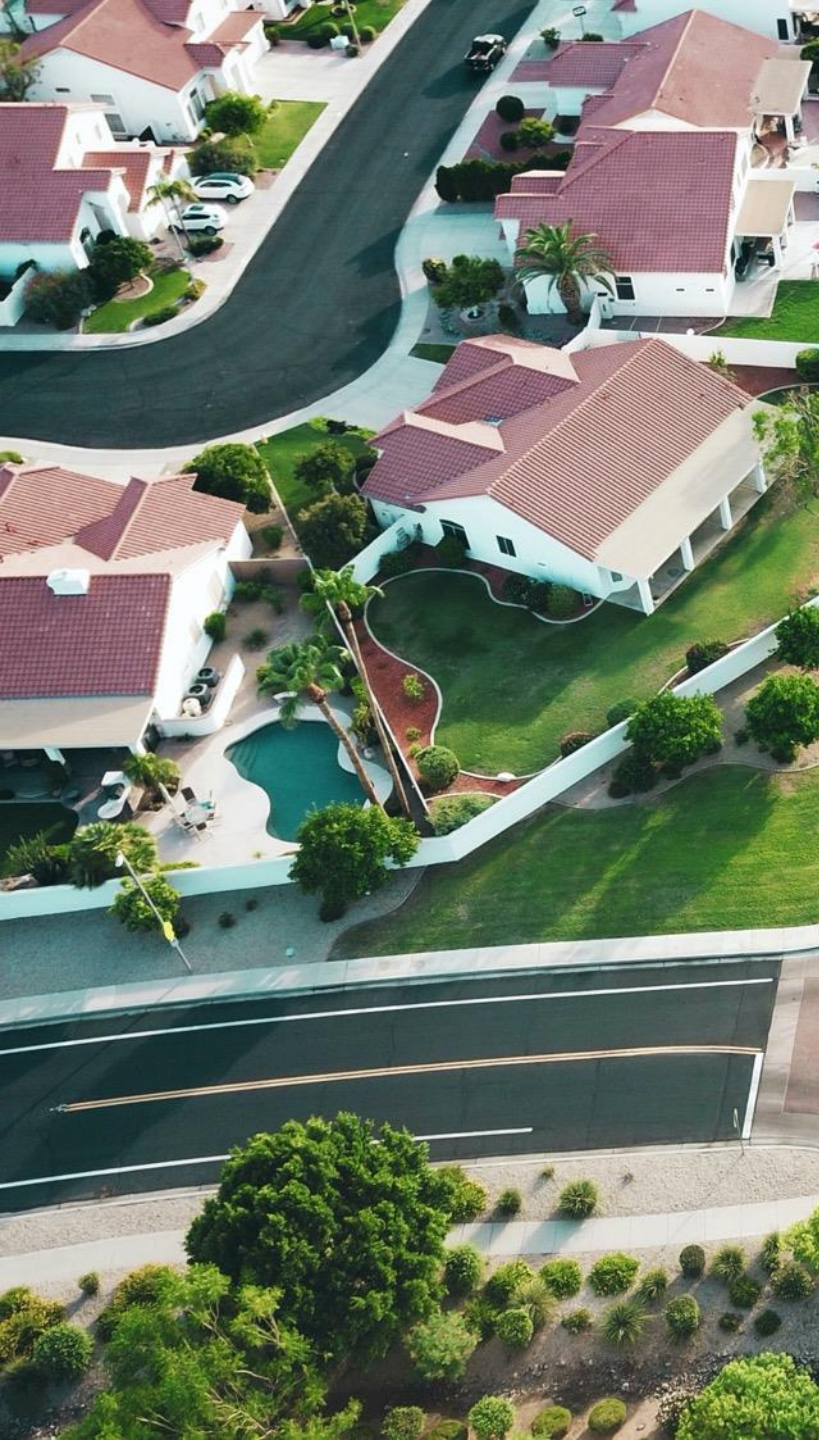
Housing Construction Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Sales Index

The LegalShield Housing Sales Index was mostly unchanged last month just below a record high. Home sales are forecasted to stay elevated due to strong housing demand.

The LegalShield Housing Sales Index edged up by 0.1 point in July to 118.9. Meanwhile, existing home sales increased 1.4% in June and are 23% higher than a year ago.

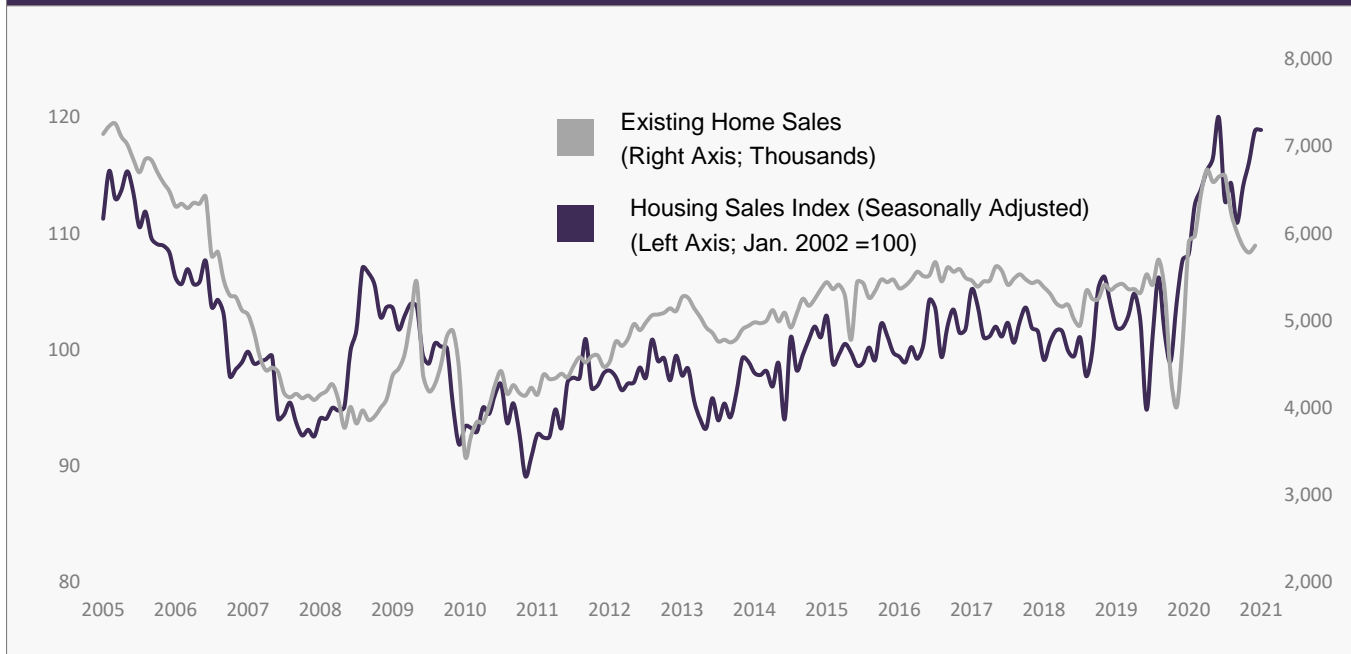
Robust housing demand has been propelled by low mortgage rates, accumulated savings over the pandemic, and increased homebuying among millennials. Much of this housing demand is in less densely populated suburban areas as a result of health concerns surrounding the pandemic and the prevalence of remote work. [Redfin](#) reported that median home prices in “car-dependent” areas (+33%) rose at twice the rate of “transit-accessible” cities (+16%) since the start of the pandemic.

One symptom of the red-hot housing market is consistently low inventories, which have weighed on sales in recent months. [New homes sales](#) declined for the third straight month to their weakest pace since April 2020. Similarly, existing home sales fell for four months before ticking up in June. Low inventories are pushing up prices and pricing out homebuyers at the lower end of the market. Per the National Association of Realtors, the median prices of existing homes was up 23% Y/Y in June to a record high of \$363K. Meanwhile, [Redfin](#) reports that a record 55% of homes were sold above their asking price in June, up 29% compared to this time last year. Unsurprisingly, prospective homebuyers increasingly believe that now is a bad time to buy a home, according to [Fannie Mae](#).

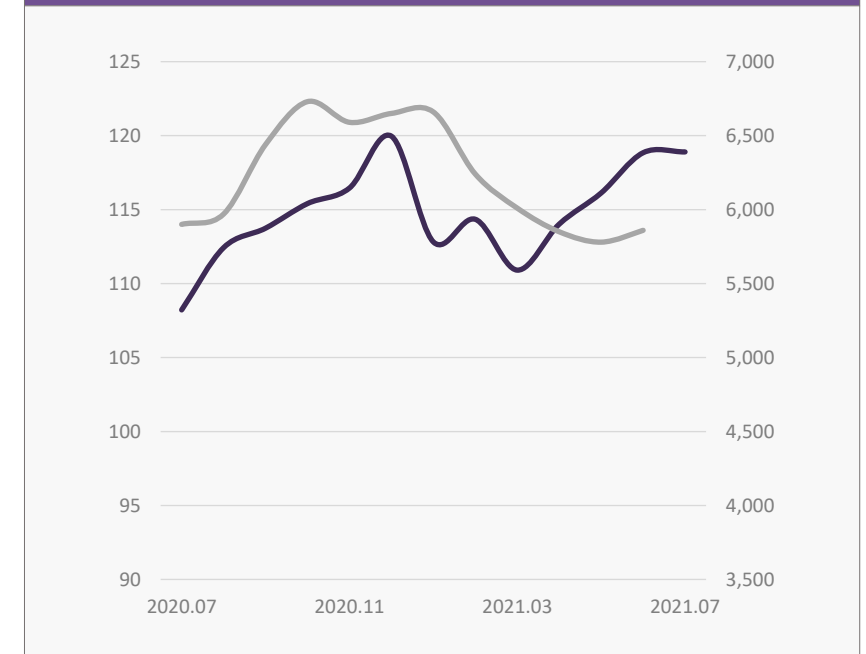
Overall, strong housing demand is likely to keep housing sales elevated, though affordability constraints may weigh more heavily on the market later this year.

Housing Sales Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months



Technical Appendix



Key Findings

Three individual AOLs demonstrated strong correlation and leading properties against five target macroeconomic indicators.

Summary Of Results							
LEGALSHIELD AREA OF LAW	TARGET MACRO INDICATOR(S)	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)	TRACKS HISTORICAL TREND?	ESTIMATED LEAD	ROBUST OVER TIME?
Bankruptcy	Bankruptcies	0.75	0.74	0.22	✓	≈ 1 mo.	✓+
Foreclosure	Foreclosures	0.96	0.88	0.47	✓	Coincident*	✓+
Real Estate	Existing Home Sales	0.87	0.65	0.46	✓	≈ 0-1 mo.*	✓

*These indices have a timing advantage over their target indicators due to the release schedule of the target series.

Composite Indices

We developed two composite indexes that are strongly correlated with and tend to lead economic indicators of interest.



LegalShield “Consumer Stress” Index

- ✓ **Component AOLs:** (1) Bankruptcy; (2) Consumer/Finance; (3) Foreclosure
- ✓ **Target Indicator:** Consumer Confidence
- ✓ **Performance:** -0.85 Correlation; 1-3 Month Lead



LegalShield “Housing Construction” Index

- ✓ **Component AOLs:** (1) Real Estate; (2) Foreclosure
- ✓ **Target Indicator:** Housing Starts
- ✓ **Performance:** 0.91 Correlation; 0-2 Month Lead*

*In addition to its statistical lead time, the Index also has a timing advantage over housing starts of roughly one week due to release schedules.

Methodology:

Individual Index Development



Methodology

A six-step process was used to convert LegalShield intake data into potential indices.

1

CONSTRUCT DATASET:

Conduct preliminary data cleaning, processing, and formatting.

2

DETERMINE SCOPE OF ANALYSIS:

Examine differences across plan types and subscriber samples to determine the optimal “subscriber universe” for index development.

3

DEFINE INTAKE METRIC:

Test competing approaches for normalizing intake data.

4

FILTER AOLS:

Evaluate and scope the original list of 65 areas of law (AOLs) to identify the best candidates for index development.

5

TEST:

Run the scoped AOLs through a series of transformations and statistical tests to identify quantitative relationships with key macroeconomic indicators.

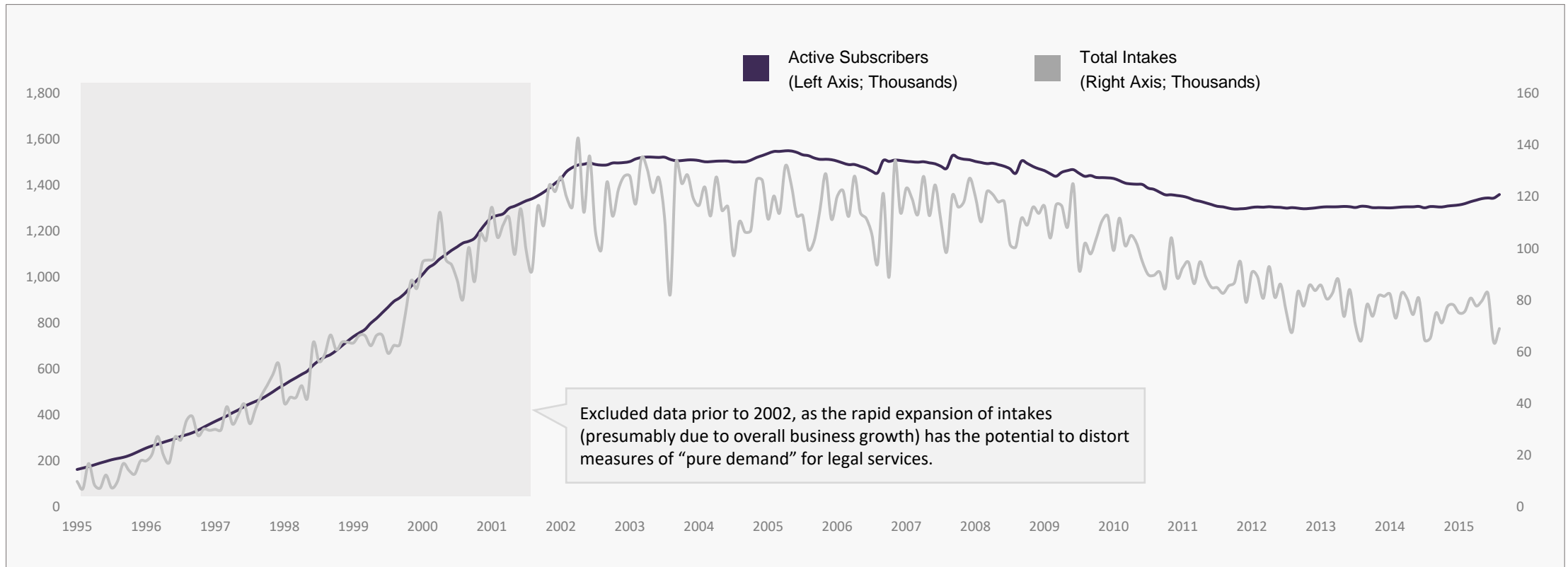
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DEVELOP INDEXES:

Combine specific AOLs into composite indexes and test relationships with key macroeconomic indicators.

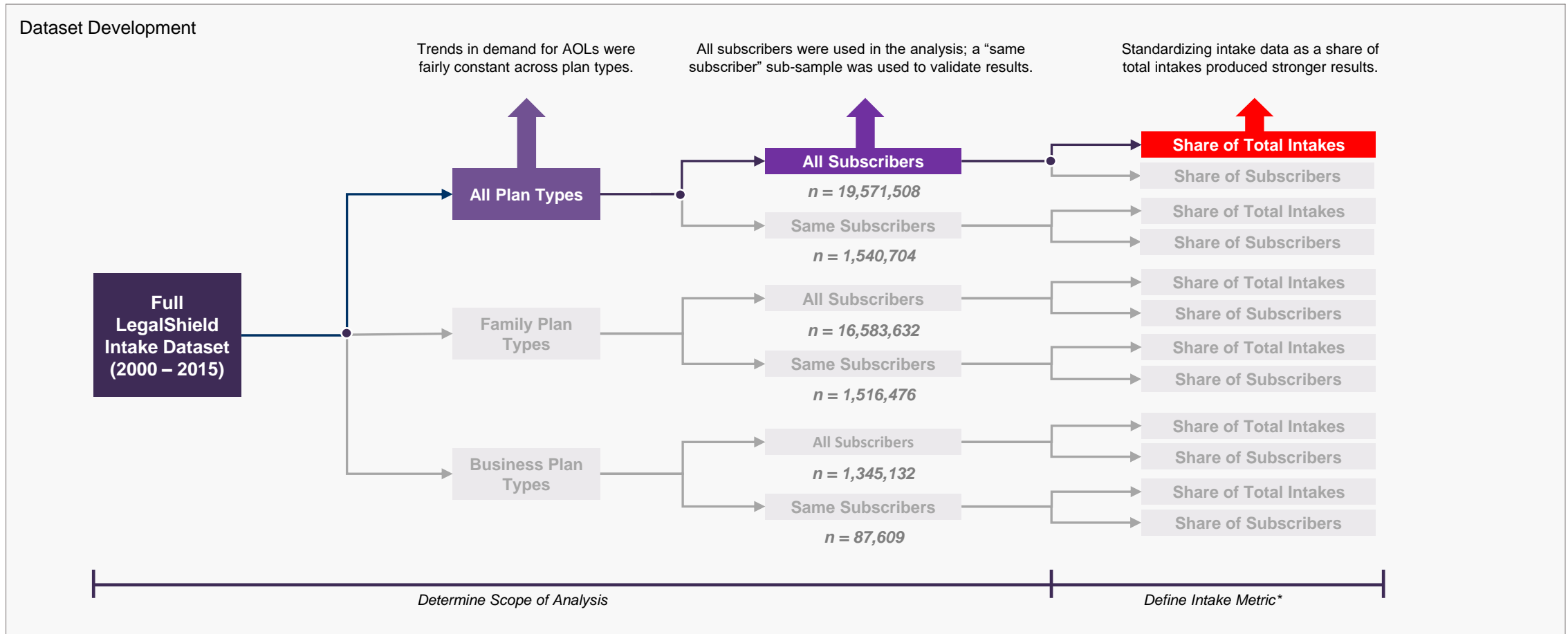
Data Construction & Cleaning

Monthly subscriber and intake data was trimmed to improve the stability of the dataset over time.



Analytical Scope

Testing and index development used intake data from all subscribers across all plan types, standardized by total intakes.



*Standardizing intake data as a share of active subscribers controls for the change in the size of the subscriber base over time. Standardizing intake data as a share of total intakes controls for shifts in the relative demand for different AOLs over time.

Filter AOLs

Out of 65 AOLs in the original intake data, a three-step filtering process identified 27 as suitable candidates for index development.

Scoping Intake Data

1

ORIGINAL DATASET:

Historical intake data from LegalShield included 65 AOLs.



2

CONSOLIDATE AOLs:

Consolidating “like” AOLs reduced the number from 65 to 49.



3

CRITERIA 1: HISTORICAL DATA

18 AOLs lacked sufficient historical data.



4

CRITERIA 2: NARROW SCOPE

4 AOLs were defined too broadly to support a specific index narrative, leaving 27 “qualifying” AOLs.



Filter AOL

Detailed Inclusion Filter Results (1/2)

ID	LEGALSHIELD AREA OF LAW	ASSOCIATED WITH +/- LIFE EVENT	HISTORICAL DATA	NARROW SCOPE	INCLUDE IN DATASET
1	Administrative Law	Ambiguous		✓	
2	Automobile Accident	-	✓	✓	✓
3	Banking	Ambiguous	✓		
4	Bankruptcy	-	✓	✓	✓
5	Business License, Fees, etc.	Ambiguous	✓	✓	✓
6	Civil Litigation	-	✓	✓	✓
7	Collection	-	✓	✓	✓
8	Consumer/Finance	Ambiguous	✓	✓	✓
9	Contract	Ambiguous	✓	✓	✓
10	Corporate	+	✓	✓	✓
11	Criminal	-	✓	✓	✓
12	Divorce	-		✓	
13	Divorce Uncontested	-		✓	
14	Education	-	✓	✓	✓
15	Elder Law	-	✓	✓	✓
16	Employment	Ambiguous	✓	✓	✓
17	Entertainment	Ambiguous		✓	
18	Estate Planning	Ambiguous	✓	✓	✓
19	Family Law	Ambiguous	✓	✓	✓
20	Firearm	Ambiguous		✓	
21	Foreclosure	-	✓	✓	✓
22	Franchise Law	Ambiguous		✓	
23	General Law	Ambiguous	✓		
24	Identity Theft	-		✓	
25	Immigration	Ambiguous	✓	✓	✓

Filter AOL

Detailed Inclusion Filter Results (2/2)

ID	LEGALSHIELD AREA OF LAW	ASSOCIATED WITH +/- LIFE EVENT	HISTORICAL DATA	NARROW SCOPE	INCLUDE IN DATASET
26	Insurance	-	✓	✓	✓
27	Labor Law	-		✓	
28	Landlord Tenant	-	✓	✓	✓
29	Legal Malpractice	-		✓	
30	Loan Modification	Ambiguous		✓	
31	Medical Malpractice	-	✓	✓	✓
32	Military Law/Security Clearance	Ambiguous		✓	
33	Other	Ambiguous	✓		
34	Patents Combined	+	✓	✓	✓
35	Personal Injury	-	✓	✓	✓
36	Probate	-	✓	✓	✓
37	Product Liability	-		✓	
38	Public Service	Ambiguous		✓	
39	Real Estate	+	✓	✓	✓
40	Request for Service	Ambiguous			
41	Small Claims	-	✓	✓	✓
42	Social Security	-	✓	✓	✓
43	Tax	Ambiguous	✓		
44	Trademarks	+		✓	
45	Traffic	-	✓	✓	✓
46	Veteran's Affairs	Ambiguous		✓	
47	Will Workshop	Ambiguous		✓	
48	Workman's Compensation	-	✓	✓	✓
49	Wrongful Death	-		✓	
TOTAL			31	44	27

Testing

Intake data from the 27 “qualifying” AOLs was then tested against 15 economic indicators of interest to assess potential predictive value.

MACROECONOMIC INDICATORS:

1. Conduct preliminary data cleaning, processing, and formatting.
2. Examine differences across plan types and subscriber samples to determine the optimal “subscriber universe” for index development
3. Test competing approaches for normalizing intake data.

HOUSING INDICATORS:

4. Housing Starts
5. Existing Home Sales (NAR)
6. Residential Construction Permits
7. Small Business Optimism Index (NFIB)

FINANCIAL HEALTH INDICATORS:

8. Total Bankruptcies (Total Filings; Epiq)
9. Delinquencies (All Loans & Leases; St. Louis Fed)
10. Foreclosures (All Mortgage Foreclosures Started; Mortgage Bankers Association)
11. Consumer Credit (Total; Revolving; Non-Revolving)
12. S&P 500 Index
13. Wilshire 5000 Index






CONFIDENCE INDICATORS:

14. Consumer Confidence Index (Conference Board)
15. Small Business Optimism Index (NFIB)

Testing

Three out of the final 27 AOLs demonstrated a strong statistical relationship to a handful of economic indicators.

Scoping Intake Data

- 1 27 SCOPED AOLS:** 27 AOLs were subjected to several rounds of statistical testing. 
- 2 STATISTICAL RELATIONSHIP:** Test for correlation across various transformations. 
- 3 TRACKING HISTORICAL TREND:** Visually assess AOL to determine how closely it tracks its target indicator. 
- 4 LEADING PROPERTIES:** Test for leading / concurrent properties. 
- 5 ROBUST ACROSS TIME:** Confirm that relationships hold across various out-of-sample time periods. 

Testing

Testing included computing various correlations, assessing historical trends and leading properties, and evaluating stability over time.

1

BASIC COORELATIONS:

- Examined the correlation between AOL and target macro indicator using different transformations



2

HISTORICAL TREND & LEADING PROPERTIES:

- Produced charts of transformed AOL and select economic indicators to confirm/reject if AOL tracks indicator's historical trend
- Examined AOLs on both a concurrent and leading basis

3

STABILITY TESTS:

- Performed testing to confirm that relationship between AOL and macro indicator was not driven solely by a specific time period within the dataset and ensure that the relationship holds across time
- Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)
- Test 2: Compared correlations between random samples of the data
- Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)
- Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

Testing

Statistical Relationship Testing, Select Results

Correlation Results (2002 – 2017)				
LEGALSHIELD AREA OF LAW	TARGET INDICATOR	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)
Bankruptcy	Bankruptcies	0.76	0.67	0.20
Foreclosure	Foreclosures	0.96	0.87	0.49
Real Estate	Existing Home Sales	0.85	0.58	0.36

Testing

Historical Trend & Leading Properties Testing, Select Results

Historical Trend & Leading Properties Results (2002 – 2016)				
LEGALSHIELD AREA OF LAW	TARGET INDICATOR	TRACKS HISTORICAL TREND?	LEADING PROPERTIES	APPROXIMATE LEAD TIME
Bankruptcy	Bankruptcies	✓	✓	≈ 1 mo.
Foreclosure	Foreclosures	✓	r	Coincident*
Real Estate	Existing Home Sales	✓	✓	≈ 1 mo.*

* These indices have a practice lead time of varying length due to the release schedule of the target series.

Testing

Intertemporal Stability Testing, Select Results

Stability Test Results (2000 – 2015)							
LEGALSHIELD AREA OF LAW	TARGET MACRO INDICATOR(S)	TEST 1*	TEST 2*	TEST 3*	TEST 4*	OVERALL SCORE	KEY TAKEAWAYS
Bankruptcy	Bankruptcies	✓	✓	✓	✓	✓+	Performed well across all tests
Foreclosure	Foreclosures	✓	✓	✓	✓	✓+	Performed well across all tests
Real Estate	Existing Home Sales	r	✓	✓	✓	✓	Performed well on all but one test

* Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)

* Test 2: Compared correlations between random samples of the data

* Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)

* Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

Methodology:

Composite Index Development



Methodology

A five-step process was used to convert LegalShield data into composite indices.

- 1 SELECT AOLS:** Select individual AOLs to be included in the composite index, based on results of statistical tests and desired index “narrative” (e.g., consumer stress).
- 2 TRANSFORM AOLS:** Compute the month-on-month percent change for each AOL.
- 3 STANDARDIZE:** Create a standardization factor for each AOL, based on its standard deviation. Multiply each transformed AOL by the standardization factor to produce an “adjusted monthly contribution” for each AOL.
- 4 SUM COMPONENTS:** Sum the adjusted monthly contribution across each AOL to produce a monthly index growth rate.
- 5 REBASE TO 100:** Rebase the monthly index growth rate to a given month (January 2000 = 100) and to produce a monthly composite index.

Testing

Historical Trend & Leading Properties Test Results

Historical Trend & Leading Properties Results (2002 – 2016)				
COMPOSITE INDEX	TARGET INDICATOR	TRACKS HISTORICAL TREND?	LEADING PROPERTIES	APPROXIMATE LEAD TIME
Consumer Stress	Consumer Confidence	✓	✓	1 - 3 mo.
Housing Construction	Housing Starts	✓	✓	0 – 2 mo.*

*In addition to its statistical lead time, the Index also has a timing advantage over housing starts of roughly a week due to release schedules.

Testing

Statistical Relationship Test Results

Correlation Results (2002 – 2017)				
COMPOSITE INDEX	TARGET INDICATOR	CORRELATION (INDEX)	CORRELATION (Y/Y)	CORRELATION (Q/Q)
Consumer Stress	Consumer Confidence	-0.85	-0.58	-0.33
Housing Construction	Housing Starts	0.88	0.55	0.23

Testing

Intertemporal Stability Tests

Stability Test Results (2000 – 2015)							
COMPOSITE INDEX	TARGET INDICATOR	TEST 1*	TEST 2*	TEST 3*	TEST 4*	OVERALL SCORE	KEY TAKEAWAYS
Consumer Stress	Consumer Confidence	r	✓	✓	✓	✓	Performed well on all but one test
Housing Construction	Housing Starts	r	✓	✓	✓	✓	Performed well on all but one test

Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)

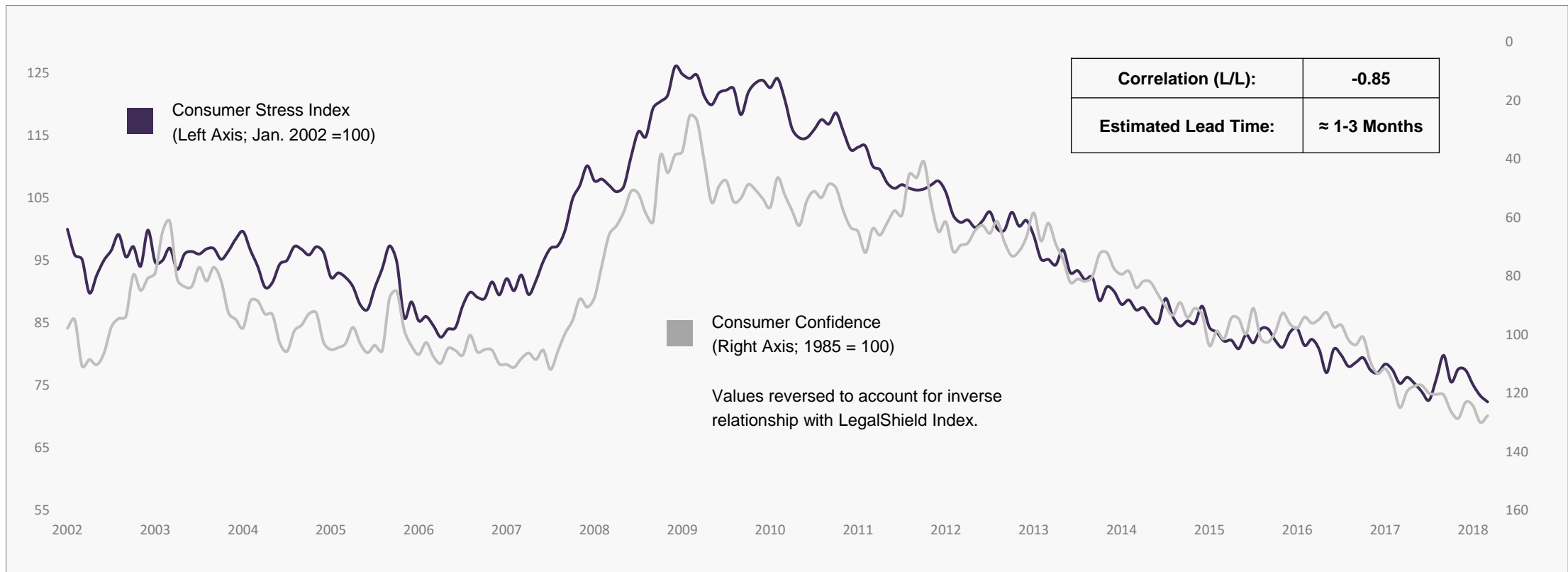
Test 2: Compared correlations between random samples of the data

Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)

Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

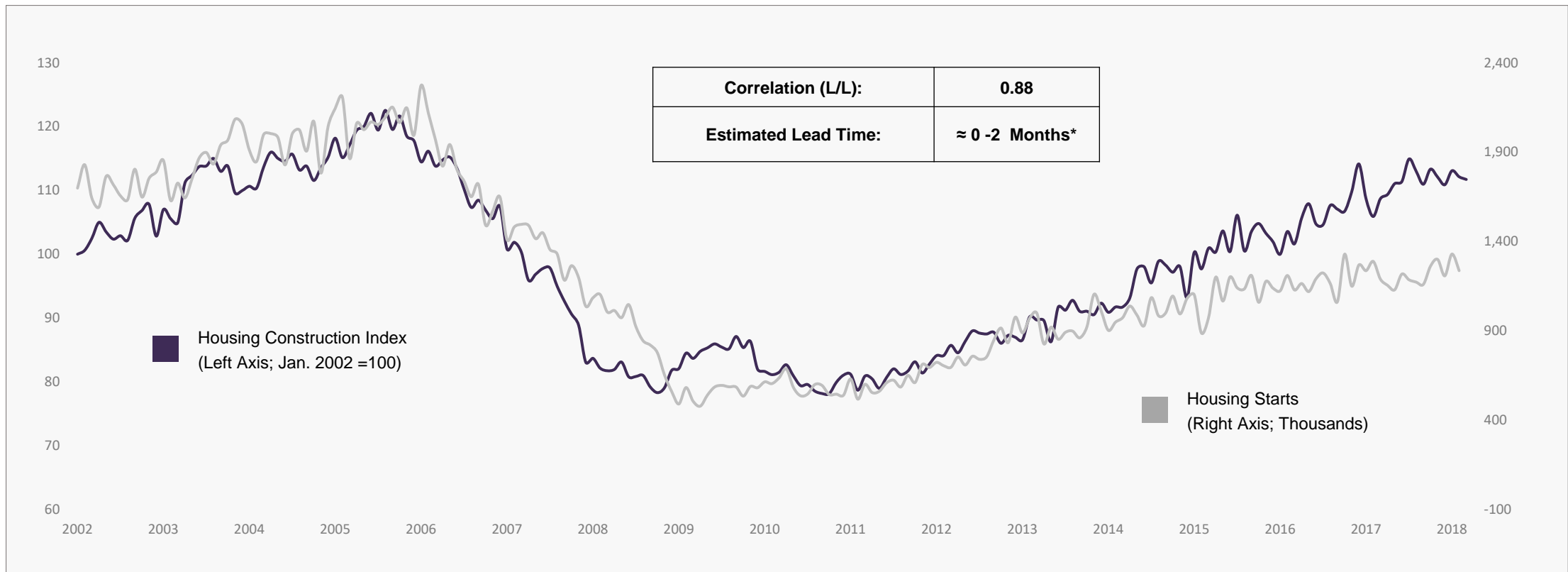
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance



Composite Index: Housing Construction Index

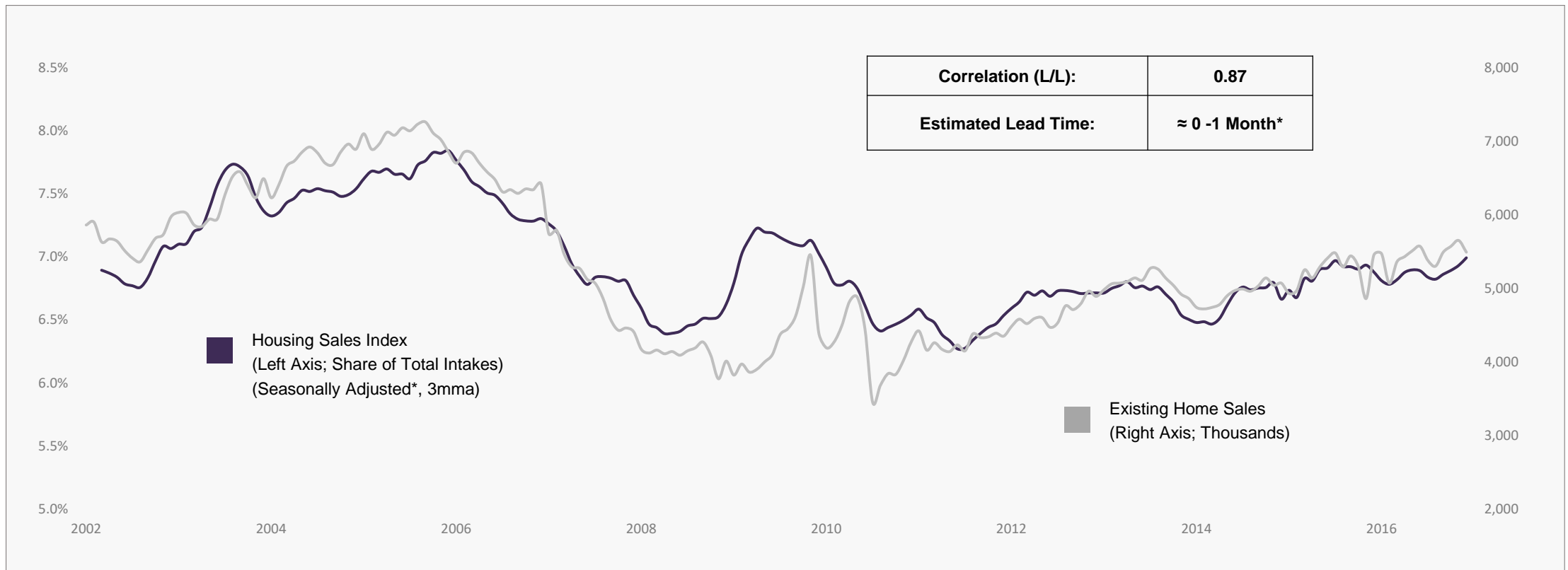
AOLs: Foreclosure; Real Estate*



*The Housing Construction Index component of the Housing Activity Index was seasonally adjusted using the Census Bureau's X-13 ARIMA-SEATS Seasonal Adjustment Program. In addition to its statistical lead time, the Index has a timing advantage over housing starts of roughly a week due to release schedules.

AOL: Real Estate

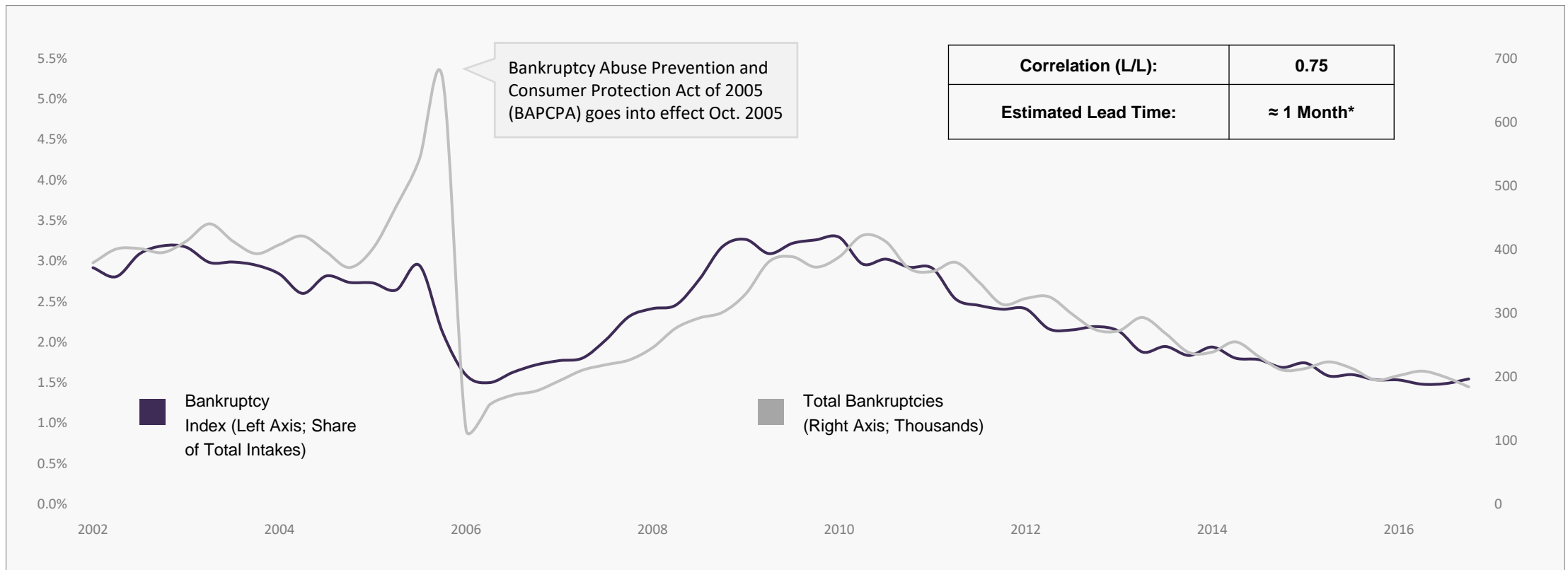
Target Series: Real Estate*



*The Housing Sales Index was seasonally adjusted using the Census Bureau's X-13 ARIMA-SEATS Seasonal Adjustment Program. In addition to its statistical lead time, the Index has a timing advantage of roughly two weeks over existing home sales due to release schedules.

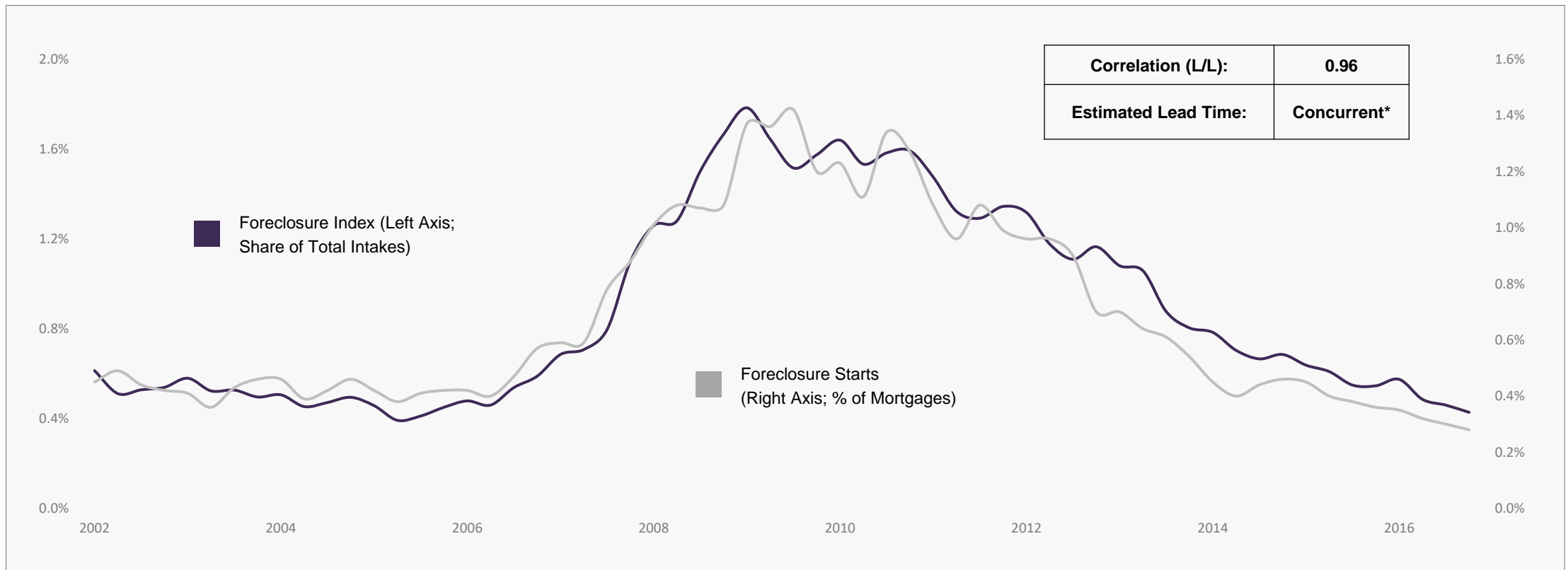
AOL: Bankruptcy

Target Series: Consumer Bankruptcies



AOL: Foreclosure

Target Series: Foreclosure Starts



*Foreclosures starts are statistically coincident with the LegalShield Foreclosure Index, but the Index has a significant timing advantage time due to its monthly release (compared to the quarterly release of foreclosure starts).

Results

Summary of Key Findings

Summary of Results						
LEGALSHIELD LAW Index	TARGET SERIES	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)	APPROXIMATE LEAD TIME	ROBUST ACROSS TIME
Bankruptcy	Bankruptcies	0.76	0.67	0.20	≈ 1 mo.	✓+
Foreclosure	Foreclosures	0.96	0.87	0.49	Coincident*	✓+
Housing Sales	Existing Home Sales	0.85	0.58	0.36	≈ 0-1 mo.*	✓
Consumer Stress	Consumer Confidence	-0.85	-0.58	-0.33	≈ 1-3 mo.	✓
Housing Construction	Housing Starts	0.88	0.55	0.23	≈ 0-2 mo.*	✓

Thank you!



Economic
Stress Index™

