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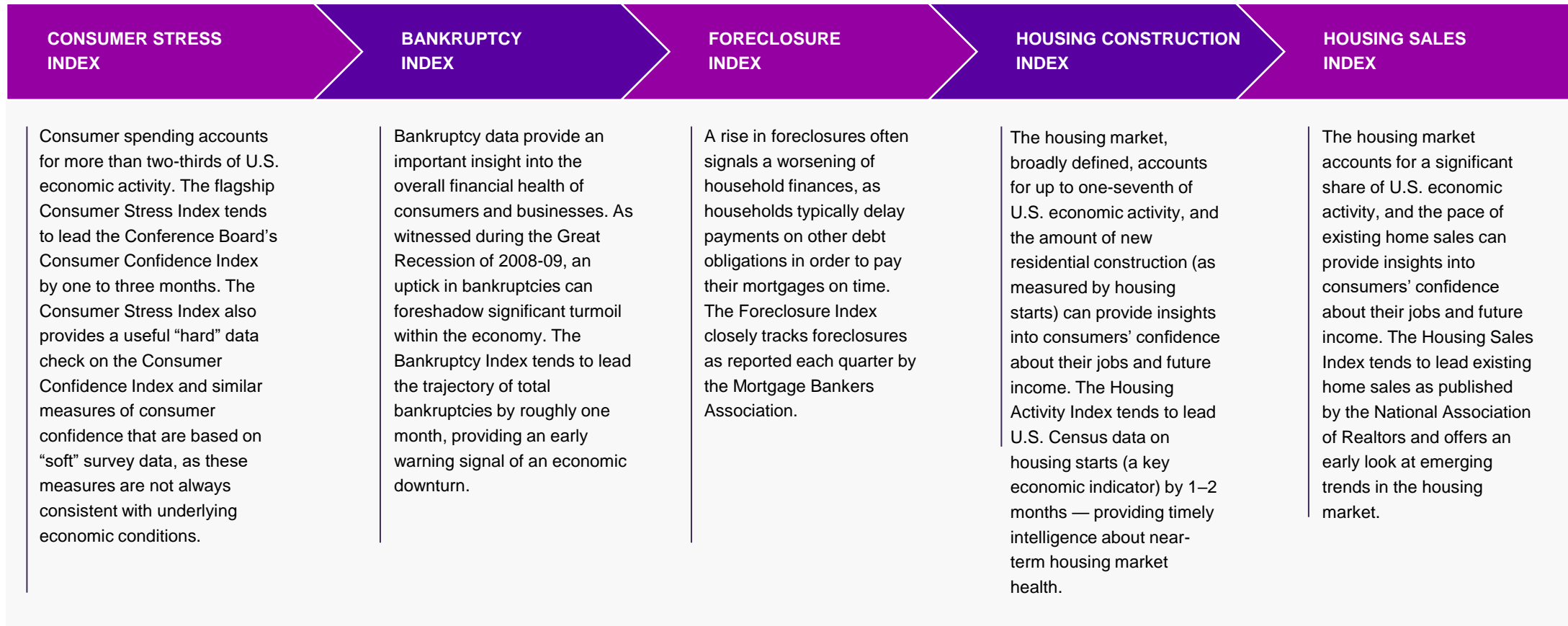
✓ **HIGH-FREQUENCY**
The LegalShield Economic Stress Index is based on data collected on a near real-time basis, and can be refreshed on a weekly, monthly, or quarterly basis depending on the user's needs.

✓ **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	BANKRUPTCY INDEX	FORECLOSURE INDEX	HOUSING CONSTRUCTION INDEX	HOUSING SALES 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 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.	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.	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.	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 was roughly unchanged and was near a record low level in January. The financial cushion consumers built during the pandemic has helped keep stress low in the recent months, even as high inflation and a COVID surge put downward pressure on consumer sentiment.

The LegalShield Consumer Stress Index ticked up (deteriorated) 0.5 point in January to 56.9. Meanwhile, the Conference Board's Consumer Confidence Index fell 1.4 points in January to 113.8 after rising in the prior month.

Consumer financial stress has remained low thanks to amassed savings, rising nominal incomes, and government stimulus. Earlier in the pandemic, above-trend income boosted by federal relief efforts and below-trend spending led to record savings. While the personal savings rate has normalized and most federal relief efforts have expired, a robust labor market has left most consumers financially well positioned.

At the same time, inflation remains a major concern. Headline CPI inflation accelerated to a multi-decade high at the end of 2021, suggesting inflation is becoming more embedded in the economy. Further, there are few reasons to believe that price pressures will ease in the near term: oil prices have surged to their highest level in more than seven years and are approaching $100 per barrel, while inflation expectations continue to rise. Further complicating matters, the recent surge of infections caused by the Omicron variant has taken a toll on some economic activity. For example, the time people spent at retail and recreation establishments fell in January to the lowest level in a year (Google), while a record number of people missed work due to illness or caring for sick a household member (Census Bureau). Reflecting these headwinds, over one-quarter of consumers reported that they were in worse financial shape at the end of 2021 than they were a year earlier.
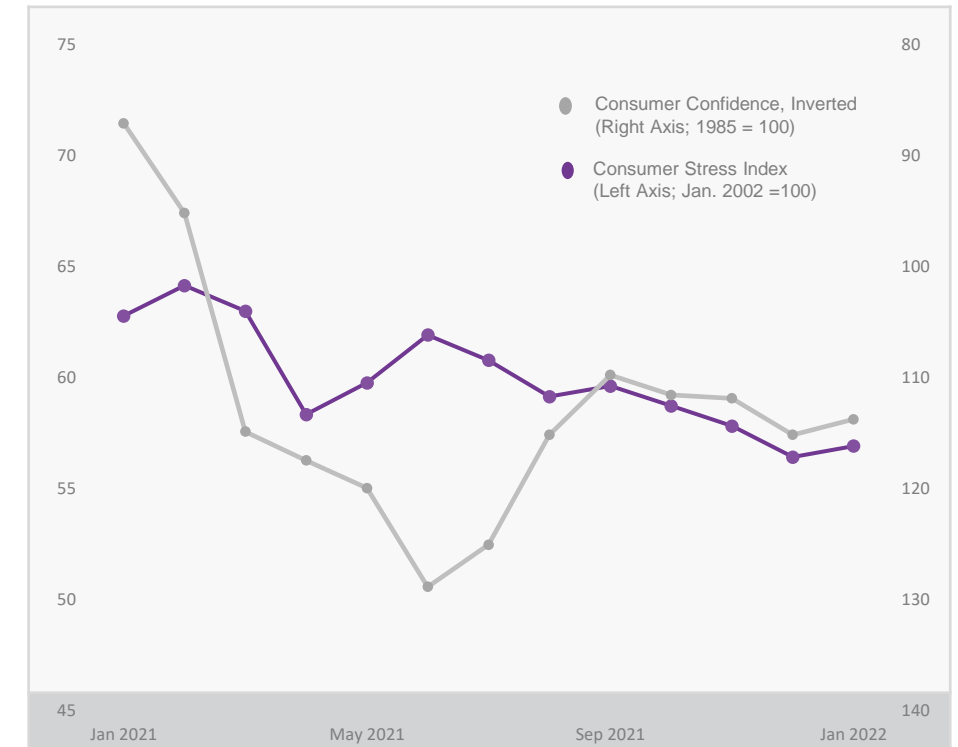
In all, LegalShield data suggests that consumer financial stress should continue to remain low in the near term. However, persistent high inflation could impact consumers' finances and cause the Index to rise later in the year.

Consumer Stress Index

Historical Trend Over Past 16 Years

Consumer Confidence, Inverted
(Right Axis; 1985 = 100)

Consumer Stress Index
(Left Axis; Jan. 2002 =100)

Movement Over Past 12 Months

Consumer Confidence, Inverted
(Right Axis; 1985 = 100)

Consumer Stress Index
(Left Axis; Jan. 2002 =100)
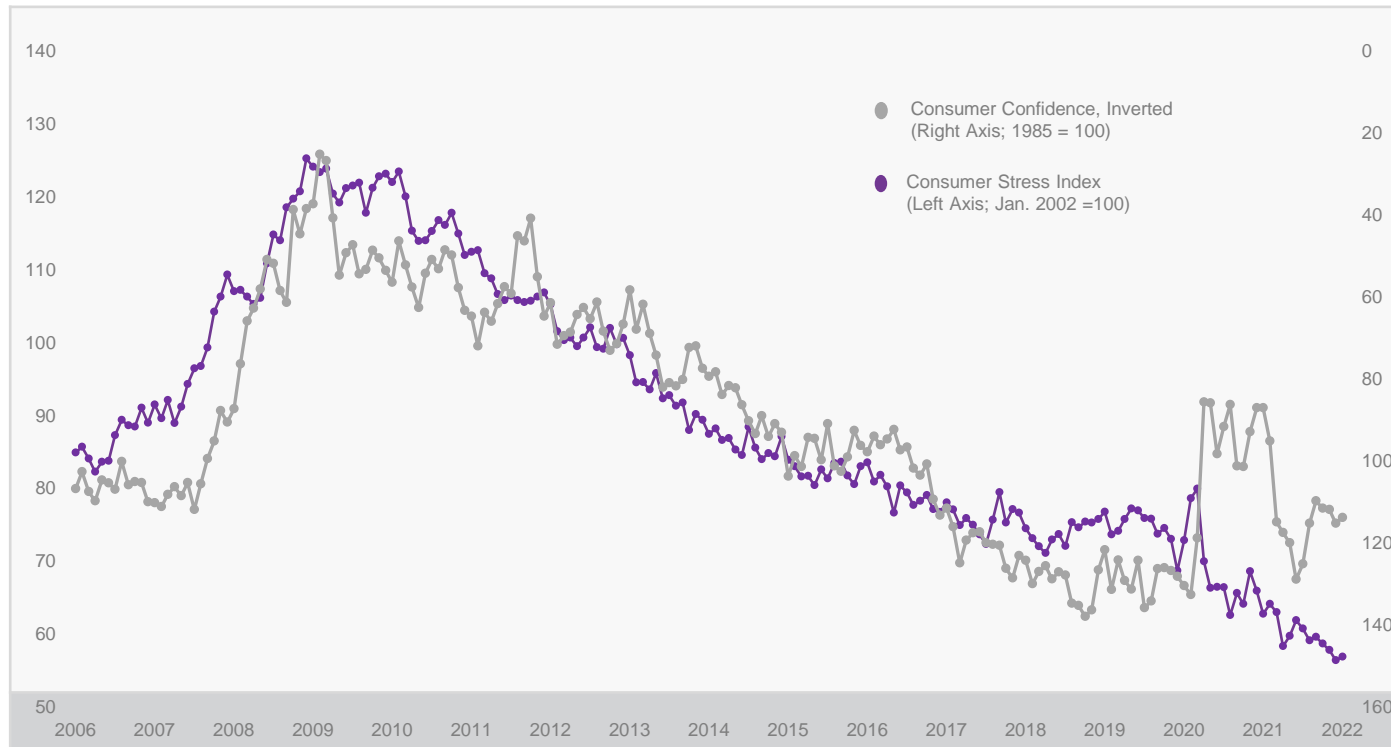
Bankruptcy Index

The LegalShield Bankruptcy Index ticked up in January but remains historically low. The combination of accumulated savings and a strong labor market have kept most consumers in good financial standing, and while high inflation threatens to increase financial stress this year, bankruptcy rates should remain low in the near term.

The LegalShield Bankruptcy Index increased (deteriorated) 1.3 points to 18.7 in January after improving in December. Meanwhile, total seasonally adjusted bankruptcy filings fell -0.5% to 30,550 in December and were down 19% compared to a year ago.

Consumers have thus far remained financially healthy thanks to savings built during the pandemic and a favorable labor market, and bankruptcies remain low despite the return to pre-pandemic spending and borrowing patterns. For example, consumer revolving credit rose to the highest pandemic-era level in November, and December data from Moody's Analytics showed that outstanding bank card debt reached its highest level since March 2020. Rising debt levels may be a sign that excess consumer savings fueled by robust government benefits — which comprised up to 22% of Americans' personal income last year, per Axios — are dwindling. Last year, many consumers benefitted from the expanded child tax credit, which expired in December. According to the Census Bureau, these payments were mostly used to pay off debt, and fund school expenses and childcare. Reduced incomes, combined with high inflation, may increase financial vulnerability among some Americans, as demonstrated by a recent Morning Consult/Axios survey in which the share of adults earning less than $50,000/year whose savings wouldn't cover one month of expenses rose to 40% — up from 28% just two months earlier.

While these headwinds are likely contributing to rising financial stress for some households, LegalShield data suggest they are unlikely to lead to a significant increase in bankruptcies in the near-term.

Bankruptcy Index

Historical Trend Over Past 16 Years

Total U.S. Bankruptcies
(Right Axis; Thousands)

Bankruptcy Index
(Left Axis; Jan. 2002 =100)
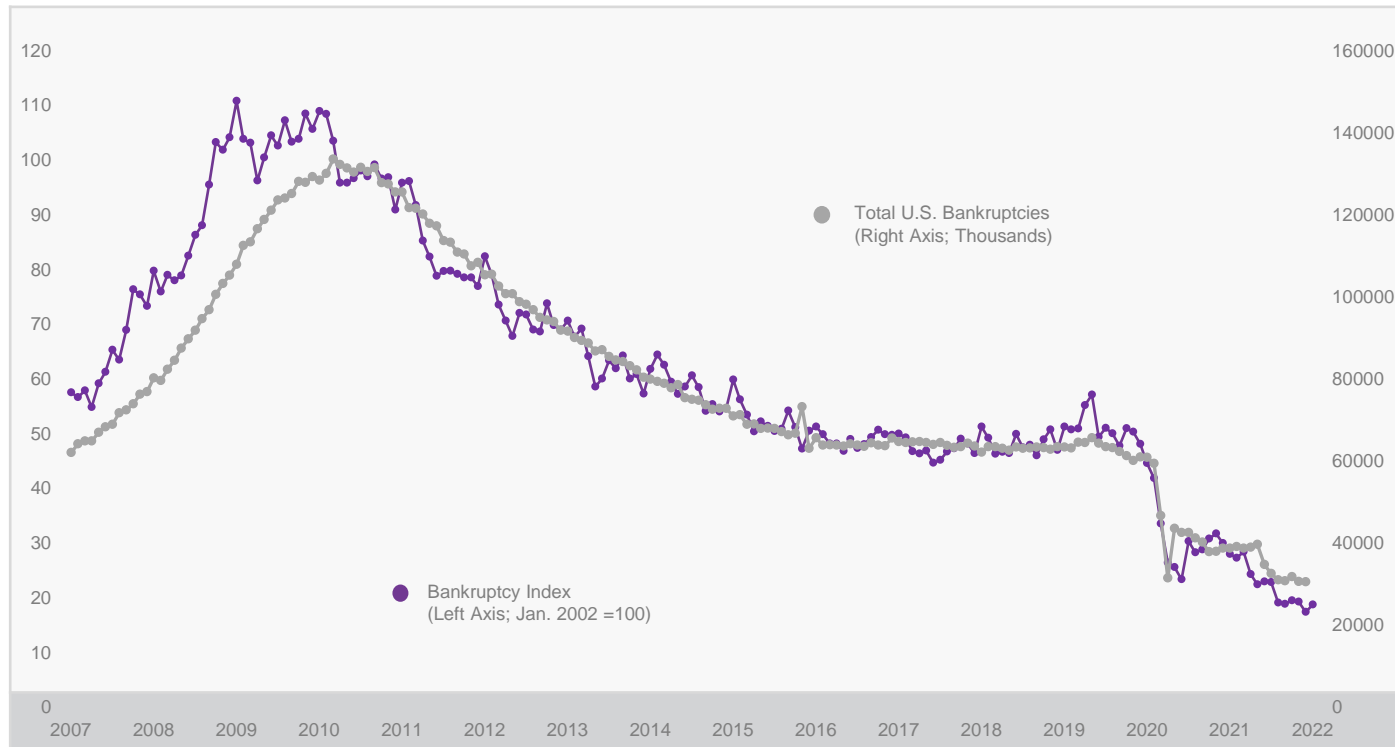
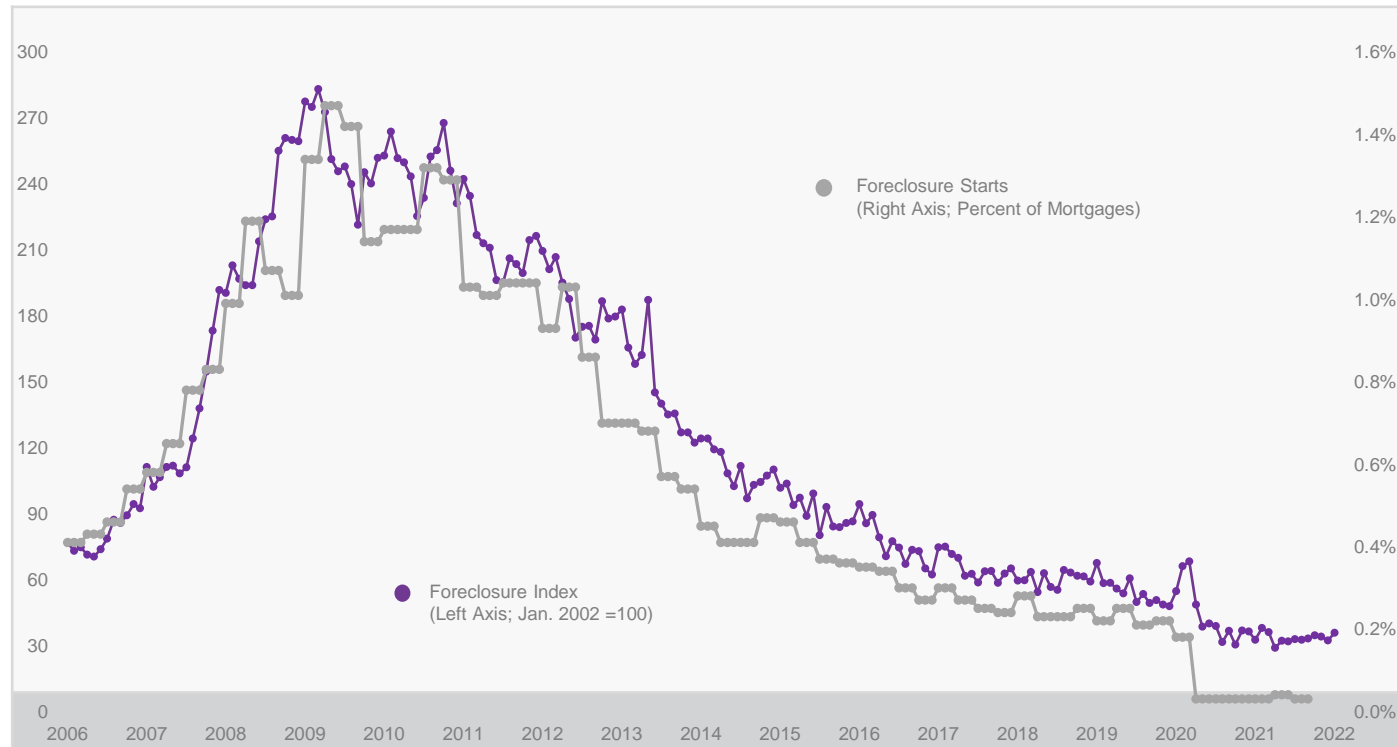## Movement Over Past 12 Months
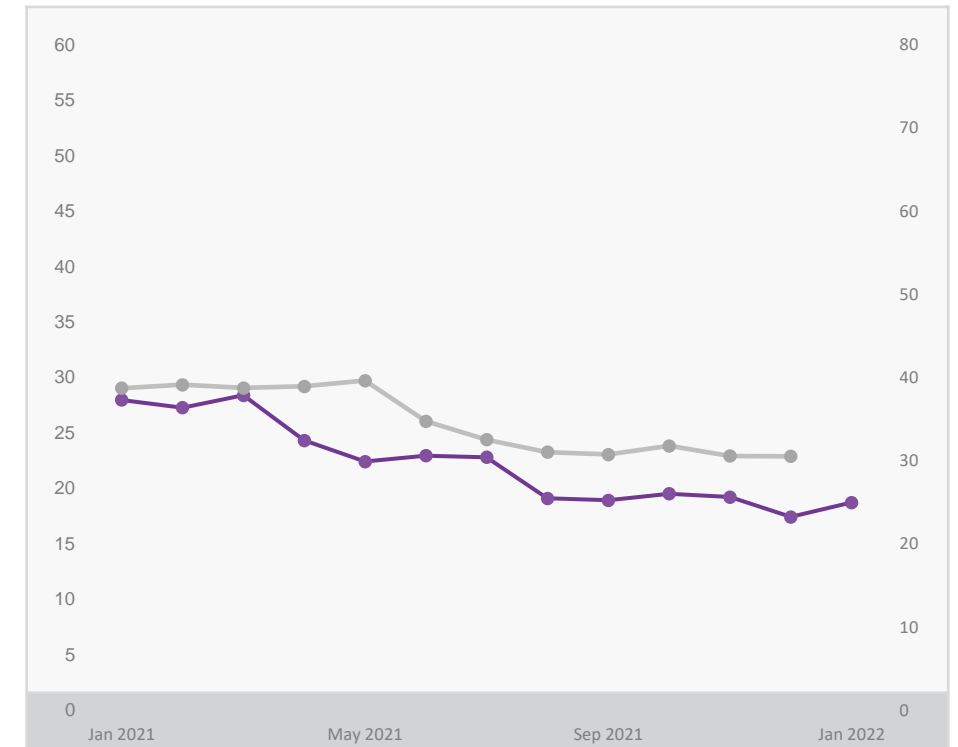
Foreclosure Index

The LegalShield Foreclosure Index increased in January to the highest level in ten months. While foreclosure activity has increased since the federal foreclosure moratorium expired, it remains low by historical standards thanks to elevated home equity and loss mitigation options offered by the government and service providers.

The LegalShield Foreclosure Index increased (worsened) 3.5 points to 35.8 in January. Meanwhile, 17,971 foreclosure filings occurred in December according to ATTOM, down 8% compared to a month earlier but 65% above year-ago levels. Data from Black Knight suggest that a wave of foreclosures is not imminent, as the national delinquency rate at the end of December was at one of the lowest levels on record, down nearly 45% from a year ago and roughly equivalent to February 2020 levels. However, there were still more than half a million "excess" (i.e., above pre-pandemic trend) loans that were 90+ days past due. While these serious delinquencies could point to rising foreclosure activity in the months ahead, the run-up in housing prices has helped homeowners build equity, and service providers continue to offer assistance to those who are struggling.
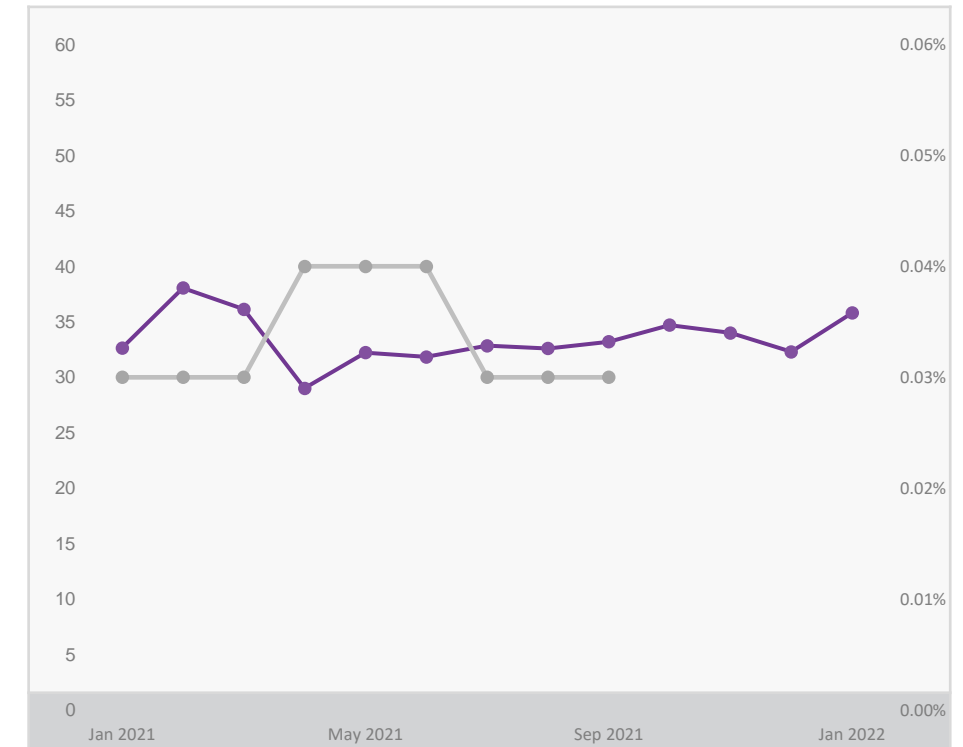
In all, foreclosure activity is predicted to stay low in the near term, though it may begin to rise later in the year, especially if interest rates rise quickly.

Foreclosure Index

Historical Trend Over Past 16 Years

Foreclosure Starts
(Right Axis; Percent of Mortgages)

Foreclosure Index
(Left Axis; Jan. 2002 =100)

Movement Over Past 12 Months

Housing Construction Index

The LegalShield Housing Construction Index decreased for the fourth straight month in January, though it is still historically elevated. Construction activity is expected to remain strong thanks to robust housing demand and a significant backlog of homes waiting to be built.

The LegalShield Housing Construction Index fell 2.1 points in January. Meanwhile, housing starts rose 1.4% in December and were 2.4% above year-ago levels.

While the housing market initially led the economy's recovery from the 2020 pandemic-induced recession, the pace of homebuilding was hampered in late 2021 by supply chain disruptions, high input costs, and shortages of skilled workers and available lots. Indeed, a survey by Zonda found that 90% of homebuilders reported supply disruptions in November, up from 75% in January 2021. While some supply chain constraints eased after the holiday shopping season, homes are still taking weeks longer than usual to finish. Meanwhile, the National Association of Home Builders reports that the cost of residential construction materials is up nearly 20% since December 2020. However, while these headwinds continue to drive up building costs, there are few signs that demand is waning — in fact, quite the opposite, as evidenced by the largest ever backlog of homes authorized for building but not yet started.

Overall, the LegalShield Housing Construction Index suggests that while housing market headwinds may continue to take a toll on construction activity this year, builders should remain busy in the months ahead.

Housing Construction Index

Historical Trend Over Past 16 Years

Housing Starts
(Right Axis; Thousands)

Housing Construction Index
(Left Axis; Jan. 2002 =100)
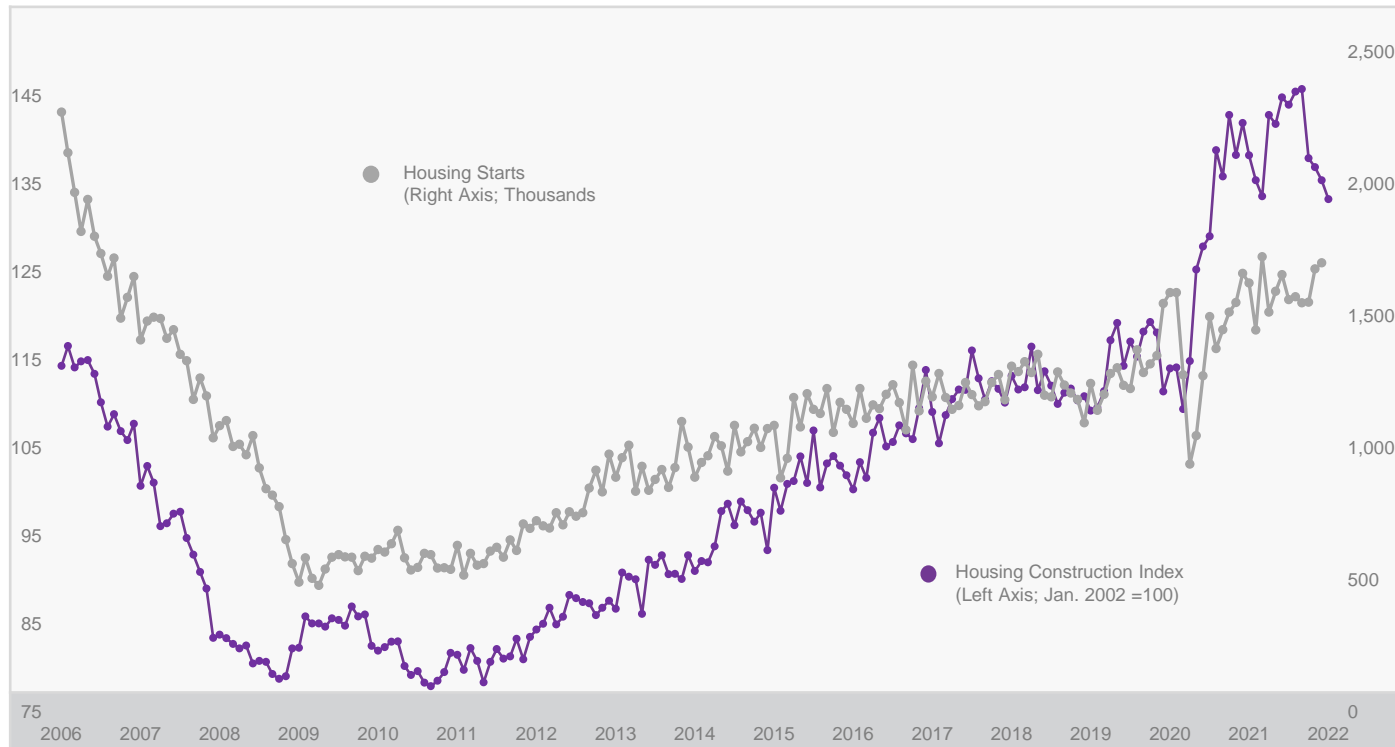
Movement Over Past 12 Months
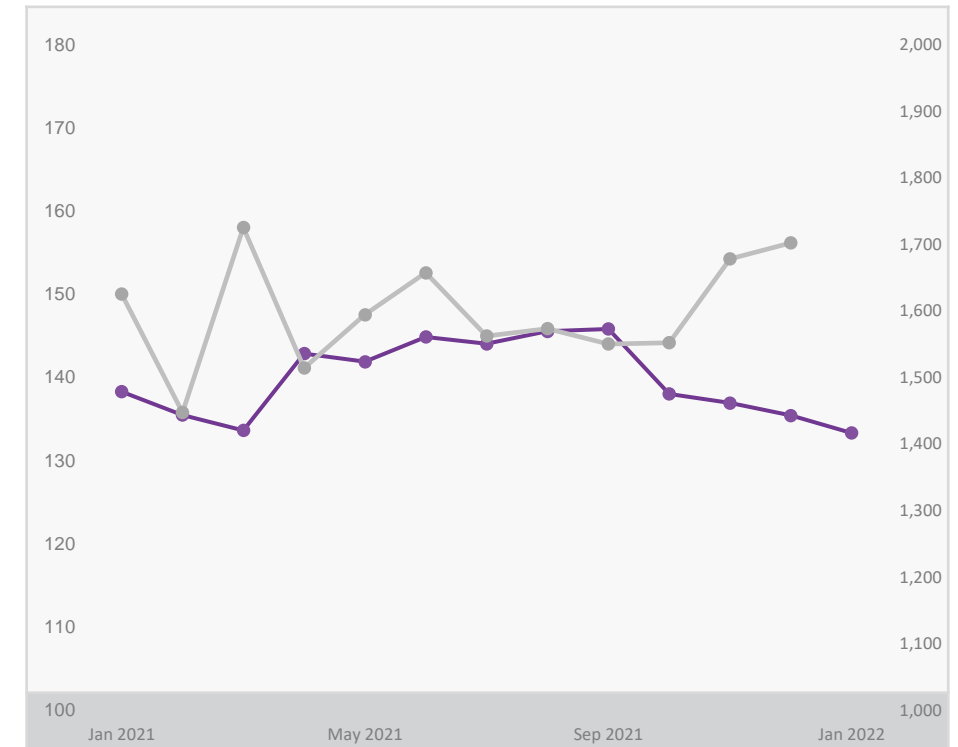
Housing Sales Index

The LegalShield Housing Sales Index ticked up in January after falling to the lowest level since July 2020 in December. Expected interest rate increases will likely slow home sales later this year but may pull demand forward in the near term while rates are still relatively low.
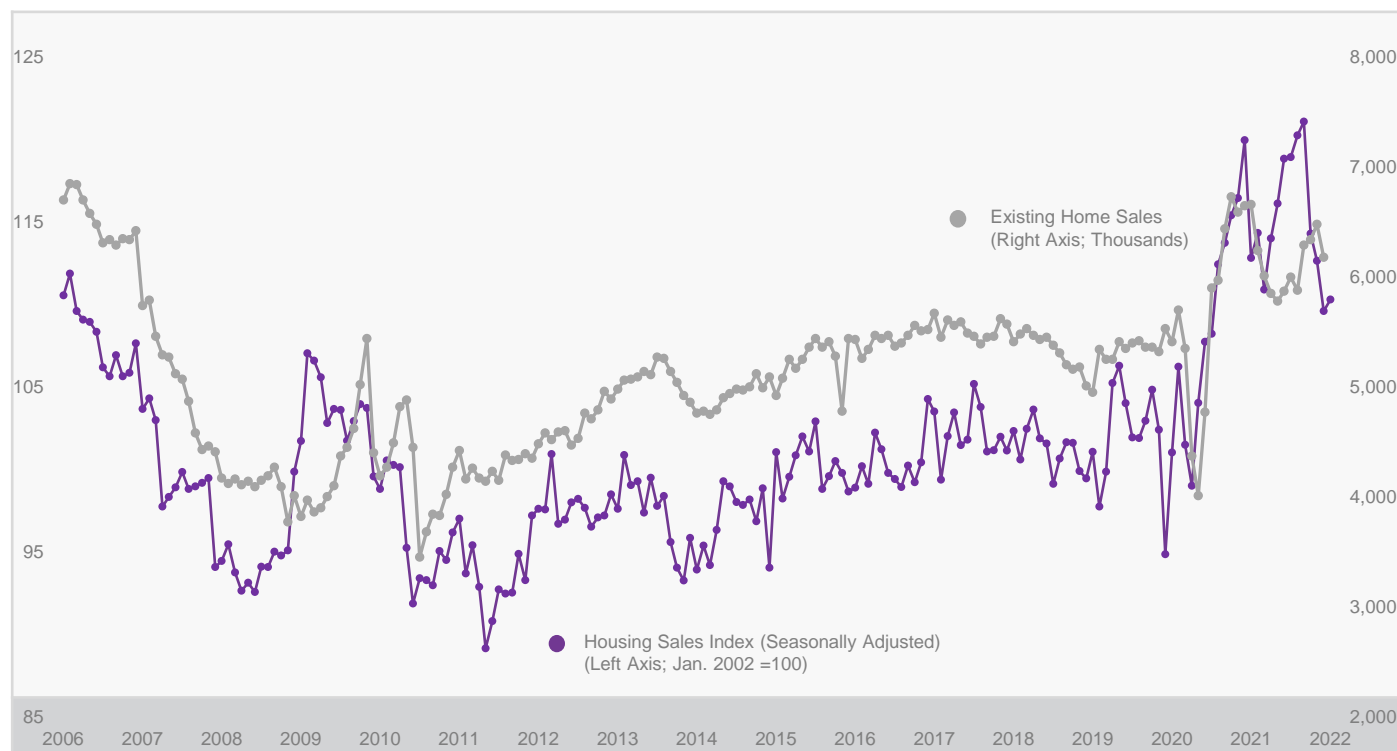
The LegalShield Housing Sales Index inched up 0.7 point in January to 110.3, the first monthly increase after three straight months of decline. Meanwhile, existing home sales fell 4.6% in December and are down 7.1% compared to last year. The National Association of Realtors' index tracking pending home sales, which are a leading indicator of imminent sales, fell 3.8% in December.

Housing demand has remained robust for the past year, and the combination of fierce competition and limited supply led to many months of bidding wars and double-digit price growth in 2021. Per Redfin, the median home sale price rose 16% Y/Y in early January to a record high of $365K. Unsurprisingly, a survey by Fannie Mae found that 76% of respondents considered December a good time to sell a house, while just 26% said it was a good time to buy. Further, widely expected interest rate increases this year will further constrain affordability and could impact overall demand. The Mortgage Bankers Association predicts that rates for a 30-year fixed loan will rise to 4% by the end of the year, leading many economists to predict that both homebuying activity and price appreciation will slow in 2022. In the near term, however, demand for homes may rise as buyers aim to lock in mortgages before the expected rate surge.

Overall, the combination of high prices, low inventories, and rising mortgage rates will likely result in slower home sales growth this year. However, historically high demand should continue to keep the housing market healthy, an outlook supported by LegalShield data.

Housing Sales Index

Historical Trend Over Past 16 Years

Existing Home Sales
(Right Axis; Thousands)

Housing Sales Index (Seasonally Adjusted)
(Left Axis; Jan. 2002 =100)

Movement Over Past 12 Months
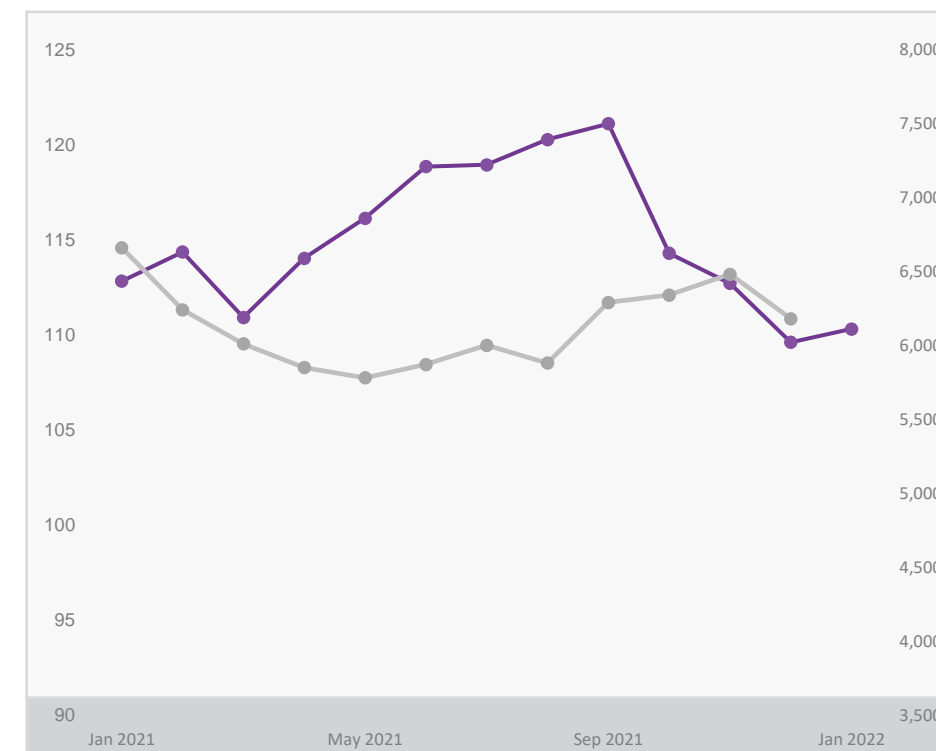
Technical Appendix

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

LegalShield "Housing Construction" Index

✓ **Component AOLs:** (1) Bankruptcy; (2) Consumer/Finance; (3) Foreclosure

✓ **Component AOLs:** (1) Real Estate; (2) Foreclosure

✓ **Target Indicator:** Consumer Confidence

✓ **Target Indicator:** Housing Starts

✓ **Performance:** -0.85 Correlation; 1-3 Month Lead

✓ **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.

6

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.

Active Subscribers (Left Axis; Thousands)

Total Intakes (Right Axis; Thousands)

Excluded data prior to 2002, as the rapid expansion of intakes (presumably due to overall business growth) has the potential to distort measures of "pure demand" for legal services.
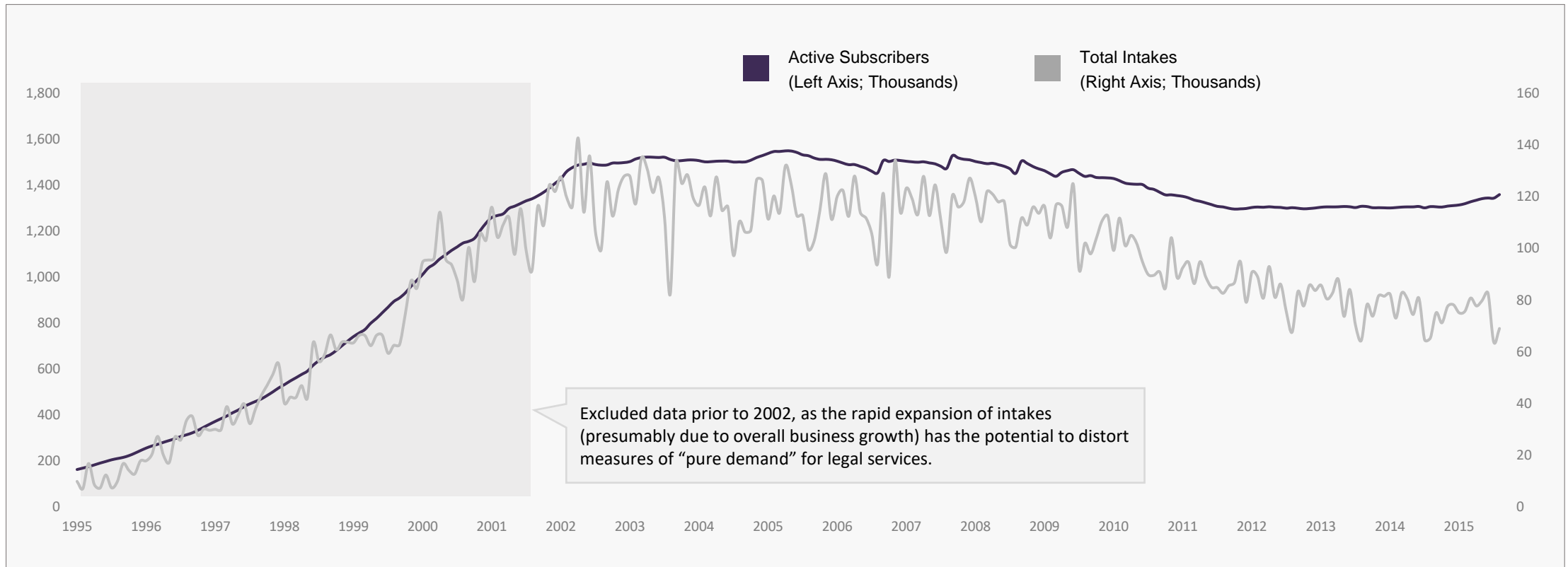
Analytical Scope

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

Dataset Development

Trends in demand for AOLs were fairly constant across plan types.

All subscribers were used in the analysis; a "same subscriber" sub-sample was used to validate results.

Standardizing intake data as a share of total intakes produced stronger results.

All Plan Types

All Subscribers
n = 19,571,508

Same Subscribers
n = 1,540,704

Share of Total Intakes
Share of Subscribers
Share of Total Intakes
Share of Subscribers

Full LegalShield Intake Dataset (2000 – 2015)

Family Plan Types

All Subscribers
n = 16,583,632

Same Subscribers
n = 1,516,476

Share of Total Intakes
Share of Subscribers
Share of Total Intakes
Share of Subscribers

Business Plan Types

All Subscribers
n = 1,345,132

Same Subscribers
n = 87,609
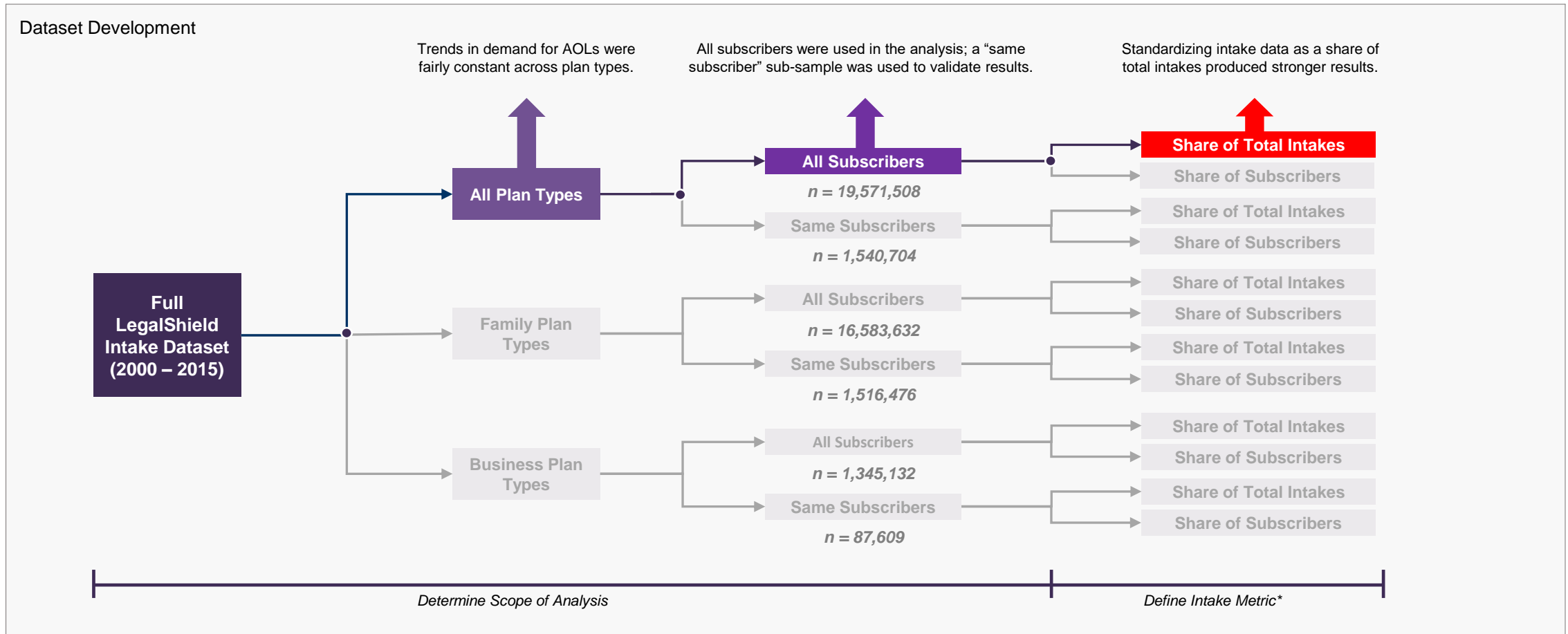
Share of Total Intakes
Share of Subscribers
Share of Total Intakes
Share of Subscribers

Determine Scope of Analysis

Define Intake Metric*

*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.
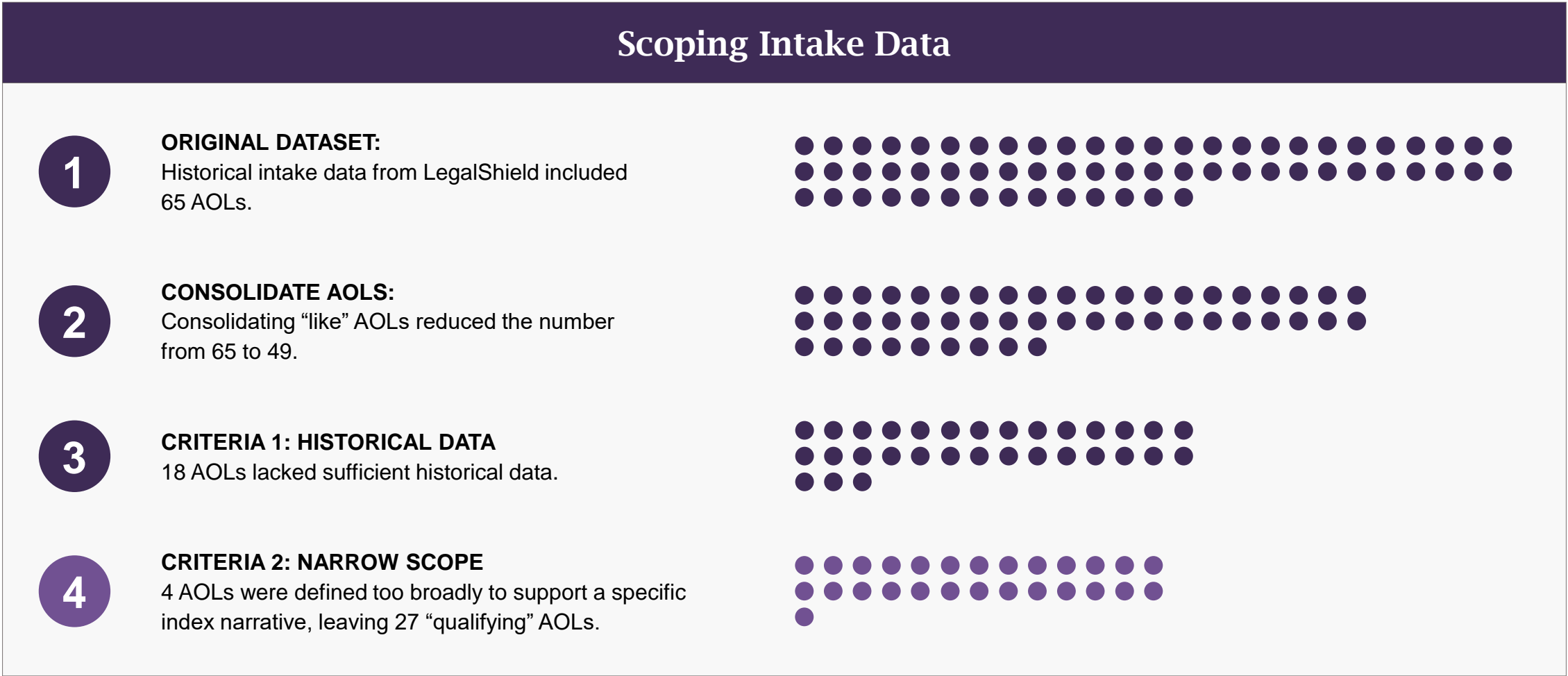
Filter AOL

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

Less Rigorous ←——————————————————————————————————→ *More Rigorous*

| *Level/Level* | *Year/Year* | *6 Month/Month* | *3 Month/Month* | *1 Month/Month* |

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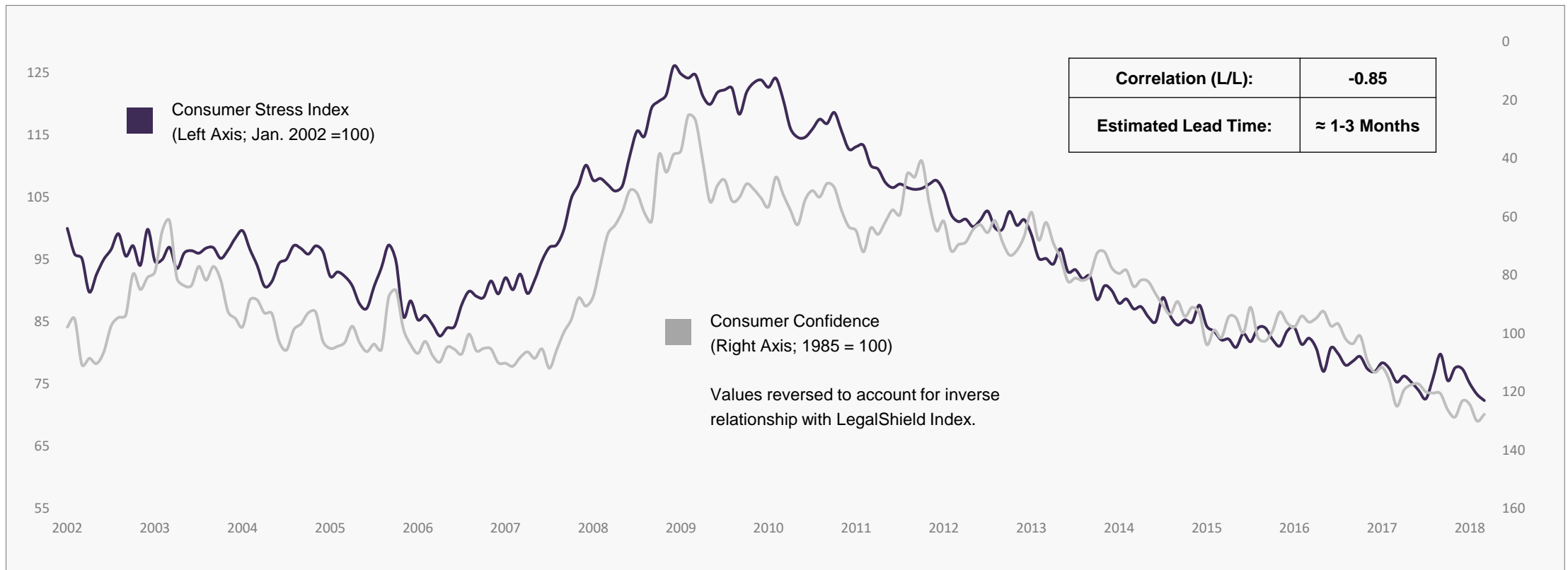
Test 2: Compared correlations between random samples of the data

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
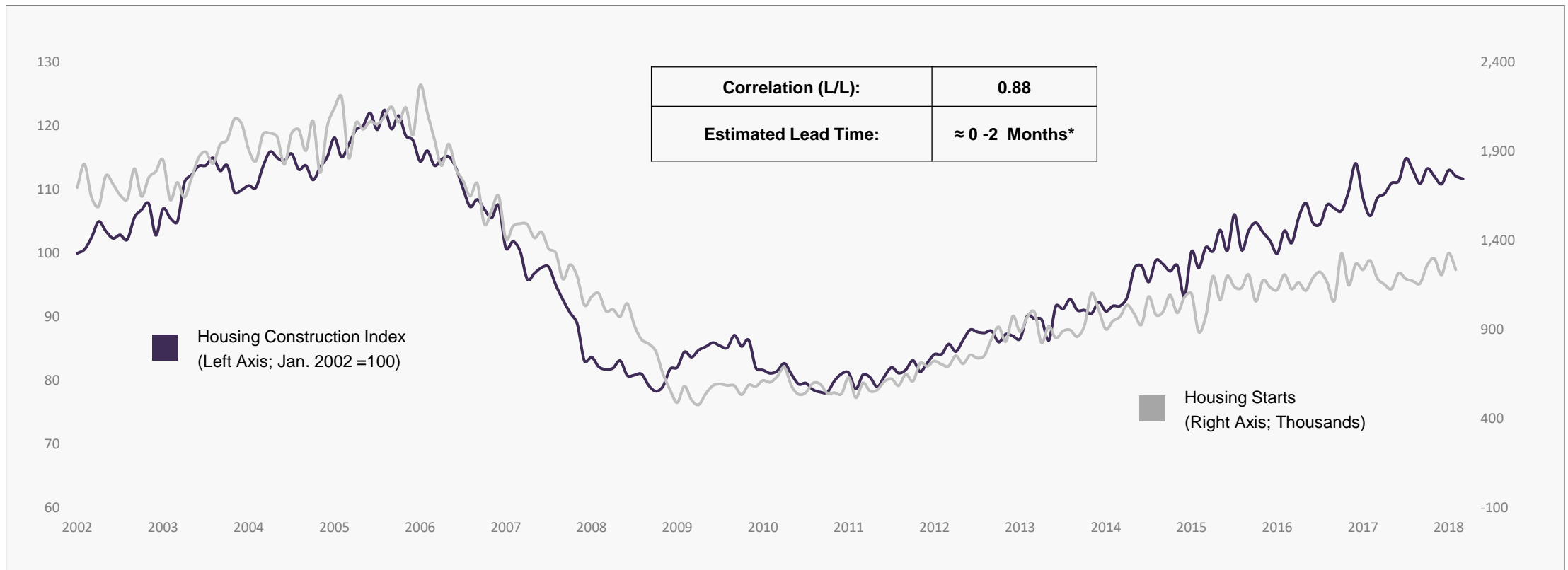
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance

Consumer Stress Index
(Left Axis; Jan. 2002 =100)

Consumer Confidence
(Right Axis; 1985 = 100)

Values reversed to account for inverse
relationship with LegalShield Index.

Correlation (L/L):	-0.85
Estimated Lead Time:	≈ 1-3 Months

Composite Index: Housing Construction Index

AOLs: Foreclosure; Real Estate*

Correlation (L/L):	0.88
Estimated Lead Time:	**≈ 0 -2 Months***

Housing Construction Index
(Left Axis; Jan. 2002 =100)

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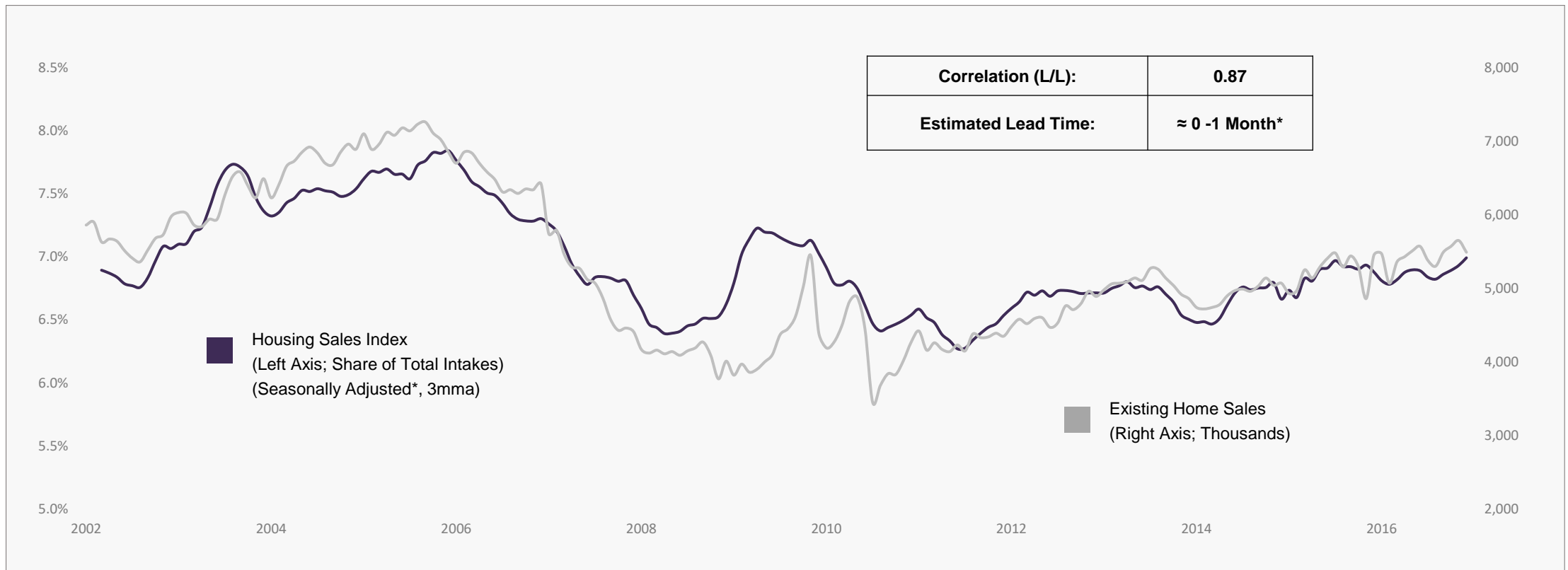
*The Housing Construction Index component of the Housing Activity Index was seasonally adjusted using the Census Bureau's X-13 ARIMA-SEATS Seasonal Adjustment Program. In addition to its statistical lead time, the Index has a timing advantage over housing starts of roughly a week due to release schedules.
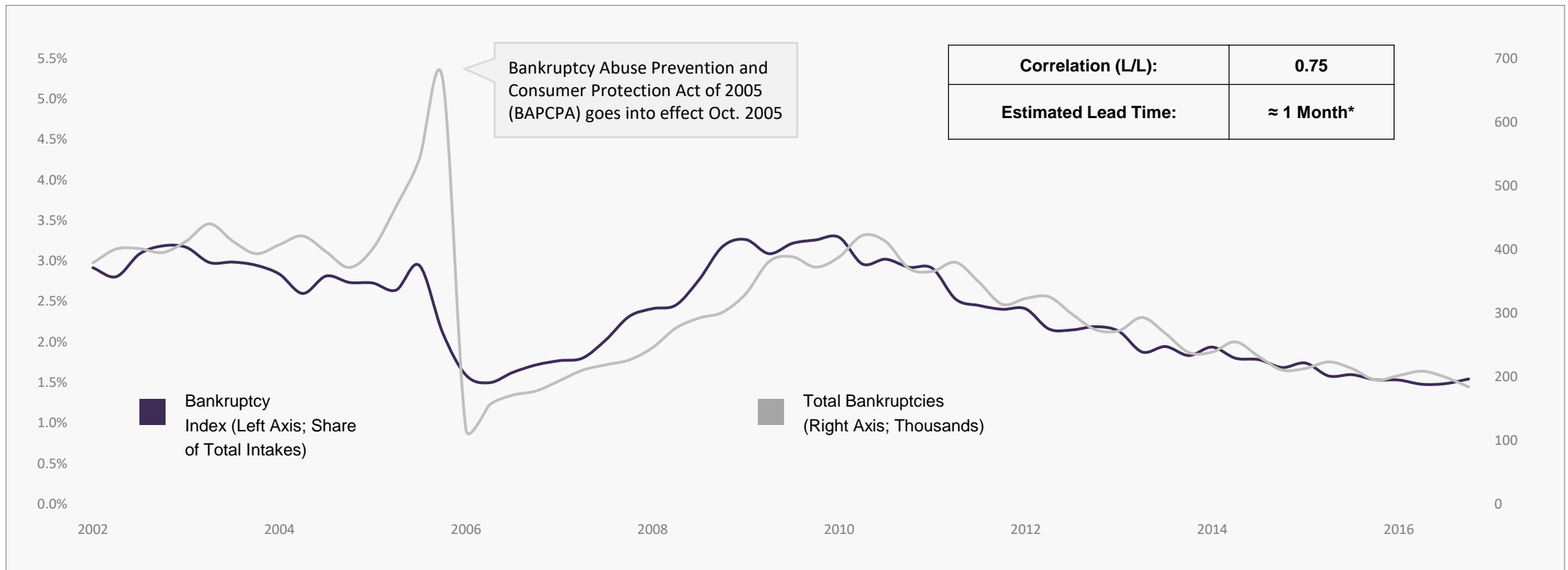
AOL: Real Estate

Target Series: Real Estate*

Correlation (L/L):	0.87
Estimated Lead Time:	≈ 0 -1 Month*

Housing Sales Index
(Left Axis; Share of Total Intakes)
(Seasonally Adjusted*, 3mma)

Existing Home Sales
(Right Axis; Thousands)

*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.
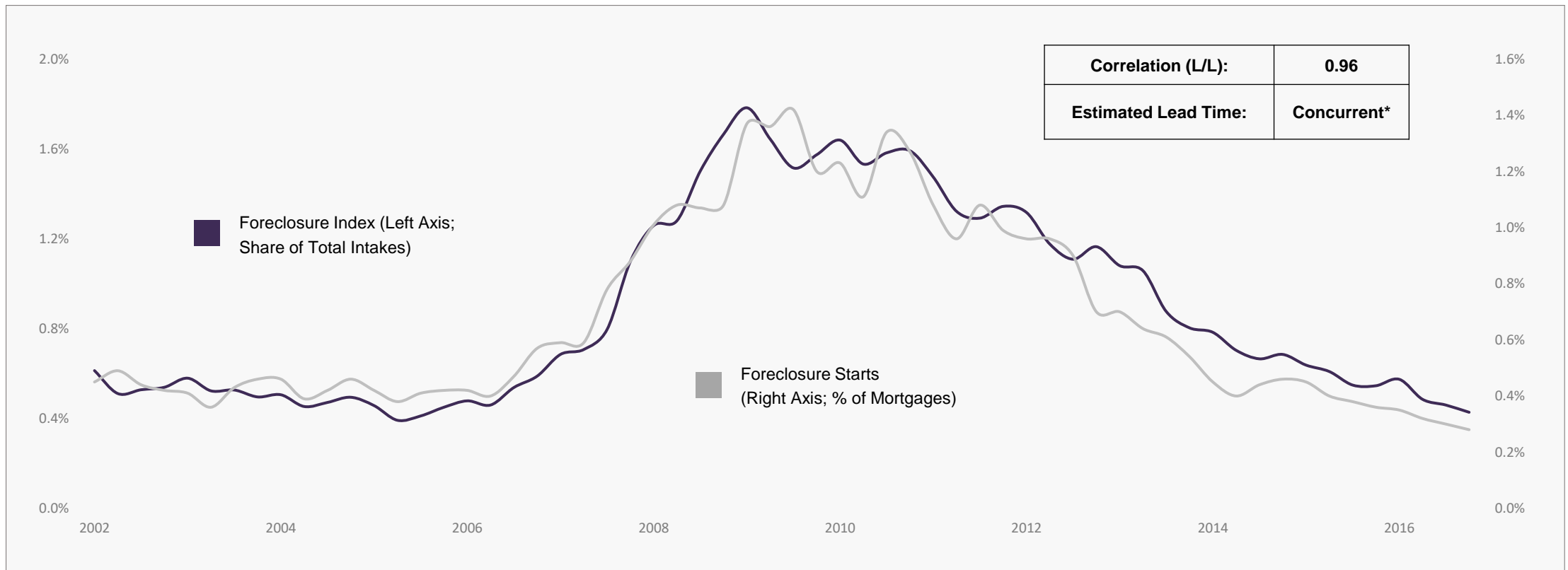
AOL: Bankruptcy

Target Series: Consumer Bankruptcies

Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA) goes into effect Oct. 2005

Correlation (L/L):	0.75
Estimated Lead Time:	≈ 1 Month*

Bankruptcy Index (Left Axis; Share of Total Intakes)

Total Bankruptcies (Right Axis; Thousands)

AOL: Foreclosure

Target Series: Foreclosure Starts

Correlation (L/L):	0.96
Estimated Lead Time:	Concurrent*

Foreclosure Index (Left Axis;
Share of Total Intakes)

Foreclosure Starts
(Right Axis; % of Mortgages)

*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.*	✓