

ASSOCIATE ADVISORS

THE ADVISORS' GOAL is to move the manufacturer-distributor relationship beyond demand fulfillment toward a customer centric mindset around demand creation.

The information the Associate Advisors submit to the SHDA Board is intended to be used for insight into potential opportunities and threats to help the members navigate their businesses forward.

ECONOMIC OUTLOOK SUMMARY:

Signs of Economic Encouragement

- Stable consumer confidence
- Low unemployment and rising wages
- Purchasing Managers Index (PMI) remains strong though forecasts indicate will start to decline
- State and local tax revenues
- Fed decreased interest rates

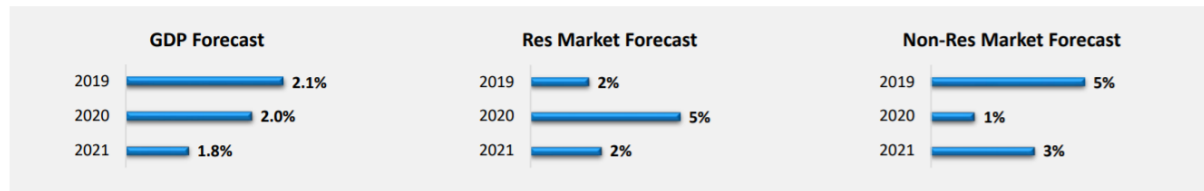
Signs of Economic Risk Factors

- Continued increased annual household debt growth (mortgage, student loans, auto loans, and credit card).
- Global uncertainty: Politicized trade (tariffs and price of raw material, goods, etc), border dispute
- Anti-globalization
- Global Business Weakness
- Unfunded Public Pensions

Economic Snapshot

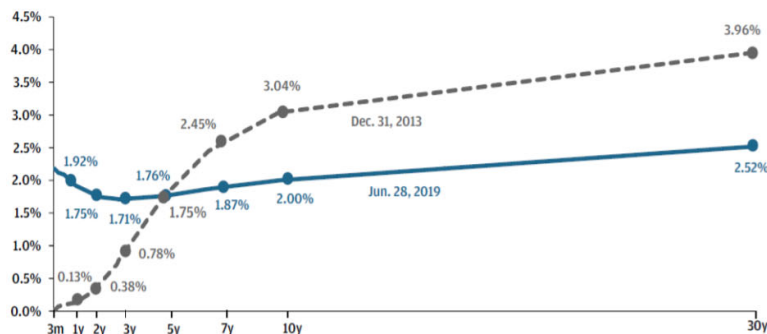
According to FED GDP slowing in 2020 and beyond.

Per ITR, US Economy slows in 2019 and into 2020, causing a slow down in the security industry, 12 months later in 2020.

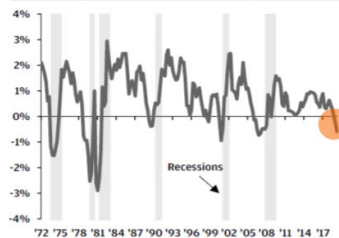


10-Year Government Bond Yield

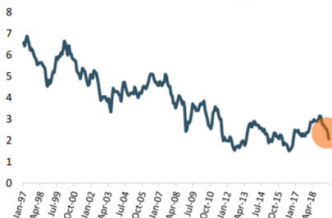
US Treasury Yield Curve



Near Term Forward Spread



Yield on 10 Yr. Treasury Note



Trend of declining yield indicates a flight to safe investments and nervousness in the market. The yield curve inverted in July which is a good predictor of a slower market. Additionally near term forward spread went below zero – in the past this has been followed by a recession.

AIA ABI – June Release – 49.1 (>50 indicates growth in the next 9-12 month)

National

Architecture firm billings decline in June, as indicators of future work weaken

Graphs represent data from June 2018 - June 2019.

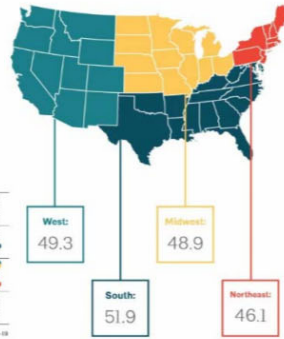
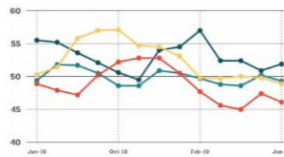


- ABI dropped back to below 50 for the 2nd time this year and since Sep' 17.
- All regions but the South contracting this month. Continued weakness in Northeast.
- Commercial / industrial sectors continued its recovery this month. Institutional, residential sectors continue to contract.
- Hardware demand lags ABI 18-24 months.

Regional

Billings soften further in all regions except South

Graphs represent data from June 2018 - June 2019 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase. Below 50 shows decrease. 3-month moving average.



Sector

Business conditions improve modestly at firms with a Commercial/Industrial specialization

Graphs represent data from June 2018 - June 2019 across the three sectors. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase. Below 50 shows decrease. 3-month moving average.



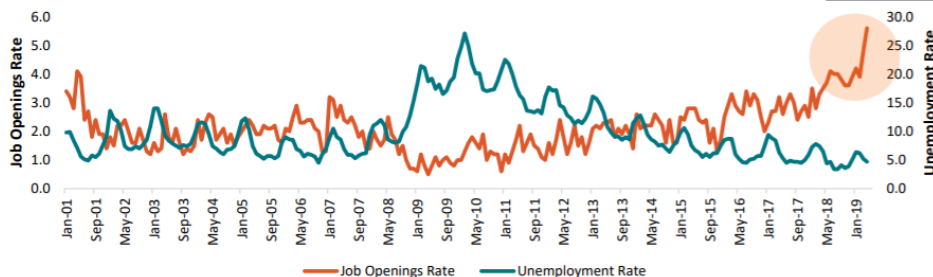
CONSTRUCTION FORECASTING + TRENDS + DISRUPTORS:

- As a leading indicator, the American Institute of Architects (AIA) Architecture Billings Index (ABI) shows all sectors (commercial, institutional, and residential) are growing. Traditionally the demands of hardware lag ABI by 18-24 months.
- Regionally, AIA ABI is showing an increase in business conditions in the following regions: South only

Labor Trends in the Building Construction Industry

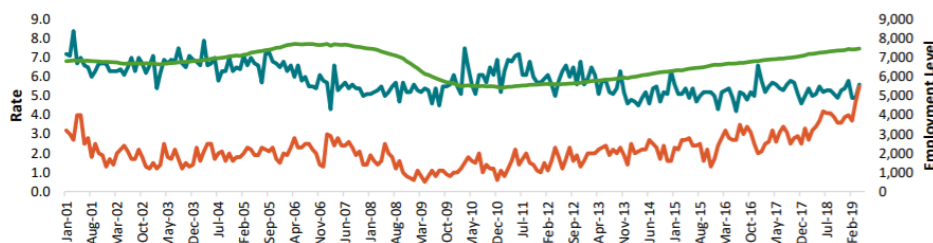
Construction Job Opening Rates vs. Unemployment vs. Hiring Rate

Construction Unemployment vs. Job Openings



Job Openings Rate:
May 2019: 4.7%
May 2018: 3.7%

Hire Rate vs. Job Openings



- The job openings rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.
- The disconnect between unemployment rate and job openings rate continues to grow.
- Openings continue to trend higher despite record low unemployment levels indicating labor shortage.
- Job openings increased at an avg. rate 44% in the last 3 months and +37% in the last 12 months.
- Unfilled construction sector jobs continue to rise.
- Construction employment has increased to 97% of peak (April 2006).
- Construction wage growth is holding +3%

Market Outlook – New Construction Growth by Vertical

Market Segment	Segment %	2016A	2017A	2018A	2019	2020	2021	2019	Trend 2020	2021
Institutional	37%	5.9	2.6	3.2	4.8	0.7	4.6			
Total Education	21%	6.6	1.0	3.3	7.5	1.3	4.3			
K-12	11%	10.2	5.5	6.5	7.1	1.6	6.1			
Higher Ed	8%	2.3	-5.6	-0.5	10.3	0.8	2.1			
Other Ed	1%	7.5	6.2	1.2	-3.3	1.2	2.3			
Total Health Care	9%	2.6	4.4	0.2	1.7	-0.1	3.0			
Hospital	5%	-1.6	0.8	1.9	-3.0	-0.9	5.5			
Medical Office & Clinics	2%	12.4	11.7	-2.6	10.8	1.7	-0.9			
Special Care & Nursing	1%	-1.9	1.2	-8.4	7.1	-3.4	5.2			
Public Health Care	2%	0.3	7.1	-1.3	2.4	5.8	-4.3			
Other Health Care	1%	-3.3	6.1	-13.2	2.5	4.6	-6.2			
Government	2%	-5.4	3.3	11.5	0.8	3.3	7.7			
Religious	1%	4.0	-9.5	-10.2	-0.9	-4.5	1.1			
Amusement and Rec	5%	14.3	7.3	6.7	2.6	-0.4	7.6			
Commercial	50%	11.5	0.3	4.4	8.4	3.5	3.5			
Retail	5%	12.6	11.8	-10.3	-21.3	14.5	0.9			
Office	16%	21.8	-1.1	9.1	9.9	0.3	8.7			
Lodging	8%	23.1	6.3	11.3	10.5	8.9	-4.2			
Manufacturing	15%	-4.4	-13.0	-2.0	13.5	-2.4	0.3			
Warehouse	8%	36.8	30.5	13.7	11.4	11.8	7.1			
Multi-Family	13%	15.1	-1.2	-0.3	3.9	-4.5	1.0			
Total New Construction	100%	9.9	0.9	3.3	6.6	1.4	3.6			

1 – Construction Spending Mix. Construction Spending is not always aligned to hardware spending. 2- Preliminary US Census data subject to change. *12/12 Rates of Change



Education Trends

- State and local tax revenue continue to grow, but the budget stressors of unfunded public pensions and public debt more than off-set the additional revenue. America's schools need \$870B to modernize them (B+) – a funding gap of \$380B
- Growth will be driven by population growth and the need for compliance in safety (active shooter and lockdown trends). 43% of schools can lockdown 100% of their campus compared to 35% in 2014.
- TIA 1436: Language allowing two non-simultaneous releasing operations on classroom doors in existing schools will be added to the 2018 edition of NFPA 101.
- Use of more prefabrication and modular building designs for flexible and changing classrooms.
- Lack of visitor management and key management continues to be a challenge for schools.
- Smart security cameras, wireless door locking systems are included in formal internet of things (IoT) strategy.
- Increased demand for emergency notification
- Apple (and others) launching into space with access control/card manufacturer partnerships to turn mobile device into One Card – Higher education to start
- Access control becoming more widely accepted and in fact a requirement in many establishments

Healthcare Trends

- Aging population will continue to drive healthcare demand.
- Outpatient visits continue to trend upward (for the past ~25 years) while inpatient visits continue to trend downward (for the past ~10 years).
- More Healthcare is moving through online interfaces.
- Real-time location systems (RTLS) will continue to be implemented with ~80% of hospitals not having RTLS
- Healthcare starts have shifted to additions, alterations vs. new construction
- Continued consolidation with GPOs and health systems (affects procurement, standardization (mechanical, access control, providers, etc.) More stakeholders than in the past
- Mental health fastest growing segment with product specific needs (anti-lig)

Residential Keys

- Trend of patented security keys, high security and mechatronic solutions in consolidated markets (i.e. master key systems growth in residential and commercial applications) growing which will impact aftermarket-key replacement potential
- No relevant changes in technology (e.g. raw material) for standard mechanical key blanks
- Electronic solutions continue to enter the residential housing sectors, slightly reducing demand for standard keys – Flow over into MF
- Market strategy opportunity for labor vs labor + product (DIY)
- New players emerging outside of traditional security professional (home automation, HVAC, etc.)
- Increase use of keyless entry systems affects North American market for key blanks
- The emergence of DIY kiosks for key duplication (i.e. KeyMe and Minute Key).

Automotive Channel

- Initial investment in cloning is not necessarily growing, but the presence of more affordable Programming devices has shifted part of the cloning into programming
- Distributors equipping themselves with resources (fleets of vans/technicians) to facilitate the required service to the end user (via the security professional) without requiring additional resource investment on the part of the security professional
- As the customer matures there appears to be a natural shift from cloning to programming.
- More affordable Programming devices and more knowledge of this business have increased the number of professionals who have decided to get into the automotive/programming business
- Automotive manufacturers are evolving their technology and electronic keys/devices manufacturers have to keep investing in R&D to provide new solutions to be offered to the aftermarket industry. Presently the number of solutions is growing YOY
- At the present, automotive locksmiths have opportunity to serve the market with multiple solutions: edge keys (decreasing), transponder keys, universal remotes, look alike original fobs (growing), IRKEs (growing), remotes etc.
- Refurbished products are now competing against look like original, universal remotes and iRKEs, mostly imported but not necessarily low quality
- Overall volumes in traditional car keys (no transponder) are decreasing in favor of keys with transponders. As of 9/1/2007 all Canadian made vehicles must be equipped with an anti-theft device / transponder. The US market is close to 100% coverage.
The market is changing and, manufacturers (like us) can offer very many different types of solutions to continue to serve the automotive aftermarket. As markets change, new opportunities have to be developed and offered.
- It remains to be seen how NFC, which may turn your smartphone into your car key via an app, will impact aftermarket opportunities.

Commerce

The Census Bureau of the Department of Commerce announced that the estimate of U.S. retail e-commerce sales for the fourth quarter of 2018, adjusted for seasonal variation, but not for price changes, was \$132.8

billion, an increase of 2.0 percent ($\pm 1.1\%$) from the third quarter of 2018. Total retail sales for the fourth quarter of 2018 were estimated at \$1,345.2 billion, an increase of 0.4 percent ($\pm 0.2\%$) from the third quarter of 2018. The fourth quarter 2018 e-commerce estimate increased 12.1 percent ($\pm 2.6\%$) from the fourth quarter of 2017 while total retail sales increased 3.1 percent ($\pm 0.9\%$) in the same period. E-commerce sales in the fourth quarter of 2018 accounted for 9.9 percent of total sales.

Forrester Research estimates that 13% of all B2B sales occur online and predicts that B2B ecommerce transactions will reach \$1.2 trillion by 2021.

10 trends to watch out for as eCommerce continues to grow

1. Ecommerce Is Growing but Is Only 11.9% of Retail
2. Multi-Channel Ecommerce Enables Anywhere Buying
3. Ecommerce Automation Is an Accessible Reality
4. Mobile Is the New Normal but Adds Purchase Complexities
5. Native Social-Selling Is Finally Delivering Results
6. International Ecommerce Remains Largely Untapped
7. Micro-Moments Are the New Battleground for Optimization
8. Content Is the Holy Grail of Ecommerce Engagement
9. B2B Ecommerce Dwarfs B2C
10. Fragmentation Is Ecommerce's Biggest Challenge

Amazon will retain its dominance of the U.S e-commerce market, commanding 47.0% of sales this year. Its e-commerce business will grow 20.4% to reach \$282.52 billion. Amazon now commands more than 5% of the total U.S. retail market, according to eMarketer. That's actually down 3% from last summer's predictions.

- **Online Selling & Digital Transformation**

- **What it is:** Digital transformation and online selling is upon us and gaining momentum every day. Leaders of distributors and manufacturers are in various stages of interpreting the long-term impact of this transformation on their organizations. They are beginning to realize that the impact of digital technologies is broad based and far reaching and will potentially impact every customer interaction with their organizations. The digital frontier is uncharted territory, full of exciting possibilities for innovation and productivity. At the same time, it creates more competitive pressure and the potential for businesses without the best digital assets and capabilities to be disrupted.
- **Manufacturer's response:** It is well known that customer experience (Amazon like) and content is critical to success in the digital world of online selling. Manufacturers are working diligently to develop enhanced content to include images, videos, installation instructions, specifications, datasheets, product reviews, etc. to provide an excellent customer experience so they can make informed purchasing decisions. Align closely with your manufacturer partners to ensure that you have all of the available content that they can provide.
- **More information:** <https://www.naw.org/category/distributors-in-the-digital-era/>

Regulations

- **Tariffs**

- **What it is:**

- On June 1, 2018 the US Govt implemented a 25% tariff (section 232) on all imported steel and aluminum into the US
 - On July 6, 2018 it was announced that there would be another 25% tariff (section 301) assessed on goods imported from China going into effect on August 23
 - On September 24, a third tariff was implemented, set to impact \$200B of goods
 - Affects components as well as final finished goods - deep analysis of supply chain by many manufacturers

- **Manufacturer's Response:** Most manufacturers are increasing pricing due to these tariffs - anywhere from 6%-14% is what we've seen so far; some are executing a list price increase on certain lines, some are adjusting buying programs, some are using a surcharge process instead

- **More information:** [United States Trade Representative website](#)

- **CHECK WITH EACH MANUFACTURER FOR IMPACT**

- **Prop 65**

- **What it is:** This directive, The California Safe Drinking Water and Toxic Enforcement Act (Prop. 65), was enacted in Nov. 1986, and requires the state of California to publish and update [a list of chemicals known](#) to cause cancer or reproductive toxicity and to prescribe a minimum threshold for those chemicals of concern. This list contains over 800 chemicals and was last updated June 4, 2014 and can be found at <http://oehha.ca.gov/prop65/getNSRLs.html>. If you sell a product into California, that product has to be clear of any 'known' chemicals OR have the appropriate warning labels.

- **Manufacturer's response:** Anyone selling products into CA is responsible for making sure products are compliant to the warning regulations. Manufacturers are incorporating this warning language into product labeling. As it relates to product currently in stock at wholesalers: manufacturers are leaving it to the wholesalers to ensure the product they ship into CA has the appropriate warning labels. Additional information around specific products and materials in those products should be requested directly from the manufacturer.

- **More information:**

Materials	Most Frequent in Litigation
<ul style="list-style-type: none">● 900+ Chemicals & Substances● 8 on Frequent Litigation List	<ul style="list-style-type: none">● Lead● 5 phthalates● Cadmium● Hexavalent Chromium● Nickel

- The Office of Environmental Health Hazard Assessment (OEHHA) has established safe harbor levels (levels of exposure that trigger the warning requirement) for some, but not all, listed chemicals.
- For chemicals with no safe harbor levels, a company must notify the public with a “clear and reasonable” warning before knowingly and intentionally exposing anyone to a listed chemical unless the exposure poses “no significant risk of cancer” (as defined by the Act) or is significantly below levels observed to cause defects or other reproductive harm.
- **The warning message must include the following language:**
- *For consumer products that contain a chemical known to the state to cause cancer:*
- **WARNING: This product contains a chemical known to the State of California to cause cancer.**
- *For consumer products that contain a chemical known to the state to cause reproductive toxicity*

- **General Data Protection Regulation**

- **What it is:** The **General Data Protection Regulation** (EU) 2016/679 ("GDPR") is a regulation in EU law on data protection and privacy for all individuals within the European Union (EU) and the European Economic Area (EEA). It also addresses the export of personal data outside the EU and EEA areas. The GDPR aims primarily to give control to individuals over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU.^[1] (Source Wikipedia) This became enforceable May 2018 and because it is a regulation and not a directive, does not require individual endorsement by each country in order for it to be enforced.
- **Manufacturer’s response:** Some manufacturers have chosen to enact the same practices around protecting data in other parts of the world as they’ve done in the EU.
- **More information:** <https://gdpr-info.eu/>

- **Conflict Minerals**

- **What it is:** “Conflict minerals,” as defined by the US legislation (a key component of the Dodd-Frank Wall Street Reform and Consumer Protection Act) rules impose strict reporting requirements for publicly traded manufacturers that make products containing certain minerals originating in the Democratic Republic of the Congo (DRC) or adjoining countries. These minerals include coltan, tantalum, tin, tungsten, gold and their derivatives, though the Act leaves the door wide open for the Secretary of State to designate additional minerals in the future. The whole idea behind the legislation is to halt the flow of money to armed groups with mining operations surrounding the DRC that allegedly engage in serious human rights violations and leverage proceeds from mineral sales to fund long-standing regional conflicts.
- **Manufacturer’s response:** According to the rules, manufacturers affected by the legislation will have to provide an annual disclosure on whether their products contain any minerals that originated in the DRC or its nine adjoining countries. That means a detailed, accurate report—named a Conflict Minerals Report in the Act—vetted by a third-party private sector auditor must be provided to regulators.
- **More information:** https://en.wikipedia.org/wiki/Conflict_resource

- **TIA 1436**

- **What it is:** A **Tentative Interim Amendment submitted to revise the 2018 edition of NFPA 101**. TIA 1436 proposed the addition of a line of text in the section addressing classroom doors in existing schools: ***“(3) Two non-simultaneous releasing operations shall be permitted.”*** This successfully passed and language allowing two non-simultaneous releasing operations on classroom doors in existing schools will be added to the 2018 edition of NFPA 101.
- **Manufacturer’s response:** Please work with your manufacturer.
- **More information:** <https://idighardware.com/2019/08/nfpa-101-tia-1436/>

Opportunities

- Use associate members as a resource. Manufacturers are more than willing to help with knowledge, education, advice, etc. Utilize the combined experience of the industry to strengthen your business and market place.
- Operational efficiencies can be realized by digitalization, automation, management of inventory, product data
- New services/technology 'for the last mile'
- E-commerce continues to grow at rapid rates. This trend is not going to change. Ecommerce will continue to increase and take market share over retail sales. There is an opportunity to expand business practices to include the creation and execution of Ecommerce sales.
- Offer products that help the bottom line. For example, in door-dense facilities, the amount of energy being drawn by locks, exits, door accessories and access control devices can contribute heavily to the overall energy use of a facility. Seek out solutions utilizing new energy-efficient technologies. Both electrified door hardware and access control options on the market today can drastically reduce power consumption and save money. Sustainability.
- Electronics continue to gain acceptance and funding. Convergence of Div. 8/28 (products and channels) leading towards a changing landscape.
- The work force is getting younger, as is the association. Take the time listen and strategize on how to best utilize your increasingly, tech minded employees. Learn from the Legacies of the association while the opportunity is available.