ACEC Private Industry Brief

Economic Outlook

2022 End-of-Year Review & Economic Outlook

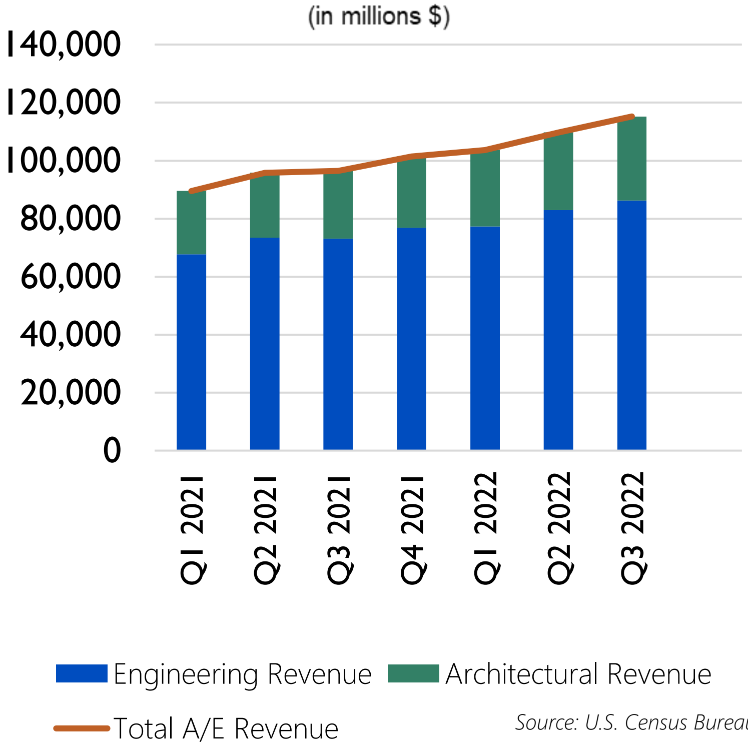
Introduction

In this issue of ACEC's award-winning *Private Industry Briefs* series we provide a summary of the five macroeconomic trends for 2022 including recession, inflation and economic uncertainty, as well as forecasted design and construction spending by market. Also featured is a closer look at funding from the Infrastructure and Investment Jobs Act (IIJA) and what each state will receive in funding.

Sources for the 2022 End-of-Year Review & Economic Outlook include:

U.S. Census Bureau, National Association for Business Economics, FMI Consulting and Investment Banking, ACEC Research Institute, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, Engineering News Record and the General Services Administration.

U.S. A/E Firm Revenues, Q1 2021 – Q3 2022
(in millions $)



Source: U.S. Census Bureau

5 Macroeconomic Trends for EOY 2022

1. Firm Revenues Remain Strong Despite Economic Softening:

Total A/E revenues reached an all-time high at over $115 billion in Q3 2022, according to the U.S. Census Bureau, a 5.1% increase from the previous quarter and a 19.7% increase year-over-year *(see table, below left)*. This is the 9th straight quarter of consecutive growth after dipping in Q2 2020 due to the pandemic-induced recession.

The National Association for Business Economics (NABE) Policy Survey is forecasting a high degree of variance between its 51 professional forecasters. Their Policy Survey Chair Juhi Dhawan said, "roughly one-fifth of panelists believes the U.S. is already in a recession, while nearly half the panelists—47%—expect a recession to begin by the end of 2022 or the first quarter of 2023". The same panel continues to downgrade growth projections and projects a near zero GDP growth in 2023. (*See chart below for what markets are projected to be hot and not through 2026, according to FMI.*)

Continued on next page

Top 3 markets forecasted to be *hot* and *not* through 2026.

Hot:

1. **Transportation (not highway & street) +46%**
2. **Sewage & Waste Disposal +39%**
3. **Water Supply +38%**

Not:

1. **Commercial -35%**
2. **Office -29%**
3. **Residential -21%**

Source: FMI

1400 L Street NW, 4th Floor, Washington DC 20005-2605 P: 202.347.7474 | F: 202.898.0068 | E-mail: acec@acec.org

5 Macroeconomic Trends for EOY 2022

continued

The panel also predicts too much monetary tightness could be the largest downside risk with 75% believing a "soft landing" would be an upside risk. A soft landing is defined as "a period of positive but below potential growth allowing for inflation to normalize and for the economy to avoid a severe recession."

2. Design and Construction Spending Strong Due to IIJA Funding:

The administration has released $185 billion under the IIJA to states by category including transportation, climate, energy and environment, broadband and other projects. Even with thoughts of a recession looming, total construction put-in-place for October 2022 saw a 9.2% increase year-over-year, according to data released December 2022 by the U.S. Census Bureau. Private residential design and construction spending saw an increase of 8.6% year-over-year and public spending was up almost 10% year-over-year (*see chart below*).

Construction Put-In-Place for October 2022

Construction Put-in-Place	October 2022	October 2021	Y/Y % Change
Total Construction	**$1.795 T**	**$1.644 T**	**+9.2%**
Residential (private)	$887.2 B	$816.9 B	+8.6%
Private (non-residential)	$533.2 B	$486.8 B	+9.5%
Public	$374.6 B	$340.7 B	+10.0%

Source: *U.S. Census Bureau, released 12/1/2022 for October 2022.*

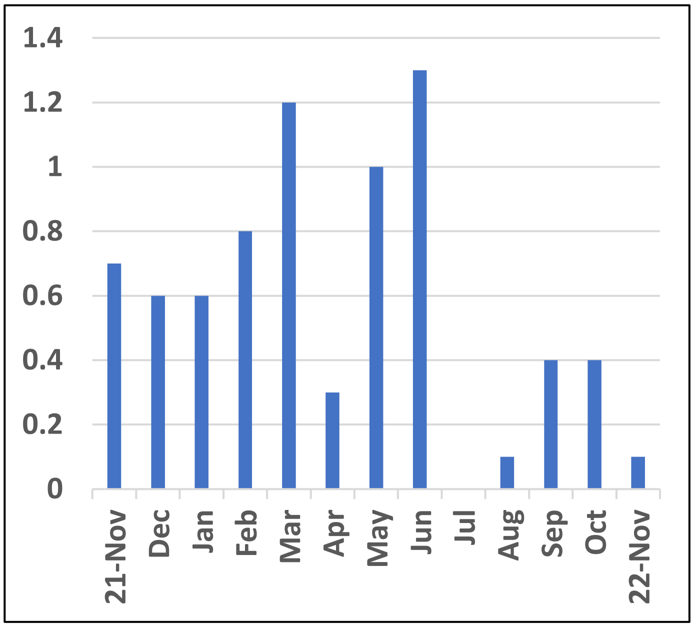
3. Inflation Expectations Vary:

Inflation cooled more than expected as prices rose 7.1% annually in November 2022, according to the U.S. Bureau of Labor Statistics. It was the lowest reading since December 2021 and an improvement on the peak rate in June at 9.1%. Prices rose just 0.1% last month as compared to October's reading of 0.4% (*see chart on next page*). CPI reported its 5th straight monthly decline, better than economists' expectations of the projected 7.3%.

In December, the Federal Reserve raised its benchmark interest rates by 50 basis points to its highest level in 50 years. Policy makers project rates would end next year at 5.1% before dropping to 4.1% in 2023, higher than previously indicated. The fed's announcement also came with the indication that officials plan to keep rates higher through 2023 with no reductions until 2024.

According to NABE panelists, inflation expectations will continue with the CPI projected to rise 8.1% year-over-year in 2022 and remain elevated in 2023 at 4.2%. The survey also reports 43% of panelists believe that tightening of monetary policy will lag 6-12 months before showing its impact on the economy.

Monthly % Change in CPI for All Urban Consumers



Source: *U.S. Bureau of Labor Statistics, seasonally adjusted Nov. 2021 – Nov. 2022*

4. Housing Market Weakens but Not Another 2008:

Housing starts showed the first decline since 2009, down 12% in 2022, projected to be down 18% in 2023, according to the NABE December outlook panel. The residential market will feel weakness but only 4% of the survey panelists see a housing bust like 2008.

Home prices are expected to rise at a slower rate through 2022 and experience declines by 3.5% in 2023. Fixed investment drags growth in Q4 2022 with a projected 10% decline and an expected 11.7% drop in 2023.

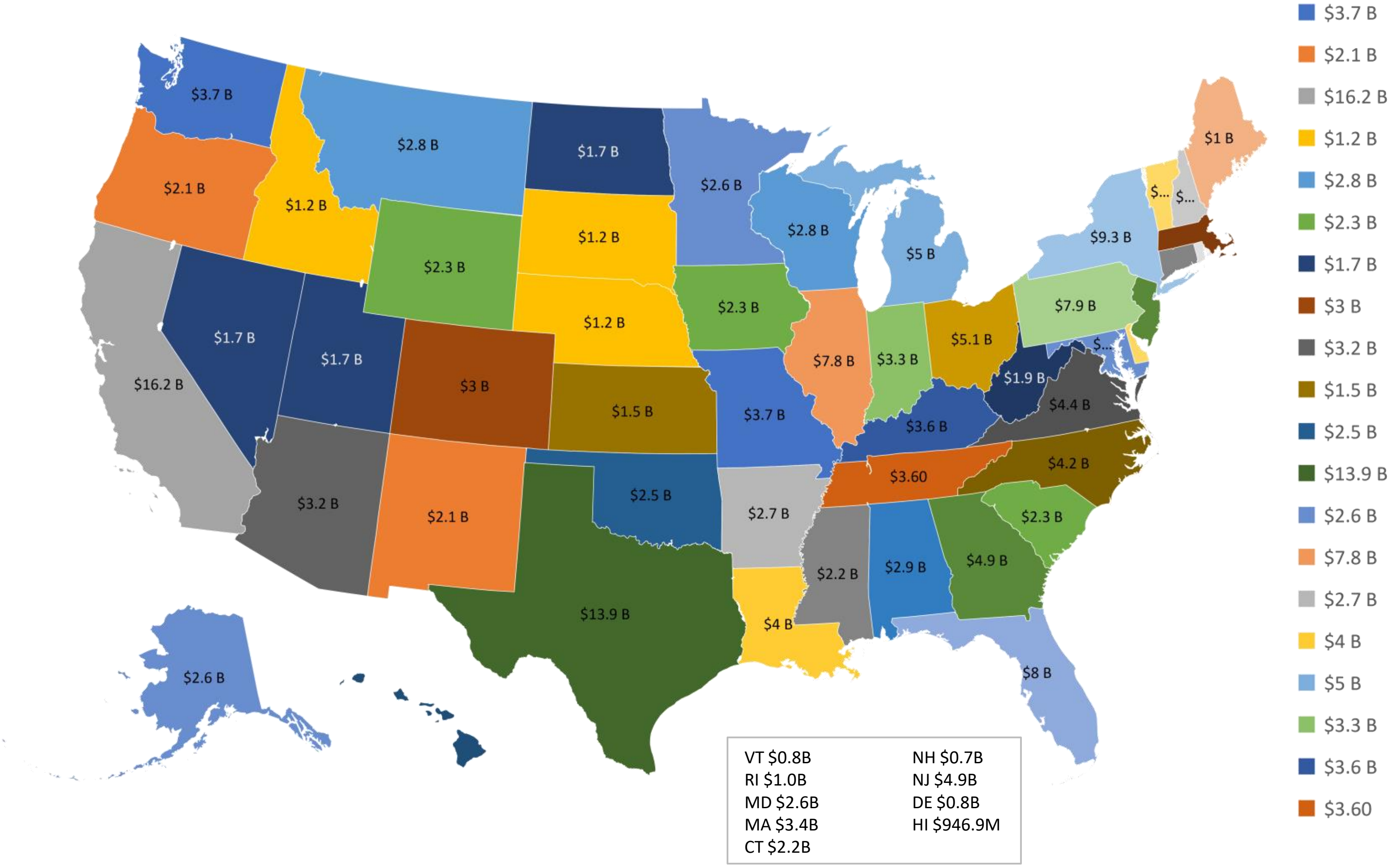
The FMI Q4 2022 outlook showed rising interest rates through early 2023 and a 30-year fixed mortgage rate nearing 7% or higher. Non-residential segments including the commercial real estate market are projected to follow the decline beginning H2 2023.

5. Labor Market Softens with Fewer Job Additions:

Unemployment rates remain lower than other economic downturns, however unemployment is expected to rise quarterly from 3.6% in Q3 2022, as reported in the NABE survey, to 4.5% in Q4 2023. Survey results show variations in unemployment rates that take them as high as 5.8%. Wage growth is expected to rise 4.9% in 2022 with a 4.3% slowdown in 2023, above pre-pandemic levels, according to the NABE panel.

1400 L Street NW, 4th Floor, Washington DC 20005-2605 P: 202.347.7474 | F: 202.898.0068 | E-mail: acec@acec.org

IIJA Funding Allocated by State to Date *(as of October 2022)*



Source: GSA

$185 Billion Released Under IIJA

In October 2022, the White House published its "Maps of Progress" to show over $185 billion had been allocated to states, Tribes, territories and local governments. Funding was broken up into four categories: 1.) transportation, 2.) climate, energy and the environment, 3.) broadband and 4.) other, per state (*see map above for allocations*).

The IIJA aims to accomplish these ten goals:

1. No more lead pipes
2. High-speed internet access
3. Better roads and bridges
4. Investments in public transit
5. Upgrade airports and ports
6. Investment in passenger rail
7. Network of electric vehicle chargers
8. Upgrade power infrastructure
9. Resilient infrastructure
10. Investment in environmental remediation

Outlook by Market Sector

The following three pages detail the expected growth and decline of market sectors through 2026, updated with Q4 information from FMI.

Markets are expected to see a large variation of trends from 2022 to 2026 due to impacts of economic uncertainty. This is not a surprise given the potential of a possible fed-induced recession. Other markets will trend upward given the IIJA funding projects. Below are the market segments that are expected to trend upward, remain stable, fluctuate or decline through 2026:

- Trending up: transportation, communication, highway and street, sewage and waste disposal, water supply, and conservation and development.
- Remain Stable: health care and educational.
- Fluctuations: public safety, religious, amusement and recreation, manufacturing, and power.
- Decline: single-family residential, multifamily residential, home improvements, lodging, office, and commercial.

1400 L Street NW, 4th Floor, Washington DC 20005-2605 P: 202.347.7474 | F: 202.898.0068 | E-mail: acec@acec.org

Commercial & Residential Real Estate

Key drivers/trends:

- Logistics infrastructure and warehousing will become less active.
- Businesses will trim office space square footage as leases expire.
- Increasing lending costs will reduce demand for homes and ease pricing pressures on other construction inputs in the years ahead.

Market Scope: The commercial and residential real estate market is 'vertical' in nature and contains a variety of commercial and residential real estate property types, including: office; industrial; retail; multifamily residential, including student and senior housing; and hospitality. Clients are typically developers and owner-users, such as large retailers. A wide range of engineering services is provided to these clients, including mechanical/electrical/plumbing (MEP), structural, site-civil, surveying, geotechnical, and environmental services. Land development-focused firms also include residential home builders as major clients.

Construction Put-in-Place *Forecast by market segment*	2022e	2023f	2024f	2025f	2026f	Change 2022-2026f
Commercial	$105 B	$105 B	$92 B	$81 B	$78 B	-35 %
Office	$85 B	$83 B	$77 B	$69 B	$66 B	-29 %
Lodging	$17 B	$18 B	$17 B	$15 B	$15 B	-13 %
Amusement & Recreation	$26 B	$27 B	$28 B	$25 B	$23 B	-13 %
Residential (single, multi & improvements)	$909 B	$848 B	$772 B	$735 B	$749 B	-21 %

Key: e=estimate, f=forecast

Source: FMI Q422

Intermodal & Logistics

Key drivers/trends:

- Megaprojects in planning for airport and rail infrastructure.
- Electrification investments will occur across local and state transportation systems.
- Planned construction investment will cause near-term inflationary pressures.

Market Scope: The intermodal and logistics market is a dynamic one, with various types of facilities, including marine terminals, rail terminals, depots and container yards, inland ports, freight airport terminals, and industrial real estate located adjacent to intermodal facilities. Many facilities are like mini-cities, and a wide range of engineering design services are required for their creation and expansion, including land development, transportation, mechanical/electrical/plumbing, structural, environmental, geotechnical, and water-related design. With more than 2,200 facilities, the North American intermodal market is the largest in the world.

Construction Put-in-Place *Forecast by market segment*	2022e	2023f	2024f	2025f	2026f	Change 2022-2026f
Manufacturing	$93 B	$107 B	$113 B	$111 B	$106 B	+14 %
Transportation (buildings)	$56 B	$60 B	$68 B	$77 B	$82 B	+46 %

Key: e=estimate, f=forecast

Source: FMI Q422

Energy & Utilities

Key drivers/trends:

- Renewables, solar and wind expected to make up 70% of utility-scale electricity generation.
- IIJA allocates $50 billion for water and wastewater investments, with $15 billion, or 30% into replacing 6 million to 10 million lead water lines.
- $65 billion in IIJA funds for broadband.

Market Scope: The energy and utilities market was estimated to be approximately 29% of A/E revenues for *Engineering News-Record (ENR)* Top 500 firms in 2022. Many firms count oil and gas companies, as well as utilities, as major clients. Typically working under a Master Services Agreement or similar type of contract, a wide range of engineering services are provided to these clients, including: civil, mechanical/electrical, structural, environmental, geotechnical, and water-related design. Energy and utility clients are also significant buyers of surveying and mapping services because their projects often span large geographies.

Construction Put-in-Place *Forecast by market segment*	2022e	2023f	2024f	2025f	2026f	Change 2022-2026f
Power	$114 B	$109 B	$110 B	$117 B	$122 B	+7.0 %
Communication	$25 B	$26 B	$29 B	$32 B	$34 B	+36 %
Sewage & Waste Disposal	$31 B	$34 B	$37 B	$40 B	$43 B	+39 %
Water Supply	$21 B	$24 B	$26 B	$28 B	$29 B	+38 %

Key: e=estimate, f=forecast *Source: FMI Q422*

Health Care & Science+Technology

Key drivers/trends:

- The only institutional segment to experience growth in construction spending through 2022 and 2023.
- Recessionary pressures.
- Specialty care and nursing home investments will remain depressed.

Market Scope: The health care (HC) and science+technology (S+T) markets are generally considered ‘recession-proof’ due to an aging population, and this is a theory that is being put to the test now. Health care construction grew to about $51B in 2022 with major clients for firms being more than 600 health care systems and 6,000 hospitals in the United States. Besides hospitals, facility types include outpatient centers and medical office buildings (MOBs) as well as laboratory, production and administrative space for pharmaceutical, biotechnology, and university clients. A wide range of engineering services are provided to these clients, often with specialized needs related to mechanical/electrical, HVAC and commissioning.

Construction Put-in-Place *Forecast by market segment*	2022e	2023f	2024f	2025f	2026f	Change 2022-2026f
Health Care	$51 B	$53 B	$53 B	$54 B	$55 B	+8 %

Key: e=estimate, f=forecast *Sources: FMI Q422*

K-12 & Higher Education

Key drivers/trends:

- Student loan forgiveness and other recessionary factors (e.g., rising unemployment), will drive enrollments over the next several years.
- Investments will be challenged by depressed enrollments, tightened budgets, higher operations costs and staffing.

Market Scope: The public market is significant for engineering firms and involves federal, state, and municipal clients. Projects are of course both ‘horizontal’ and ‘vertical’ in nature, ranging from K-12 schools and public universities; roadways, bridges, airports and transit facilities; civic and public safety buildings, which includes police and fire stations; as well as water/wastewater facilities and dams. Education includes student housing, utilities and public-private partnerships.

Construction Put-in-Place *Forecast by market segment*	2022e	2023f	2024f	2025f	2026f	Change 2022-2026f
Educational	$96 B	$97 B	$101 B	$104 B	$106 B	+10%

Key: e=estimate, f=forecast

Source: FMI Q422

Private Industry Briefs

Focusing on the private-sector markets listed below, ACEC's Private Industry Briefs are available via subscription; they are free, and you can cancel at any time. To sign up or download current issues, visit: https://programs.acec.org/industrybrief/

- Commercial & Residential Real Estate
- Intermodal & Logistics
- Energy & Utilities
- Health Care & Science+Technology
- K-12 & Higher Education

For more on ACEC’s private market resources, check out:

- Private Side column in *Engineering Inc.* magazine
- Engineering Influence Podcast
- Virtual Private/Vertical Roundtable Discussions

Diana Alexander is ACEC’s director of private market resources. She can be reached at: dalexander@acec.org

ACEC's Private Industry Briefs include updates of five key markets, as well as economic reviews.