

GFAFBTM

NGA Glass Fabricator Conference



THE FUTURE OF GLASS
FABRICATION HAPPENS HERE

JUN 14-17, 2026

CHICAGO

GLASS INDUSTRY TREND WATCH

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National Glass Association

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- Highlights from the GFAB economic forecast
- Big picture industry trends
- Glass industry metrics

Richard Branch, Free Agent Economist, chief economist of the AIA, GFAB economic forecaster



5 KEY ECONOMIC TAKEAWAYS

1. We are in the midst of a K-shaped construction market

Some segments are up, some are down.

- Richard Branch, chief economist

TOP ARM ▲ GROWING

- › Data Centers
- › Multifamily · Healthcare
- › Institutional · Retrofit / Renovation

+32%

data centers 2025
YoY

+26%

data centers
forecast 2026

+2%

institutional
2025

*"Is your best customer building more or less than two years ago?"
Your answer maps directly to one of these two arms.*

BOTTOM ARM ▼ DECLINING

- › Commercial / Retail
- › Manufacturing · New Office · Lodging

-8%

commercial retail

-5%

manufacturing

-1%

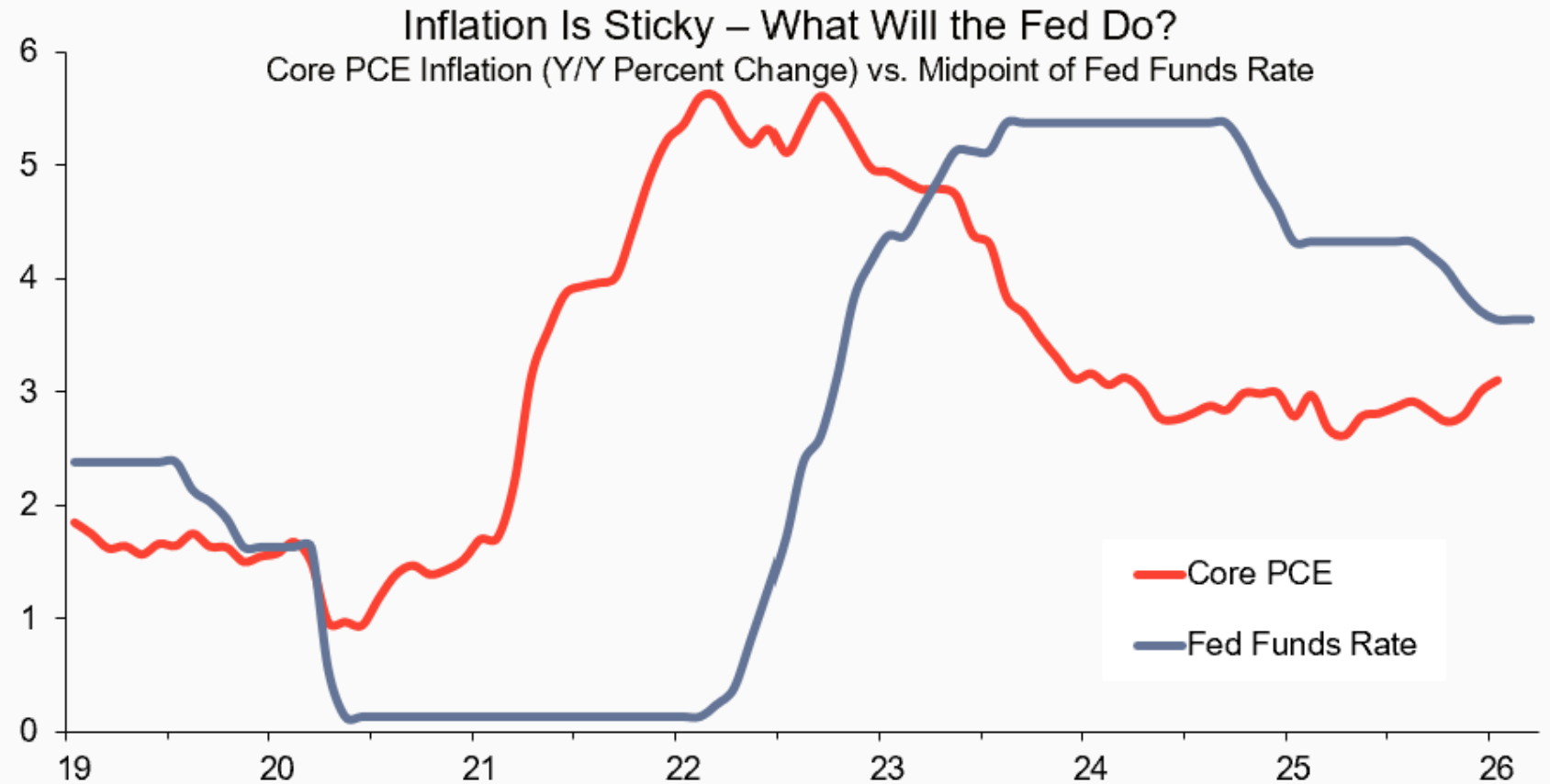
lodging

5 KEY ECONOMIC TAKEAWAYS

2. Inflation remains above 3%.

The Fed is unlikely to cut interest rates in 2026.

- Richard Branch, chief economist

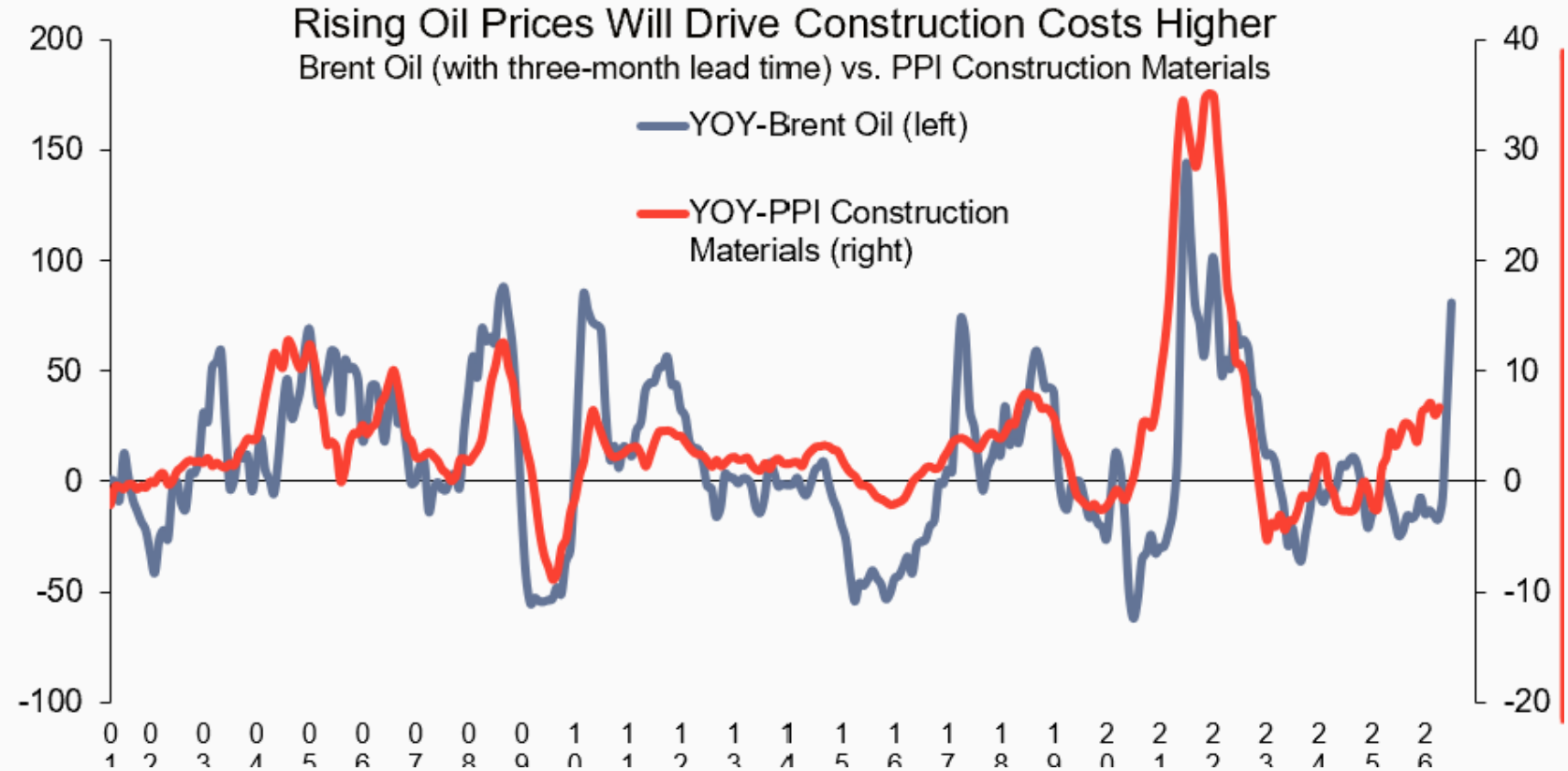


5 KEY ECONOMIC TAKEAWAYS

3. Rising oil prices drive material costs higher.

Construction costs lag oil prices by 3 months.

- Richard Branch, chief economist



5 KEY ECONOMIC TAKEAWAYS

4. Labor shortage is a structural, not cyclical, concern.

“And it’s getting harder to ignore.”

- Richard Branch, chief economist

1 in 3 fabricators

found it harder to hire in 2025.
Hardest roles: production staff and supervisors.

Labor = #2 delay cause

11% of project delays attributed to labor shortages. Combined with financing (34%) = nearly half of all delays.

Population slowing

Long-run labor pool is shrinking.
Immigration policy changes compound the existing structural shortage.

Wages rising

But cost-of-living pressures mean workers relocate away from job sites.
Net availability declining in key markets.

5 KEY ECONOMIC TAKEAWAYS

5. Retrofit is a durable opportunity in the market, not a fallback.

- Richard Branch, chief economist

+18 points in one year

46% → 64% of fabricator business in retrofit — largest single-year shift in recent survey history

Code-driven demand

Energy, security, bird-friendly — all expanding legislatively. Not rate-sensitive. Not cyclical.

Bottom-arm buildings

Retrofit demand concentrated in sectors soft on new construction. Existing relationships = path in.

>50% architect billings

came from renovation/retrofit in 2025 — first time renovation has exceeded new construction in the AIA survey.

3 FORECAST SCENARIOS

- **Base case:** Economy grinds along with nominal construction gains wiped out by inflation; no recession but no real recovery.
- **Upside case:** Multiple tailwinds align (rates ease, oil drops, confidence returns) and delayed projects begin to move.
- **Downside case:** Oil, tariffs, and persistent inflation force the Fed to hold or hike, tipping construction into meaningful contraction.

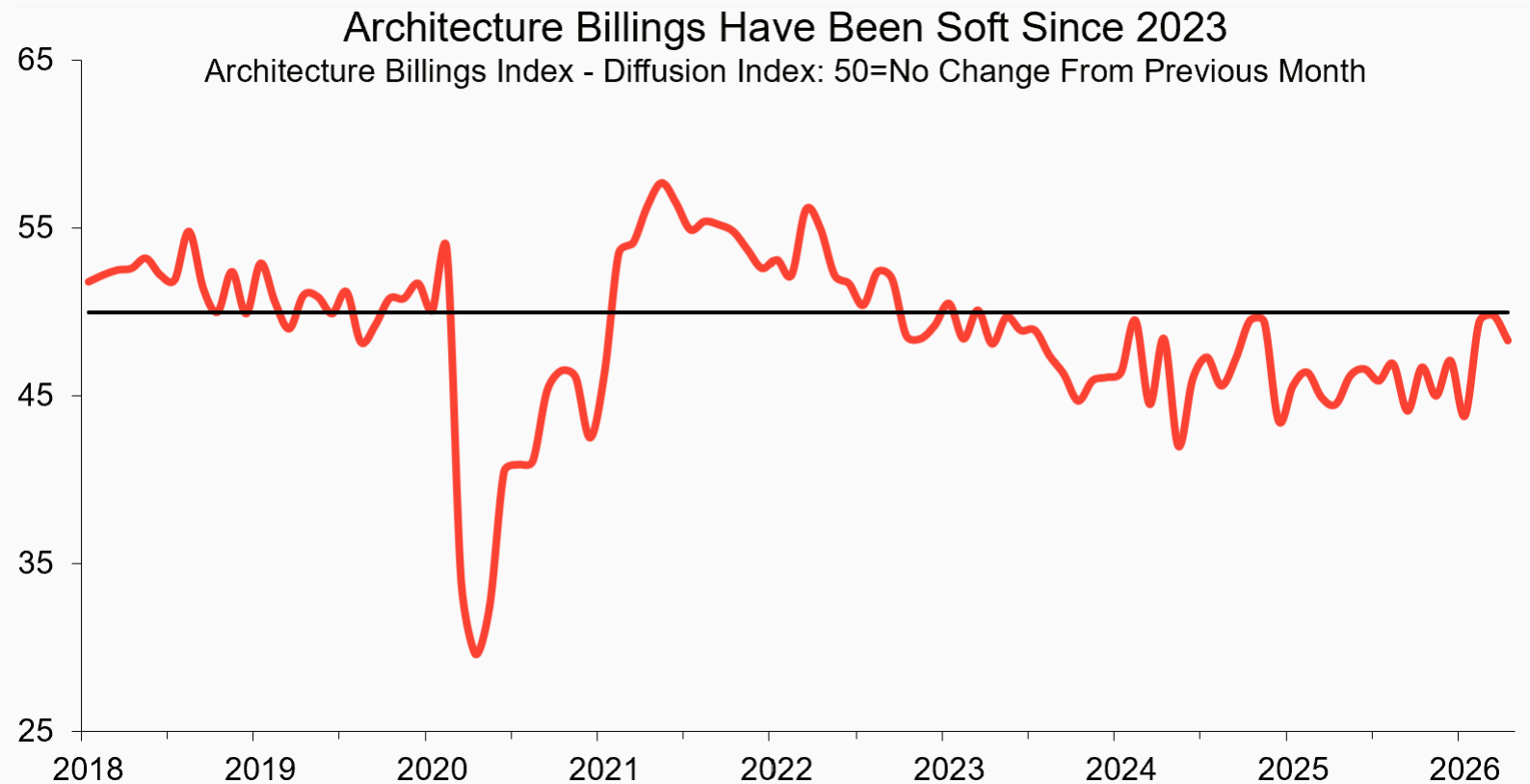
- *Richard Branch, chief economist*

3 INDICATORS TO WATCH

Architectural Billings Index

- Sustained readings above 50 would tell us that design activity is beginning to expand again.

- *Richard Branch, chief economist*

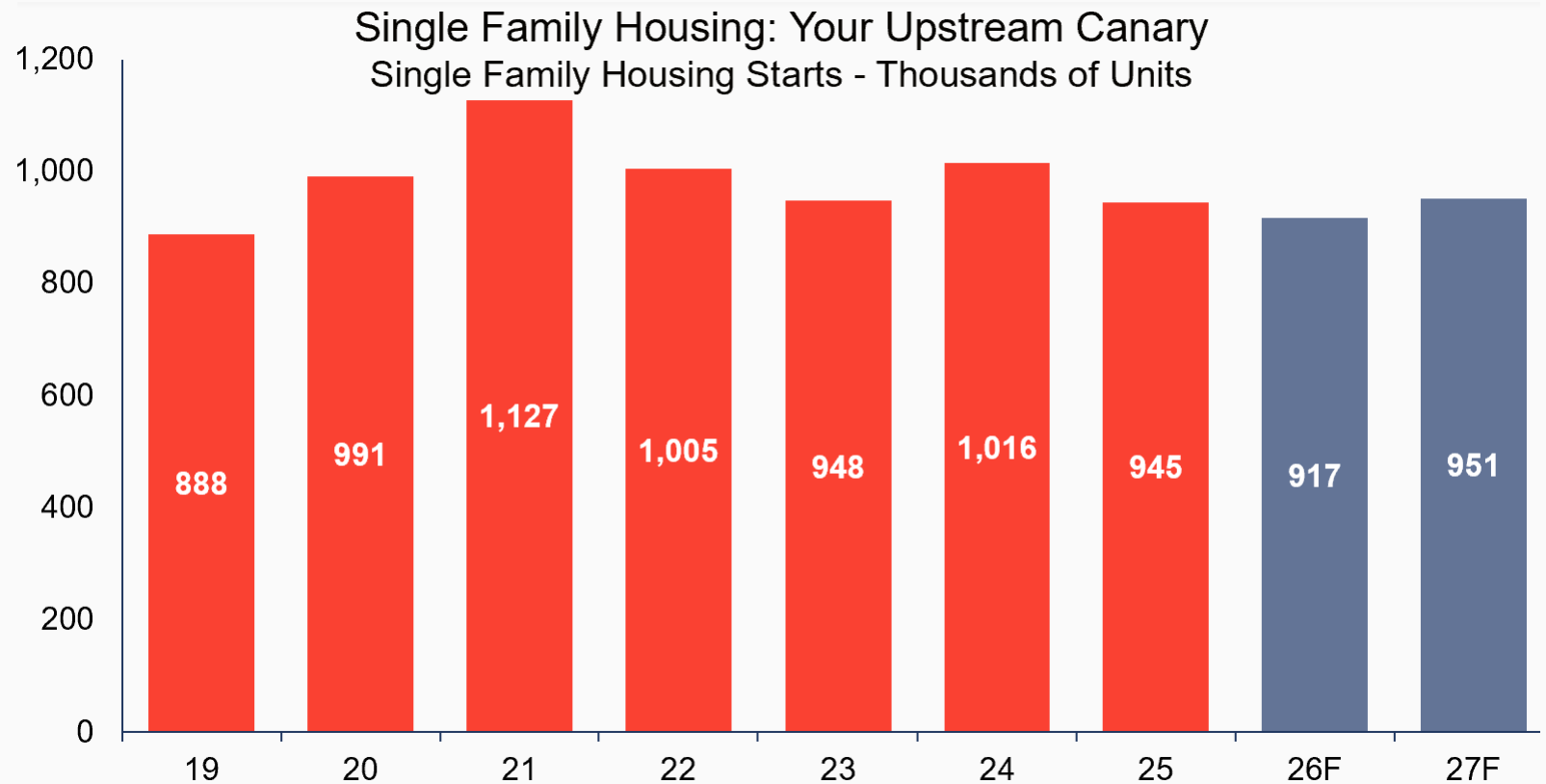


3 INDICATORS TO WATCH

Single-family housing permits

- SF leads healthcare, education, and retail construction by roughly 13 to 14 months.

- Richard Branch, chief economist



3 INDICATORS TO WATCH

Brent crude oil price

- Energy costs feed into construction materials, freight, and electricity with a 3-month lag.

- *Richard Branch, chief economist*

Market Summary > Brent Last Day Financial

77.36 USD ↑ 31.83% +18.68 past 6 months

NYMEX: BZW00

Jun 16, 4:31 PM EDT • [Disclaimer](#)

1D | 5D | 1M | **6M** | YTD | 1Y | 5Y | Max



Open	80.00	Low	76.60	Volume	26,901
High	80.00	Prev close	79.57	Open interest	41,296

BIG PICTURE INDUSTRY TRENDS

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WHERE THE NGA IS FOCUSED

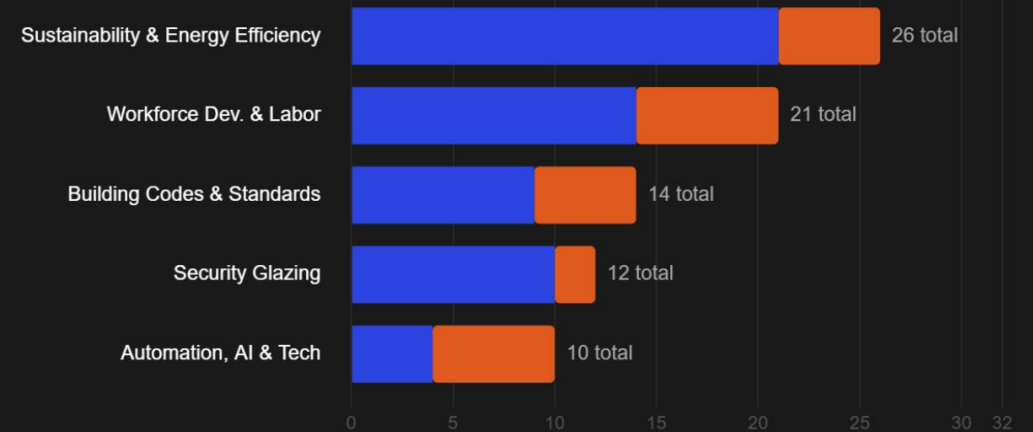
- 1. Sustainability & Energy Efficiency**
LEED v5, embodied carbon, VIG, triple-pane IGUs, EPDs, thermal performance, energy codes
- 2. Workforce Development & Labor**
Apprenticeship, second-chance hiring, succession, mental health, MyGlassClass, automation as labor solution
- 3. Building Codes & Standards**
Code updates, stretch codes, fire-rated standards, bird-friendly legislation, hurricane testing
- 4. Security Glazing**
School security, ballistic and forced-entry standards, detention glazing, NGA advocacy
- 5. Automation, AI & Technology**
Robotics, AI order entry, Smart Factory, Bluebeam, shop floor visibility platforms

NGA CONTENT ANALYSIS — JUNE 2025 TO JUNE 2026

Top 5 topics by combined mentions

■ Glass Magazine

■ Conferences + webinars



SOURCES: GLASSMAGAZINE.COM + BEC 2026 + GFAB 2026 + THIRSTY THURSDAY + GLASSBUILD 2025 GEF + MAIN STAGE

NGA INDUSTRY REPORTS

- **World of Glass** (Glass Magazine – January)
- **Industry Pulse** (Window + Door – February)
- **Top Glass Fabricators** (Glass Magazine – April)
- **Top Manufacturers** (Window + Door – June)
- **Top 50 Glaziers** (Glass Magazine – July)
- **Window and Door Market Survey** (Window + Door – published Quarterly)

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WEBINAR – 6/18 1 PM ET

WINDOW & DOOR MARKET REPORT



CHRIS BEARD

VP Building Products Research

John Burns Research & Consulting

Register at glass.org

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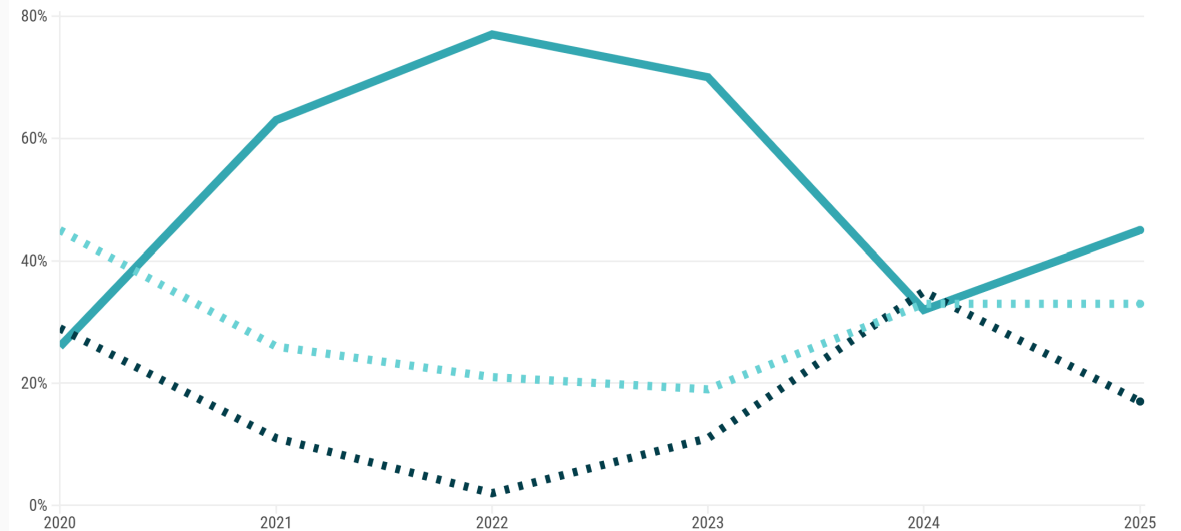
TOP GLASS FABRICATORS

- Published in April 2026 (data gathered in Q1)
- “Cautious Optimism” replaced by “Resilient Optimism”
- 45% reported higher sales in 2025; a 12-point increase

Gross Sales Increased in 2025

Sales relative to the previous year

Higher Lower About the same



Source: Glass Magazine

Made with Flourish • Create a chart

TOP GLASS FABRICATORS

AT A GLANCE

Data from the 2025 Top Glass Fabricators survey of North America's leading architectural glass fabricators.

77%

EXPECT SALES TO **INCREASE** IN THE COMING YEAR
GROWTH

45%

REPORTED **HIGHER SALES** IN 2025, A 12-POINT
INCREASE
GROWTH

64%

SAY **RETROFIT** COMPRISED 25-100% OF THEIR
BUSINESS
GROWTH

82%

INVESTED IN **CAPITAL EQUIPMENT** IN 2025
INVESTMENT

1 IN 3

FOUND IT **HARDER TO HIRE** IN 2025
LABOR

92%

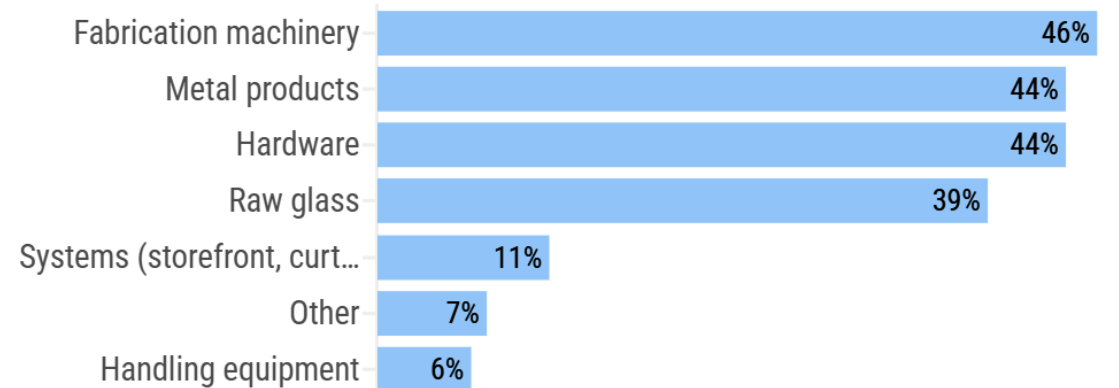
RECYCLE GLASS AT AN **EXTERNAL FACILITY**
PRODUCTS

TOP GLASS FABRICATORS

1. Tariffs froze the market

- 50% aluminum and steel tariffs created project paralysis, not just cost increases.
- 39% of fabricators said tariffs affected raw material purchases; 20% changed suppliers.
- Fabricator closures deepened uncertainty.

What products were most affected by tariffs?



Source: [Glass Magazine](#) • *Fabricators could select more than one option

TOP GLASS FABRICATORS

2. Recovery is real but retrofit-driven

- 45% of fabricators posted higher sales in 2025 (up 12 points), and 77% expect growth in 2026.
- But the bigger story: 64% said retrofit made up 25% or more of their business, up from 46% the prior year.
- Owners are upgrading buildings for performance, energy, and security — and fabricators are treating this as a durable segment, not a stopgap.

45%

REPORTED HIGHER SALES IN 2025, A 12-POINT
INCREASE
GROWTH

64%

SAY RETROFIT COMPRISED 25-100% OF THEIR
BUSINESS
GROWTH

TOP GLASS FABRICATORS

3. Labor is a chronic constraint, not a crisis

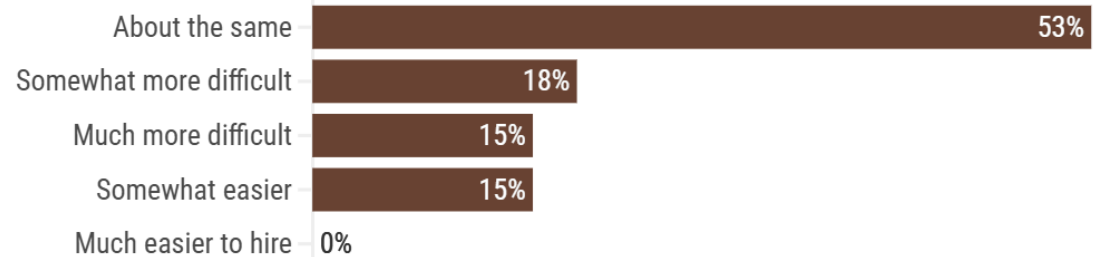
- 1 in 3 fabricators found it harder to hire in 2025.
- Production staff and supervisors are the hardest roles to fill.
- Workforce size held steady. The problem isn't shrinkage, it's inability to grow. Cost of living is limiting what better pay packages can actually accomplish.

Labor

One third of fabricators found it more difficult to hire than last year. Fabricators find it hardest to hire for the factory floor.

Select a question from the menu below.

Rate the difficulty of finding qualified workers in 2025 compared to 2024? ▾



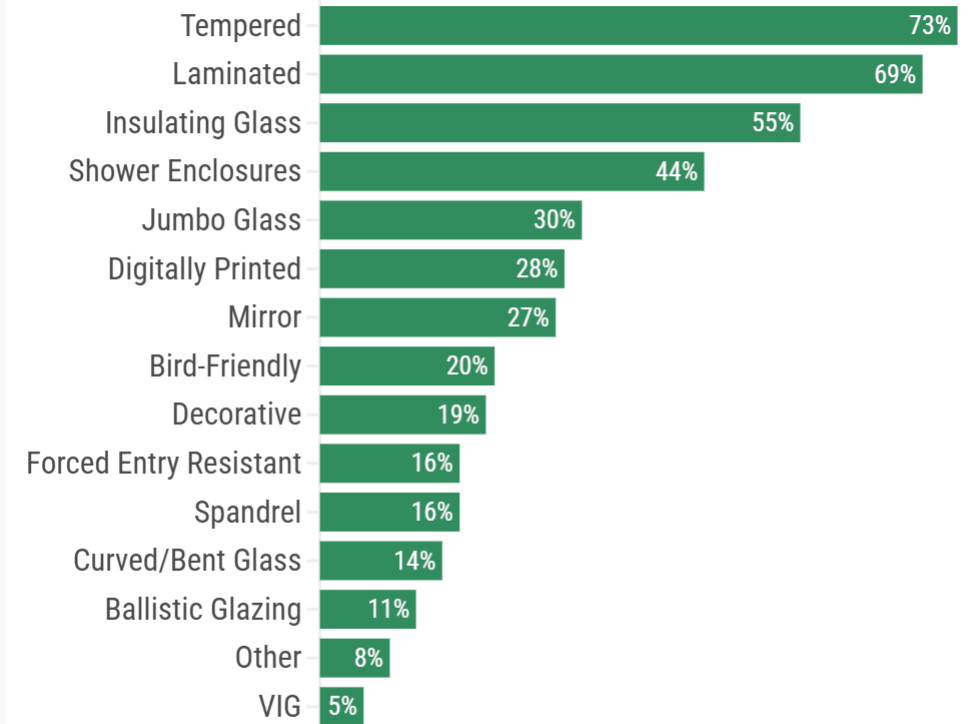
Source: [Glass Magazine](#)

TOP GLASS FABRICATORS

4. Product demand is code-driven

- Security glazing, high-performance IGUs, laminated glass, and bird-friendly solutions are all growing.
- Fabricators say regulation and safety requirements, not preference, are the primary driver.
- Multi-threat glazing (ballistic + forced-entry + impact) is an emerging product priority.
- Shower enclosures outperform jumbo glass.

What products were most in demand in 2025?



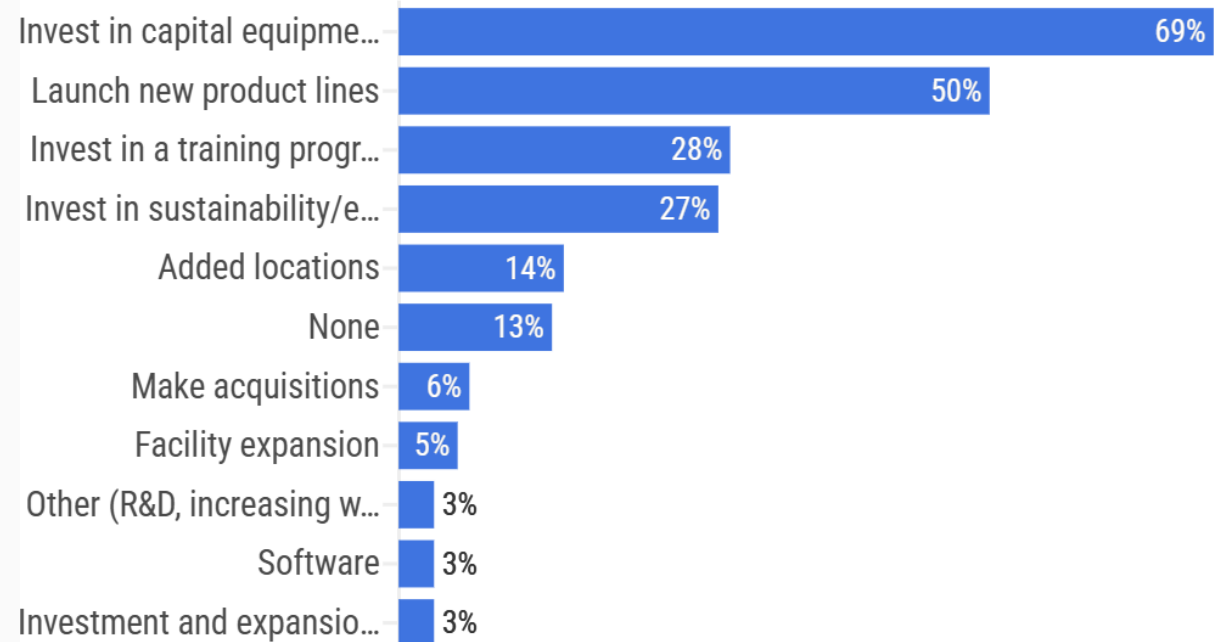
Source: [Glass Magazine](#)

TOP GLASS FABRICATORS

5. AI is on the radar, not the production floor

- 82% invested in capital equipment in 2025.
- 69% plan to invest in capital equipment in 2026
- On AI: most fabricators aren't using it yet.
- Those that are have deployed it for data analysis, scheduling, and ERP integration.

What are your company's expansion and investment plans for 2026?*



Source: [Glass Magazine](#) • *Fabricators could select more than one option

WORLD OF GLASS REPORT

- Published in the January/February edition. Research and interviews completed in Q4 2025.
- Interviews with domestic primary glass manufacturers
- Update of the World of Glass map and database of global float locations
- Go to: WorldOfGlassMap.com

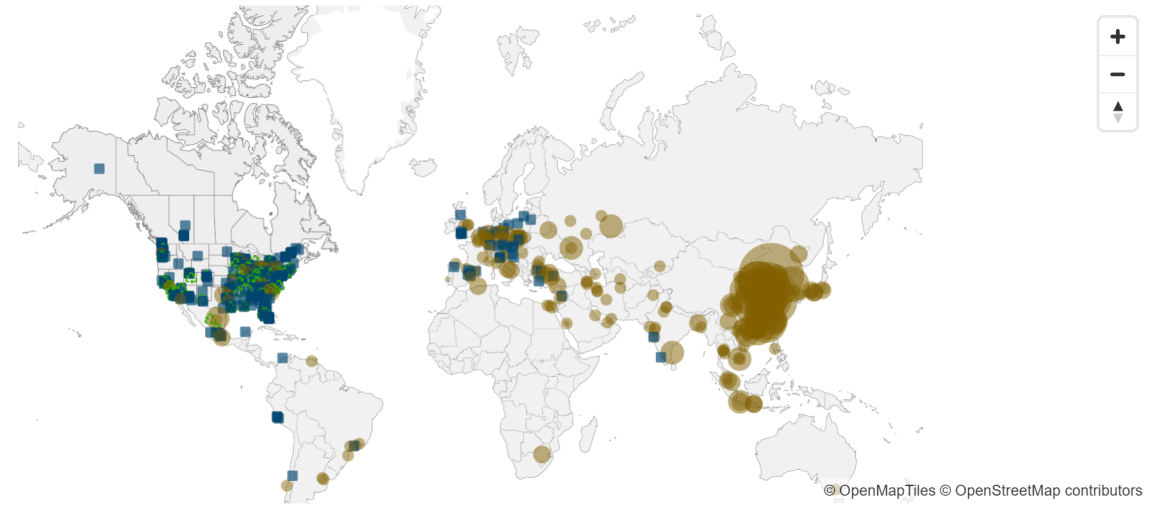
World of Glass Map

700+ Global **Float Glass**, **Fabrication** and **Glass Recycling** Facilities

- ✓ Hover over (or click) any marker on the map to learn more about each location.
- ✓ Use the **Plant Types** legend to turn each category off and on with a click.
- ✓ Use the +/- control to zoom in and out.
- ✓ Reposition the map by clicking and dragging when the hand appears.

Plant Types

- float
- fabricator
- ♻️ recycling

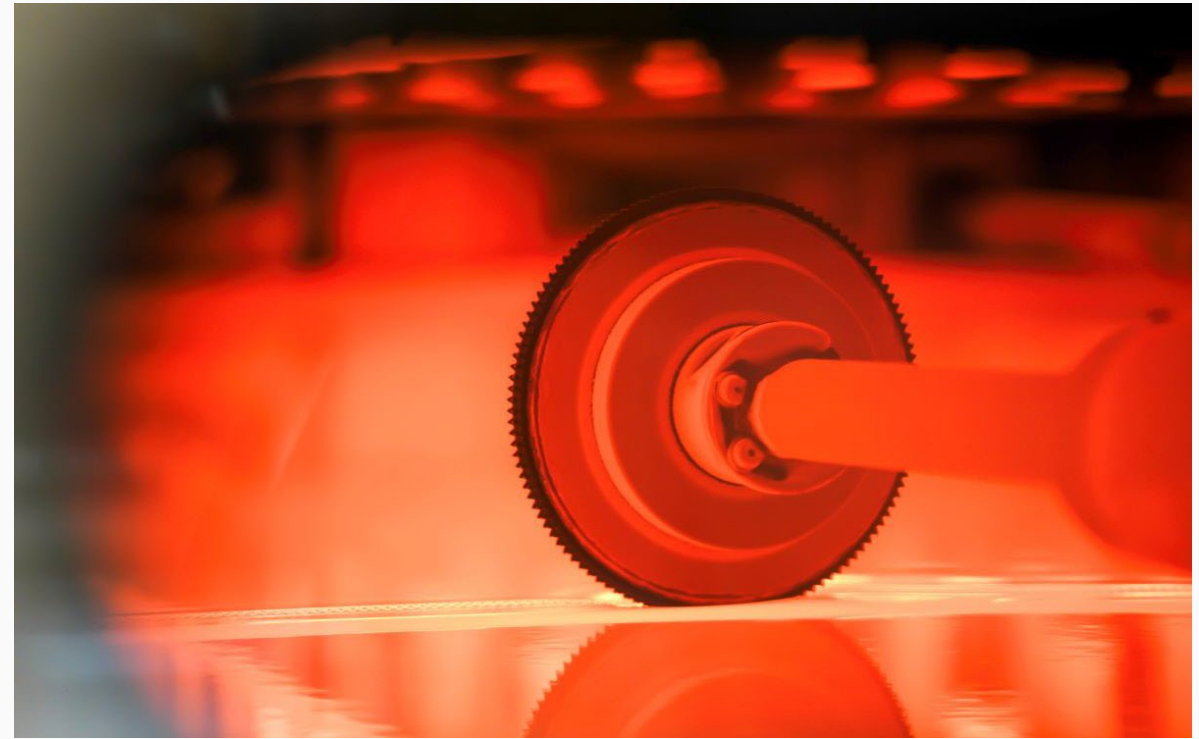


Source: [National Glass Assoc.](#), [Glass Magazine](#)

WORLD OF GLASS REPORT

1. Tariffs reshuffled float supply in unexpected ways

Domestic float glass is now being consumed by onshoring solar panel and automotive production, putting architectural fabricators in competition for supply with manufacturers they weren't competing with before.



Guardian Glass, Hautcharage, Luxembourg.

WORLD OF GLASS REPORT

2. Next-gen performance products have momentum.

- VIG is at the top of its growth curve. All three major North American float companies now offer VIG, plus others.
- Thin glass IGUs have momentum, but safety glazing certification remains a hurdle to broader adoption.



The newly renovated Hugel Welcome Center in Markle Hall on the campus of Lafayette College in Easton, Pennsylvania, is the first project in the U.S. to feature VacuMax VIG by Vitro Architectural Glass. Photo by Jim Cunningham.

WORLD OF GLASS REPORT

3. Embodied carbon and EPDs are holding at the state and customer level

- Federal interest may be on pause, but state and regional legislative pressure and customer demand for EPDs continues.
- Workshop: Glass & Glazing EPD Generator Tool





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