2027 Annual Infrastructure Construction Cost Inflation Estimate

The Office of Resilience and Capital Planning

November 2, 2026

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Overview

The Annual Infrastructure Construction Cost Inflation Estimate (AICCIE) is the projected rate of construction cost escalation for the upcoming calendar year.

The rate is used to:

- Forecast costs for the 2-Year Capital Budget & 10-Year Capital Plan
- Update Facility Resource Renewal Model (FRRM)
- Prepare construction budget estimates, unless departments rely upon their own escalation rate
- Calculate the backlog

Note: With the passage of modified development impact fee indexing in 2023, AICCIE will no longer be used to determine those fees, which will now increase at a flat 2% each year.

➢ **<u>Today's action item</u>:** Adopt rate for CY 2027 – *proposing 4.7%*

Contents

- Construction Cost Measures
- Labor Market
- Construction Activity
- Broader Economic & Political Factors
- Summary of Survey Findings
- Discussion of Mitigation Strategies

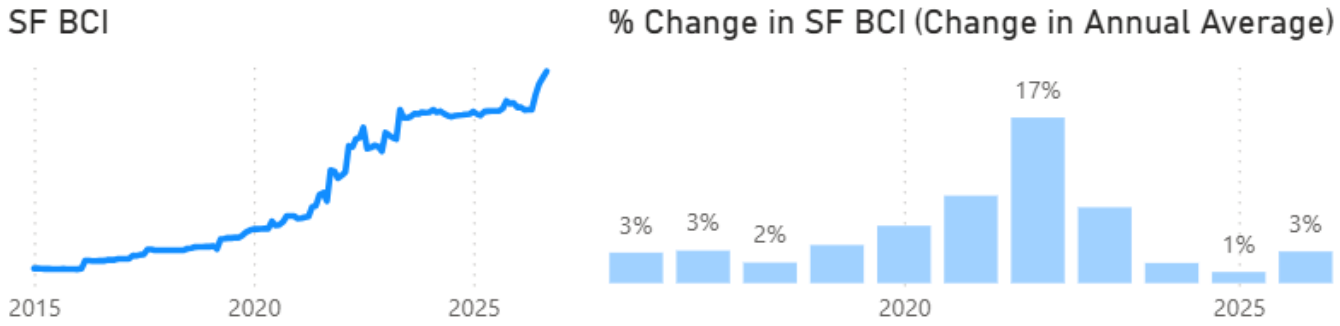
Construction Cost Measures

San Francisco construction cost indices have risen 2-3% in the past year

ENR Building Cost Index (BCI) (San Francisco)

Cost of skilled labor, structural steel, cement, lumber

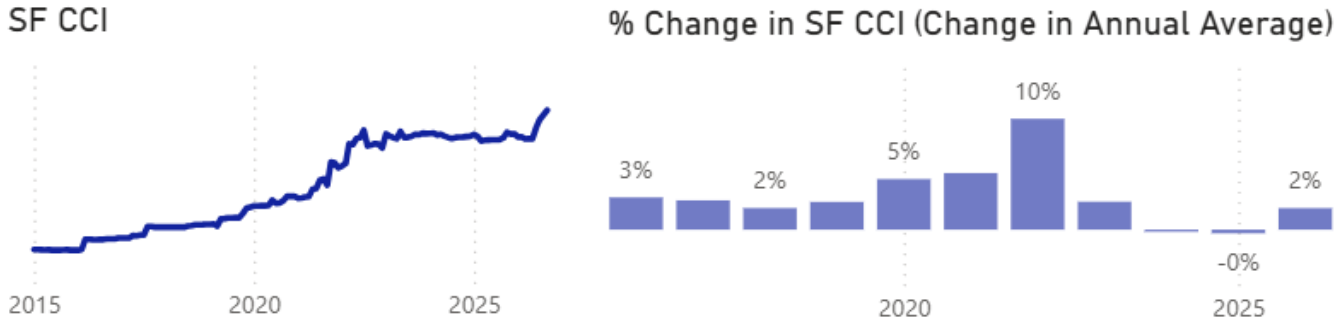
->Increasing at 3%



ENR Construction Cost Index (CCI) (San Francisco)

Cost of common labor, structural steel, cement, lumber

->Increasing at 2%



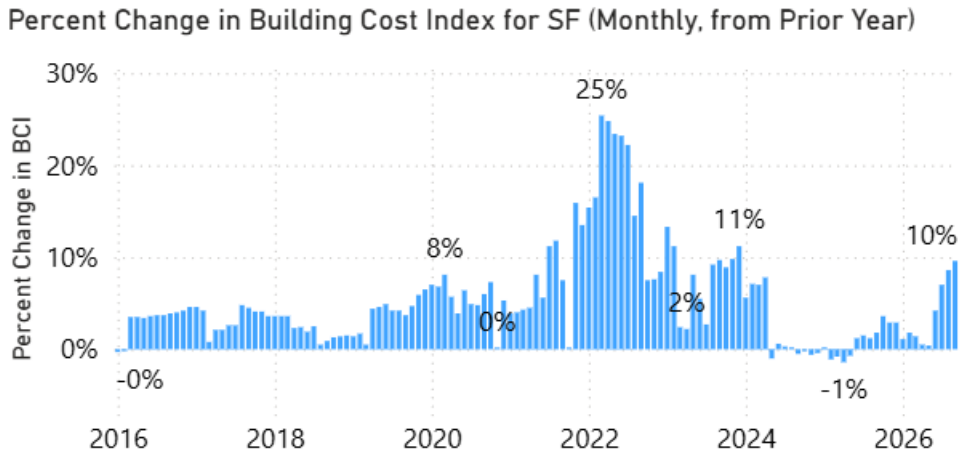
Source: Engineering News-Record Construction Cost Index & Building Cost index from 2016- Sept 2026

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Costs rose dramatically starting in June, up to 10% as of September 2026

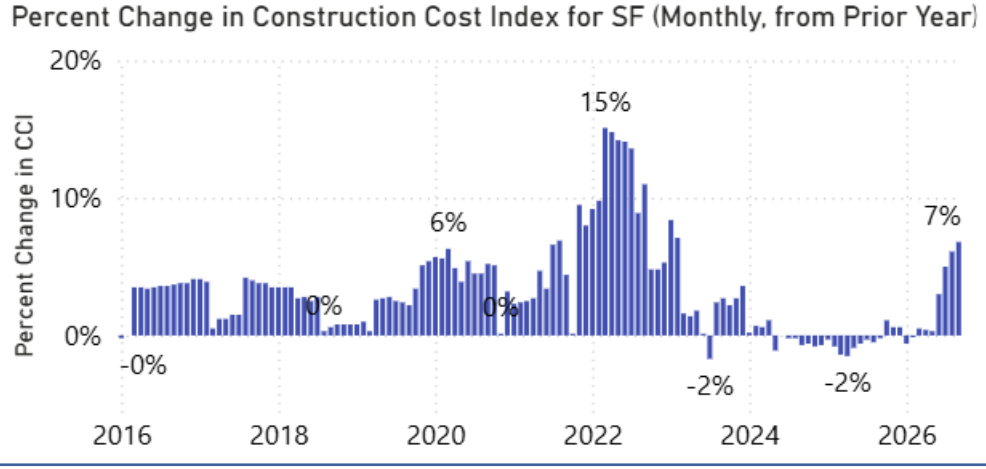
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Source: Engineering News-Record Construction Cost Index & Building Cost index from 2016- Sept 2026

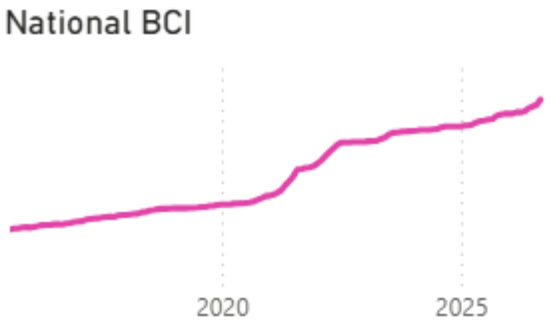
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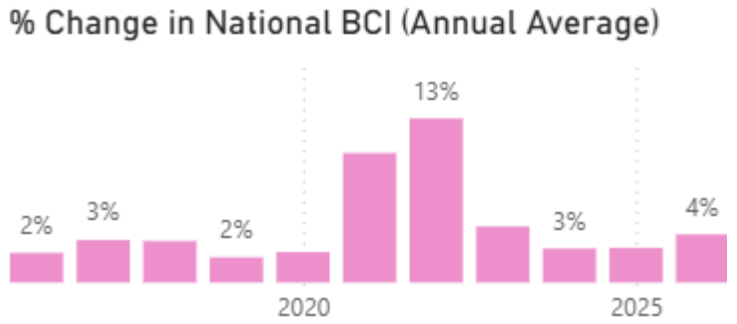
Nationally, construction cost indices are increasing at about 2-4%

ENR Building Cost Index (BCI) (US)

Cost of skilled labor, structural steel, cement, lumber

->Increasing at 4%

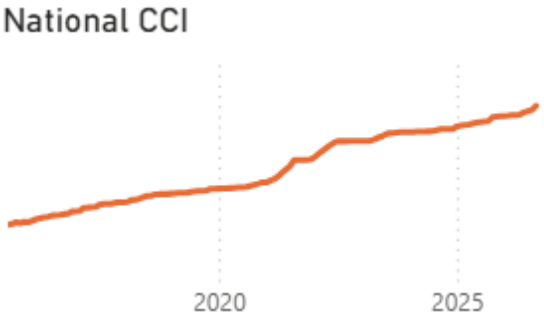


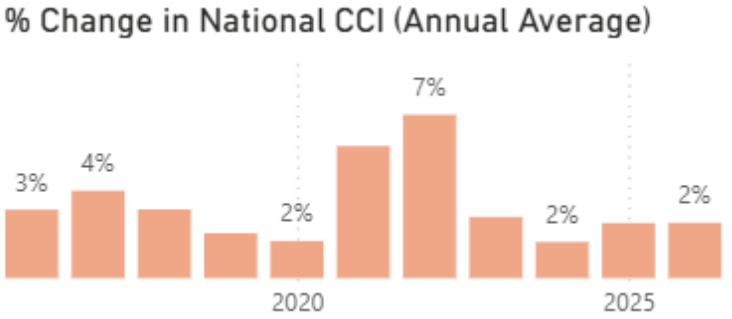


ENR Construction Cost Index (US)

Cost of common labor, structural steel, cement, lumber

->Increasing at 2%





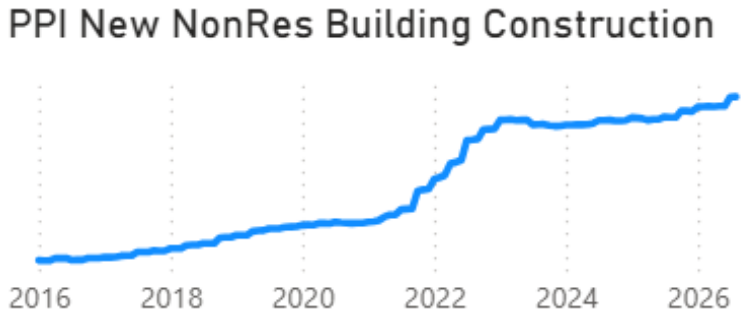
Source: Engineering News-Record Construction Cost Index & Building Cost index from 2016-Sept 2026

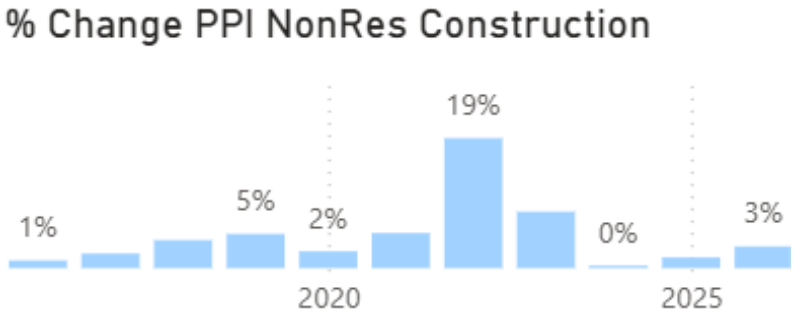
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Construction cost PPIs (from the BLS) show similar increases over the past year

US New Non-Residential Building Construction Producer Price Index (PPI)

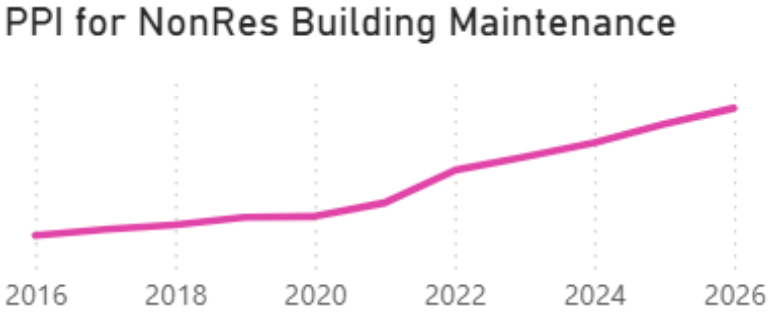
-> increasing by 3%

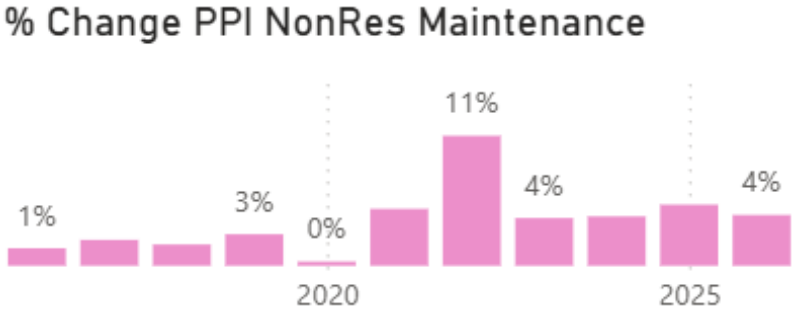




US PPI Industry data for Non-Residential Building Maintenance & Repair

->increasing by 4%





BLS = Bureau of Labor Statistics; PPI = Producer Price Index, measures the average selling prices

Source = Source: Bureau of Labor Statistics, various Producer Price Indices, 2016 – August 2025

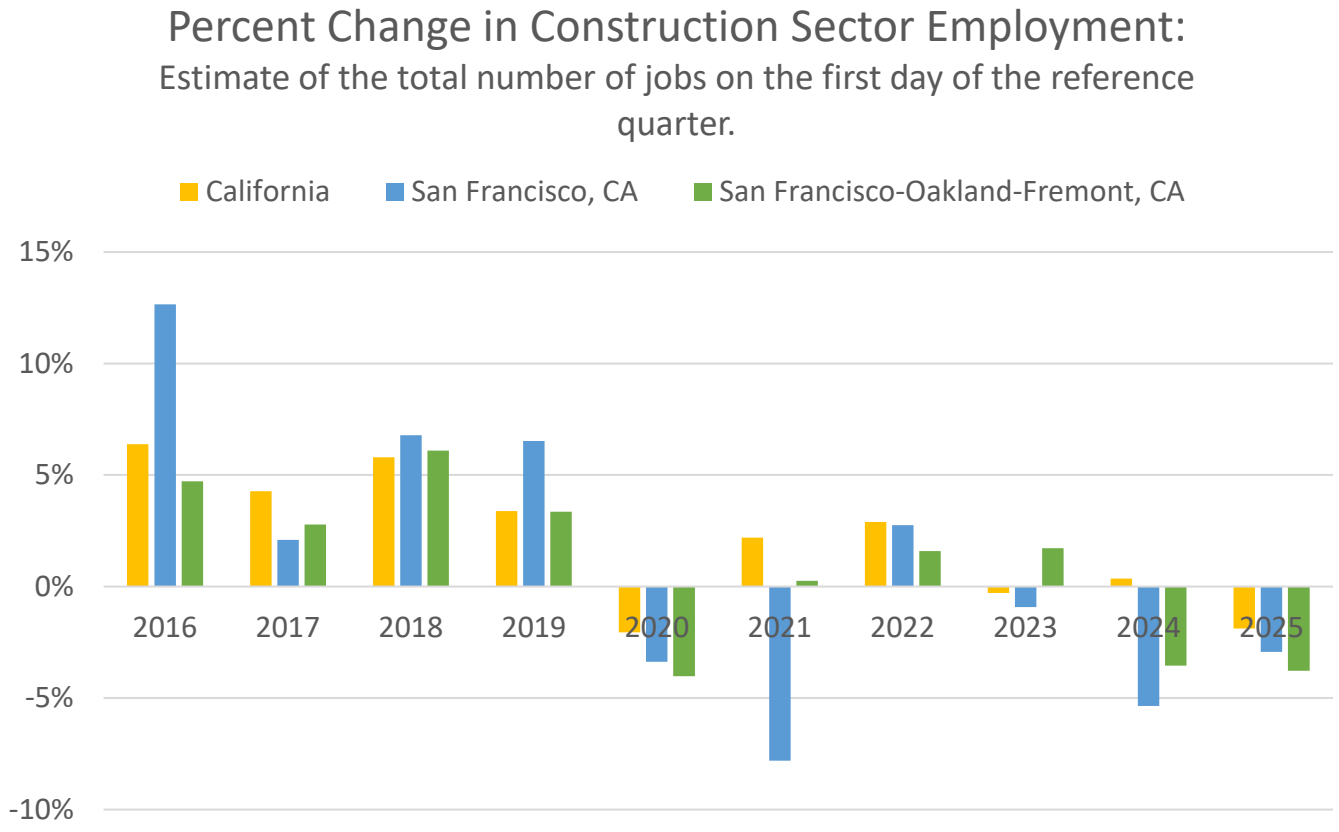
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Labor Market

Construction labor employment continues to fall

- The number of employees in the construction sector in San Francisco Bay Area continues to fall.
- Local unemployment is about 4.8%, which is similar to last year.

"Labor remains the primary driver of construction cost escalation primarily due to cost of living increases combined with competition for experienced craft labor continue to increase costs."
- *Turner Construction*



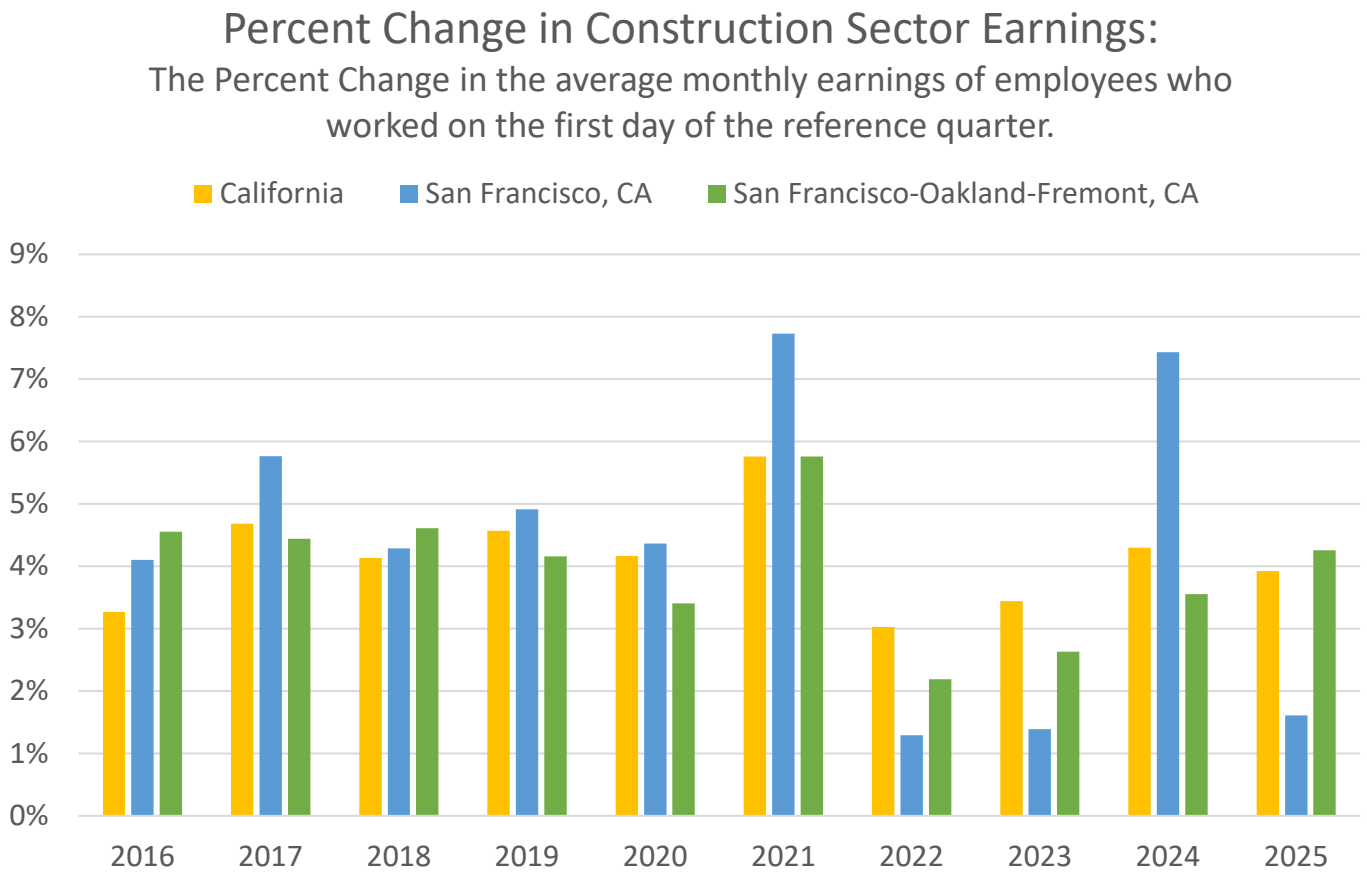
Source: US Census Bureau, Longitudinal Employer-Household Dynamics data, 2015-2025

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Construction labor costs continue to rise

- Construction sector earnings continue to rise
- SF Public employee union agreements include two wage increases in 2027:
  - 2% increase in January
  - 2.5% increase in July

"Additionally, a general shortage of the workforce continues to put upward pressure on wage rates."
- TBD Construction Consultants



Source: US Census Bureau, Longitudinal Employer-Household Dynamics data, 2015-2025

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Construction Activity

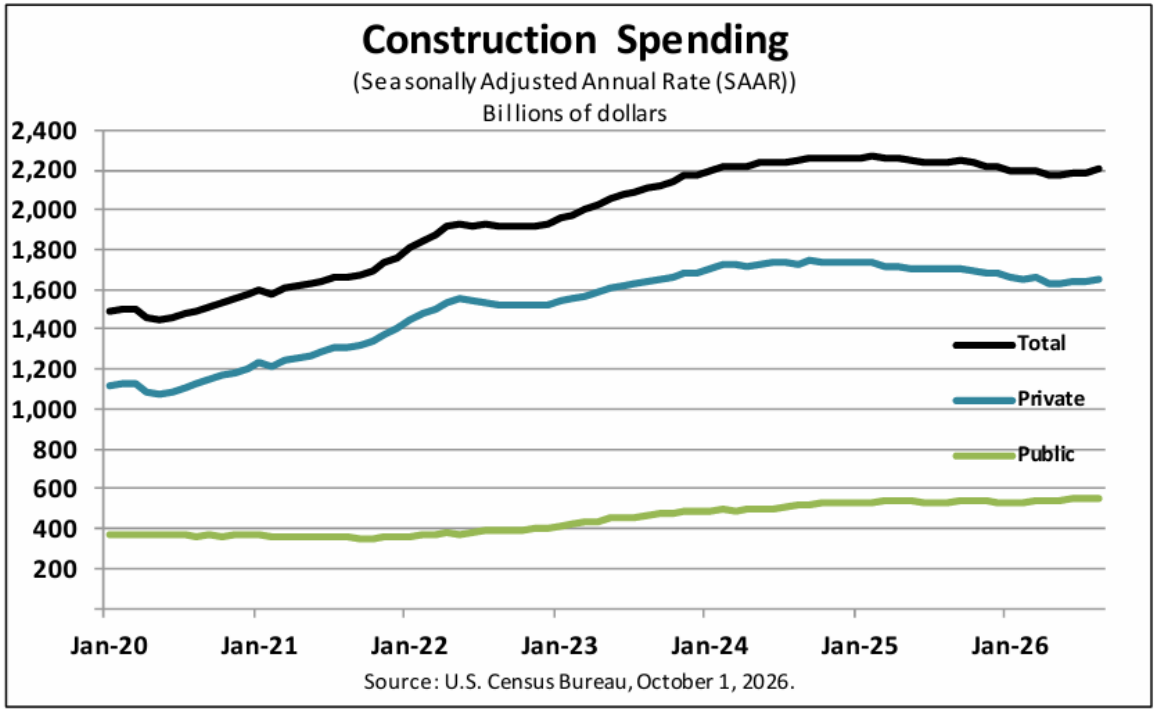
Total US construction activity is slightly lower than last year, but not for public spending

CONSTRUCTION SPENDING

AUGUST 2026	**$2,203.1 billion**
JULY 2026 (revised)	**$2,184.5 billion**

Next release: November 2, 2026

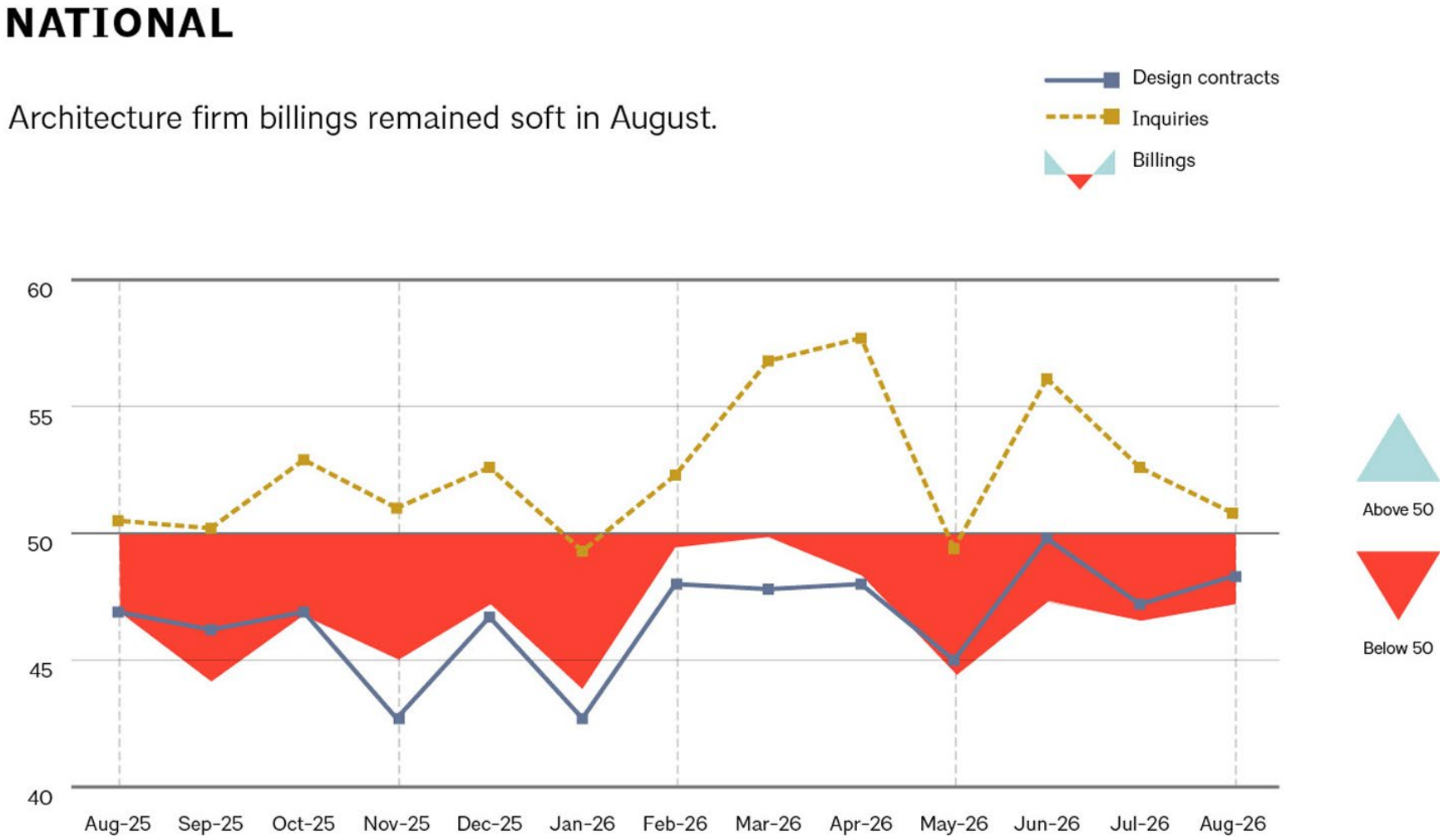
Seasonally Adjusted Annual Rate (SAAR)
Source: U.S. Census Bureau, October 1, 2026



Source: US Census Bureau, "Monthly Construction Spending, August 2026"

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US architecture billings continue to decline



Source: AIA, ABI Monthly Reporting "ABI August 2026: Architecture firm billings continue to decline"

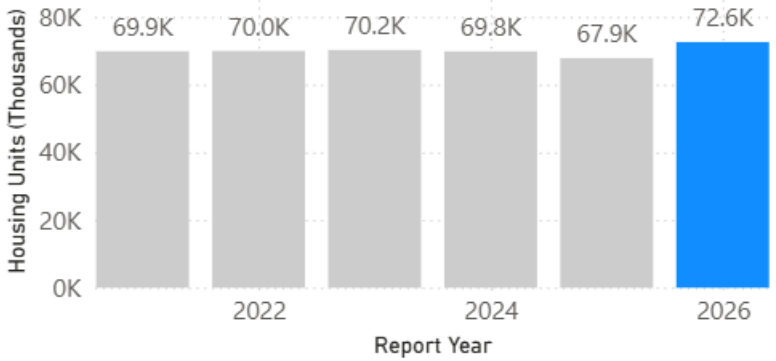
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Local development pipeline shows a very similar level of active construction this year

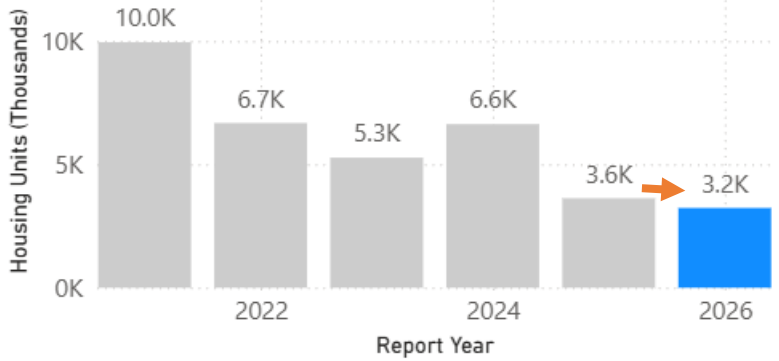
Totals Represent a Snapshot of the Development Pipeline in Q2 of the Report Year

Note: Projects may be in the pipeline for many years. We revise prior years when Planning identifies data inconsistencies.

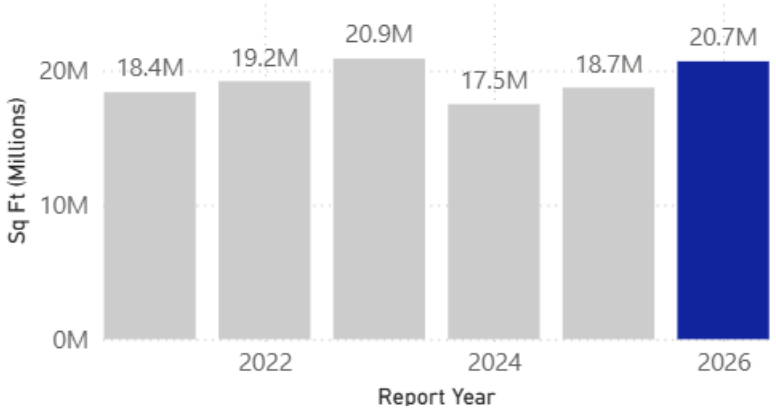
Net New Housing Units in Pipeline



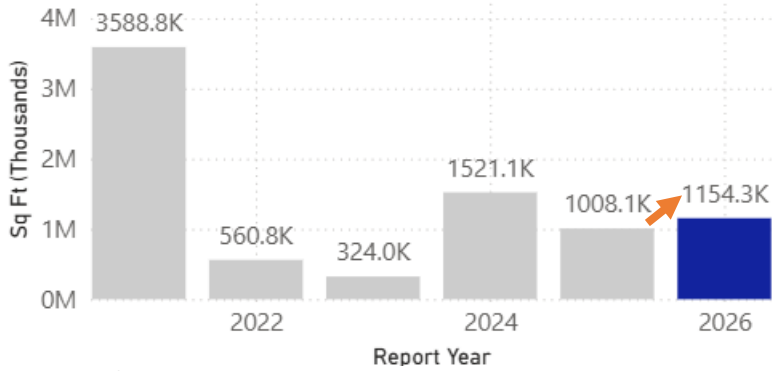
Net New Housing Units in Construction (at time of Report)



Net New Commercial Square Footage in Pipeline



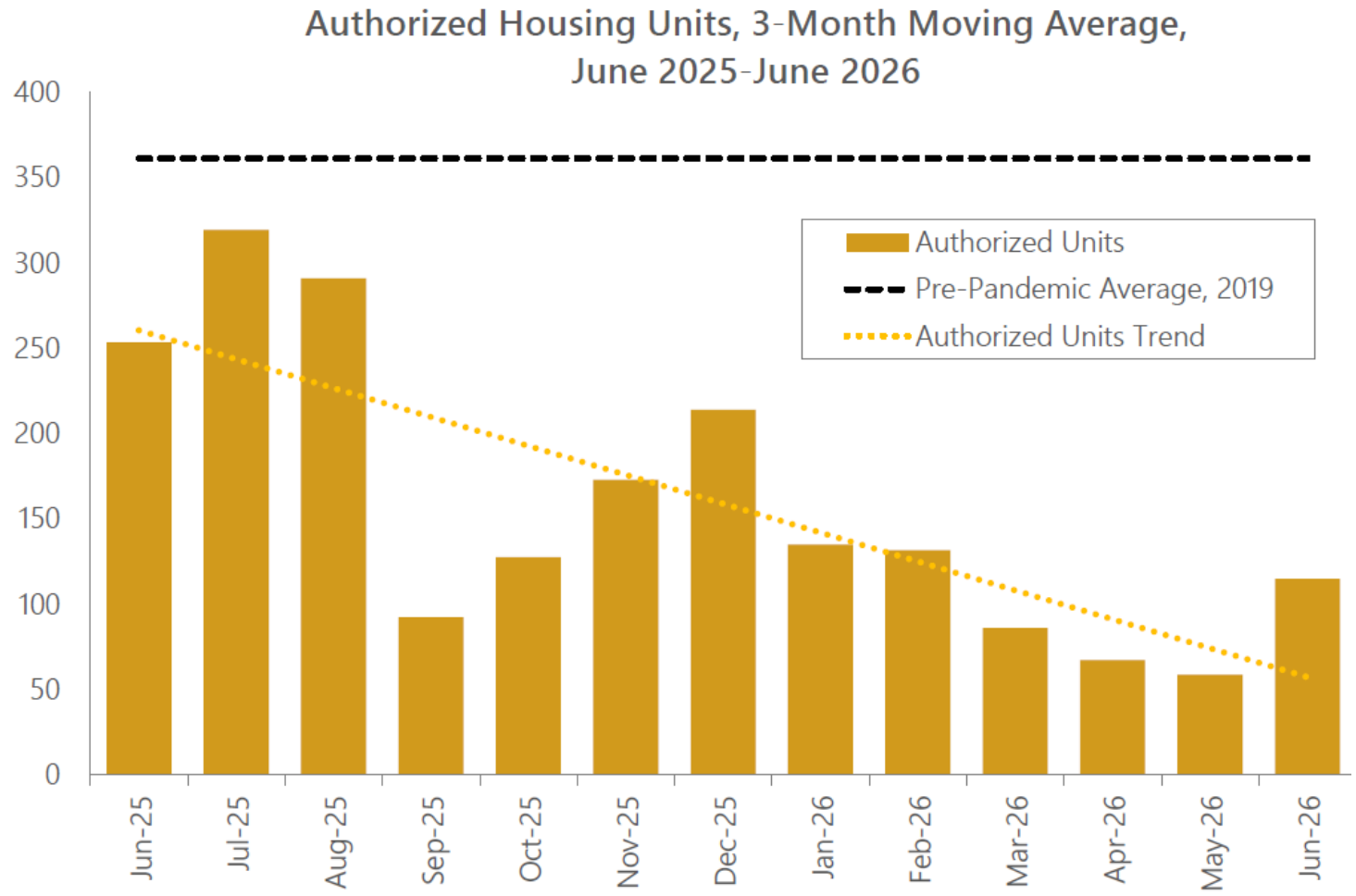
Net New Commercial Square Footage in Construction (at time of Report)



Source: SF Planning Development Pipeline, https://data.sfgov.org/d/6jgi-cpb4

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Housing permits remain lower than pre-pandemic levels



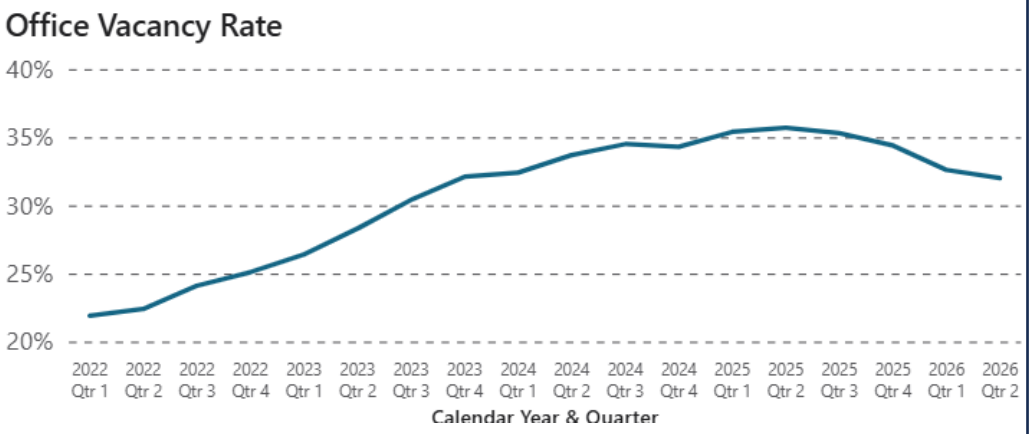
Source: Data from the SF Planning Department;
Visual from the City Economist August 2026 Status of the San Francisco Economy Report

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Demand on office space has slightly increased

Office vacancy rate has decreased, but remains above 30% (as of Q2 of 2026)

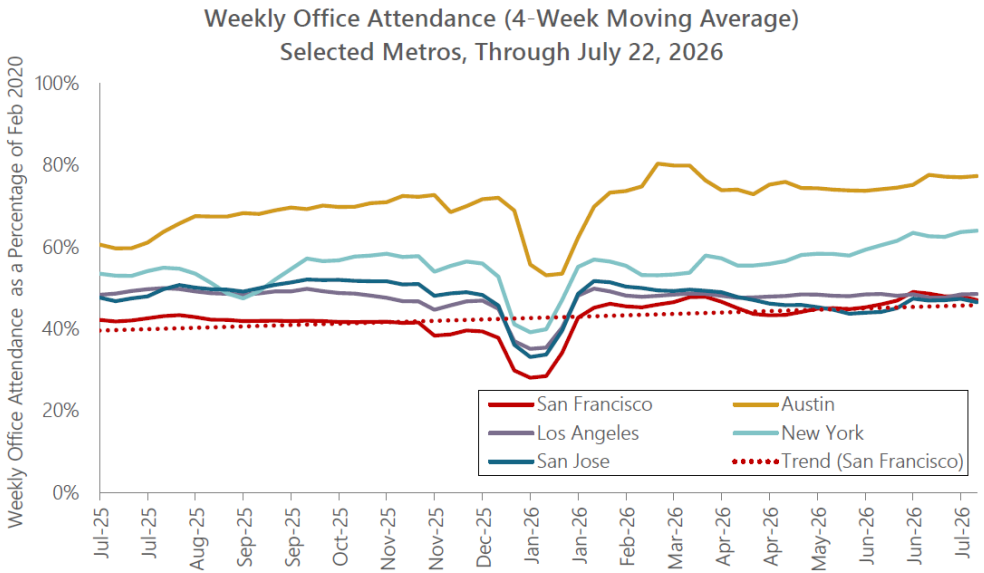
- 32% of office space vacant



Source: San Francisco Scorecards, through Quarter 2 of 2026

In-Office work rates in SF remain steady

- About 40% of pre-pandemic levels



Source: Data from Kastle System, Visual from the City Economist August 2026 Status of the San Francisco Economy Report

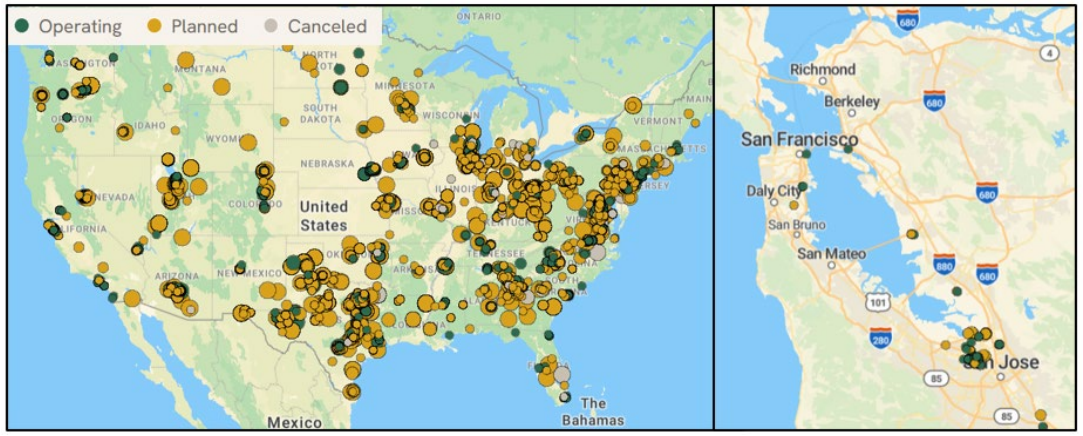
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Economic & Political Factors

AI data center construction work is booming, which impacts material costs

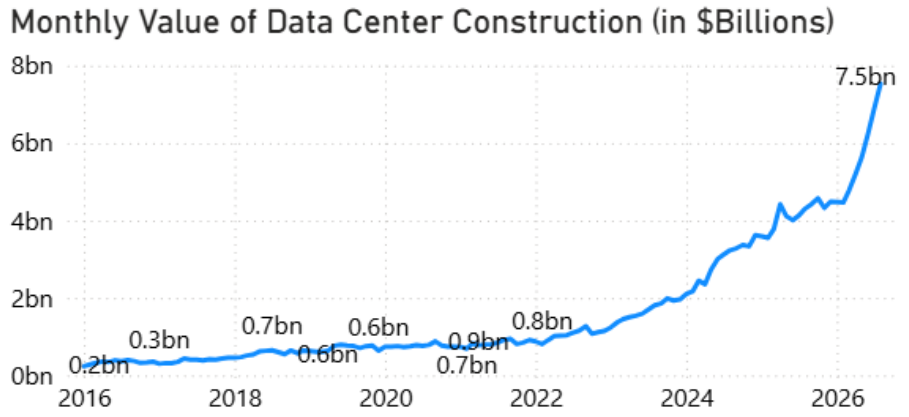
- Data center construction increases demand on materials, labor, and equipment.

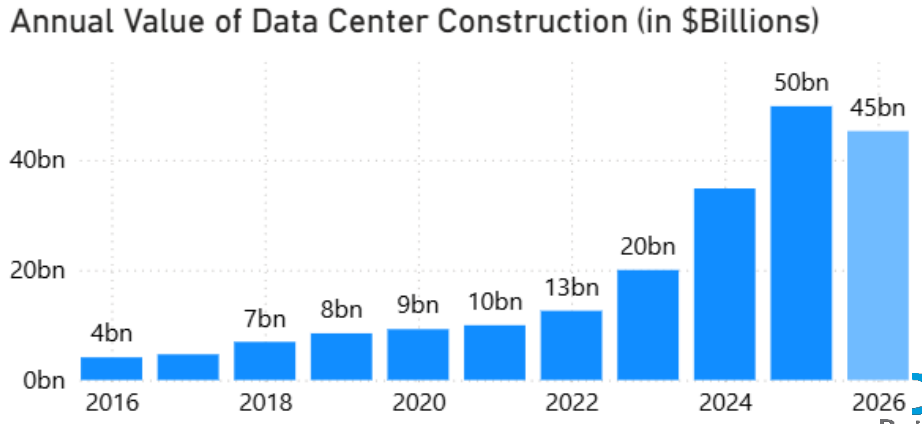
Data Centers in the US: Planned, Operating, and Under Construction



Source: Cleanview's Data Center Tracker, as of 10/26/26
https://www.cleanview.co/

Value of Data Center Construction in the US, through August 2026





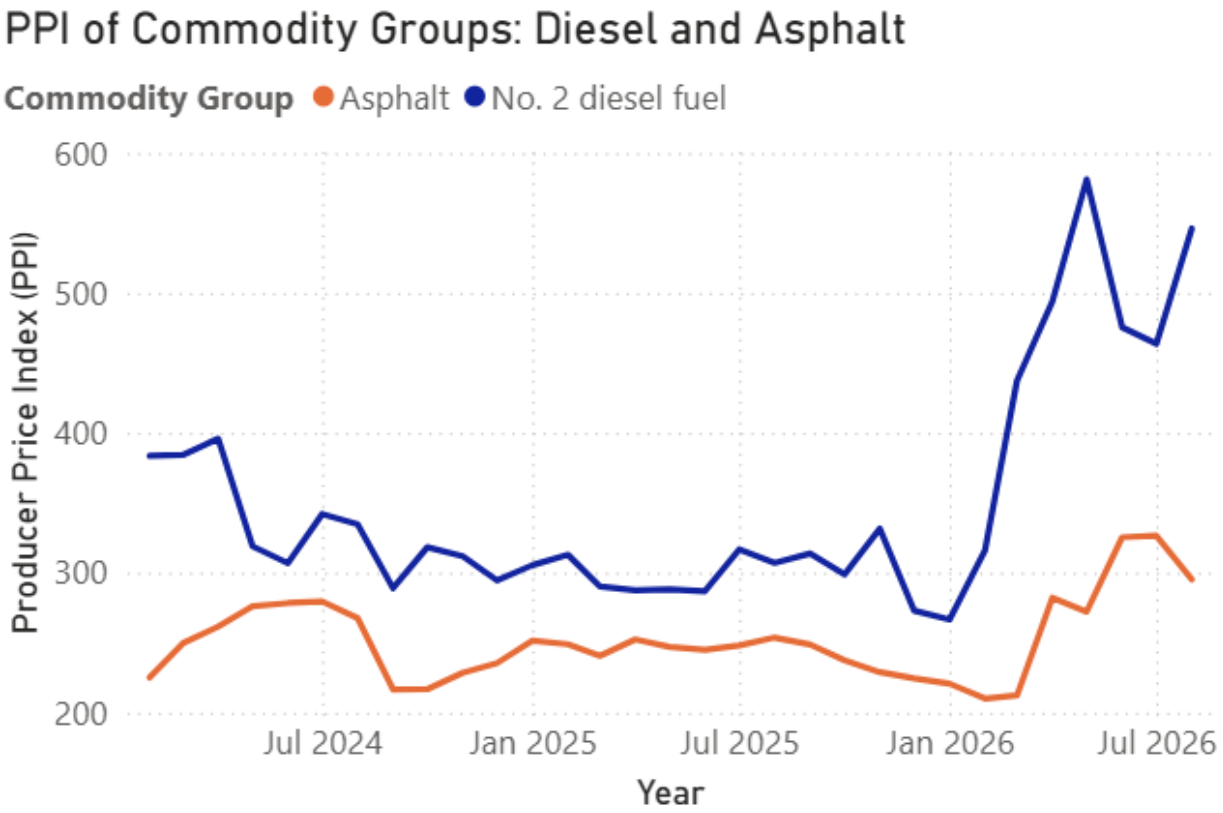
Source: US Census Bureau

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Oil and diesel price volatility can drive escalation for certain types of projects

- Rising oil prices impact fuel, transportation costs, and other related material costs.
- Differentially impacts projects.

"Higher fuel prices can have a downstream impact on construction material costs through trucking and transportation. This is particularly relevant to heavy civil projects with significant equipment and fuel usage."
- M Lee Corporation survey response

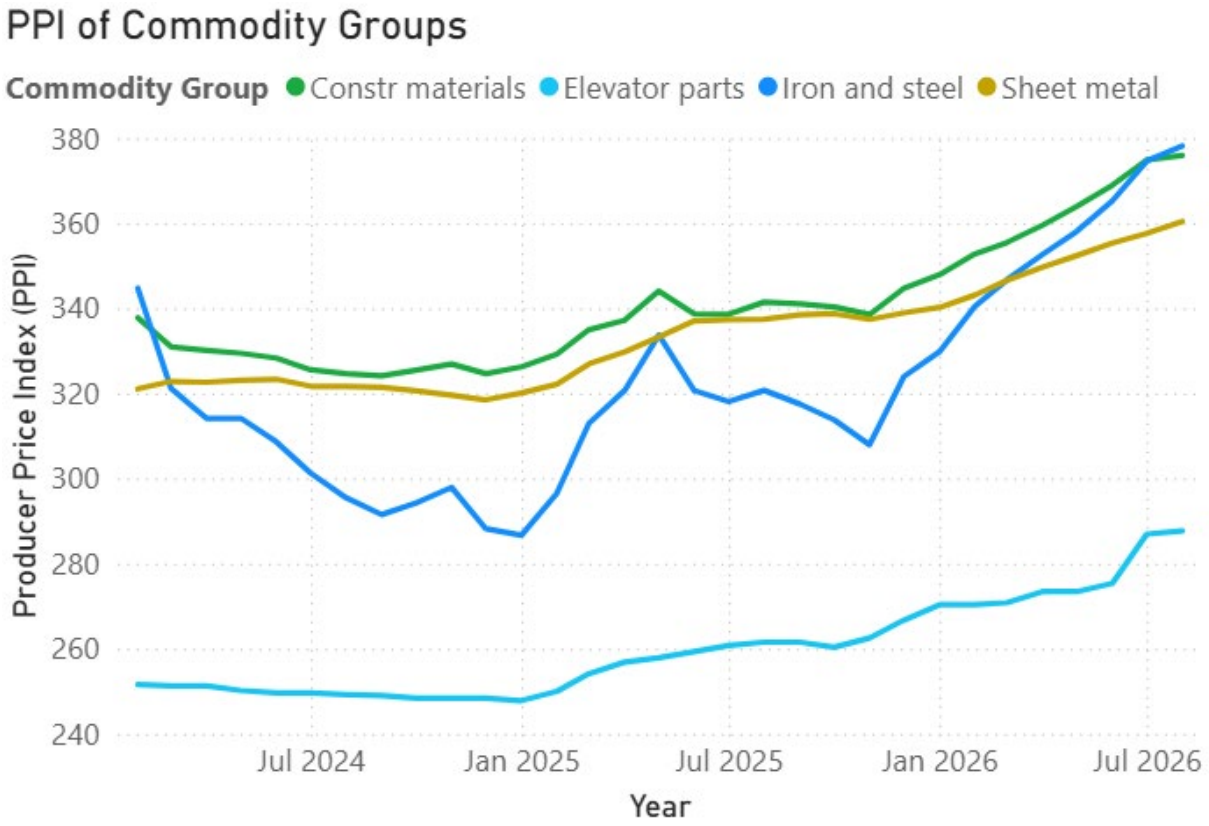


Source: Bureau of Labor Statistics, Producer Price commodity indices: WPU057303 and WPU058102; 2024 - 2026

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Tariffs have increased costs on certain materials and continue to add uncertainty

- Tariffs impact the cost of construction in multiple ways:
  - Directly impact the price of construction inputs.
  - Impact the broader economy which can then impact the labor market, investment, etc.
- Largest direct impacts so far have been on metals, steel, electrical equipment, including elevator parts.
- Cited as a key source of uncertainty by almost all experts.



Source: Bureau of Labor Statistics, Producer Price commodity indices: WPU101, WPU1073, WPU114202, WPUSI012011; 2024 - 2026

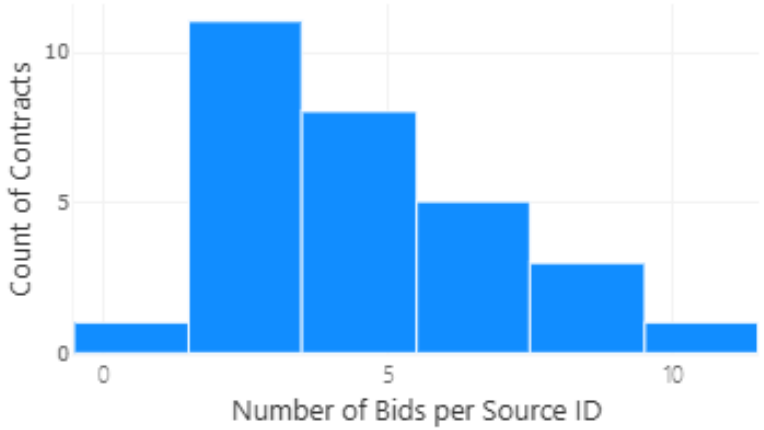
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Bid Data

Bid environment is similar to prior year's reporting

- DPW received an average of **4.5 bids and a median of 4 bids** (for the 29 successful solicitations with a contract awarded).
- Winning bids were an average of .90x the engineer's estimates.

Histogram of Total Contracts by Number of Bids Received



Histogram of Total Contracts by Award Price Differential



Source: DPW Bid Data FY26, as of Sep 2026

Expected Price Impacts of Bids Received

Bid count	Differential from Eng. Estimate
1	25% to 50% above estimate
2-3	10% to 25% above estimate
4-5	0% to 10%
6-7	0% to -10% below estimate
8-10	-10% to -25% below estimate

Source: Saylor Consulting, Market Conditions Report

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Summary of Survey Findings

SF Experts Projected Escalation (as of Sept 2026)

Organization	2027 Estimate
Builders	
Clark Construction	4-5
DPR Construction	4
Hathaway Dinwiddie	5-5.5
Pankow	3-5
Swinerton	4
Turner	6.1
Market Consultants	
Cumming Group	5.45
Gordian[1] (5-year avg.)	4.83
Martin Lee Corporation	4.5
Saylor Consulting Group	4-6
TBD Construction	4.5
Average	**4.7**

[1]Uses Gordian 5-year average as of the end of prior year

What are the main drivers of the escalation rate in the next year?

"Tariff uncertainty and volatility continues to put upward pressure on material costs. Additionally, a general shortage of the workforce continues to put upward pressure on wage rates."
– TBD Consultants

"1) Geopolitical uncertainty including conflicts around oil rich areas and tariffs, and 2) Labor shortage in the construction industry " – Clark Construction Group

"Increasing lack / shortage of labor, especially in apprenticeship programs and welders, lack of labor and equipment due to the boom of data center construction, healthcare construction"
– Cumming Group

"Unpredictable trade and tariff policies; multiple ongoing wars and their far-reaching effects; the surge in large-scale data center construction nationally, which has created competition for certain equipment, materials, and skilled trades."
– Hathaway Dinwiddie

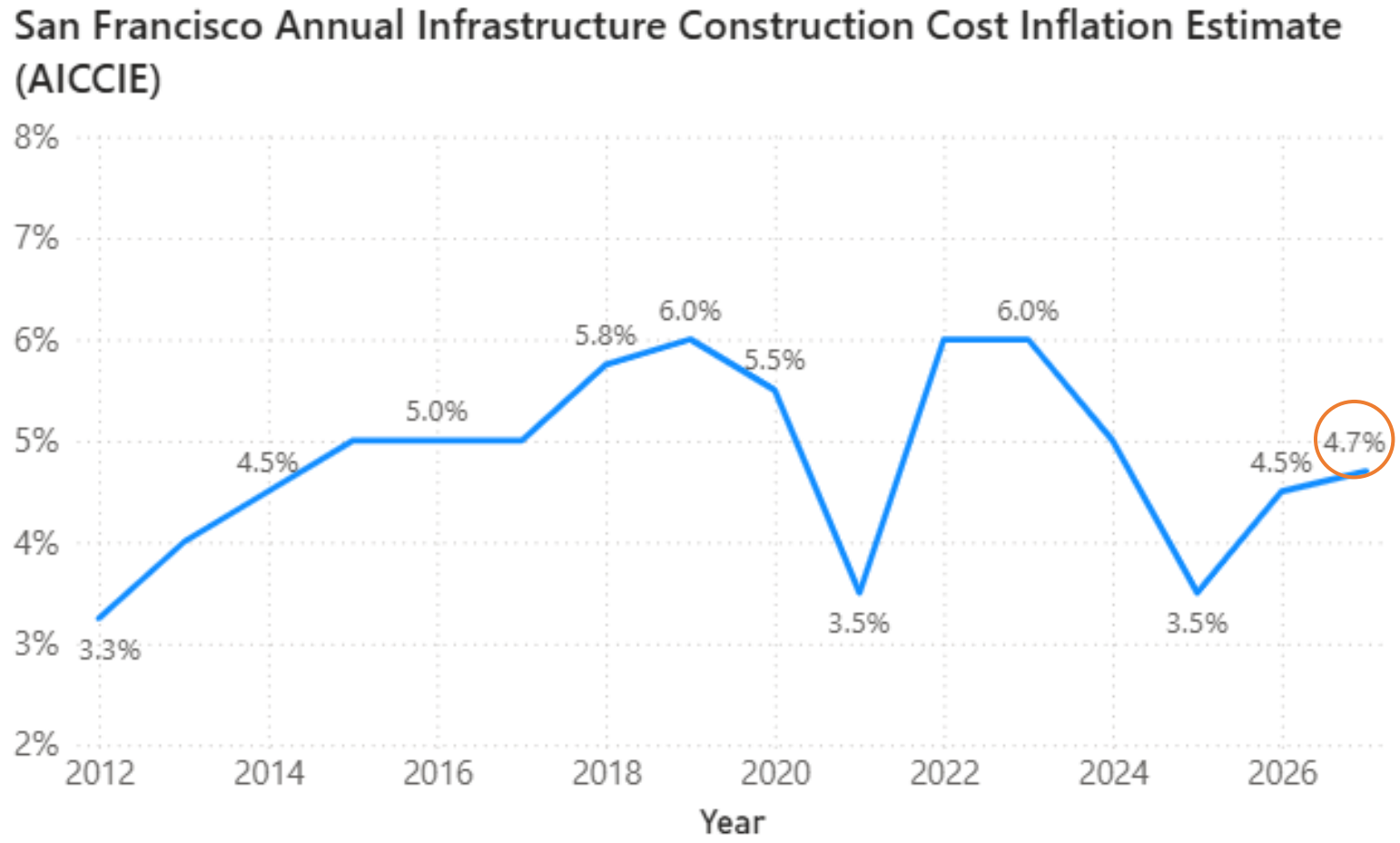
SF Department Projected Escalation (as of Sept 2026)

Department	2027 Estimate	Notes
SFO	5	This is the base escalation estimate; additional market factors may be added for certain projects (for example, for specific tariff impacts).
SFPUC	4.5	This is the base escalation; market condition factor may be added when applicable.
REC (Custom Work)	4.5-6	Use professional cost estimators for project-specific escalation. Estimated 4.5-6 in the next year. Note that RPD projects are a unique mix of landscape, building, and infrastructure.
PORT	-	Use AICCIE where applicable, also use professional cost estimators for projects.

Additional themes in department conversations:

- Market factors used for new technologies and other project-specific factors
- Have seen increased lead times
- Impacts of tariffs and oil prices have impacted projects
- Impacts of historic El Niño, climate change, and environmental hazards

Considering the current market conditions, we propose 4.7%



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Mitigation strategies

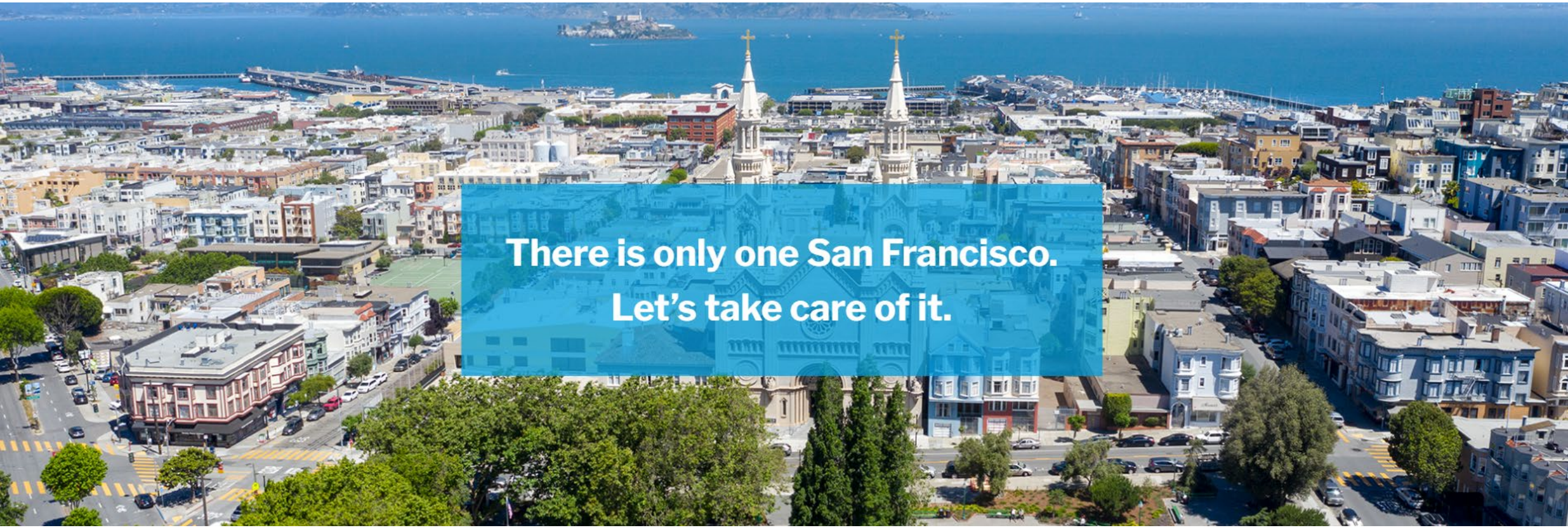
- What can the City do to respond to construction cost escalation?
- How might we pivot or respond to escalation of certain materials?
- Mitigation Strategies from Saylor Consulting:
  - During design: Prioritize project elements, reduce scope, or augment project funds
  - During bidding: Identify and mitigate barriers to bidding; Solicit interest 1-3 months before bid and allow 2 months for bidding
  - Consider the costs of different delivery methods

"Proactive procurement strategies, fuel cost monitoring, and early contractor engagement remain critical to mitigating oil-driven cost volatility in 2026."
– Cumming Group Market Analysis, March 2026

Notes from department experts:

- Consider different delivery methods and the cost implications
- Allowing sufficient advertising and bid time is critical for competitive bids
- For each project, understanding the high-level cost categories and considering different commodities or approaches.
- Process improvements to deliver projects faster and on time will prevent escalation

Thank You



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Appendix: Additional Data & Methods

AICCIE Legislation Text

- The AICCIE "shall be updated on an annual basis…in order to establish a reasonable estimate of construction cost inflation for the next calendar year for a mix of public infrastructure and facilities in San Francisco."

- "The Controller shall review the amount of each development fee established in this Article and shall adjust the dollar amount of any development fee on an annual basis every January based solely on the AICCIE…"

Methodology

Review indices

- Bureau of Labor Statistics (Indices and Commodities)
- Engineering News-Record
- Turner Index
- TBD Bid index

Gether input from local experts

- Construction Firms
- Market Consultants
- SF Gov departments
- SF Chief Economist

Understand SF public construction market

- Development pipeline
- Bid competition & validity of engineer's estimate
- Local labor considerations

Contextualize with market and sector trends

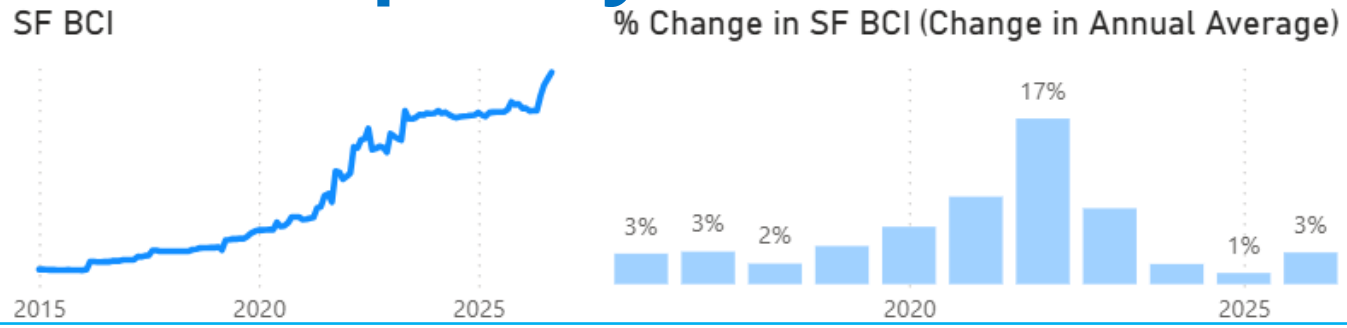
- Resources:
  - Major construction and construction-related cost indices
  - Materials cost information (from the Bureau of Labor Statistics (BLS) data)
  - Labor data from the Census
  - Market reports from industry experts (RLB Reporting, Cumming Group Market Analysis, Gordian, AIA, etc.)
  - Conversations with project managers, construction consultants/economists, and those working in the field
  - Public reports of local construction activity

At the local level, construction cost indices have risen 2-3% in the past year

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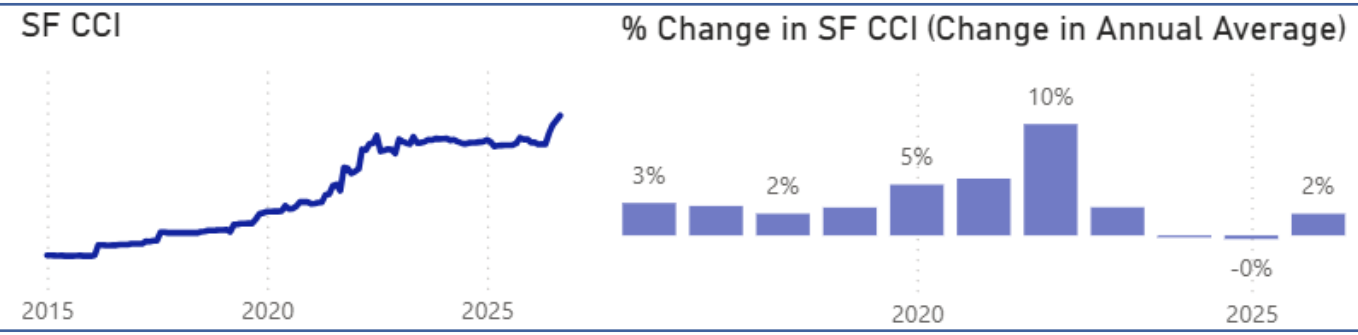
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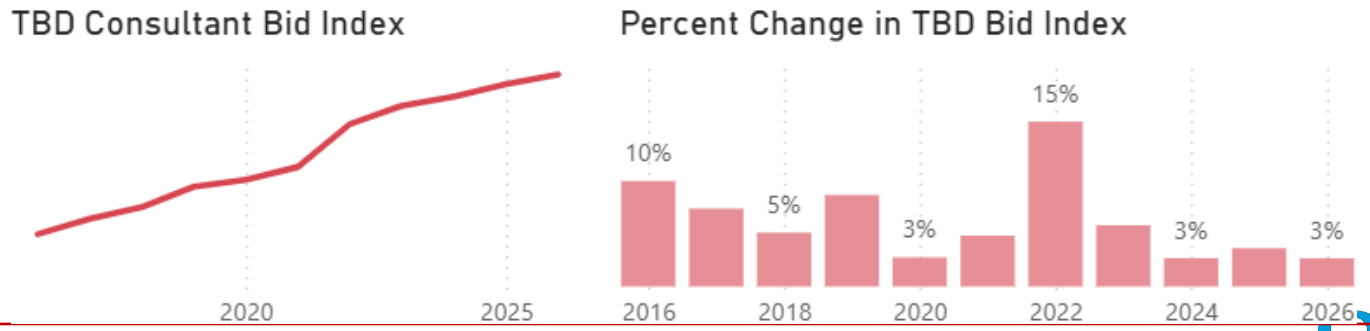
->Increasing at 2%



TBD Consultants Bid Index (SF)

Change in construction bid cost for an indexed new construction project in SF

->Increasing at 3%



Source: Engineering News-Record Construction Cost Index & Building Cost index from 2016- Sept 2026; TBD Index through Q2 2026

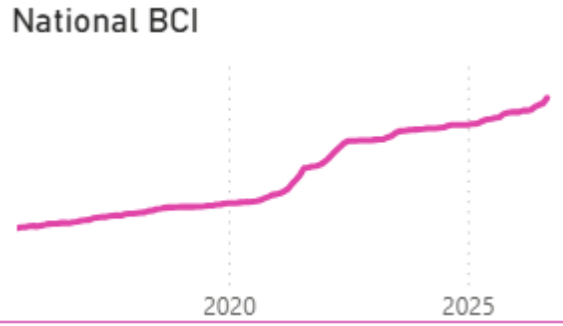
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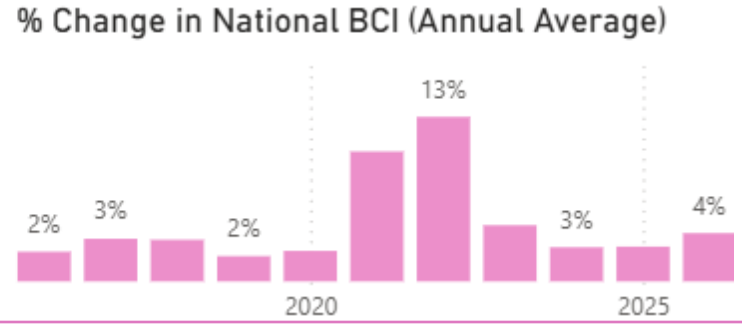
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Cost of skilled labor, structural steel, cement, lumber

->Increasing at 4%

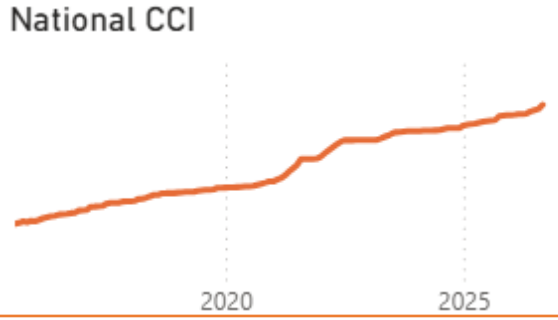


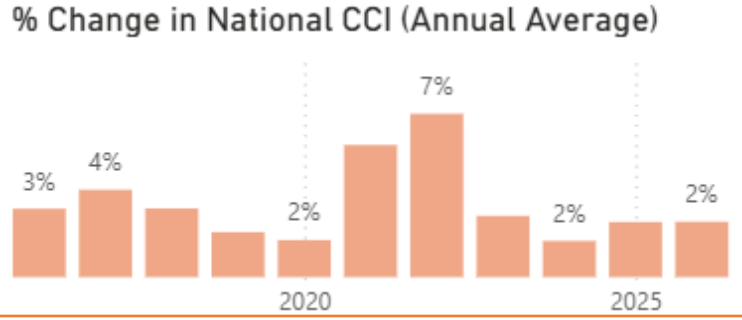


ENR Construction Cost Index (US)

Cost of common labor, structural steel, cement, lumber

->Increasing at 2%

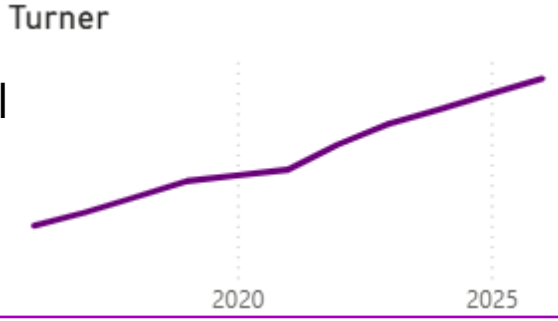


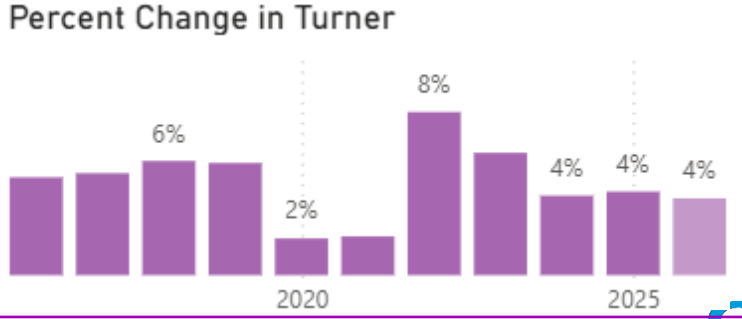


Turner Building Cost Index (US)

Labor rates, productivity, material prices, and the competitive condition of the marketplace

->Increasing at 4%





Source: Engineering News-Record Construction Cost Index & Building Cost index from 2016-Sept 2026; Turner Index through Q2 2025

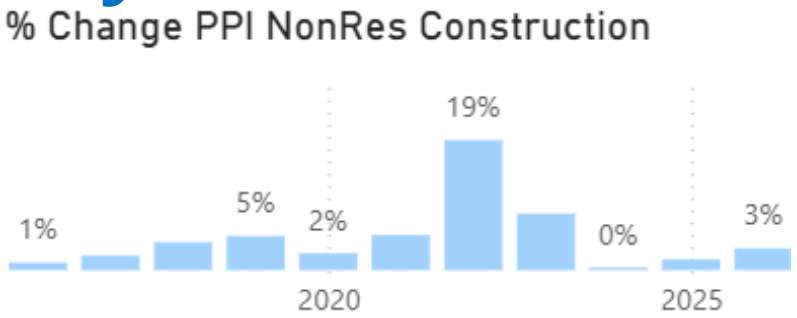
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Construction cost PPIs (from the BLS) show similar increases over the past year

US New Non-Residential Building Construction Producer Price Index (PPI)

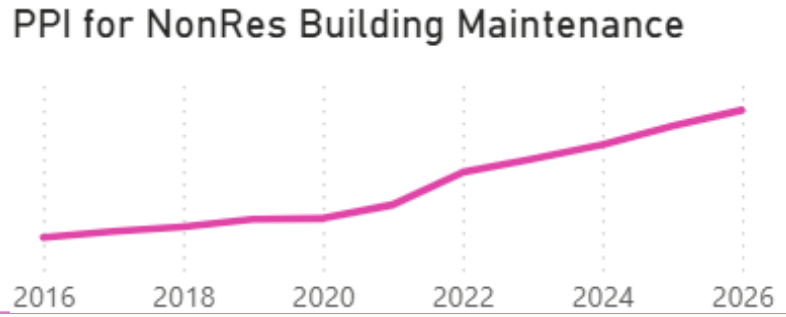
-> increasing by 3%

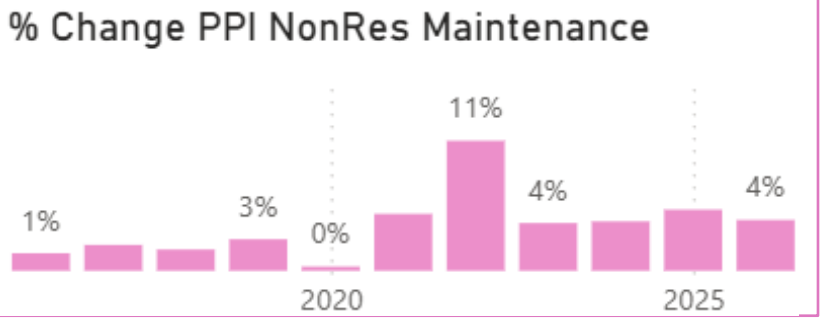




US PPI Industry data for Non-Residential Building Maintenance & Repair

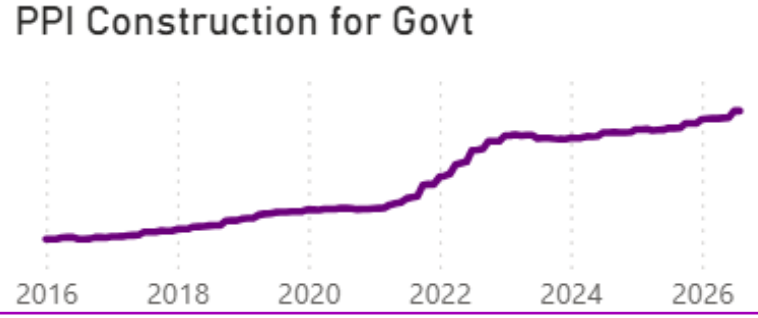
->increasing by 4%

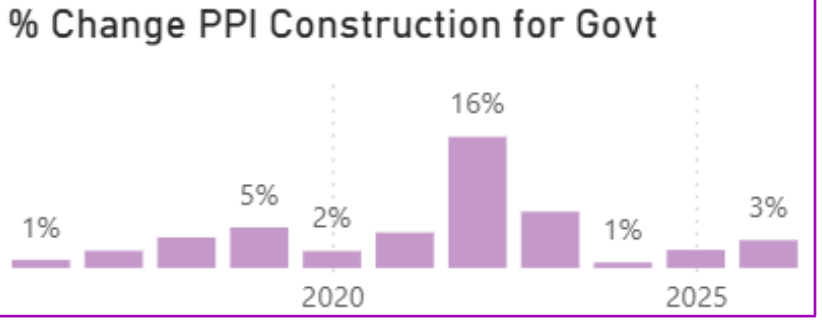




US PPI Commodity data for Final demand-Construction for Government

->increasing by 3%





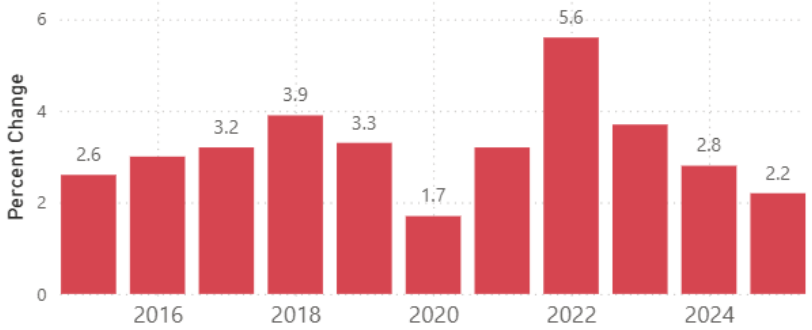
BLS = Bureau of Labor Statistics; PPI = Producer Price Index, measures the average selling prices

Source = Source: Bureau of Labor Statistics, various Producer Price Indices, 2016 – August 2025

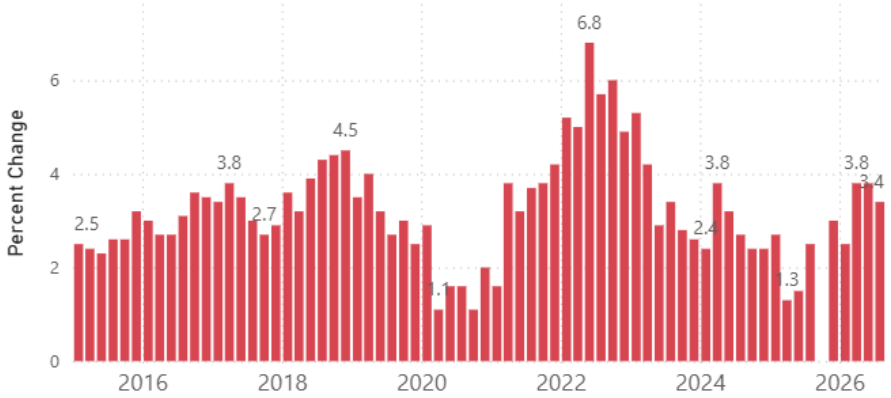
Consumer prices are increasing and interest rates remain relatively high

Consumer Price Index for All Urban Consumers (CPI-U)
All items in San Francisco-Oakland-Hayward, CA
All urban consumers, not seasonally adjusted
2015-Aug 2026

Percent Change in CPI (Annual change from prior year)



Percent Change in CPI (Monthly change from same month, prior year)



Source: Local Metro Area CPI from BLS, through Aug 2026

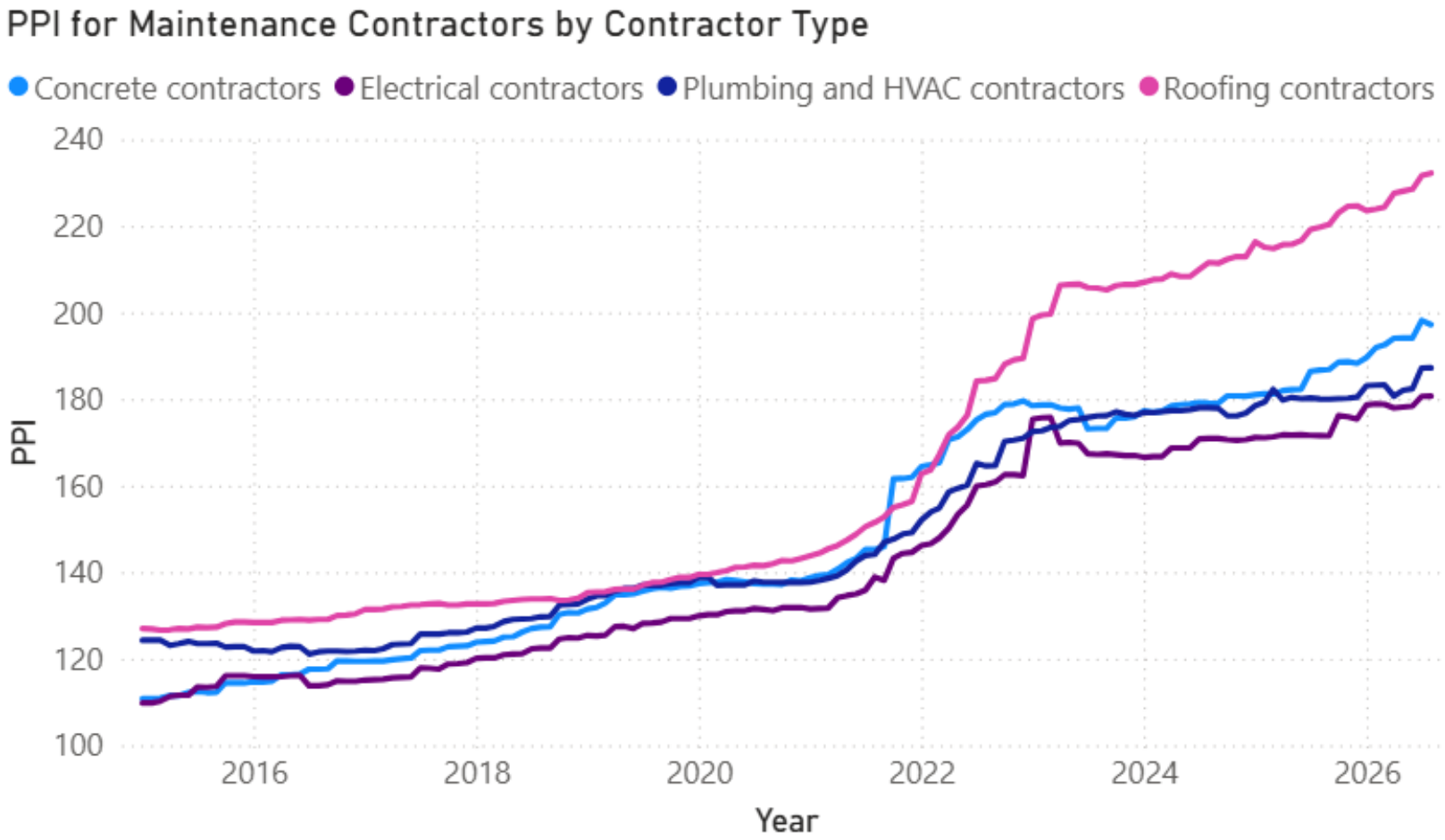
Federal Funds Effective Rate



Source: [Federal Funds Effective Rate (FEDFUNDS) | FRED | St. Louis Fed](), through Aug 2026

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Roofing contractors have a comparatively higher PPI, and increasing faster than other maintenance contractors

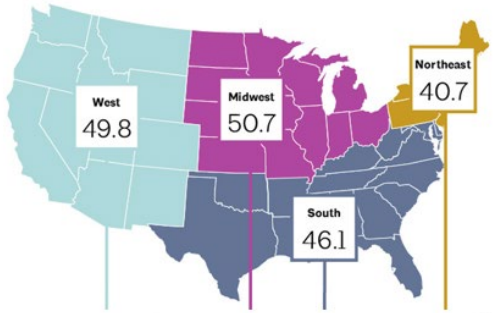


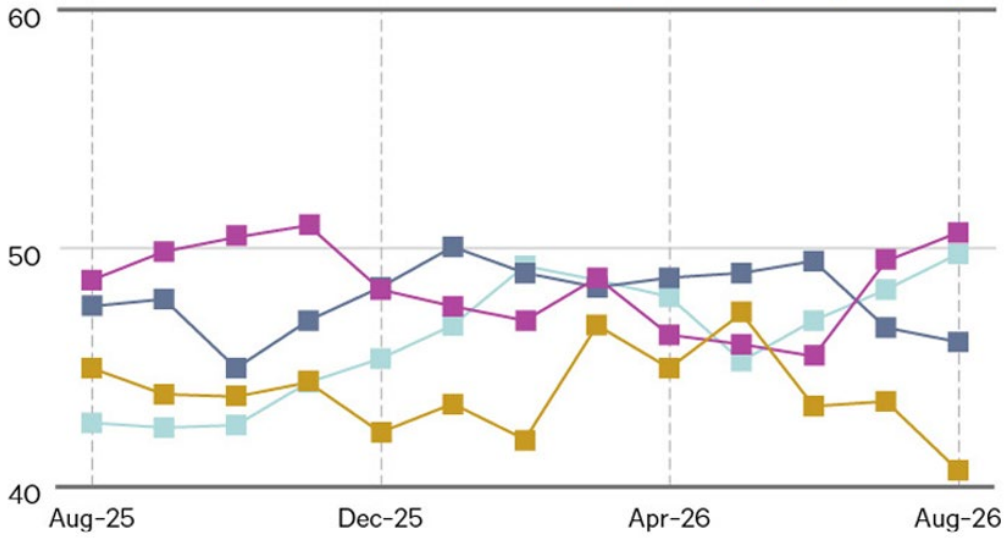
BLS = Bureau of Labor Statistics; PPI = Producer Price Index, measures the average selling prices
Source = Bureau of Labor Statistics, Producer Price Indices for Non Residential Maintenance Contractors, 2015 - 2026

Architecture billings remain soft, but some growth in Midwest and Commercial

REGIONAL

Business conditions remain soft at firms in all regions.

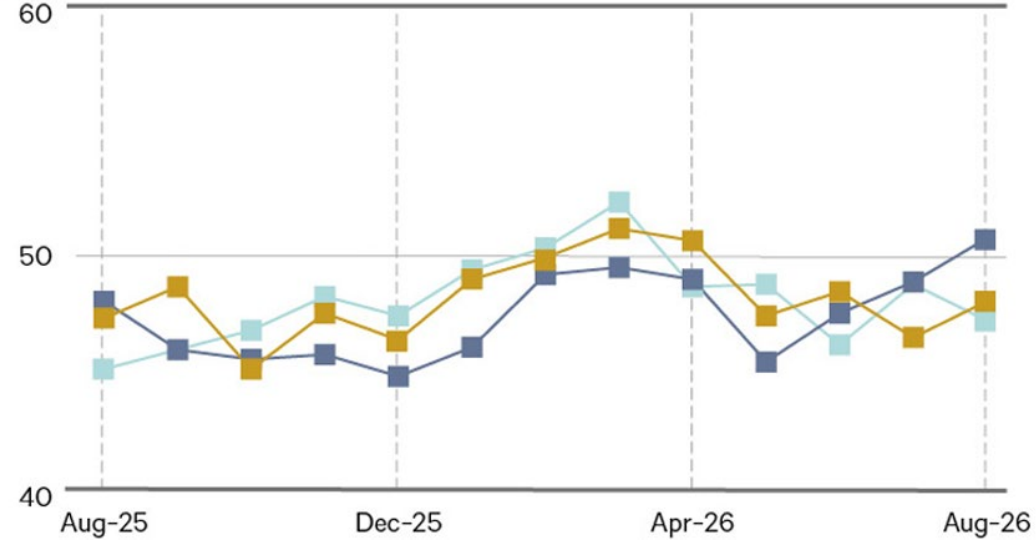




SECTOR

Firms of all specializations continue to see soft billings.





Source: AIA, ABI Monthly Reporting "ABI August 2026: Architecture firm billings continue to decline"

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So far in 2026, we've seen the biggest price increases for diesel, iron, steel, and heat exchangers

% Change in PPI For Specific Commodity Groups through August 2026 (% change from prior year)

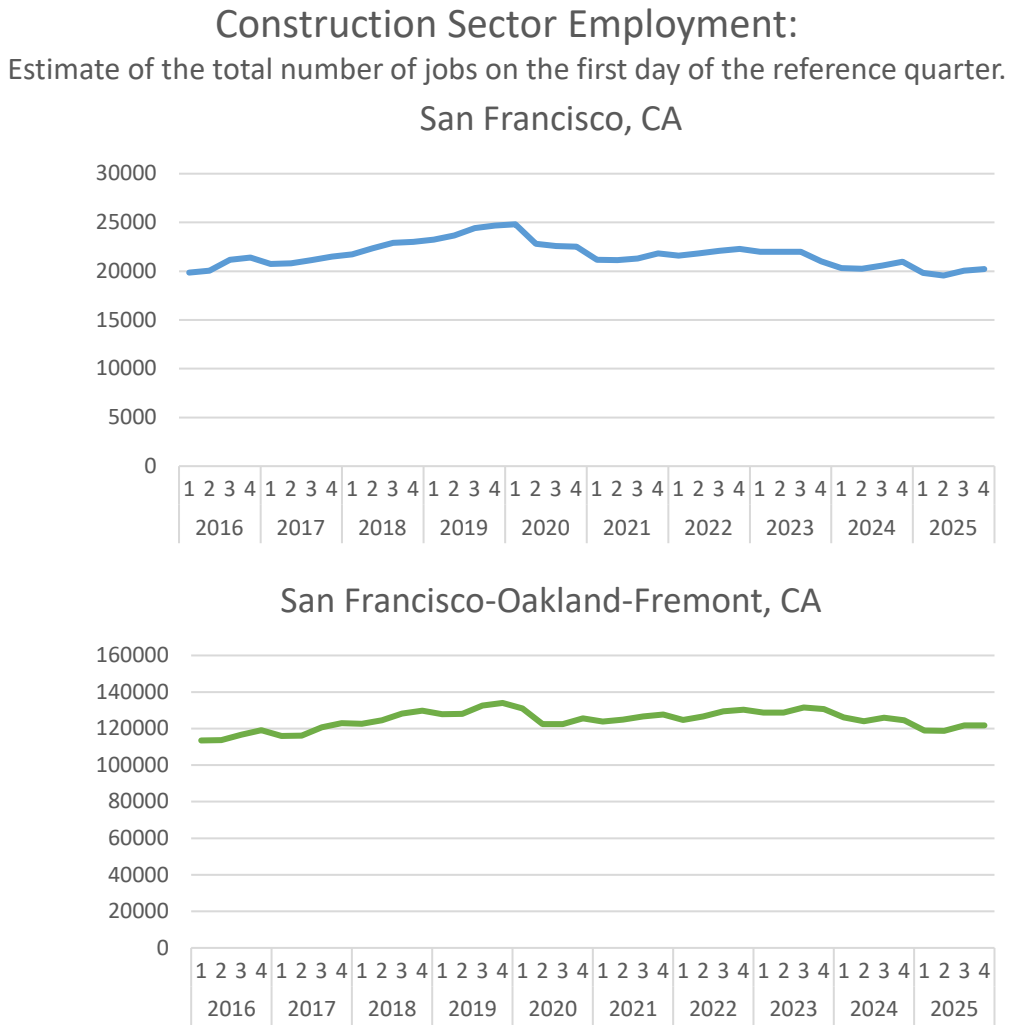
Commodity Group or Type	2026
No. 2 diesel fuel	50.3
Iron and steel for bldgs	20.8
Heat exchangers and steam condensers	13.7
Iron and steel	13.4
Asphalt	7.9
Elevator parts	7.8
Sheet metal	6.1
Air conditioning	4.8
Concrete ingredients	4.1
Lumber and plywood	3.9
Constr machinery and equipment	3.7
Lumber	3.5
Softwood lumber	3.4
Asphalt and tar paving	3.1
Plastic construction products	2.6
Asphalt and tar roofing/siding	1.1
Gypsum bldg materials	-1.4

% Change in PPI For Specific Commodity Groups through August 2026 (% change from prior year)

Year	2026							
Commodity Group or Type	January	February	March	April	May	June	July	August
No. 2 diesel fuel	-12.7	1.0	50.6	71.9	101.6	65.7	46.4	77.8
Iron and steel for bldgs	22.6	20.3	15.9	15.5	17.0	21.2	24.5	29.1
Heat exchangers and steam condensers	11.3	12.4	14.1	14.8	14.9	15.8	13.2	13.2
Iron and steel	15.0	14.8	10.8	10.0	7.3	13.9	17.8	17.9
Asphalt	-12.3	-15.6	-11.8	11.8	10.2	32.9	31.6	16.4
Elevator parts	9.1	8.1	6.6	6.5	6.0	6.2	10.0	10.0
Sheet metal	6.3	6.5	6.0	6.1	5.7	5.4	6.0	6.8
Air conditioning	5.4	5.8	6.8	5.2	4.0	2.9	4.3	4.1
Concrete ingredients	4.0	3.9	4.0	4.0	4.0	4.2	4.2	4.2
Lumber and plywood	0.7	0.9	-2.1	2.5	4.6	5.9	10.0	8.3
Constr machinery and equipment	4.8	4.9	4.8	4.0	3.5	2.6	2.6	2.2
Lumber	0.4	1.0	-2.7	2.1	4.3	5.1	10.1	7.6
Softwood lumber	-2.8	-1.7	-6.8	0.9	4.8	6.1	15.0	11.8
Asphalt and tar paving	-4.4	-5.4	-5.5	2.8	9.2	8.9	9.2	10.1
Plastic construction products	0.0	0.8	1.3	1.4	3.2	4.3	4.9	4.8
Asphalt and tar roofing/siding	-1.3	1.2	-0.4	0.8	-0.9	2.2	3.6	3.9
Gypsum bldg materials	-0.2	-1.5	-2.2	-1.5	-2.5	-1.8	-0.8	-0.9

Source: Bureau of Labor Statistics, various Producer Price commodity indices, 2015 - 2026

Construction labor employment continues to fall



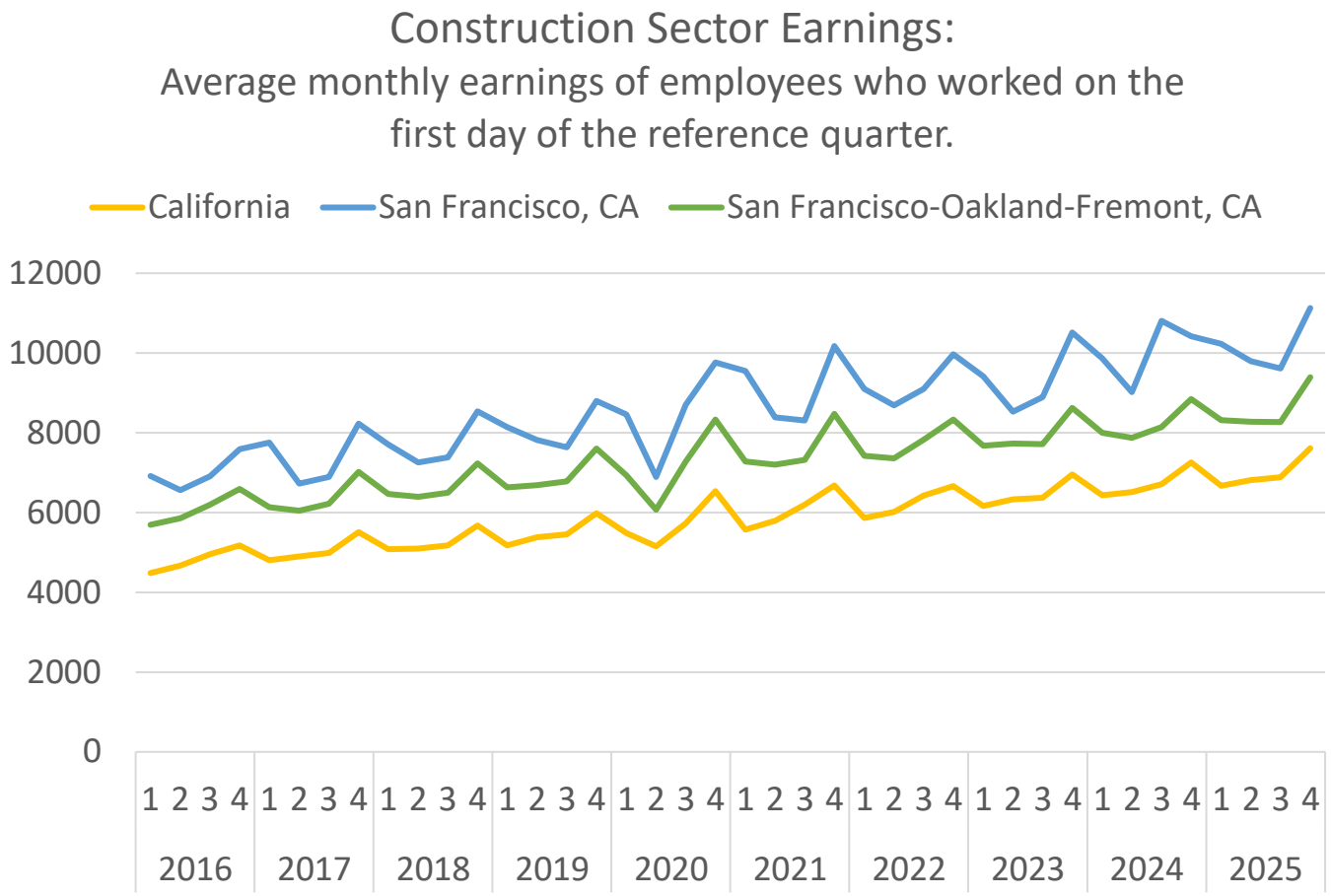
Construction Employment: Annual Percent Changes

	San Francisco, CA		San Francisco-Oakland-Fremont, CA	
Year	Average Employment	Percent Change	Average Employment	Percent Change
2016	20,620	13%	115,706	5%
2017	21,052	2%	118,948	3%
2018	22,500	7%	126,307	6%
2019	23,998	7%	130,610	3%
2020	23,182	-3%	125,345	-4%
2021	21,353	-8%	125,751	0%
2022	21,954	3%	127,740	2%
2023	21,736	-1%	129,897	2%
2024	20,530	-6%	125,136	-4%
2025	**19,914**	**-3%**	**120,309**	**-4%**

Source: US Census Bureau, Longitudinal Employer-Household Dynamics data, 2015-2025

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Construction labor costs continue to rise



San Francisco Construction Sector Earnings: Annual Percent Changes

Year	Average of Monthly Earnings	Percent Change from Prior Year
2016	6,994	4%
2017	7,401	6%
2018	7,720	4%
2019	8,099	5%
2020	8,453	4%
2021	9,105	8%
2022	9,213	1%
2023	9,336	1%
2024	10,028	7%
2025	**10,190**	**2%**

Source: US Census Bureau, Longitudinal Employer-Household Dynamics data, 2015-2025

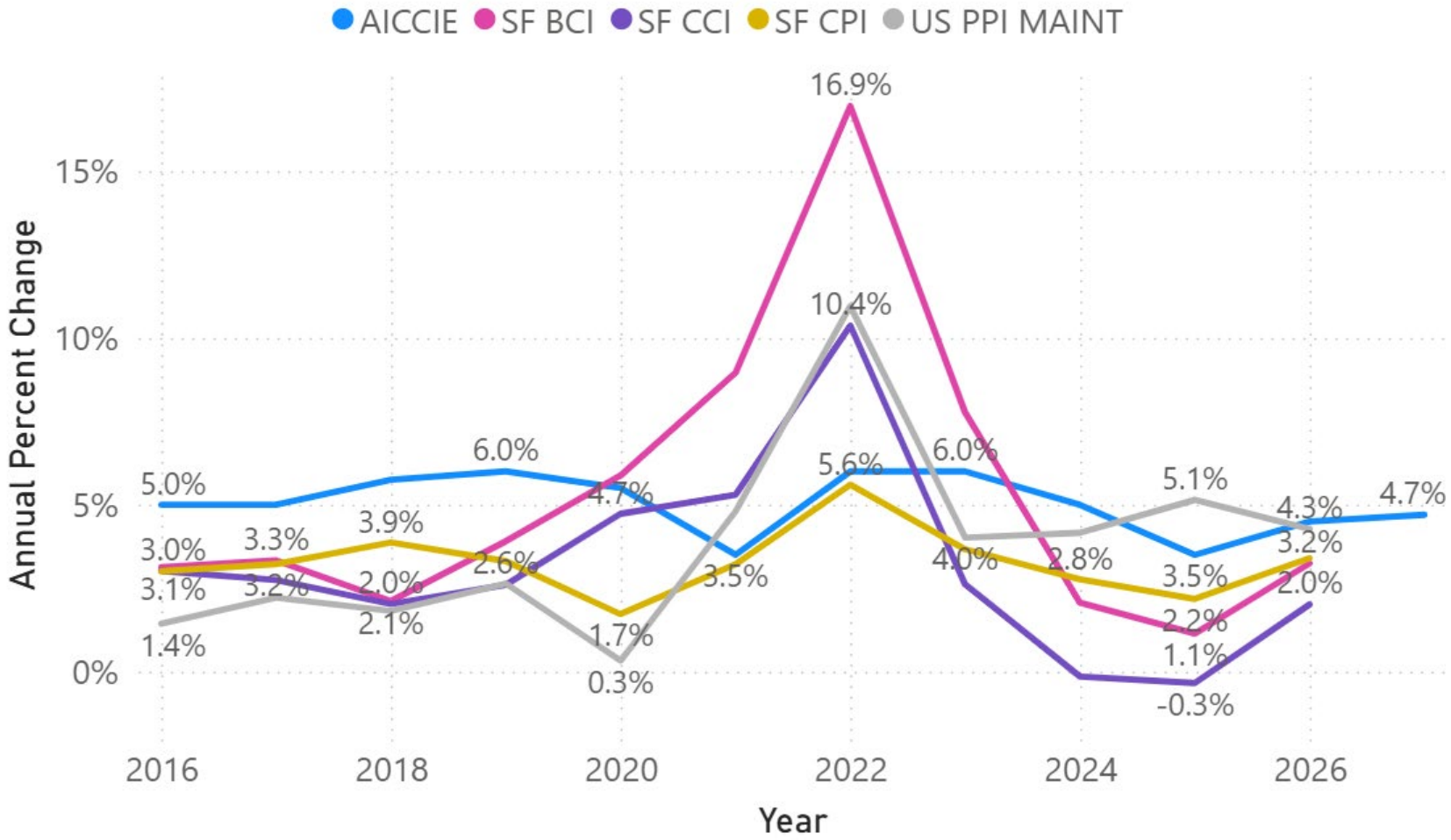
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Cost Escalation Survey Results Over Time

Organization	2023 Estimate	2024 Estimate	2025 Estimate	2026 Estimate	2027 Estimate
Builders					
Clark Construction	5.5	3.5-4	4-5	4-5	4-5
DPR Construction					4
Hathaway Dinwiddie					5-5.5
Jacobs	8	7-8	4-5	6-8	
Pankow	5	2-3	3-4	4[2]	3-5
Swinerton					4
Turner	-	-	-	3.65-4.65	6.1
Webcor	-	-	-	4.5[2]	
Market Consultants					
Cumming Group	4.74	5	4.68	5.35	5.45
Gordian[1] (5-year avg.)	5.88	6.27	5.68	4.49	4.83
Martin Lee Corporation	8	5	5	4	4.5
Saylor Consulting Group	7	3-5	4	4.5	4-6
TBD Construction	6-7	6	4.5	4	4.5

[1]Uses Gordian 5-year average as of the end of prior year
[2]Base escalation, but also estimating a potential tariff add-on

Cost Escalation Indices Comparison to AICCIE



Source: ORCP AICCIE data (forward-looking prediction); ENR construction cost indices for BCI and CCI; Bureau of Labor Statistics for CPI and Producer Price Indices for Building Maintenance and Repair Work, 2015 - 2026

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