

# 2025 Annual Infrastructure Construction Cost Inflation Estimate



October 21, 2024

# Overview

The Annual Infrastructure Construction Cost Inflation Estimate 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.*

**Today's action item:** Adopt rate for CY 2025 – *proposing 3.5%*

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- ❑ U.S. construction market
  - Construction cost indices
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- ❑ Metropolitan market conditions
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- ❑ Summary

# National indexes



# U.S. Construction Cost Indices – Historic

*Year-on-year annual change, using June of each year*

|                                       | Description  | 2019 | 2020 | 2021  | 2022  | 2023  | 2024  |
|---------------------------------------|--|------|------|-------|-------|-------|-------|
| <b>National Indices</b>               |  |      |      |       |       |       |       |
| <b>BLS New Construction PPI</b>       | Change in bid price for new non-residential construction   | 5.5% | 2.5% | 3.2%  | 18.9% | 11.6% | -0.9% |
| <b>BLS Maintenance Contractor PPI</b> | Change in bid price for work done to maintain and repair non-residential buildings only                            | 2.5% | 0.4% | 4.4%  | 13.9% | 2.5%  | 4.3%  |
| <b>Turner Building Cost Index</b>     | Change in costs of non-residential building construction nationwide; factors labor, materials, and competitiveness | 5.5% | 2.4% | 0.9%  | 8.1%  | 6.4%  | 4.1%  |
| <b>ENR Indices</b>                    |  |      |      |       |       |       |       |
| <b>ENR BCI</b>                        | Change in <b>skilled labor</b> and structural steel, portland cement, and lumber                                   | 1.9% | 2.1% | 10.1% | 14.8% | 2.6%  | 2.8%  |
| <b>ENR CCI</b>                        | Change in <b>common labor</b> and structural steel, portland cement, and lumber                                    | 1.8% | 1.5% | 5.9%  | 8.2%  | 2.4%  | 0.9%  |

BLS = Bureau of Labor Statistics

PPI = Producer Price Index, measures the average change of selling prices

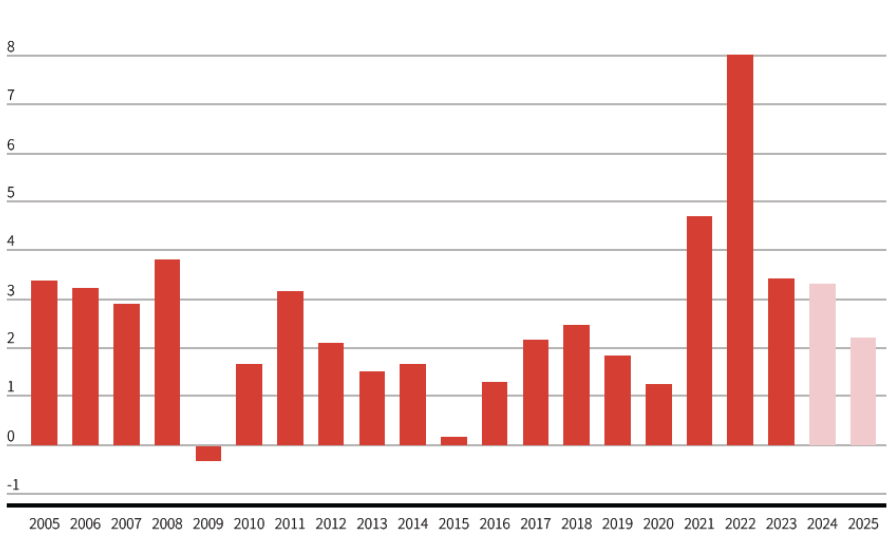
# Construction Site Materials Changes

*Change in index between annual average*

|                                 | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Concrete and related products   | 11.03       | 11.08       | 12.69       | 33.09       | 40.81       | 29.83       |
| Asphalt and tar paving mixtures | 4.71        | -0.18       | -0.26       | 16.24       | 13.93       | 0.75        |
| Gypsum building materials       | -17.79      | 0.22        | 43.44       | 56.22       | 34.12       | 2.42        |
| Lumber, softwood                | -26.5       | 64.9        | 117.38      | -12.79      | -109.45     | -31.33      |
| Sheet metal products            | 5.55        | -1.23       | 42.5        | 54.06       | 14.8        | 3.55        |
| Construction machinery          | 9.56        | 3.93        | 11.55       | 26.33       | 26.26       | 13.63       |
| Steel for buildings             | -1.67       | -0.08       | 44.72       | 42.51       | 4.49        | -25.97      |
| Plastic construction products   | 3.31        | 4.03        | 52.03       | 66.39       | 13.06       | -7.31       |
| Diesel fuel                     | -25.98      | -45.68      | 140.216     | 208.34      | -22.55      | -75.75      |

# Inflation and Interest Rates

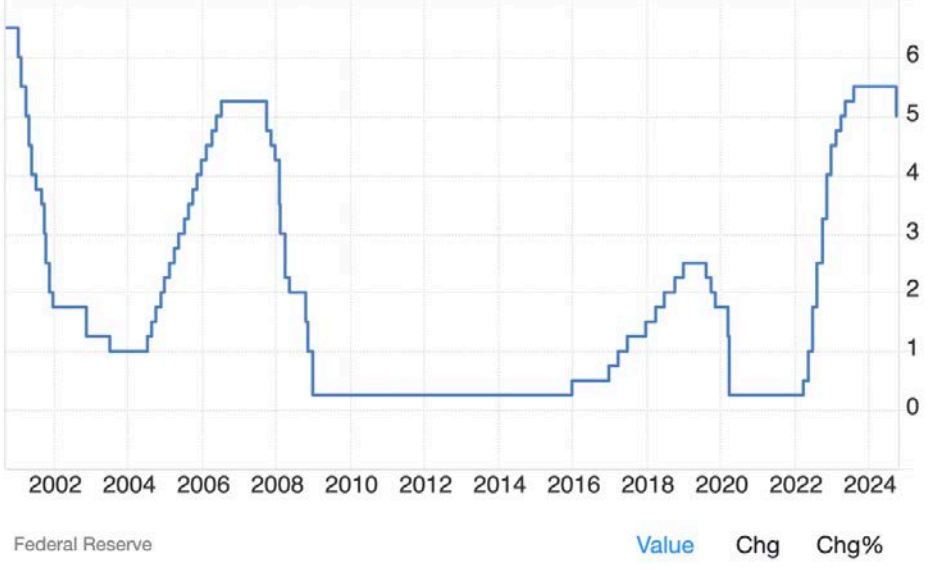
U.S. Consumer Price Index Forecast (2005-2025)



SOURCES:  
 Historic - Federal Reserve Bank of Minneapolis  
 Forecast - Wall Street Journal - Bi-monthly Survey

Source: Cumming Q2 2024 Market Analysis

U.S. Fed Funds Interest Rate (2000-2024)



Source: <https://tradingeconomics.com/united-states/interest-rate>

# S.F. metro construction market





# Local Economic Indices – Historic

*Numbers represented here are from June of each year*

|                                    | Description  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|------------------------------------|--|------|------|------|------|------|------|
| <b>Economic Indicators</b>         |  |      |      |      |      |      |      |
| <b>BLS SF Metro CPI</b>            | Change in cost of local consumer goods                                   | 3.2% | 1.6% | 3.2% | 6.8% | 2.9% | 3.2% |
| <b>BLS Local Area Unemployment</b> | Percent of unemployed labor force in San Jose-San Francisco-Oakland area | 3.0% | 9.1% | 5.8% | 3.2% | 4.2% | 4.2% |

# 2024 SF Experts Projected Escalation

| Organization                | 2021 Estimate | 2022 Estimate | 2023 Estimate | 2024 Estimate | 2025 Estimate |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Public Institutions</b>  |               |               |               |               |               |
| SFO                         | 2-3           | 6-9           | 5             | 6             | Avg. 4.5      |
| SFPUC                       | 4-5           | 6             | 6             | 5             | 4             |
| REC (Custom Work)           | -             | -             | -             | -             | 2             |
| <b>Builders</b>             |               |               |               |               |               |
| Pankow                      | 3-4           | 5-10          | 5             | 2-3           | 3-4           |
| Cumming Construction        | 3             | 5.6           | 4.8           | 5             | 4.68          |
| Clark Construction          | 3-4           | 4.5-5.5       | 5.5           | 3.5-4         | 4-5           |
| Jacobs                      | 5             | 6-10          | 8             | 7-8           | 4-5           |
| <b>Market Consultants</b>   |               |               |               |               |               |
| TBD Construction            | 3.5-4         | 4-5           | 6-7           | 6             | 4.5           |
| Saylor Consulting Group     | 4             | 5             | 7             | 3-5           | 4             |
| Martin Lee Corporation      | 5             | 8             | 8             | 5             | 5             |
| Gordian* (5-year avg./2025) | 3.6           | 3.8           | 5.88          | 6.27          | 5.68/-0.7     |
| <b>Average*</b>             | <b>3.8</b>    | <b>6.0</b>    | <b>6.3</b>    | <b>5.1</b>    | <b>3.68</b>   |

\*Uses Gordian number for 2025, not 5-year average

# Local Indices – Historic

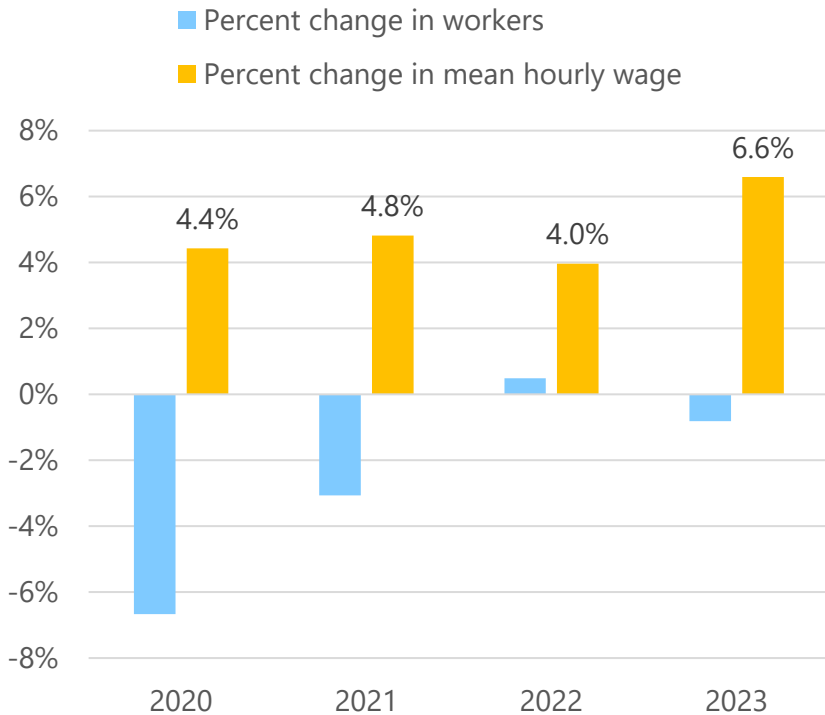
| Economic Indicators                |  |      |      |      |      |      |      |
|------------------------------------|--|------|------|------|------|------|------|
|                                    |  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| <b>BLS Metro CPI</b>               | Change in cost of local consumer goods                                   | 3.2% | 1.6% | 3.2% | 6.8% | 2.9% | 3.2% |
| <b>BLS Local Area Unemployment</b> | Percent of unemployed labor force in San Jose-San Francisco-Oakland area | 3.0% | 9.1% | 5.8% | 3.2% | 4.2% | 4.2% |

| Construction Indices             |  |       |      |      |       |       |      |
|----------------------------------|--|-------|------|------|-------|-------|------|
|                                  |  | 2019  | 2020 | 2021 | 2022  | 2023  | 2024 |
| <b>ENR BCI – San Francisco</b>   | Change in <b>skilled</b> labor and structural steel, portland cement, and lumber | 4.9%  | 6.5% | 5.7% | 23.2% | 5.5%  | 0.6% |
| <b>ENR CCI – San Francisco</b>   | Change in <b>common</b> labor and structural steel, portland cement, and lumber  | 2.8%  | 5.4% | 3.4% | 14.1% | 0.07% | 0%   |
| <b>TBD Consultants Bid Index</b> | Change in construction bid cost for an indexed new construction project in SF    | 10.4% | 2.6% | 3.6% | 17.2% | 4.9%  | 2.6% |

# Regional labor and wages

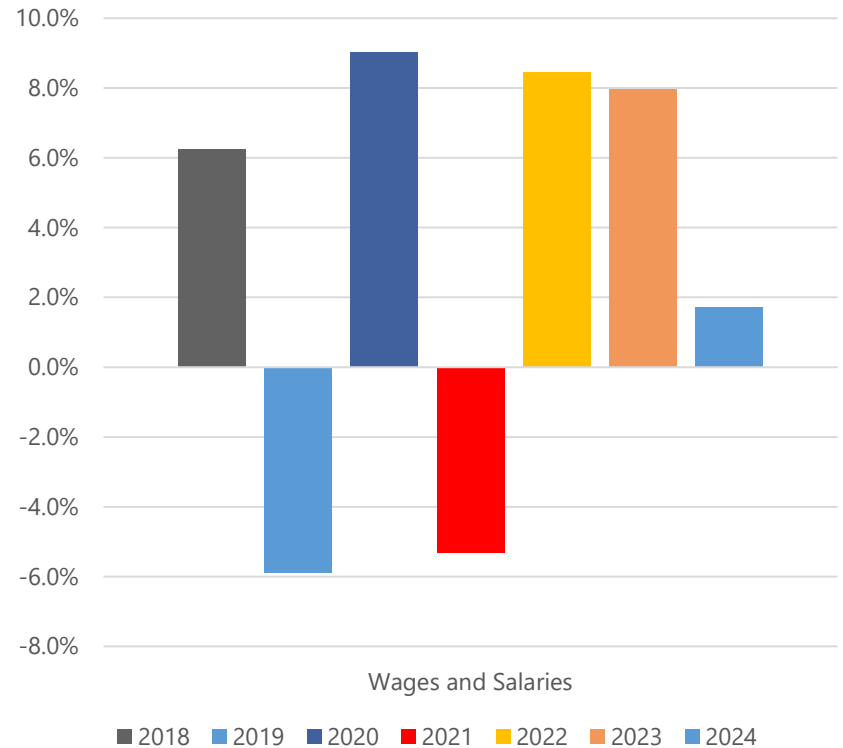
- Public employee union agreements include 3.5% wage increases in 2025.

Annual % Change in Construction Employment and Wages



Source: Bureau of Labor Statistics, Occupational Employment and Wage Statistics, San Francisco-Oakland-Hayward, CA

Annual % Change in SF Metro Area Private Industry Wages and Salaries



Source: Bureau of Labor Statistics, Employer Costs, San Jose-San Francisco-Oakland, CA

# Bid Environment

- DPW received an **average of 3.4 bids and a median of 3 bids** (out of 24 projects)
- Winning bids were an average of 1.08x of engineer's estimates

| # of Bids | % Differential (estimate vs. bid) |
|-----------|-----------------------------------|
| 1         | +25% to 50%                       |
| 2-3       | +10% to 25%                       |
| 4-5       | 0% to 10%                         |
| 6-7       | 0% to -10%                        |
| 8 – 10    | -10% to -20%                      |

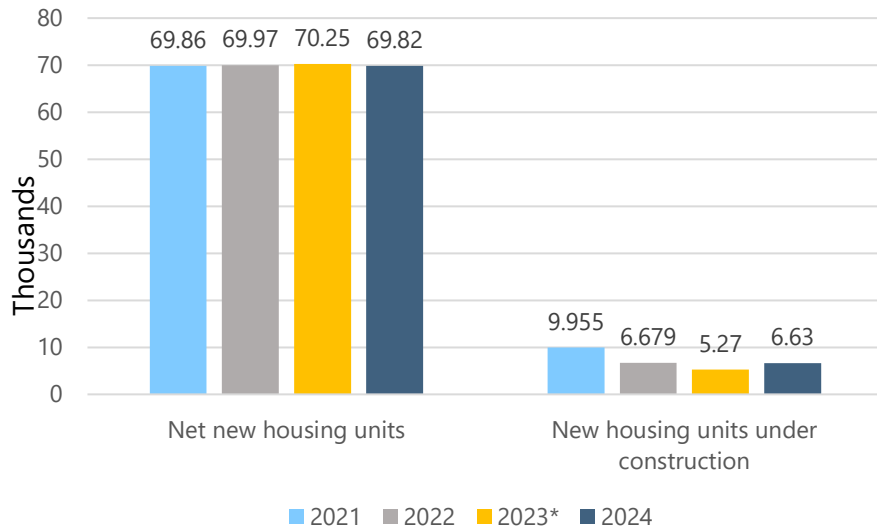
Source: Saylor Consulting Market Conditions SF Bay Area 4Q 2023

| # of Bids | Low Bid Deviation From Estimate |
|-----------|---------------------------------|
| 1         | 1.15                            |
| 2         | 1.11                            |
| 3         | 1.07                            |
| 4         | 1.01                            |
| 5         | 0.95                            |
| 6         | 0.91                            |
| 7         | 0.89                            |
| 8         | 0.88                            |

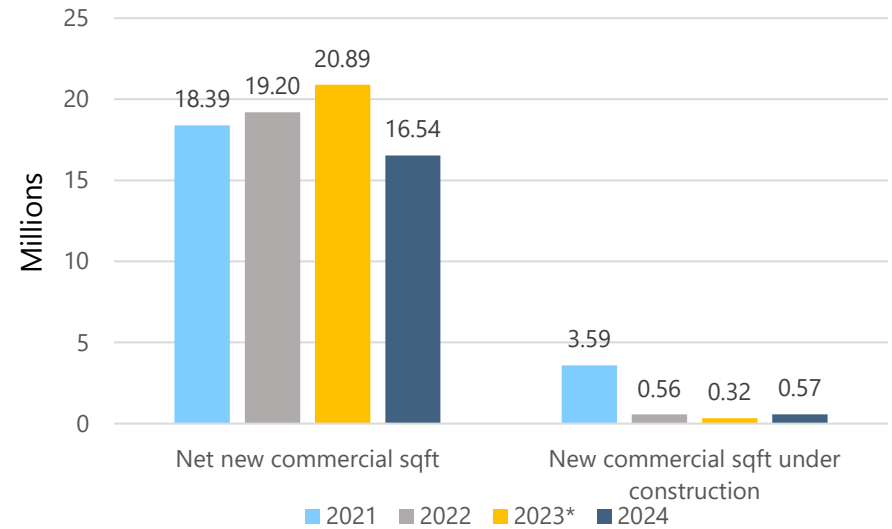
Source: Cumming Construction Economic Forecast; from: Carr, Paul G., P.E., M.ASCE, "Investigation of Bid Price Competition Measured through Prebid Project Estimates, Actual Bid Prices, and Number of Bidders", Journal of Construction Engineering and Management, 2005

# Local Activity: Development Pipeline

## Housing Units in Pipeline

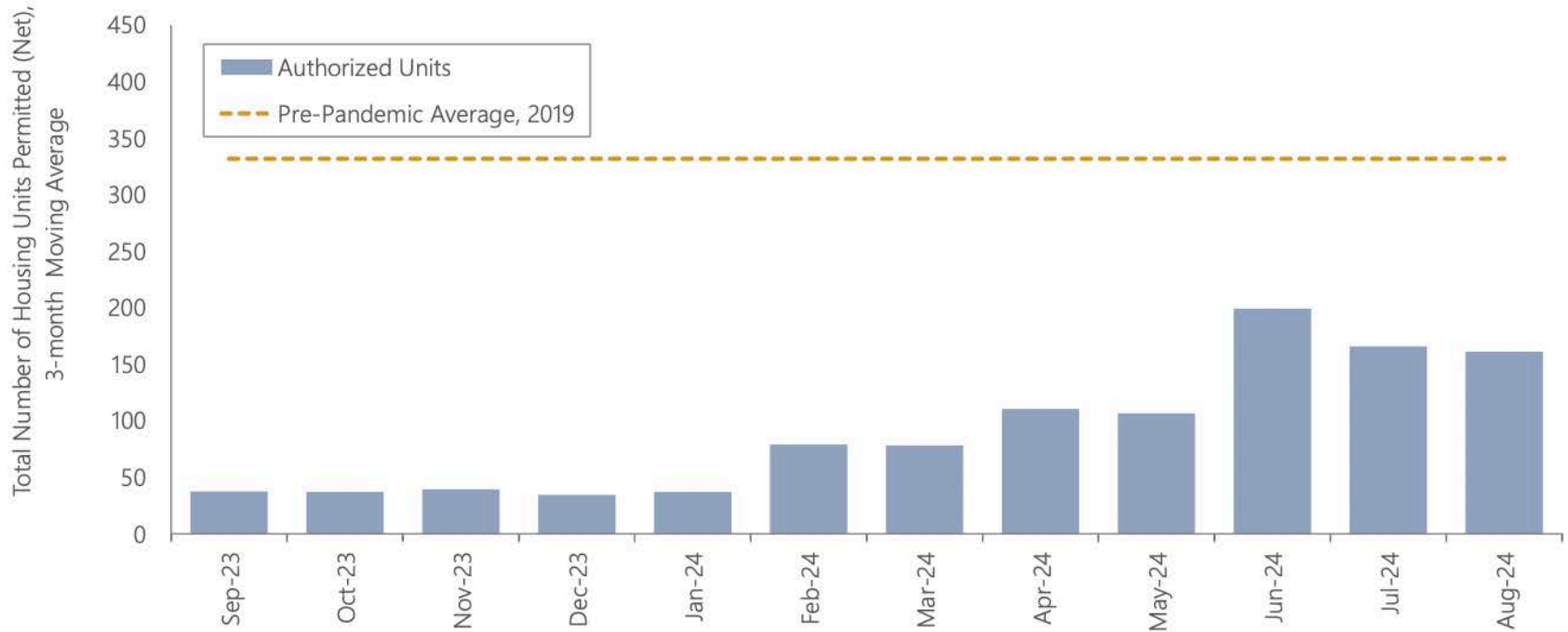


## Commercial Square Footage in Pipeline



# Local Activity: Housing Permitting

Authorized Units (Housing Pipeline),  
(3-Month Moving Average), San Francisco, Through August 2024



Source: San Francisco Planning Department

# State-Level Drivers

## Policy and Resources

- **SB1395 signed** – waives CEQA for shelter and contracts for residential services for people experiencing homelessness
- **Prop 1 implementation** – \$2B for Homekey+ and \$4B to support behavioral health services/treatment infrastructure
- **November bond measures** – schools and educational institutions (Prop 2, \$10B) and climate resilience (Prop 4, \$10B)

## Sector Challenges

- **Cost of construction** continues to be higher in CA than elsewhere  
(Cumming)
- Nearly half of CA general contractors reported projects scheduled to start in 2023 or 2024 were **postponed or canceled and not rescheduled**  
(Associated General Contractors of America 2024 Survey)



# Demand Horizon Flat

Return to office remains flat at about 40%, lower in SF and San Jose than in other major cities

Office vacancy rate continued to rise in Q2 2024

# Recommendation & Summary



Materials & Supply Chain



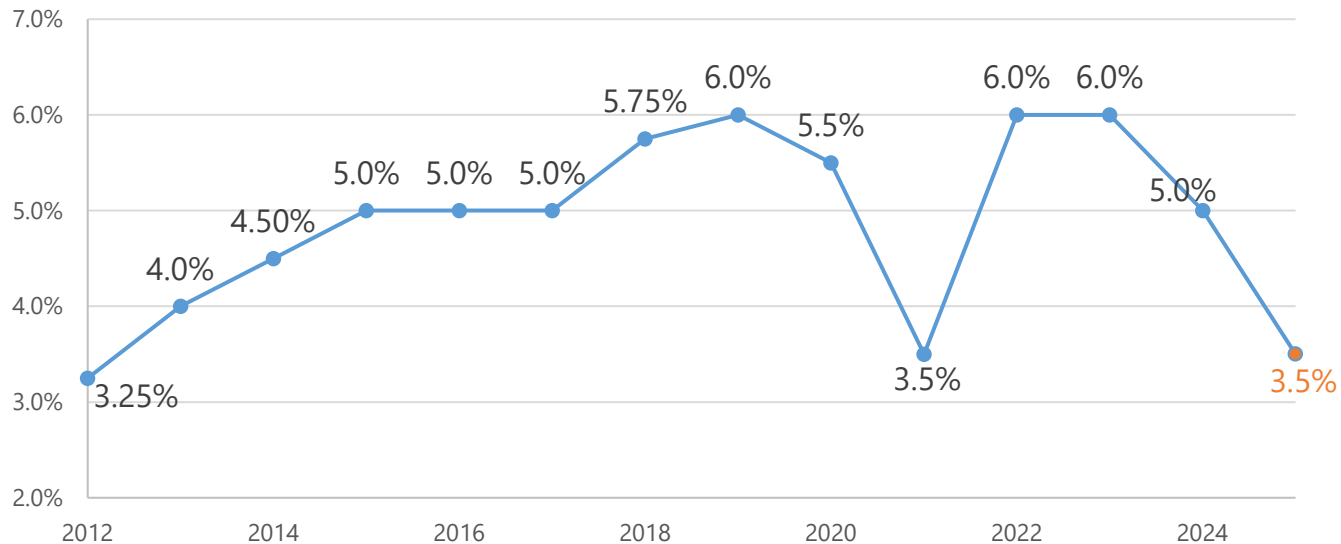
Less Tight Local Labor Market



Pipeline & Changing Demand

**Proposed: 3.5%** for CY 2025

San Francisco AICCIE,  
2012-2025 (Proposed)

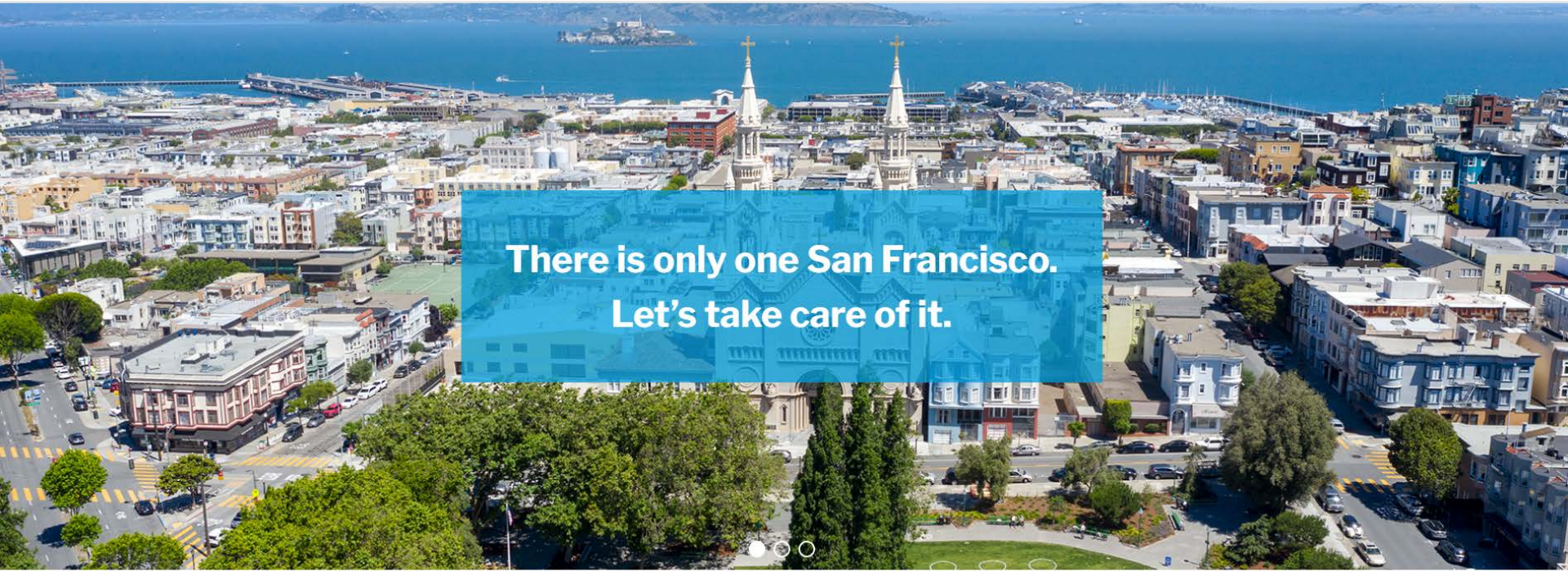


# Thank You!

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[www.onesanfrancisco.org](http://www.onesanfrancisco.org)

# Appendix



# Methodology

## Review indices

- Bureau of Labor Statistics
- Engineering News-Record
- Turner Index
- TBD Bid index

## Interview local experts

- SF Gov departments
- Construction companies, other private experts

## Understand SF public construction market

- Bid competition & validity of engineer's estimate
- Materials costs
- Local labor considerations

## Contextualize with market and sector trends

- Resources:
  - Major construction and construction-related cost indices
  - Bureau of Labor Statistics (BLS) data
  - Market reports from industry experts
  - Conversations with project managers, construction consultants/economists, and those working in the field
  - Public reports of local construction activity

# Methodology

- ❑ Public Spending in Construction broken into types:
  - Highway, bridge, and roads
  - Educational facilities
  - Transportation
  - Utilities
  - Public safety
  - Healthcare
  
- ❑ Product Price Index: Tracks material cost inputs for the producer
- ❑ ENR and RSMMeans: Building costs, no contractor margins
  - ENR BCI has very limited materials and labor inputs, does not include productivity changes
- ❑ Level of development activity
- ❑ Turner Building Cost Index:

# 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...”