

## MID-YEAR REPORT: 2020 & BEYOND

# Cost & Building Trends in the Pacific Northwest



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*PICTURED:* The Spheres

## EXECUTIVE SUMMARY

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*Our industry may see a significant rise in development from 2021 through 2023.*

With the end of 2019 just around the corner, at Sellen, we find ourselves not only looking toward 2020 but also 2021-2023. In 2020, we predict the Northwest A/E/C industry will continue to be busy at the same rate that we experienced in 2019; however, our industry may see a significant rise in development from 2021 through 2023.

This increase in activity is often both the cause and effect of several significant trends, including the continued growth in our region by tech firms and the resurgence of development in Bellevue, Kirkland and Redmond. As a result, our industry will once again face many of the same constraints and resource issues that we experienced from 2015-2017. Another trend we will focus on in this report is the evolution of the built environment and its role in recruiting and retaining talent, which will both contribute to our forecasted growth and affect the cost of future projects.

In past years, Sellen has provided a summary of costing trends for our industry, focusing on labor, materials and subcontractor costs. But it has become increasingly clear that future costs cannot be predicted through escalation alone, so we have taken this past year to dig deeper into the many complex levels of cost analysis to bring you a full market picture of the major cost drivers you can expect and should plan for in the upcoming years. We have broken these into four main sections:

### **SECTION 1: MARKET & BUILDING TRENDS**

There are seven overarching trends that we've been tracking over the last year. While many aren't new to our industry, they continue to have far-reaching effects for clients developing projects. We predict these will remain true from 2020 and into the busier years of 2021-2023. They are:

- Market exhaustion
- Eastside growth
- The effect of tech companies using workplaces to retain and recruit talent
- Seattle's role as a "gateway city" for investment sources
- Labor cost increases
- National interest rates
- Global effects on Seattle's economy

## **SECTION 2: PRIMARY COST DRIVERS**

In addition to the building trends, we've identified five primary factors that drive the hard costs for buildings. This not only includes the expected hard costs such as materials and labor, but also other major contributing factors such as how the design of buildings has evolved over the past 10 years. The five factors we focus on are:

- Labor and materials costs
- Industry capacity
- The evolution of the built environment
- The government
- Global factors

## **SECTION 3: SUSTAINABILITY TRENDS**

Sustainability trends – and more specifically evolving energy codes and LEED requirements – continue to be major cost drivers for buildings. The major sustainability trends to focus on in upcoming years will be:

- Updates to LEED version 4/version 4.1
- Materials disclosure
- Upcoming changes to the Seattle and Washington state energy codes

## **SECTION 4: ESCALATION PREDICTIONS**

Escalation is still a major cost driver. Here you'll find our predictions for:

- Material cost escalation
- Subcontractor costs
- Labor updates
- Overall escalation



## 1. MARKET & BUILDING TRENDS

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*Market exhaustion is currently being felt by our industry, and it will continue through 2020 and worsen when 2021-2023 activity picks up.*

Our preconstruction teams at Sellen have been actively tracking seven main building and market trends for the Pacific Northwest over the past year. These trends will contribute to the upswing in development activity that we predict for 2021-2023.

### **MARKET EXHAUSTION**

Market exhaustion is currently being felt by our industry, and it will continue through 2020 and worsen when 2021-2023 activity picks up. The amount of available resources in the Pacific Northwest will be strained as contractors respond to projects in the 2021-2023 pipeline.

### **EASTSIDE GROWTH**

Our industry is already seeing significant growth from the current and future development activity in the Eastside, encouraged by the recent rezoning of Bellevue, as well as multiple, large office and transit-oriented developments. Additionally, the Eastside tech market is experiencing a resurgence with major players such as Amazon, Microsoft, Google and Facebook moving into Kirkland, Redmond and Bellevue, as well as the major modernization planned for Microsoft's campus. This trend is a primary factor contributing to our predicted activity in 2021-2023.



*In the race for talent recruitment and retention, design aesthetics and office amenities are playing a larger role than ever before.*

### **ATTRACTIVE WORKPLACES = ATTRACTING TALENT**

With Amazon and Microsoft leading the tech charge in the Northwest, more and more tech firms are opening offices in our region. In the race for talent recruitment and retention, design aesthetics and office amenities are playing a larger role than ever before as firms use them to differentiate themselves and attract employees.

However, this trend changes the building market, specifically for developers striving to market to tech tenants. It's hard to predict what a tenant might want, and many new buildings have required major renovations after a tenant is secured. With buildings becoming more unique and sophisticated, they can become less economically viable and may be higher risk.

### **SEATTLE AS A “GATEWAY CITY”**

Seattle continues to garner interest from atypical investment sources, primarily foreign and out-of-state investments. While the interest has been somewhat tempered by Seattle's relatively low real estate returns, it's still enough to transition Seattle to a first-tier city in terms of real estate investment capital. Tempering this is Seattle's relatively high construction costs with relatively low rental rates in contrast to some other first-tier markets, such as San Francisco, New York and Los Angeles.

### **LABOR COST INCREASES**

Labor costs are increasing. As the market grows busier, we expect this trend to continue. The cost of living in the Northwest remains high, as does the expectations for higher wages.



### INTEREST RATE EFFECTS

The Federal Reserve has switched back and forth this year between suggesting that interest rates were “near neutral” to being a “long way from neutral.” With Seattle’s generally low rates of return driven by relatively low rental rates and continuing cost increases, the interest rate uncertainty makes private development even more of a challenge. In some cases, it has even stalled projects.

### GLOBAL EFFECTS ON SEATTLE’S ECONOMY

Global macro-economic factors are proving to be increasingly hard to predict, and they have the ability to completely derail every other cost variable and trend. These include potential tariffs, currencies, Chinese divestments, and continued Canadian investments. The primary thing we can do is remain vigilant in tracking these factors and their potential effects on the Northwest’s real estate market.

**FIGURE 1.1: 10-Year Treasury Constant Interest Maturity Rate**

*Source: Board of Governors of the Federal Reserve System*



## 2. PRIMARY COST DRIVERS

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*Labor resources are currently and will continue to be a challenge as subcontractors remain busy and their options numerous.*

Our preconstruction and estimating team has broken down the main cost drivers for buildings into five primary factors. In past years, Sellen has focused solely on the first factor, cost escalation for labor and materials; however, in doing so we are missing out on some of the major drivers that need to factor into the overall equation. These five variables will drive costs in 2020 as our industry prepares for the anticipated 2021-2023 construction boom.

### **LABOR & MATERIALS**

Escalation for labor and materials costs is a driving factor for buildings and must be taken into account. In 2018, we saw labor costs rise by 5 to 6 percent in key union trades. While copper, lumber and diesel fuel prices may lower slightly, the pricing of most materials are increasing. Many pricing changes will depend on external or macro-economic forces, such as tariffs. For our full list of labor and material cost predictions, turn to page 15.

### **INDUSTRY CAPACITY**

Labor resources are currently and will continue to be a challenge as subcontractors remain busy and their options numerous. As competent and available resources are scarce, the resulting increase in cost, tied primarily to decreased productivity and/or opportunity cost, will continue to be a major cost driver. Of all the variables, this is the hardest to predict and has the highest potential to affect overall building costs.

### **EVOLUTION OF THE BUILT ENVIRONMENT**

We simply don't build the same buildings that we built five to 10 years ago. In the Northwest specifically, employers are using new workspaces as a differentiator in the competition for talent. The resulting expectations and unique results are highly dynamic and can dramatically affect a building's cost from year to year. This variable is difficult to quantify, as it is based on ever-changing expectations, but worth paying attention to as the war for talent transitions to the built environment.

*Last year, Sellen released a white paper with the results of research we undertook with PAE Engineers and MacDonald-Miller about the 2015 Seattle Energy Code.*

## **GOVERNMENT**

Building codes are one of the biggest drivers of costs. Last year, Sellen released a white paper with the results of research we undertook with PAE Engineers and MacDonald-Miller about the 2015 Seattle Energy Code. In the past year since the final amendments of this code were adopted, we have been updating our research and the white paper as new information rolls in. If you're planning on building a high-rise office, residential tower or tenant improvement in Seattle in the near future, [check out our white paper](#) to learn how different mechanical systems and glazing solutions affect costs while meeting the code.

Washington State will enact a new energy code in 2020. While less aggressive than the City of Seattle, owners will feel its impact on costs. We're currently monitoring how those changes might manifest themselves.

There are changes to the structural codes, as well. In November 2018, the Washington State Building Code Council codified additional options for using mass timber and made those changes retroactively applicable to the current 2015 State Building Code. With conditions, these changes allow for additional building height and create new construction types for mass timber up to 270-feet tall, distinct from the heavy timber classification.

## **MACRO-ECONOMIC FACTORS**

Cost drivers on a global scale include expansion and recession, currencies, commodities, capital flows, etc. Capital flows may distort land values to such a degree that property values may not be economically viable. Volatility related to foreign investment, whether Chinese or Canadian investment, is increasing and will continue to be a unique part of the real estate landscape in the Northwest.

## **OVERALL EFFECT**

These five factors comprise the primary influencers of building costs in the Pacific Northwest market as we are preparing for the construction uptick in 2021-2023. On the following page, we've evaluated each driver based on its predictability, degree of variability and overall effect on building cost.

**FIGURE 2.1: Primary Cost Drivers**

Here, we've done our best to qualify the degrees of variability and effects on overall building cost presented by the five primary cost drivers.

CATEGORY	EASE OF QUANTIFICATION	PREDICTABILITY	DEGREE OF VARIABILITY	EFFECT ON OVERALL BUILDING COST
Labor & Materials	Relatively Easy	Somewhat Predictable	Low to Medium	2%-6%
Industry Capacity	Hard	Next to Impossible	High	(5%)-10%
Evolution of the Built Environment	Very Hard	Somewhat Predictable	Low to High	0%-10%
Government	Somewhat Easy	Varies	Low	0%-2%
Macro-Economic Factors	Some Easy/Some Hard	Hard to Predict	Low	?

### 3. SUSTAINABILITY TRENDS

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*As rating systems evolve and the performance bar raises, both the LEED and the A/E/C industry are at an inflection point with this newest version of LEED.*

Sustainability trends continue to be major cost drivers for buildings in the Northwest. As the resources in our world become increasingly scarce, and as we learn more about human health and well-being, Sellen remains dedicated to sustainable practices not only in the way we build but also in the way we live our day-to-day lives. The major sustainability trends that will affect pricing in the upcoming years include LEED version 4/4.1, materials disclosure, and changing energy codes.

#### **LEED V4 AND V4.1 UPDATE**

LEED remains the world's most widely used sustainability rating system. LEED version 4 (v4) is now the current version, and some owners view LEED certification as an important component of their corporate sustainability commitments. In some jurisdictions, LEED certification is the key to attaining zoning bonuses, so rating systems can have a permitting and financial importance as well.

As rating systems evolve and the performance bar raises, both the LEED and the A/E/C industry are at an inflection point with this newest version of LEED. Sellen is currently working on eight buildings pursuing LEED v4 and is gathering key information on the availability of compliant materials and potential impact on costs.

It's fair to say that some designers, manufacturers and suppliers are finding LEED v4 to be a challenge, as some credits have a limited number of compliant products or documentation. In response, the United States Green Building Council has launched a pilot version 4.1 (v4.1) rating system that brings many welcome changes. In some cases, v4.1 offers feasible options to meet rigorous material transparency and low-emitting materials requirements. We are investigating the newly published v4.1 and the potential benefits for our current v4 projects.

Additionally, other sustainable certifications, such as WELL or Zero Carbon, are gaining attention in the industry, reflecting an interest of viewing sustainability through the lens of health or greenhouse gas reduction. While early rating systems – including LEED – covered many topics, they had a heavy focus on operational energy performance. Newer systems are focusing more on health and well-being, as well as carbon emissions.

*The industry is still rallying around the basic standards that should be used for materials disclosure.*

## **MATERIALS DISCLOSURE**

We are entering a new era of material disclosure as more people understand that by measuring and publishing the environmental impact of materials, projects can make better long-term choices. The idea of materials disclosure is relatively simple – it's trying to understand every type of material that goes into the making of an object, regardless of scale. While the idea seems straightforward, the execution is anything but, and the building industry has a number of challenges to overcome before materials disclosure can become the norm.

One of the primary challenges is that not everyone thinks about the accessory components, such as glue, and for this idea to truly take hold everyone along the supply chain should be thinking about the materials they are using and identifying those materials. Additionally, the industry is still rallying around the basic standards that should be used for materials disclosure; while norms exist, there isn't one single database where information is easily available. Environmental Product Declarations (EPDs) are an important resource for disclosure, and projects, such as the Helen Sommers Building constructed by Sellen, can be a lever to increase disclosure. For a case study on the new concrete EPDs that this project created, [click here](#).

In the cycle of storming, norming and performing, the industry is somewhere between the storming and norming phase for materials disclosure, but the overall intent is a focus on human health and well-being. It stands to reason that if a material is healthy for the end user, then it should also be healthy for the installer, as well as the manufacturer and any others along the supply chain.



PICTURED: Helen Sommers Building

## ENERGY CODES

Codes are a major sustainability and cost driver. Washington state will enact a new energy code in 2020 that is less aggressive than Seattle's, but will still have a major impact on costs. We are monitoring how these changes will affect new buildings in the state.

For more information on the effects of the current 2015 Seattle Energy Code, [check out our white paper online.](#)

### FIGURE 3.1: Core & Shell and Tenant Improvement Mechanical Costs in a High-Rise Office Building

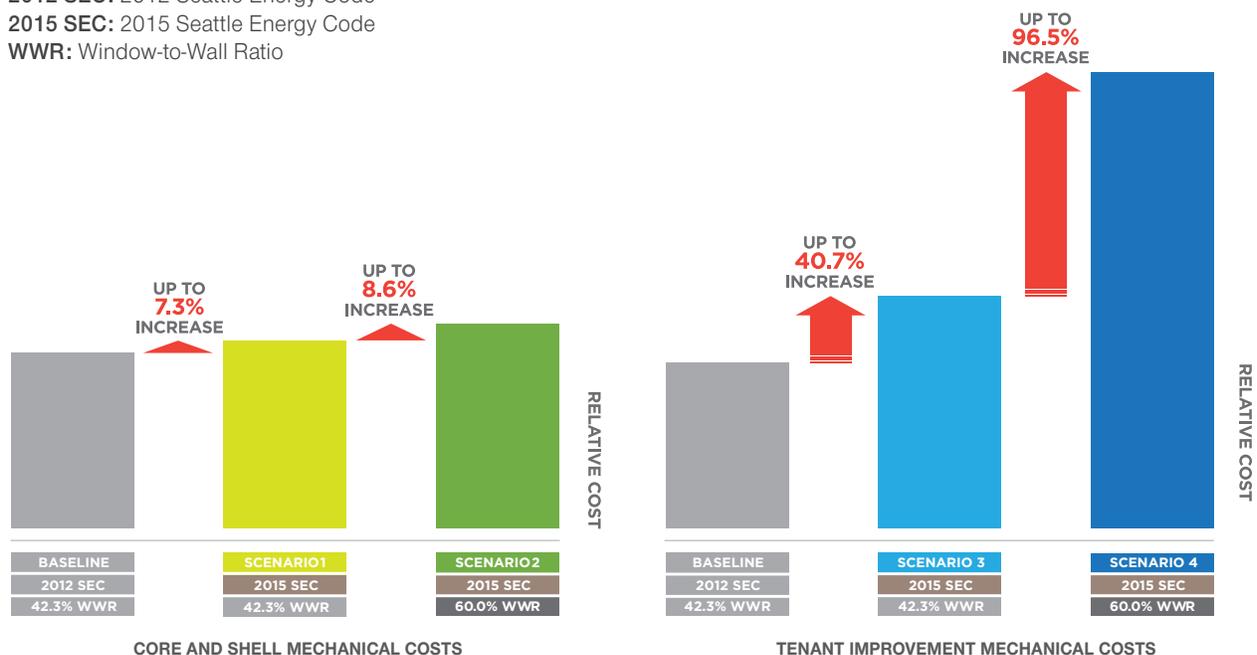
With the adoption of the 2015 Seattle Energy Code (SEC), Sellen teamed with PAE Engineers and MacDonald-Miller Facility Solutions to research how the changes will affect high-rise office and residential projects, especially with the increased level of glazing that we've seen. Overall, our study found that increased glazing in high-rises is possible under the new code, but it comes with a cost.

To evaluate the changes, our team compared: 1) a baseline case (actual mechanical costs from a recently completed Seattle office building that had a 42.3% window-to-wall ratio (WWR)); with 2) the separate forecasted costs for the mechanical systems to be 2015 SEC compliant with *no change* to the WWR for the core and shell scope and then the tenant improvement scope; and 3) the separate forecasted costs for the mechanical systems to be 2015 SEC compliant while *increasing the WWR to 60%* for the core and shell scope and then the tenant improvement scope. Below are the summary results of the forecasted cost increases that owners should expect under the 2015 SEC.

**2012 SEC:** 2012 Seattle Energy Code

**2015 SEC:** 2015 Seattle Energy Code

**WWR:** Window-to-Wall Ratio



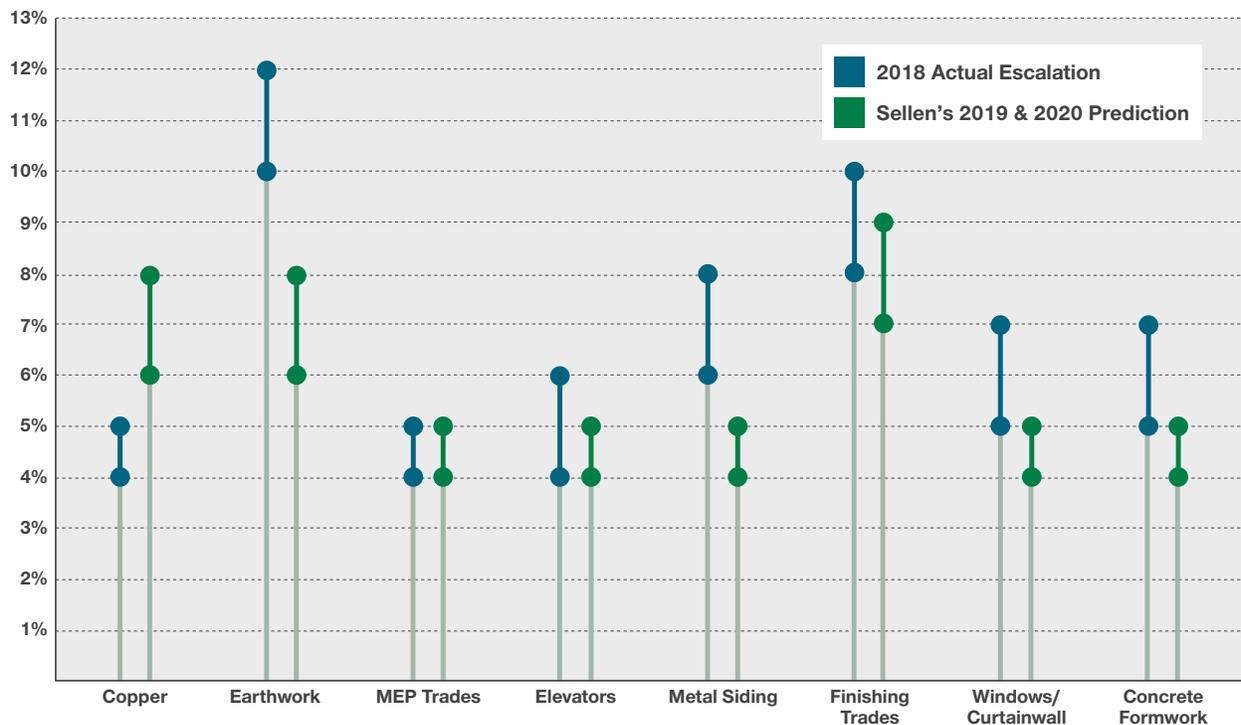
## 4. ESCALATION PREDICTIONS

### SUBCONTRACTOR TRENDS

Subcontractors continue to remain very busy and labor resources are still a challenge for Northwest general contractors. Last year, we saw labor costs increase dramatically. They have continued to increase in 2019, primarily because of trade negotiations.

TRADE	2018 ACTUALS	2019 & 2020 PREDICTIONS
Steel Erection	4%-5% ▲	6%-8% ▲
Earthwork	10%-12% ▲	6% -8% ▲
MEP Trades	4%-5% ▲	4%-5% ▲
Elevators	4%-6% ▲	4%-5% ▲
Metal Siding	6%-8% ▲	4%-5% ▲
Finishing Trades	8%-10% ▲	7%-9% ▲
Windows/Curtainwall	5%-7% ▲	4%-5% ▲
Concrete Formwork	5%-7% ▲	4%-5% ▲

FIGURE 4.1: Subcontractor Cost Escalation



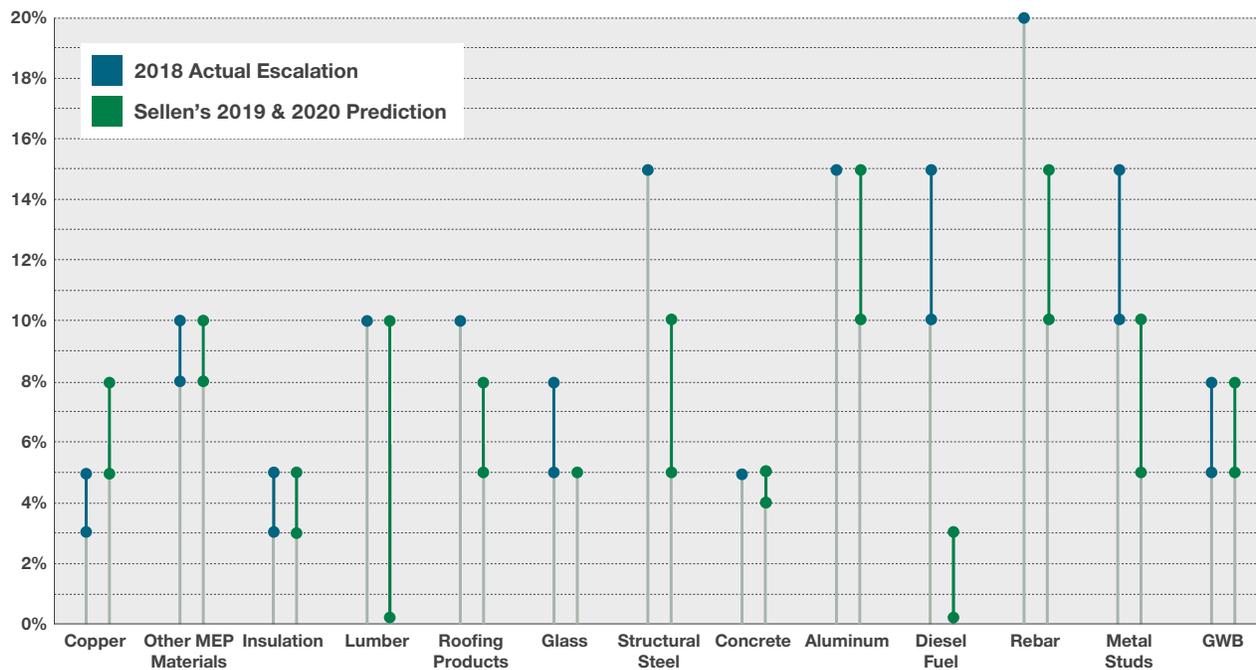
Owners can expect material costs to make up around 40 percent of overall job costs.

### MATERIAL COSTS

Material costs are largely tariff dependent. Owners can expect material costs to make up around 40 percent of overall job costs.

MATERIALS	2018 ACTUALS	2019 & 2020 PREDICTIONS
Copper	3% to 5% ▲	5% to 8% ▲
Other MEP Materials	8% to 10% ▲	8% to 10% ▲
Insulation	3% to 5% ▲	3% to 5% ▲
Lumber	10% ▲	0% to 10% ▲
Roofing Products	10% ▲	5% to 8% ▲
Glass	5% to 8% ▲	5% ▲
Structural Steel	15% ▲	5% to 10% ▲
Concrete	5% ▲	4%-5% ▲
Aluminum	15% ▲	10% to 15% ▲
Diesel Fuel	10% to 15% ▲	0%-3% ▲
Rebar	20% ▲	10% to 15% ▲
Metal Studs	10% to 15% ▲	5% to 10% ▲
GWB	5% to 8% ▲	5% to 8% ▲

FIGURE 4.2: Materials Cost Escalation



## ESCALATION

We predict general escalation rates will slightly lower in 2020 and 2021 and level out in 2022-2024. The chart below shows where we have been, and where we think the costs are trending.

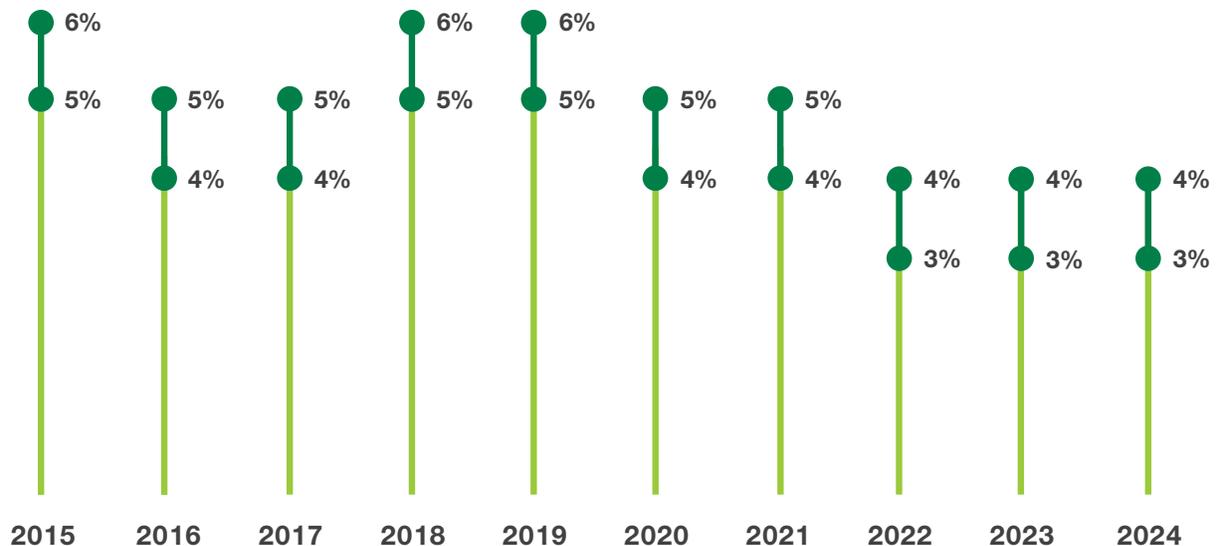
## LABOR TRENDS

The labor market supply doesn't match the high volume of work we continue to see in our region, and labor is tight in all trades. Tradespeople have been selective on which projects they choose to work, and they will continue to do so. The trade negotiations in 2019 were:

- Communication Workers (non-NECA)
- Glaziers
- Sprinkler Fitters
- Lathers and Sheetrockers
- Drywall Finishers
- Plasterers and Fireproofers
- Carpet Layers (Seattle and Tacoma)

In 2020, only a few labor agreements are up for renewal. 2021 has the majority of labor contracts to be negotiated.

**FIGURE 4.3: Annual Escalation**



## CONCLUSION

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As developers and contractors prepare for a busy market through 2023, the future cost of buildings can no longer be predicted by escalation alone. Teams must account for a number of cost factors, including current market trends, the primary hard cost drivers and sustainability trends, as well as escalation predictions.

We continue to point to three major trends as both contributors and indicators of this projected growth:

### **INDUSTRY CONSTRAINTS**

Market exhaustion and limited labor resources have been the theme of the Pacific Northwest in recent years, and this trend will continue through 2023. With a scarcity of competent and available resources.

### **THE CONTINUED RISE OF TECH AND EASTSIDE GROWTH**

The Pacific Northwest will continue to attract tech firms, and much of the new growth will be in the Eastside. Bellevue's recent rezoning and transit developments make it an attractive location for new and incumbent players. We are targeting significant growth for the Eastside in 2021, 2022 and 2023.

### **THE EVOLUTION OF THE BUILT ENVIRONMENT**

As employers are competing for talent, new, unique workspaces have become a differentiator for attracting and retaining employees. The expectations that developers and tenants have for building performance and aesthetics may vary immensely and can have significant influence on cost. This trend will continue to be the hardest to predict with the highest potential to affect overall costs.

We'd welcome the chance to continue this discussion with you – contact us!

## ABOUT THE AUTHORS

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**BRAD HAYES**  
**DIRECTOR OF OPERATIONS, PRECONSTRUCTION**

Brad provides overall leadership to Sellen's preconstruction and estimating team members. Prior to taking on this role, Brad served as a project director for many of Sellen's large-scale complex project for over 30 years, including the Bill & Melinda Gates Foundation Campus and the Rufus 2.0 Campus. Brad has a long track record of working closely with owners and developers to deliver projects of the highest caliber.

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**ADAM LORENZ**  
**CHIEF ESTIMATOR**

With 22 years of experience, Adam leads Sellen's team of estimators. He is one of Sellen's most knowledgeable estimators, and has led our estimating and preconstruction efforts on some of Sellen's most complicated projects. This has included the Rufus 2.0 Campus, UW Medicine's South Lake Union Campus, the Seattle Art Museum and the Swedish Issaquah Campus.

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**DAVID WALSH, AIA, LEED AP BD+C**  
**DIRECTOR OF SUSTAINABILITY**

David is a registered architect with over 25 years of experience working on some of the region's highest performing buildings. With a unique perspective informed by his dual experience in both architectural and construction delivery, David serves as a bridge between designers and builders and excels at identifying sustainability metrics, exploring cost-effective solutions, collaborating with manufactures to lower greenhouse gas emissions, and translating sustainable performance goals into built reality.

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## ABOUT SELLEN CONSTRUCTION

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Sellen Construction is a locally owned and operated commercial builder. Founded in 1944 and headquartered in the South Lake Union neighborhood of Seattle, Sellen builds iconic projects for the region's tech, science, arts, healthcare and hospitality leaders. We believe in building community by creating unique spaces where significant things happen, and in giving back to non-profit organizations that make our community a great place in which to live and work.

Sellen operates primarily in the Pacific Northwest and offers a wide range of services from preconstruction support, cost estimating and constructability services, to Virtual Design and Construction (VDC), integrated project delivery and sustainability services. Sellen has a Special Projects group that regularly performs renovations and tenant improvements in existing buildings for a variety of office and health care clients. Sellen's notable projects include the Bill & Melinda Gates Foundation Campus, Seattle Children's Hospital Building Hope Expansion, the Museum of History and Industry at South Lake Union, King Street Station Restoration, and the new Amazon office towers in Seattle's Denny Triangle neighborhood.

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