

Since 2010, Tenant Improvement Construction Costs are up 40-50%. WHY?

1 Implementation of Title 24 (T24)

Title 24 is a new California energy efficiency code change implemented in July 2014

AVERAGE COST IMPLICATIONS OF T24



60% increase

Electrical Systems Costs

Currently **\$40-50/sf**
Prior to T24 **\$25-30/sf**



25% increase

Mechanical Systems Costs

Currently **\$20/sf**
Prior to T24 **\$15/sf**

[CLICK FOR MORE INFO.](#)

2 The Bay Area Commercial Real Estate Industry is Very Busy

CURRENTLY UNDER CONSTRUCTION



3.8 M SF
of Office



7.8 M SF
of Multi-Family/
Residential

While General Contractor (GC) fees and labor costs are steady, GCs turning down projects or submitting "no bids" due to lack of capacity is quite common. Materials costs are also up partially due to demand, but also because the technology and products are more advanced making them more expensive.

3 In the 2008/2009 recession, there was a significant drop in skilled labor force

Less Skilled Labor



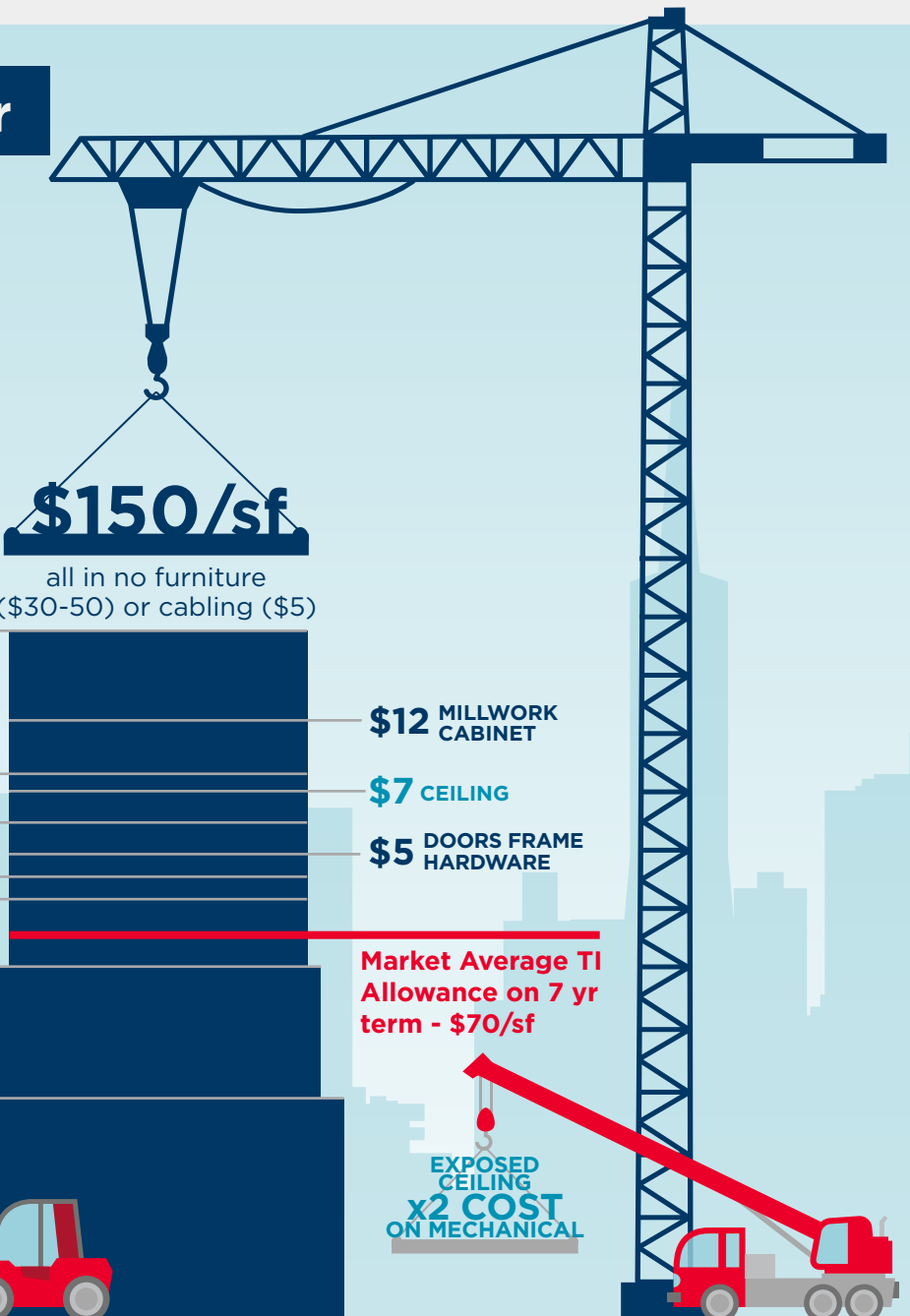
Increase In Hours/Overtime to Complete More Highly Skilled Projects

How does this all affect corporate tenants?

The supply of quality move-in ready office spaces is limited in a market with 6% vacancy, making tenant improvement (TI) buildout projects increasingly necessary. Landlord TI allowances do not cover full TI project costs. Consequently, corporate tenants are faced with capital expenditure costs to complete their interior construction projects and to move into their new space.

Conservative Budgetary Estimate for Total Construction Costs for New Tenant Improvement Build

Standard dropped ceiling office with mostly open plan (80% open plan / 20% office / conference)



The average cost of TI projects run by Cushman & Wakefield project management teams since 2014 in San Francisco is **\$120.31/SF**



Title 24 Compliance:

What applies?

Purpose?

Title 24 energy standards address the energy efficiency of new & altered commercial buildings in order to reduce energy use thus lowering energy costs, & increasing reliability and availability of electricity. Once triggered, the entire space must comply with Title 24 standards for the category of the ordinance that it activates. "Space" refers to the area being altered/repared. All other parts of the building or floor need not comply.

Who Pays?

Costs ensued to keep alterations to Title 24 standards are either assumed by the tenant or landlord, depending on the space being renovated/created, the lease fundamentals, and negotiation.

LIGHTING

Trigger: Alteration of at least 10 % of luminaires in a space or 40 luminaires total or if lighting alterations increases energy use. (Replacement of existing ballasts or lamps without replacing the entire fixture is not an alteration).

Mandatory Standards: If the lighting segment of title 24 is triggered, luminaries must operate with: Area Controls, Multi-level Lighting Controls, Shut-off Controls, Day lighting Controls and Demand Response.

Electrical Alterations Costs: Light controls have driven prices up \$4-7 per square foot just in material cost. Installation of the mandatory controls is coming in about \$3-4 a foot based on the project design. Mandatory acceptance testing depending on project size is \$1,000 minimum. Light fixture costs are up 10-20% based on mandatory dimming features.

MECHANICAL

Trigger: Changes to the heating/cooling/water heating systems.

Mandatory Standards: **a)** Packaged units down to 6 tons must have the ability to modulate cooling capacity to 20% of max. **b)** Reduced ability for HVAC systems to reheat conditioned air. **c)** Increased chiller efficiency requirements. **d)** Increased cooling tower energy efficiency and water-savings. **e)** Added requirements for commercial boiler combustion controls. **f)** Added acceptance tests for HVAC sensors and controls, including those for demand controlled ventilation. **g)** Added efficiency requirements for small motors.

Costs: HVAC costs are going up due to necessary control upgrades also. Quoted a nearly 50% increase due to the cost of the system itself and the installation.

ENVELOPE

Trigger: For Nonresidential standard replacement low-slope roofs Title 24 applies when more than 50% of the roof is replaced or more than 2,000 sq ft is replaced, whichever is less.

Mandatory Standards: Added mandatory Roof insulation requirements and minimum insulation for demising walls. The *prescriptive* standard requires tinted double glazing throughout the state. More tinting, and better U-factors are required in the harsher climates. "Cool roofs" are required on low-sloped structures. Skylights with automatic daylighting controls are required in "big box" buildings. The *performance* method of compliance can minimize or eliminate some of these requirements, especially if combined with mechanical and/or lighting compliance. Insulation on top of T-bar ceilings is now deemed to be worthless.

Costs: \$2-\$4/SF

ELECTRIC

Trigger: Electric system alterations or add volume.

Mandatory Standards: Required receptacle controls in private offices, open office areas, reception lobbies, conference rooms, kitchens, and copy rooms to automatically shut off task lighting and other plug loads when area is not occupied. Mandatory requirement for electric panels to be isolated by energy and use.

Electrical Alterations Costs: On average, electrical alterations cost an additional \$7-10 per square foot.

For more information, please contact:

ALEX SPILGER

Senior Vice President
+1 415 694 6472
alex.spilger@cushwake.com

WHITNEY STEVENSON

Project Management Director
+1 650 892 5382
whitney.stevenson@cushwake.com

