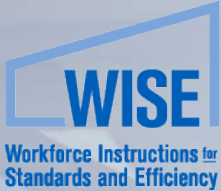




WISE

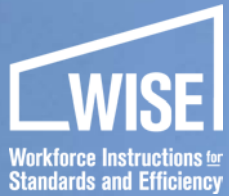
Workforce Instructions for
Standards and Efficiency





Educating the Industry through WISE

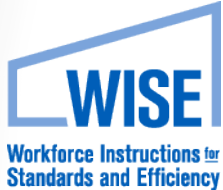
Presented by: John Morton, *Senior Project Manager*
ConSol



Where Are We Now?



In Order to Know Where to Go, We Need to Know Where we Are.



There was a need to understand where we were, where we are and where we need to be. In order for the WISE Program to be successful the team wanted to establish a baseline

- Understand the homebuilding trends throughout California.
- Understand labor trends throughout California.
- Understand where we are with Attics and Walls.
- Focus put on Major Homebuilders in each area.
- Focus on 5 Metropolitan Service Areas in California.



Where Did We Look?

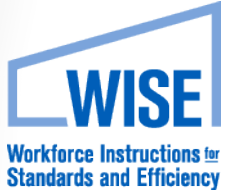


Workforce Instructions for
Standards and Efficiency

MSA	# of Subdivisions Reviewed	% of market share represented	Total # of Single Family Units produced by Sampled builders
LA/Long Beach/OC	10	70	4,846
Inland Empire	10	85.1	4,581
Sacramento	10	77.5	2,016
SF/San Jose	10	81.5	1,726
San Diego/Carlsbad	10	76.4	1,530
Total	50	39.6	14,699



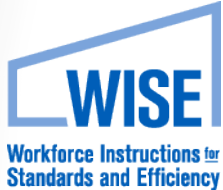
Typical Home Characteristics



- 2,690 sq ft
- 4 bed, 3 bath
- \$697,000
- 70% 2x4
- 30% 2x6
- 70% 16" OC
- 30% 24" OC



Attic Insulation



Insulation Type

- Blown-in Fiberglass – 82%
- Blown-in Cellulose – 12%
- Batt – 4%
- Spray Foam – 2%

Insulation Value

- R-30 – 52%
- R-38 – 48%

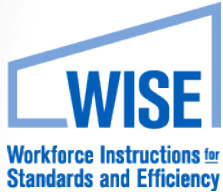
Venting

- 1/150 - 5%
- 1/300 – 91%

4% Unvented



Wall Insulation



Type

- 94% Batt
- 4% Blown-in
- 2% Spray Foam

Insulation value

- 66% R-13
- 6% R-15
- 28% R-19



Stucco Exterior



3-coat = 46 %

1-coat = 50 %



Northern California = 45% 1-coat

Southern California = 57% 1-coat



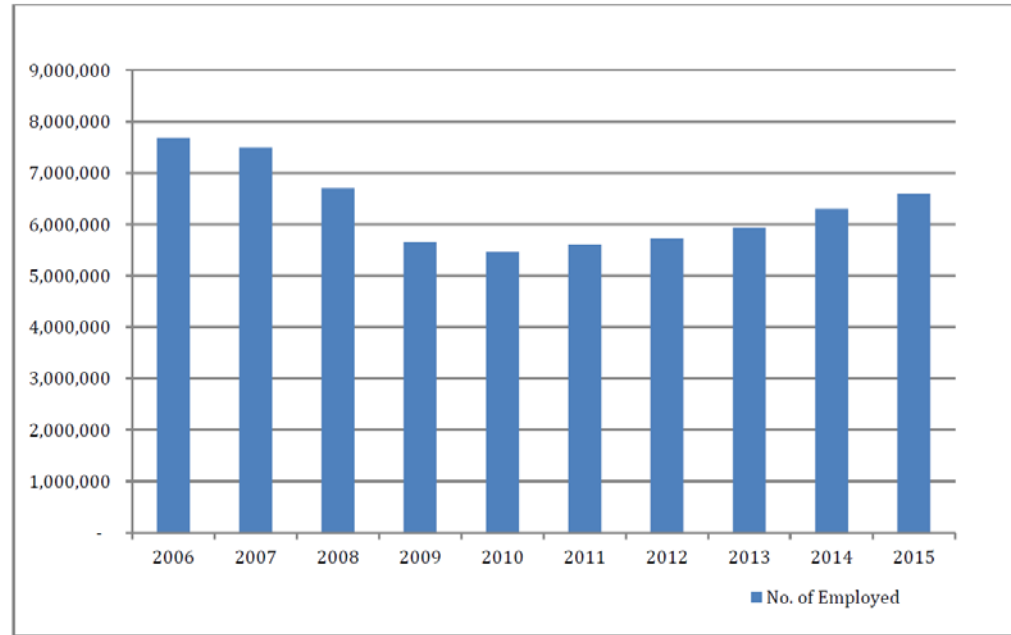
Workforce Instructions for
Standards and Efficiency

Is Labor Available?



National Labor Numbers

Figure 1: Construction Employees in the U.S. 2006-2015



Source: Bureau of Labor Statistics



California Labor Numbers

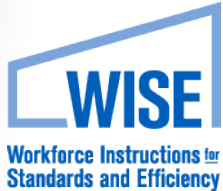
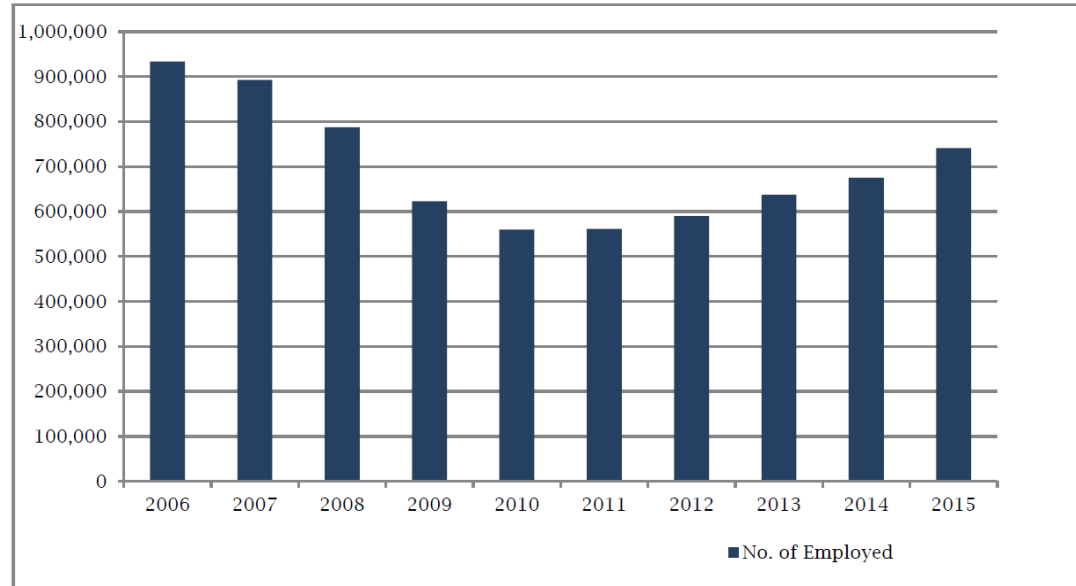
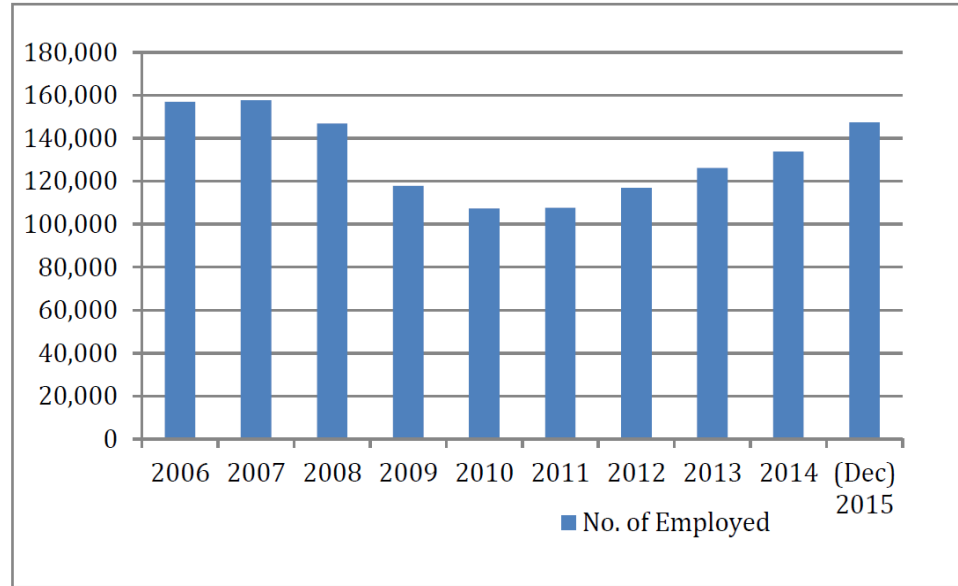
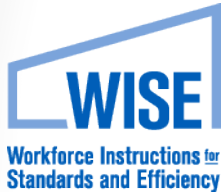


Figure 3: Construction Employees in California 2006-2015



Source: California Employment Development Department Labor Market Information Division

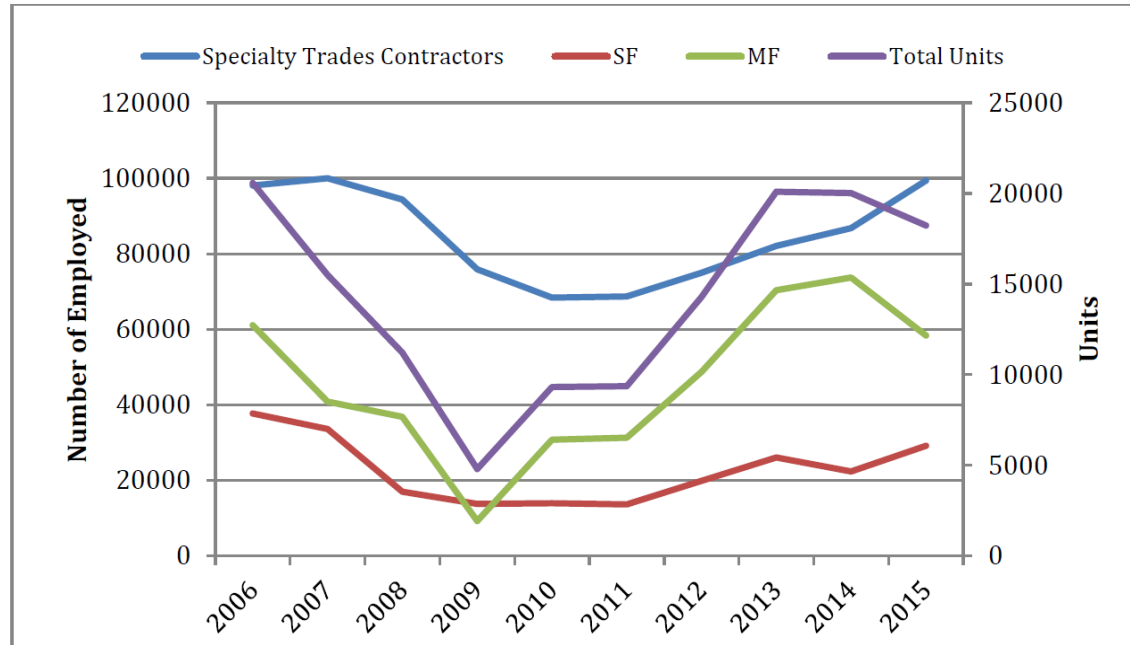
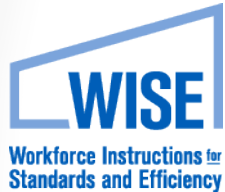
San Francisco and San Jose Labor Numbers



Source: California Employment Development Department Labor Market Information Division



San Francisco and San Jose Labor Numbers



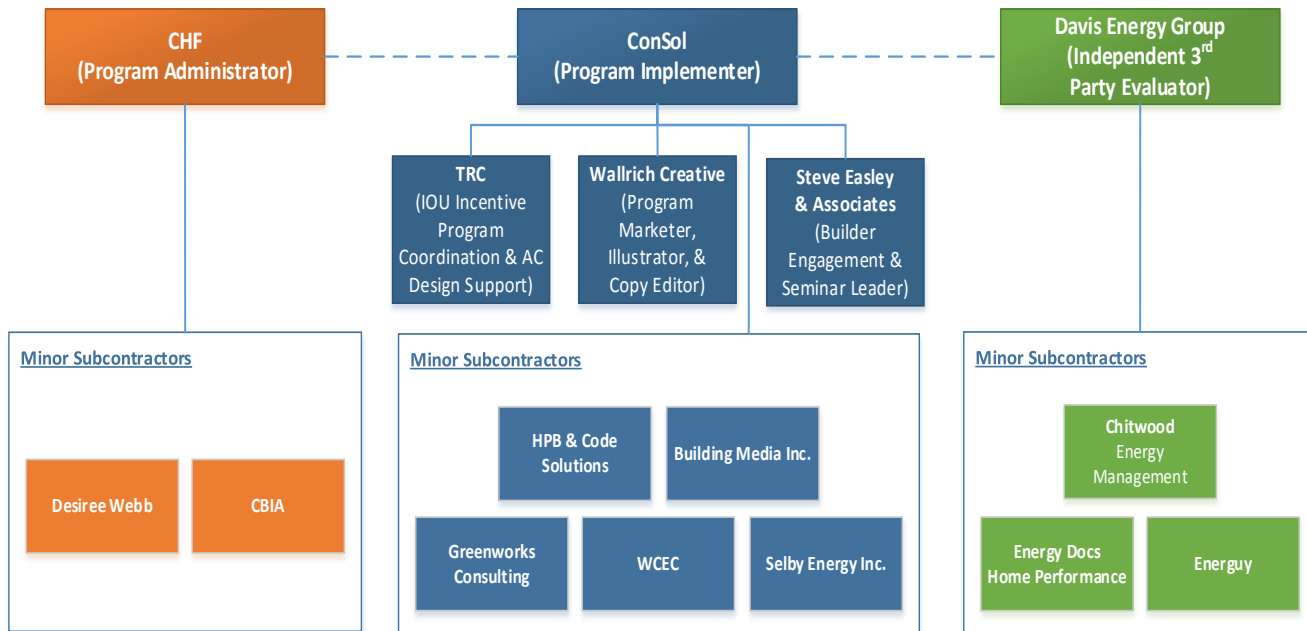
Sources: CIRB Data, California Economic Development Department LMI Data



EPIC WISE



Workforce Instructions for Standards and Efficiency



Builder Solutions to Meeting Compliance



Meet with Builders to present solutions:

Including the senior management, project management and purchasing for the project

- ★ WISE team will present multiple solutions for meeting high performance walls and attics along with projected cost
 - ✦ WISE team will work to understand builder concerns and address each one
 - ✦ Builder team will select a solution best suited for their product

On the Job TRAINING!

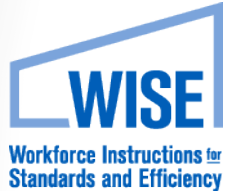


Create a working group including:

Builder, WISE team, Architect, Engineers,
Energy Consultant, HERS Rater, Relevant
Subcontractors and Product Manufactures

- ✦ Working Group will ensure that:
 - ✦ All plans and details are done correctly to implement the chosen solution;
 - ✦ All subcontractors, consultants and builder staff understand all installation requirements;
 - ✦ Nothing is being bid that is unnecessary by reviewing all contract scopes of work and subcontractor bids;
 - ✦ Installers are working efficiently and the product is installed properly through on-site training.

Website Resource



www.wisewarehouse.org





Thank you.

Presented by: John Morton, Senior Project Manager
JMorton@ConSol.ws – (949) 413-7927

