

Overhead Compensation

TRO – Caltrans' Innovative Approach

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Overhead Compensation Outline

- Overhead (OH) on a construction project.
- Traditional OH compensation methods.
- Other home office OH compensation approaches.
- Challenges with traditional methods.
- TRO – What is it, and what are the benefits?
- Continuing OH challenges.
- Recommendations and a view to the future.



Overhead on a Construction Project

Overhead: the general cost of constructing the project that can't be directly attributed to the work operations.

- **Cost-related OH:**

licenses, permits, bonding, liability insurance, profit, etc.

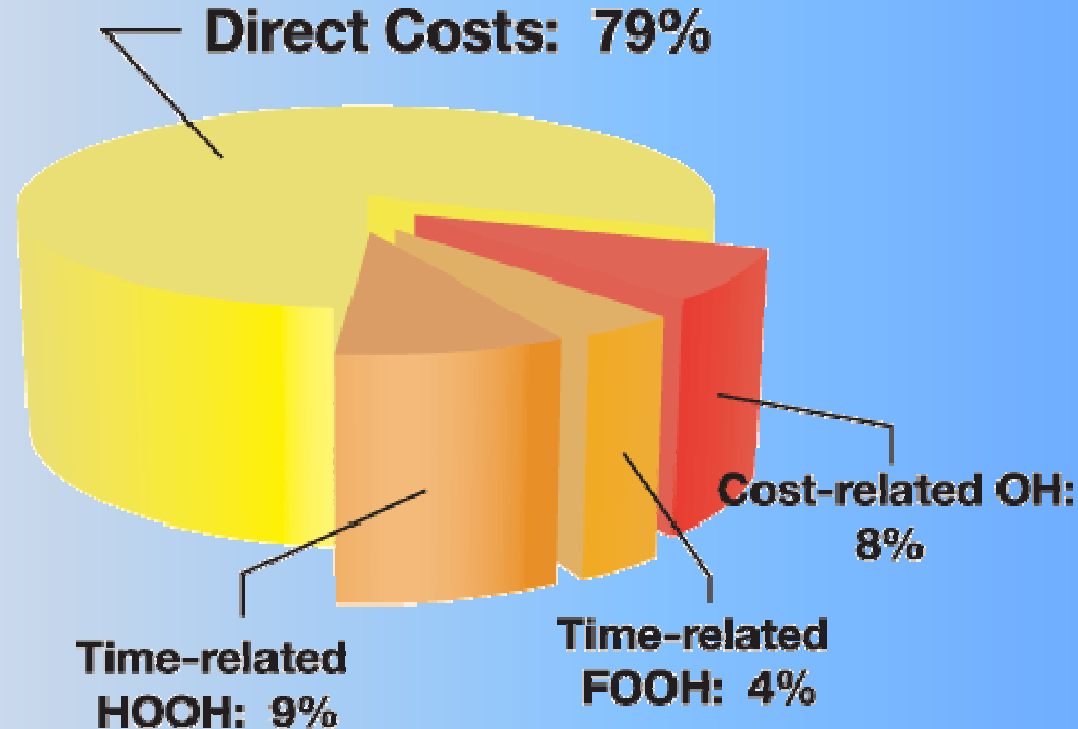
- **Time-related OH:**

FOOH: salaries/benefits of staff, rent, utilities, maintenance, security, supplies, office equipment, etc.

HOOH: general administration, insurance, purchasing, accounting, project engineering, estimating, etc.



Project Overhead Typical Breakdown



Typical OH Percentages
Direct Costs (not OH): 79%
Overhead (including profit): 21%



Traditional OH Compensation

- **Original Contract Work:** OH incorporated in the various items of work.
- **Changes:** markups applied to the direct costs of the contract change order work.
- **“Unreasonable” State-caused Delay:** Contractor submits claim for adjustment in compensation.



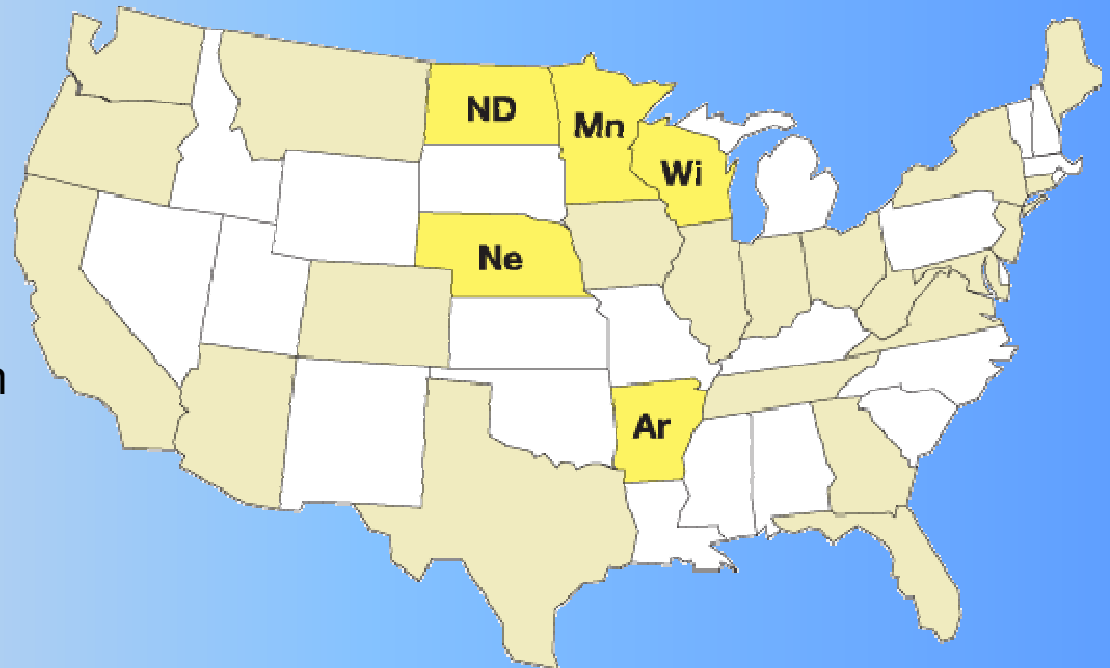
HOOH Compensation Approaches

NCHRP Synthesis 315

- **Avoidance Model**
- **Compliance Model**
- **Proactive Model**

AVOIDANCE MODEL

- Never paid for unabsorbed home office OH as part of a claim for delay. (AR, MN, NE, ND, WI)
- Arkansas and Wisconsin have used sovereign immunity as an effective defense. Others indicated a proactive attitude by dealing with claims early.

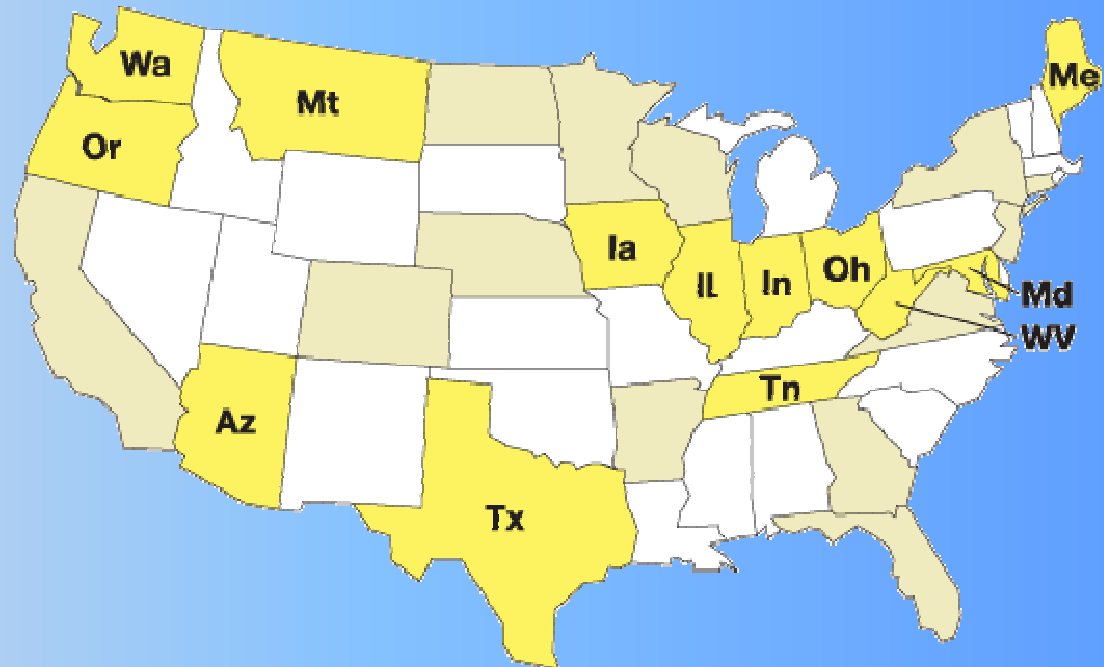


Strengths – Fewer personnel resources required & stable project budgets.

Weaknesses – Possibly higher bid prices as contractors protect against potential loss.

COMPLIANCE MODEL

- Respond to a contractor's claim in accordance with precedents set by state courts or boards. (13 of 26 state survey respondents)
- Potentially requires accounting or auditing support.

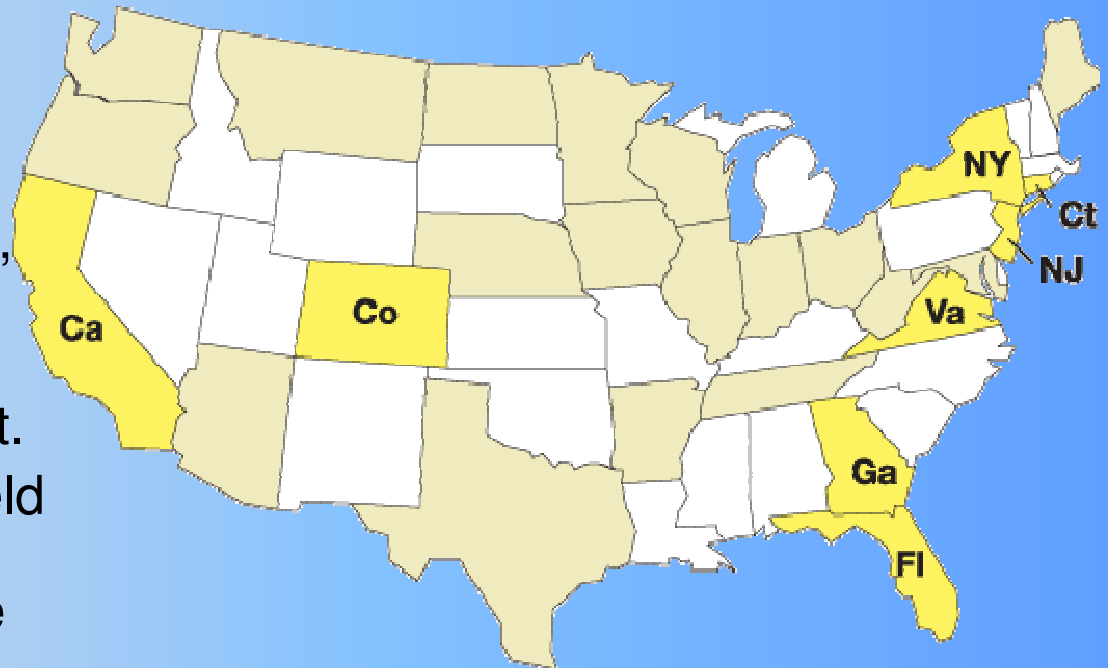


Strengths – Few strengths for owners. (keeps all options open for contractors)

Weaknesses – Leaves owner at the mercy of courts and boards. Also demands significant levels of personnel resources dedicated to claims evaluation.

PROACTIVE MODEL

- Address the payment of home office OH explicitly in their specifications. (CA, CO, CT, FL, GA, NJ, NY, VA)
- Recognize home office OH as a legitimate business cost.
- CA uses bid item for daily field and home office OH costs. Others use formula for home office OH.



Strengths – Simple to apply; Reduced personnel for claims administration; Often resolved at field level, resulting in fewer claims.

Weaknesses – Unstable project budget; Formulas may not provide sufficient full recovery of costs, thereby not resolving all claims



General Challenges Traditional OH Compensation

- OH costs are primarily a function of time, not cost.
- Markups rarely reflect contractor's actual OH costs.
- Markups only compensate for change order delays.
- Project management difficult when daily OH not known.
- Led to many claims. CT overruled by arbitrators when did not pay home office OH – “You delay, you pay!”



Caltrans' Challenges

Traditional OH Compensation

Caltrans needed innovative approach because:

- Urban areas – more state-caused delays;
- Claims savvy & sophisticated contractors;
- Size of program – dealing with many claims.



Bid Time-related Overhead (TRO)

What is it?

- Bid item approach to obtain a daily field & home OH amount (cost/working day). Other item costs reduced.
- Initial TRO quantity based upon original working days.
- TRO paid on each progress estimate based upon the number of charged working days during the month.
- TRO item quantity is changed by suspensions or adjustments of time which revise the contract completion date.



Bid Time-related Overhead (TRO) Payment Example

Original Contract Cost:	\$10 million
Original Working Days:	400 working days
Daily TRO Bid Amount:	\$2,500 per working day
Original TRO Cost:	\$1.0 million (400 days x \$2,500)
Average WD's per Month:	20 working days
Average TRO Paid per Month:	\$50,000 (20 days x \$2,500)
Original TRO Payments:	\$1.0 million (20 months x \$50,000)
Time Extension Days:	40 working days
Additional TRO Payments:	\$100,000 (40 days x \$2,500)
Final TRO Payments:	\$1.1 million (\$1.0 million + \$100,000)



Bid Time-related Overhead (TRO) Payment Example – Early Completion

Original Contract Cost: \$10 million
Original Working Days: 400 days
Daily TRO Bid Amount: \$2,500 per working day
Original TRO Cost: \$1.0 million (400 days x \$2,500)

Time Extensions Granted: 40 days
Final Working Days: 440 days
Approved Baseline Schedule: 350 days
Actual Working Days Charged: 380 days

TRO Paid During Work: **\$950,000** (380 days x \$2,500)
TRO Paid After Work Accepted: **\$150,000** (60 days x \$2,500)

Final TRO Payments: **\$1.1 million** (440 days x \$2,500)



Bid Time-related Overhead (TRO)

What are the benefits?

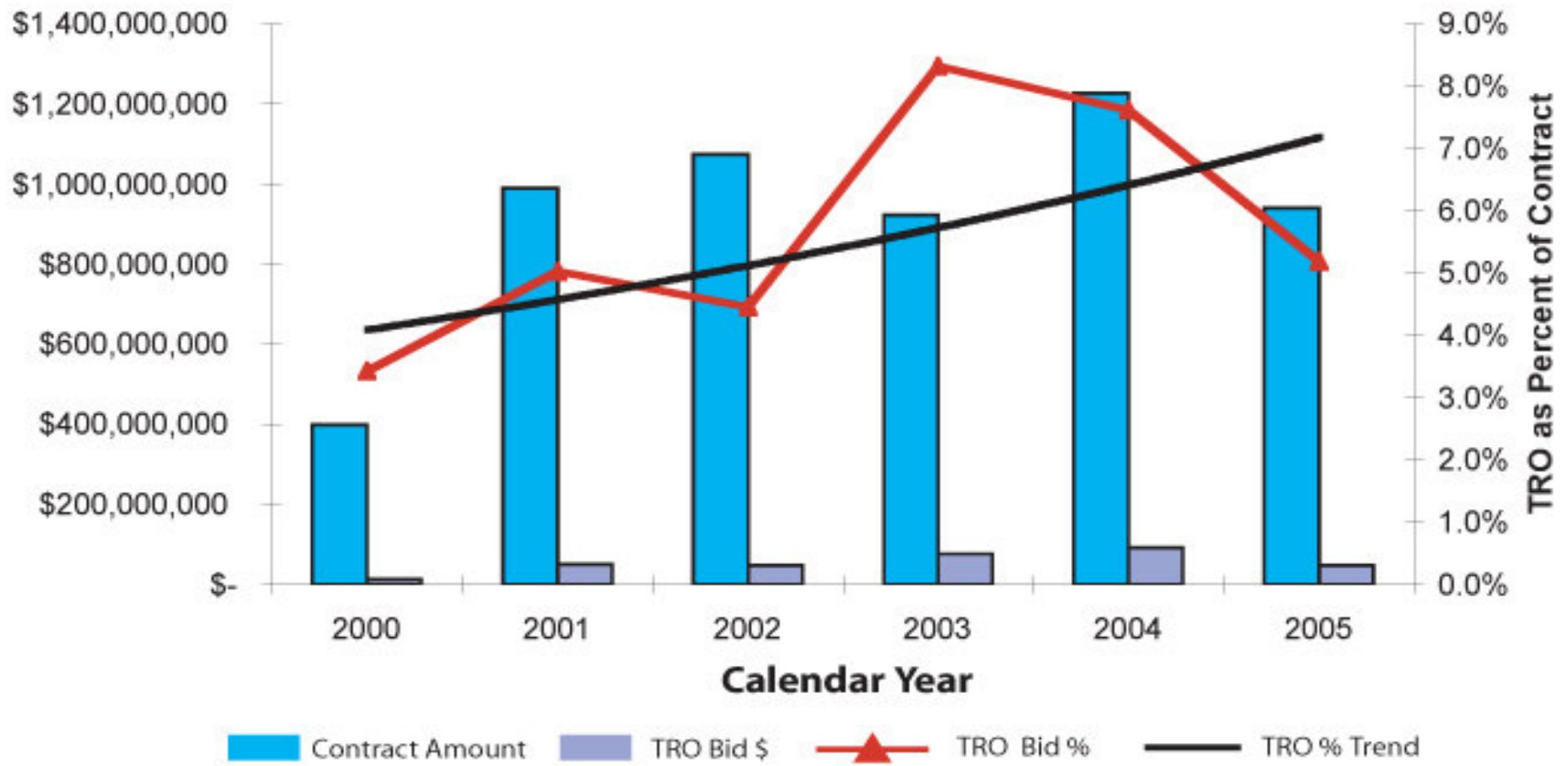
- OH paid costs are paid correctly – TRO payments based upon time and cost-related OH based upon cost.
- Payments are more accurate - costs supplied by contractor through competitive bidding.
- Improved “real-time” project management.
- When and how much TRO will be paid defined up front.
- **LESS OVERHEAD CLAIMS!**



TRO Benefits

Low OH Costs Through Bidding

Time Related Overhead vs. Total Contract Amount



Division of Construction



Overhead Compensation Continuing Challenges

Contract Time:

- Staff should be well trained in time administration and CPM.
- Need clear spec's regarding types of delays & responsibility.
- Weekly Statement of Working Days should track information.

Other Specifications:

- All indirect cost specifications need to be harmonized.
- Battle now over cost-related markup amounts. Bid markups?!
- Subcontractor OH compensation challenging – non-critical delays.

New Claims Arena

- TRO upheld by DRB's – now claiming change in character.
- A+B bidding works well – eliminates float ownership debate.



Overhead Compensation Conclusion

- The more clearly specifications define OH and how paid, the better for DOT's.
- Don't leave it up to boards, arbitrators & courts to interpret contracting laws for you!
- TRO has been helpful in defining OH and its payment, but more improvements needed.
- OH is nebulous and challenges with sophisticated contractors will always exist. Enjoy the battle!

