

**THE CONSTRUCTION USERS ROUNDTABLE**

*"THE OWNERS VOICE TO THE CONSTRUCTION INDUSTRY"*

# **Construction Labor: Managing the Construction Workforce**

UP-403  
March 2005

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## **Notice:**

The purpose of this publication is to make available to industry the results of research and common owner practices. The information is provided solely for the individual consideration and education of CURT members and the industry. The publication does not necessarily represent the views of every CURT member company on this topic. The booklet is offered as an informational publication only. CURT intends only to synthesize current thought and trends concerning the topic. Neither CURT nor its committees make any warranty as to the completeness regarding the materials. Readers are encouraged to further research the topic before relying exclusively on these materials. Each CURT member and other readers of these materials are free, acting in its own discretion and its own perception of business self-interest, to reject or adopt the recommendations in whole or in part. Adoption and/or reliance upon these recommendations is strictly voluntary.

The Mission of The Construction Users Roundtable (CURT) is to promote cost effectiveness for owners doing business in the United States by providing aggressive leadership on issues that will significantly improve project engineering, maintenance and construction processes, thereby creating value for the owners.

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## **1. Intent**

CURT user practices are developed from individual member practices as presented and discussed at CURT workshops. They are intended for use by CURT member companies.

## **2. Objective**

To optimize use of the existing construction workforce and develop the future construction workforce to meet owner needs.

## **3. Principles**

Both sectors of the construction workforce, open shop and union, can provide value to the owner.

Owners must support industry recruiting, training, and retention efforts to help ensure that the future workforce is available when needed.

## **4. Scope**

Every owner's project should have a construction workforce strategy specifically designed to ensure skilled workforce availability, both now and in the future.

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## 5. Corporate Approach (Policy)

Owners should develop a consistent corporate construction labor policy to be deployed across their sites and projects. This policy should include:

- ▲ Labor posture
- ▲ Contractor prequalification and selection
- ▲ Labor agreements
- ▲ Use of overtime
- ▲ Support for industry recruiting, training, and retention initiatives
- ▲ Safety

An example of an owner corporate policy is included below.

**XYZ Manufacturing Co.**

**Construction Labor – Corporate Policy**

We use many different labor approaches within our capital program based on the needs of individual projects. We select labor approach based on the “Best Value” available, considering many issues including estimated cost, schedule, quality, safety, availability of qualified contractors, and workforce availability. In all situations we will:

- Prequalify contractors based on their local capability
- Support labor agreements established between selected contractors and organized labor
- Influence contractors to avoid extended overtime
- Provide our fair share of financial support for industry workforce recruiting, training, and retention initiatives
- Establish safety as first priority for every project

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## 6. Responsibilities

The owner's Project Manager is accountable to ensure that project labor approaches support both site and corporate construction workforce objectives. The project Purchasing Manager and Construction Manager (Contracts Manager) are responsible for implementation during project execution. See the listing of key labor management responsibilities in the table below.

<b>Key Labor Management Responsibilities</b>	
<b>Project Manager</b>	<ul style="list-style-type: none"><li>▲ Leads the project team to develop a project-specific labor strategy</li><li>▲ Ensures that corporate and site construction labor policies are understood and incorporated in the project strategy</li><li>▲ Establishes a contractor selection process which ensures that only qualified contractors are considered</li></ul>
<b>Purchasing Manager</b>	<ul style="list-style-type: none"><li>▲ Leads the contractor selection process</li><li>▲ Establishes appropriate contract provisions to support the owner's labor strategy</li></ul>
<b>Construction Manager</b>	<ul style="list-style-type: none"><li>▲ Participates in the contractor selection process</li><li>▲ Manages contractors to ensure that the project labor strategy is implemented</li><li>▲ Provides owner support for project contractors implementing the project labor strategy</li><li>▲ Reviews labor agreements to ensure that they comply with corporate policy and project labor strategy</li><li>▲ Influences schedule and crew size to ensure that overtime objectives are met</li><li>▲ Provides active support for contractor training efforts</li></ul>

Some owners have specific expertise in Construction Industrial Relations, while others rely on their Corporate Industrial Relations and Legal resources for support.

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## 7. Timing

The project labor strategy is developed early during the Front-End Planning Phase. Implementation occurs during the Procurement Phase, when contractors are selected and contracts established, and during the Construction Phase, when contractors assemble their workforce and execute the scope of work.

## 8. Procedure

The project labor strategy includes the following components:

### 1. Labor Posture

Project labor posture identifies the source of personnel for the project workforce. Three options are possible:

- ▲ Union – The workforce is assembled by contractors that have contracts with the organized building trades.
- ▲ Non-union – The workforce is assembled by contractors from the open-shop sector.
- ▲ Merit – The workforce is assembled by contractors from both the organized building trades and the open-shop sector.

Labor posture is often selected based on a local labor survey, which includes a thorough review of:

- ▲ Local business conditions – What the status of the local economy is and what the projected construction workload is for the area.
- ▲ Construction skills assessment – What craft skills are required for this project.
- ▲ Construction craft availability – What local construction labor pools exist within the organized and open-shop sectors.

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- ▲ Local craft training programs – What craft training programs are available to supplement any shortage of skilled craft.

(Many CURT owner members generally prefer a merit-shop approach, because it provides access to the entire construction workforce and enables competition among a broader range of contractors.)

Other issues that might influence selection of labor posture include:

- ▲ In-house labor agreements – The owner’s organization may have internal agreements with other, non-construction segments of organized labor. This might influence their ability or willingness to contract for construction labor from outside the organized sector.
- ▲ Experience on past projects – The owner may have past experience, either positive or negative, that might influence their decision.

The project team should evaluate each labor posture option as part of the decision-making process. One approach that provides some objectivity is the use of a weighted decision matrix. Each selection factor can be weighted based on the project objectives. For example, if workforce availability is a critical factor, then it would receive a higher weighting.

The following table shows a sample decision matrix for evaluating alternate labor postures. Weighting factors have been selected on a scale of 1 to 10, with 10 being the most important. Each alternative is then rated on a scale of 1 to 10, with 10 indicating an excellent choice to address that factor.

<b>Example of Evaluation of Alternate Labor Postures</b>							
<b>Strategy Factor</b>	<b>Factor Weight</b>	<b>Alt 1 Union</b>		<b>Alt 2 Open Shop</b>		<b>Alt 3 Merit</b>	
		Rating	Score	Rating	Score	Rating	Score
<b>Local Business Conditions</b>	<b>6</b>	6	36	5	30	8	48
<b>Skills Availability</b>	<b>8</b>	7	56	6	48	8	64
<b>Workforce Availability</b>	<b>8</b>	5	40	4	32	8	64
<b>In-House Labor Agreements</b>	<b>3</b>	2	6	8	24	6	18
<b>Past Experience</b>	<b>6</b>	7	42	5	30	8	48
<b>Contractor Availability</b>	<b>8</b>	7	56	5	40	8	64
<b>Possible Labor Issues</b>	<b>5</b>	2	10	8	40	5	25
<b>Productivity</b>	<b>8</b>	8	64	6	48	7	56
<b>Labor Cost per Hour</b>	<b>8</b>	6	48	8	64	7	56
<b>Total</b>			<b>358</b>		<b>356</b>		<b>443</b>

After evaluating the alternatives, determine the optimum labor posture by developing consensus among the Project Team. The selected labor posture should be the one that best addresses the critical issues and has the best chance of meeting the project objectives.

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## 2. Contractor Prequalification

Contractors should be prequalified to ensure their local capability. For additional information, see the following CURT User Practices:

- ▲ UP-1002, “Construction Strategy: Selecting the Right Contractor”
- ▲ UP-801, “Construction Safety: Contractor and Craft Worker Prequalification”

## 3. Labor Agreement

If organized labor is to be used on the project, a form of labor agreement must be decided upon. It is important that a consistent agreement form be used for all trades to reduce complexity of administration. Labor agreement options include:

- ▲ **National Agreements** – These agreements are developed and signed at the national level. Wages are usually based on local agreements and sometimes include a discount. Jurisdictional disputes are reduced because these agreements are coordinated among the various trades.
- ▲ **National Maintenance Agreements** – These agreements are established at the national level for the repair, renovation, revamping, and upkeep of existing property and machinery. These agreements are special contracts for union labor that were created to allow the building trade unions to be more competitive for maintenance work by relaxing certain work rules. They include:
  - General President’s Project Maintenance Agreement (GPMA)
  - National Maintenance Agreement (NMA)

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(Many CURT owner members generally prefer these agreements when applicable for maintenance-type work, because the relaxed work rules are easier to manage and wages may be reduced.)

- ▲ **Local Union Agreements** – The terms of these agreements are negotiated by local union organizations and contractors. Wages and fringe benefits are also negotiated locally. Jurisdictional problems can arise because contract terms are not coordinated among the various trades.
- ▲ **Project Labor Agreements** – These project-specific agreements are negotiated between the primary contractor and the local craft unions. This provides consistency of terms and conditions and reduces jurisdictional problems through coordination. These agreements can take a long time to negotiate, and all unions may not agree or choose to participate.

#### 4. Use of Overtime

CURT owners recognize that productivity is lost with use of extended overtime. These losses have been researched and clearly documented in CURT Publication C-2, “Scheduled Overtime Effect on Construction Projects.” Also see CURT Report R-402A, “Extended Overtime on Construction Projects.”

This loss of productivity is significant and costly. For example, after seven weeks of 50 hours per week, productivity has fallen by 20 percent. The net effect is that the owner is paying for 55 hours of work (50 hours, with 10 of those hours at an overtime premium rate of one and one half) and receiving only an effective 40 hours of effort (50 hours x .80 productivity). See the graph entitled “Cumulative Effect of Overtime on Productivity, 50 and 60 Hour Weeks” in publication C-2.

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Also, it is generally recognized that safety risk is increased by use of extended overtime. Worker fatigue affects their ability to concentrate and focus on safe completion of the task. Fatigue also increases absenteeism.

For these reasons, CURT owners prefer to use spot overtime rather than scheduled extended overtime. Spot overtime is used to apply extra effort to critical tasks from a selected few individuals. CURT owners discourage the use of scheduled extended overtime as a technique to recruit and retain craft workers.

The project labor strategy, then, should include use of an overtime policy that encourages the use of spot overtime rather than scheduled extended overtime.

## **5. Support for Industry Effort to Recruit, Train, and Retain Craft Workers**

CURT owners recognize that skilled construction craft workers are in short supply. The construction industry has initiated a number of programs to recruit, train, and retain the workforce of the future. Owners are dependent on this workforce for construction of their future projects. The project labor strategy, then, should include provision for owner support of these industry efforts to develop the future workforce.

Owners can demonstrate their support in the following ways:

- a. Hire only those contractors who have a craft worker training program. Use a prequalification process to develop the project bid list. Make craft work training program a requirement for qualification.
- b. Contribute to craft training funds, as required by union agreement and as recommended in the open-shop sector.

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- c. Support the National Center for Construction Education and Research (NCCER) through direct contributions or through volunteer efforts. (The NCCER, [www.nccer.org](http://www.nccer.org), is a not-for-profit education foundation that publishes standardized construction training materials.)
  - d. Require that craft personnel be trained, skilled, and accredited.
  - e. Donate scrap material and equipment to a craft training program.
  - f. Provide facilities for craft training.
  - g. Provide a safe and sanitary workplace.

For more information on how owners can support construction workforce development, see CURT Report R-402, “Tripartite Initiative Report: Executive Summary.”

## **6. Safety**

Safe construction operations should always be of primary concern for any construction project. The owner must take a proactive role in ensuring the safety of the construction workforce. For additional details, see CURT User Practice UP-802, “Construction Safety: The Owners Role.”

During the Procurement Phase of the project, the owner’s Purchasing Manager and Construction Manager (Contract Manager) prequalify and select contractors, and establish contracts that support the project labor strategy.

During the Construction Phase, the owner’s Construction Manager (Contract Manager) influences contractors to ensure that the project labor strategy is consistently implemented.

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## **9. Summary**

Owners who proactively establish corporate, site, and project labor strategies experience improved labor performance on their current projects. Cost and schedule risk is reduced through improved productivity, reduced absenteeism, and fewer jurisdictional issues. Owner support for recruitment and training of craft workers supports development of the construction workforce for future projects.

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## 10. Reference Documentation

### CURT Documentation

- ▲ C-2, “Scheduled Overtime Effect on Construction Projects“
- ▲ Notes from Construction Workforce Workshop, September 14, 2004
- ▲ R-402, “CURT Tripartite Initiative Executive Summary”
- ▲ R-402A, “Extended Overtime on Construction Projects”
- ▲ R-402B, “Tripartite Study on Absenteeism in Construction”
- ▲ R-402C, “Work Disruptions on Construction Projects”
- ▲ UP-801, “Construction Safety: Contractor and Craft Worker Prequalification”
- ▲ UP-802, “Construction Safety: The Owner’s Role”
- ▲ UP-1002, “Construction Strategy: Selecting the Right Contractor”

### Construction Industry Institute

- ▲ The Shortage of Skilled Craft Workers in the US, Sep 03 (RS182-1)
- ▲ Attracting and Maintaining a Skilled Construction Work Force, Oct 00 (RS135-1)

# Construction User Roundtable Publications

The purpose of developing Construction User Roundtable (CURT) publications is to disseminate recommendations, guidelines, and reports developed by the Construction Users Roundtable. CURT is focused on improving the cost effectiveness of the U.S. construction industry. These publications have been developed from the point of view of owners or users of construction services. Efforts by all segments of the industry, however, are vital if major improvement is to be the result.

This publication is one of a series from committees or study teams addressing a problem area.

Findings and recommendations of The Construction Users Roundtable are included in publication series classified as White Papers (WP), Reports (R), or User Practices (UP). In addition to these classifications, CURT publications are numbered based on the category of the topic:

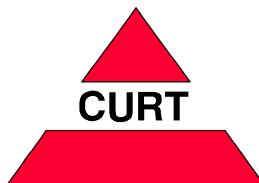
Category	Number Code
Constructability	001 to 099
Contractor Management	101 to 199
Cost	201 to 299
Interface Management	301 to 399
Workforce/Industrial Relations	401 to 499
Material Control	501 to 599
Purchasing	601 to 699
Quality	701 to 799
Safety	801 to 899
Security	901 to 999
Strategy	1001 to 1009
Work Planning and Scheduling	1101 to 1199
Technology/E-Sourcing	1201 to 1299
Special Projects	2001 to 2099

## Examples:

WP-1201: A CURT White Paper on Reverse Auction

R-402: A CURT Report on Tripartite Initiatives

UP-801: A CURT User Practice on Construction Safety in Contractor Prequalification



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