

# True Cost of Employee: Labor Burden

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# STUDENT & COURSE LEARNING OUTCOMES

ACCE (American Council for Construction Education) Student Learning Outcomes covered in this course:

- ▶ SLO 11 - Understand construction accounting and cost control.
- ▶ SLO 13 - Understand construction project control processes.

Course Learning Outcome for this lecture:

- ▶ CLO 2 - Understands the significance of labor burden for a construction company. Prepare and analyze the true cost of an employee for a construction company. Suggest recommendations to control costs.

# CLO 2 - GOALS

- ▶ Understand the meaning of each term in “labor burden”. Define Labor. Define burden and describe why labor is linked with burden.
- ▶ Find the true cost of an employee.
- ▶ Project labor costs.

# UNDERSTANDING LABOR BURDEN: CONSTRUCTION COMPANIES

- ▶ The most expensive general overhead in a construction company is an employee.
- ▶ **Labor:** Any individual on a payroll in a company.
- ▶ **Burden:** All costs other than the wages, including payroll taxes and benefits that are paid to or for the employee. There are two categories of burden
  - 1. Must Burden(taxes)
  - 2. Optional burden (benefits)

# LABOR CLASSIFICATION

Per the Bureau of Labor Statistics, labor is typically classified as Exempt or Non-exempt.

## ► Exempt Employees

1. Exempt from FLSA (Fair Labor Standards Act).
2. Usually salaried; overtime depends on employment agreement
3. Typically, professionals

## ► Non-Exempt Employees

1. Covered by FLSA (must follow federal wage/overtime rules)
2. Paid hourly; Must be paid overtime for work exceeding 40 hours/week
3. Typically, clerical/administrative roles.

# TYPICAL EMPLOYEE COSTS

- ▶ Employee Cost = Wages/Salary + Burden
- ▶ Wages = Take - home money
- ▶ Burden = payroll taxes + unemployment taxes + benefits, including but not limited to worker's compensation, general liability, retirement, health insurance, and more.

# LABOR BURDEN CALCULATIONS: STEP 1

## Step 1: Calculate Regular pay work hours and overtime pay work hours

- ▶ Identify total permitted work hours in a year based on:  
standard workweek  
total weeks in a year
- ▶ Account for paid vacation
- ▶ Standard work week = [work hours/week] × [weeks/year]
  - ▶ If Vacation is unpaid, Regular Pay work hours = standard work week
  - ▶ If vacation is paid, subtract vacation hours from standard work week to calculate regular pay work hours
- ▶ Overtime pay work hours = Actual worked hours – Regular pay work hours

# LABOR BURDEN CALCULATIONS: STEP 2

**Step 2:** Calculate regular wages ( pay), overtime wages and total wages

➤ Regular wages

$$= [\text{Regular pay work hours}] \times [\text{wage rate}]$$

➤ Overtime wages

$$= [\text{Overtime pay work hours}] \times [\text{wage rate}] \times \text{overtime rate}$$

➤ Vacation wages

$$= [\text{Paid vacation hours}] \times [\text{wage rate}]$$

➤ Total Wages

$$= \text{Regular wages} + \text{Overtime wages} + \text{Vacation wages}$$

# LABOR BURDEN CALCULATIONS: STEP 3

## Step 3: Calculate Payroll Taxable Income

► Payroll taxable income is the income that is subject to payroll taxes, paid on the highest earning.

► Payroll taxable income = Total wages

+ Gift

+ Bonus

+ Allowance

e

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+ Award  
Payroll taxable income

# TAX ADVANTAGED EMPLOYEE CONTRIBUTIONS

## ► FSA – Flexible Spending Account

- Pre-tax dollars set aside for healthcare expenses
- Lowers taxable income and payroll taxable income
- Full annual amount is accessible at start of year
- “Use it or lose it”: Unused funds are forfeited

## ► HSA – Health Savings Account

- For employees with high-deductible health plans
- Funds roll over yearly – no spending deadline
- Portable: stays with you if you change jobs or retire
- Can contribute to LFSA for dental/vision expenses

# TAX ADVANTAGED EMPLOYEE CONTRIBUTIONS CONT.

## ▶ **LFSA – Limited Flexible Spending Account**

- High-deductible health plan
- Vision and dental expenses ONLY
- Same contribution limits as FSA (\$3300 for 2025)

## ▶ **DCFSA – Dependent Care Flexible Spending Account**

- Childcare, elderly care, and dependent care when both earning members attend school or work
- Preschools, summer day camps, before or after school programs, child or adult daycare
- Max contribution limited by the government (\$5000 for 2025)

# LABOR BURDEN CALCULATIONS: STEP 4

## Step 4: Calculate Effective Payroll Taxable Income

- ▶ Effective Payroll Taxable Income (EPTI) is calculated by subtracting any pre-tax contributions from the Payroll Taxable Income (PTI).
- ▶ These pre-tax contributions depend on the health plan and benefit accounts the employee chooses to contribute to : FSA, LFSA, HSA, DCA.
- ▶  $EPTI = PTI - \text{Pre-tax Contributions}$

# LABOR BURDEN CALCULATIONS: STEP 5

## Step 5: Calculate Payroll Taxes

- Social security ( FICA)
  - Medicare
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- ▶ Paid by employee and employer.
  - ▶ Percentage rate
  - ▶ Social security wage cap

# PAYROLL TAX: SOCIAL SECURITY ( FICA)

- ▶ Tax Rate (2025): 6.2%
- ▶ **Social Security Wage Cap (2025): \$176,100**  
This is the maximum income amount subject to Social Security tax.
- ▶ Key Points:
  - Only income up to the Social Security (SS) wage cap is taxed at 6.2%
  - Any income above the cap is not taxed for Social Security
- ▶ How to Calculate:  
$$\text{Social Security Tax} = 6.2\% \times (\text{EPTI or SS wage cap, whichever is lower})$$

# PAYROLL TAX: MEDICARE

- ▶ Tax Rate: 1.45% (employee)  
1.45% (employer)
- ▶ No Wage Cap:  
EPTI is subject to Medicare tax, regardless of amount.
- ▶ Key Points:
  - Unlike Social Security, there is no Medicare wage cap.
  - Medicare is paid on the Effective Payroll Taxable Income (EPTI)
- ▶ How to Calculate:  
$$\text{Medicare Tax} = 1.45\% \times \text{EPTI}$$

# LABOR BURDEN CALCULATIONS: STEP 6

## Step 6: Calculate Unemployment Insurance Act Taxes

- Federal Unemployment Insurance Act (FUTA)
- State Unemployment Insurance Act (SUTA)

- ▶ Paid by employer.
- ▶ Percentage rate
- ▶ wage cap

# UNEMPLOYMENT INSURANCE ACT

**Unemployment Insurance Act**: temporary income for workers who are unemployed for no fault of their own.

## Two Types: SUTA and FUTA

### **FUTA (Federal Unemployment Tax Act)**

- ▶ Tax rate set by federal government.
- ▶ FUTA wage cap set by federal government.
- ▶ Employers who pay SUTA on time receive FUTA credit
  
- ▶  $\text{FUTA} = \text{FUTA rate} \times (\text{FUTA wage cap})$

# UNEMPLOYMENT INSURANCE ACT CONT.

## FUTA (Federal Unemployment Tax Act)

- ▶ Fixed tax rate: 6%
- ▶ Wage cap: \$7,000
- ▶ Max FUTA Tax =  $(6/100) \times (7000) = \$420$  per employee

The federal government offers an incentive to employers who pay their SUTA taxes on time by granting a FUTA tax credit of 5.4%.

- ▶ Original FUTA Rate: 6.0%
- ▶ FUTA Credit (for paying SUTA on time): 5.4%
- ▶ Effective FUTA Rate =  $6.0\% - 5.4\% = 0.6\%$
- ▶ FUTA Tax =  $0.6\% \times \$7,000 = \$42$  per employee per year

# UNEMPLOYMENT INSURANCE ACT CONT..

**Unemployment Insurance Act**: temporary income for workers who are unemployed for no fault of their own.

## 2 Types: SUTA and FUTA

### **SUTA (State Unemployment Tax Act)**

- ▶ Tax rate varies by state.
- ▶ SUTA wage cap also varies by state.
- ▶ New employer tax rate is set by each state.
- ▶ SUTA rate increases with higher unemployment claims.
- ▶  $\text{SUTA} = \text{SUTA rate for the state} \times (\text{SUTA cap for the state})$

# STRATEGIES TO LOWER SUTA

Minimize unemployment claims against company by:

- ▶ Hiring temp workers during peak seasons
- ▶ Employing rigorous hiring process
- ▶ Incentivizing or paying overtime to current employees on payroll
- ▶ Flexible resource allocation
- ▶ Cross-training employees

# LABOR BURDEN CALCULATIONS: STEP 7

## Step 7: Calculate effective cost of employee with must burden

This gives the true cost per hour of employing a worker; after factoring in required employer obligations of federal and state taxes

- ▶ Effective hourly cost with must burden =  $\frac{\text{Total Effective cost with must burden}}{\text{Total hours worked}}$
- ▶ Total Effective cost with must burden = PTI
  - + Payroll taxes
  - + Unemployment Insurance taxes

# LABOR BURDEN CALCULATIONS: STEP 8

**Step 8:** Calculate employer contributions toward employee benefits, including but not limited to:

- ▶ Workers' Compensation
- ▶ General Liability Insurance
- ▶ Health Insurance contributions made by the employer
- ▶ 401(k) employer Match
- ▶ Professional development funds
- ▶ Professional memberships
- ▶ And More!

# LABOR BURDEN CALCULATIONS: STEP 9

**Step 9:** Calculate the total cost of the employee

▶ Total Cost of Employee = PTI with Must Burden + Total Benefits

**Step 10:** Calculate effective hourly cost of the employee

▶ Effective Hourly Cost = Total Cost of employee ÷ Total work hours

**Step 11:** Calculate labor burden markup

▶ Labor Burden Markup =  $(\text{Total Cost} \div \text{Total work wages}) - 1 \times 100$

# PRACTICE PROBLEM - DISCLAIMER

This exercise is designed to simulate real-world financial messy data scenarios. It contains **intentionally erroneous and extraneous data points as well as made-up scenarios.** The objective is to identify and filter out “fluff/noise” that is irrelevant to calculating labor burden and achieve consistent results across participants. All values are for illustration purposes only.

# PRACTICE PROBLEM

- Determine the **effective hourly cost**, the **total annual cost**, and the **labor burden markup** for the project superintendent with the following wage and benefit information.

Wages	58.00	\$/Hour
Total hours worked during year	2,520	Hours
Reimbursements (max allowed)	50	\$/Month
Overtime rate	1.76	Times
Bonus	370	\$/ 2 months
Allowances	155	\$/month
Social Security Rate	6.20	%
Social Security Limit	155,200	\$
Medicare Rate	1.45	%
FUTA Rate	6.00	%
FUTA Limits	7,000	\$
FUTA Waiver (credit)	5.4	%
SUTA Rate	6.75	%

# PRACTICE PROBLEM CONT. 1

SUTA Limit	13,500	\$
Worker's Comp. Rate	0.52	\$/ \$100
General Liability Rate	0.60	%
401(k) Matching	0.75	\$ per \$
401(k) Limit	7.00	% of wages
Health Insurance	450	\$/Month. Another \$300 is deducted from employee's paycheck
Conference	2500	\$ / 6 months
Training	1,800	\$/year
HSA(fixed for consistency)	400	\$/month
DCA (fixed for consistency)	325	\$/month
FSA (fixed for consistency)	300	\$/month
LFSA (fixed for consistency)	150	\$/month
Paid Vacation	165	hours

# PRACTICE PROBLEM CONT. 2

## Assumptions: Problem context

- ▶ Assume SUTA was paid on time
- ▶ Assume the employee has 5 tax dependents
- ▶ Assume the employee will make the best use of all health/benefit accounts offered.
- ▶ Assume employee will take the full advantage of the retirement benefit.

# SOLUTION TO PRACTICE PROBLEM

## Step 1: Calculate reg wage hours and overtime wage hours

Reg work hours	\$ 1,915.00
Overtime work hours	\$ 605.00

## Step 2: Calculate reg wages, overtime wages, total wages

Reg wages	\$ 111,070.00
Overtime wages	\$ 61,758.40
<b>Total work wages</b>	<b>\$ 172,828.40</b>
Vacation pay	\$ 9,570.00
<b>Total wages</b>	<b>\$ 182,398.40</b>

## Step 3: Calculate Payroll Taxable Income (PTI)

Bonus/Gift	\$ 2,220.00
Allowance	\$ 1,860.00
<b>Payroll Taxable Income</b>	<b>\$ 186,478.40</b>

# SOLUTION TO PRACTICE PROBLEM CONT. 1

## Step 4: Calculate Effective Payroll Taxable Income (EPTI)

DCA	\$ 3,900.00
HSA	\$ 4,800.00
LFSA	\$ 1,800.00
FSA	N/A
<b>Effective Payroll Taxable Income</b>	<b>\$ 175,978.40</b>

## Step 5: Calculate Payroll Taxes

Social Security	\$9,622.40
Medicare	\$ 2,551.69
<b>Total Payroll taxes</b>	<b>\$ 12,174.09</b>

## Step 6: Calculate Unemployment Taxes

FUTA	\$ 42.00
SUTA	\$ 911.25
<b>Total Unemployment Insurance Taxes</b>	<b>\$ 953.25</b>

# SOLUTION TO PRACTICE PROBLEM CONT. 2

## Step 7: Effective Hourly Cost of Employee with must burden

Payroll taxable income	\$ 186,478.40
Payroll taxes	\$ 13,902.07
Unemployment Insurance Act taxes	\$ 1,158.25
Total effective cost of employee with must burden	\$ 201,538.72
<b>Total effective hourly cost of employee with must burden</b>	<b>\$ 79.98</b>

## Step 8: Calculate all benefits paid by employer

Worker's Comp.	\$ 969.69
General Liability	\$ 1,118.87
401(k)	\$ 9,790.12
Health Insurance	\$ 5,400.00
Training	\$ 1,800.00
Conference	\$ 5,000.00
<b>Total Benefits</b>	<b>\$ 24,078.67</b>

# SOLUTION TO PRACTICE PROBLEM CONT. 3

**Step 9: Calculate total cost of employee with ALL the burden**

<b>Total Cost of employee including all the burden</b>	<b>\$ 223,684.41</b>
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**Step 10: Calculate effective hourly cost with ALL the burden**

<b>Effective hourly cost of employee with all the burden</b>	<b>\$ 88.76</b>
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**Step 11: Calculate Labor Burden markup**

<b>Labor Burden Markup (%)</b>	<b>29.43%</b>
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# FOR FURTHER READING: DIG DEEP

Use the hyperlinks provided below for detailed readings available via the library:

- ▶ [Wage rate, SUTA, FUTA](#)
- ▶ [Tax FactSheet](#)
- ▶ [Payroll taxes](#)
- ▶ [The Fundamentals of FUTA](#)
- ▶ [Labor Costs Inputs Used in the Employee Benefits Security Administration, Office of Policy and Research's Regulatory Impact Analysis](#)
- ▶ [Reducing SUTA costs](#)

## **True Cost of Employee for Construction Managers**

### **End of Lecture: Concept Review Questions**

- 1) Define the terms exempt and non-exempt employees as they relate to the Fair Labor Standards Act (FLSA). Additionally, identify and explain three primary differences between these two employee classifications.
- 2) Distinguish between payroll taxable income and federal taxable income. What specific tax deductions apply to one but not the other?
- 3) What is allowance? Explain its effect on taxable income, specifically payroll taxable income.
- 4) What is reimbursement? Explain its effect on taxable income, specifically payroll taxable income.
- 5) Explain the tax advantages of a Flexible Spending Account (FSA) or similar other contributions made by an employee. Demonstrate with a numerical example comparing the net take-home pay of an employee who earns \$10,000 and contributes \$2,000 to a Healthcare FSA versus one who does not. Highlight the total tax savings achieved.
- 6) What are the two classes of burden of an employee?
- 7) How does paid vacation affect regular and overtime work hours?
- 8) Construct a detailed comparison between a Health Savings Account (HSA) and a Flexible Spending Account (FSA). Your analysis must address the following four criteria:
  - Eligibility requirements (specifically regarding health insurance plans).
  - Ownership and portability (what happens if the employee leaves the company?).
  - Rollover rules (the 'use-it-or-lose-it' policy).
  - Investment potential.
- 9) What are some strategies employers can use to reduce their State Unemployment Tax Act (SUTA) rates?
- 10) In accounting, the term “labor burden” represents the total cost of an employee beyond their gross wages. Identify and define the two primary categories of labor burden.

- 11) Identify the different types of payroll taxes and categorize them based on who is responsible for the payment. State the characteristics of each.
- 12) What is a limited FSA (LFSA), and what can it be used for?
- 13) How does contributing to a dependent care account (DCA) affect payroll taxable income?
- 14) Define the scope of a Dependent Care Account (DCA). Does it cover medical expenses for a dependent, or is it strictly for care-related services? Explain the difference.
- 15) Define Workers' Compensation and explain its role as an 'exclusive remedy.' Why is this insurance particularly critical in the construction industry compared to lower-risk sectors?
- 16) What does EMR stand for in workers' compensation? How is it used?
- 17) How can a company reduce its EMR over time?
- 18) Explain why Payroll Taxable Income is often higher than Federal Taxable Income for the average employee. List two specific deductions that create this discrepancy.
- 19) Distinguish between the coverage provided by General Liability (GL) insurance versus Workers' Compensation. Why is it essential for an employer to carry both, and what specific types of non-employee risks does the GL cover?
- 20) Why should job seekers consider employer health insurance contributions when evaluating job offers?
- 21) Why is it important for employees and employers in the construction industry to understand the true costs of employee when evaluating a job offer?
- 22) When evaluating a job offer in the construction industry, why is it misleading to focus solely on the base hourly wage? Discuss how the true cost of an employee impacts an employee's total compensation and an employer's overhead per man-hour and thus the company's sustainability.
- 23) Define the Labor Burden Markup and discuss its importance in project bidding. Specifically, analyze how non-productive time and supplemental pay alter the effective hourly rate versus the base wage.

Practice Problem

Disclaimer: This exercise is designed to simulate real-world financial messy data scenarios. It contains intentionally erroneous and extraneous data points as well as made-up scenarios. The objective is to identify and filter out “fluff/noise” that is irrelevant to calculating labor burden and achieve consistent results across participants. All values are for illustration purposes only

INSTRUCTIONS:

- 1. Write neatly and legibly. Typing is preferred.
- 2. EXCEL is not allowed. You must approach the solution step by step completing all 11 steps.
- 3. Show all work clearly. Every step must be documented.
  - o If you multiply two numbers, show exactly which two numbers were used.

Problem Statement

Determine the **effective hourly cost**, the **total annual cost**, and the **labor burden markup** for the Superintendent with the following wage and benefit information.

**Disclaimer:** The data provided below is created to strengthen your concepts and for consistent results. Many variations are otherwise possible.

Wages	65.00 \$/hour
Total hours worked during year	2,620 hrs
Overtime Rate	1.65 times
Paid vacation	135 hrs
Bonus	\$270 per month
Allowances	\$115 per month
Reimbursement	upto \$50 per month
Social Security Rate	6.50 %
Social Security Limit	\$157,000
Medicare	1.45 %
FUTA Rate	7.4%. 5.4% credit is received if SUTA is paid on time.
FUTA Limits	\$9,500
SUTA Rate	6.75 %
SUTA Limit	\$13,500
Worker's Comp. Rate	\$0.52 /\$100
General Liability Rate	0.60 %
401(k) Matching	\$0.65 per \$1.00
401(k) Limit	8.00% of wages
Health Insurance	\$ 200 / Month. Another \$500 per month is deducted from employee’s paycheck.
Union Dues	\$ 150 / Month
Conference	\$3000 per year
Training	\$1200 per year
HSA	\$270 / Month
FSA	\$320/Month
LFSA	\$50 / Month
DCA	\$125/ Month

Key assumptions top solve this problem

Assume SUTA was paid on time

Assume employee has 2 tax dependents

Assume employee will make the best use of all health/benefit accounts.

Assume employee will take the full advantage of retirement benefit.