

Do Higher Wages Raise Labor Costs?

Or do workforce skills have greatest cost impact?

Do higher wages raise labor costs? Not according to Bob Gasperow, Director of the Construction Labor Research Council (CLRC).

In a review of Federal Highway Administration (FHA) information in 1995, Bob Gasperow analyzed the available data to determine the correlation between wages, man-hours and highway construction expenditures.

His study's findings illustrate how skills and productivity - not differences in wage rates - are the critical determiner of bottom line labor costs.

Owners, public bodies and local and state legislators tend to believe higher wages add up to higher construction costs, and their reasoning seems to be because prevailing wage opponents constantly promote it.

Gasperow's analysis uses data compiled by the Federal Highway Administration (FHA) that shows construction expenditures or cost savings are related to wages and productivity - and not to wages alone.

Three other factors make the FHA database ideal for this type of scrutiny. It is 1. objective, 2. comprehensive and 3. neutral (not designed to evaluate labor costs). In addition, the data encompasses 14 years so that exceptions and atypical projects reported in a particular state in a particular year have little or no impact upon the findings. Statistics included in study cover all fifty states over the 14-year period from 1980 though 1993 with the following volumes:

	<u>All States</u>	<u>Top 26 States</u>
Total Construction Dollars	\$87.1 billion	\$67.9 billion
Roadway Miles	98,454	68,976
Bridge Miles	2,138	1,598
Total Construction Miles	100,591	70,573
Labor Hours	1.5 billion	1.2 billion

The total volumes listed above are actual construction expenditures. They do not include engineering costs, purchases of right-of-ways or any other cost that is not directly related to actual construction.

The analysis selected a grouping of states that averaged over \$100 million annually to eliminate any variables that might occur in lower dollar volume states.

Highway Costs in 26 Top \$\$ Volume States (1980-1993)

	Low Wage*	High Wage**	U.S. Average
Average Hourly Wage	\$9.76	\$17.65	\$12.15
Man-Hours Per Mile	\$22,837	\$13,697	\$18,348
Labor Costs Per Mile	\$216,864	\$241,465	\$235,603
Total Costs Per Mile	\$1,141,049	\$1,017,992	\$1,136,963

* Low Wage States: TX, GA, IA, FL, AL, MN, MS, TN, NC, CO, VA, LA, WV "

**High Wage States: OH, IL, WI, PA, MO, MI, WA, CA, NY, IN, AR, OR, NJ

These 26 states represent

- 78% of the total construction dollars,
- 70% of total construction miles and,
- 79 % of total labor hours over the 14 years.

As the above table clearly shows, the man-hours to complete a mile of highway are 40 % lower in the high wage states - in spite of an 81% higher wage rate.

And total dollar costs per mile between low wage and high wage states are 11 % less expensive in high wage states when compared to an 81 % wage rate differential.

The bottom line: The use of higher paid; higher skilled workers reaped an average \$123,057 per mile savings in the high wage states. This is despite the fact that rates in these states averaged \$17.64 an hour compared to \$9.21 per hour in lower wage states.

Higher skilled productive workers are the key to a project's cost-effectiveness.

This study documents that there is only minimal correlation between the hourly wage rate paid to labor and the cost of a mile of highway.

Moreover, the limited correlation which does exist indicates that the relationship is inverse - higher hourly rates tend to equate to lower highway cost per mile.

CLRC's Gasperow explains that the amount/cost of any *single* factor in highway construction - various mixes of equipment, labor, materials and management - reveals little about total cost.

Up to a point, factors are substitutes for each other because they may be exchanged. Similarly, within a factor category, there may be substitutes.

For example, workers with varying skill levels may be utilized. Although there are higher costs per unit of time for the more highly skilled, these workers require fewer labor inputs. Therefore, if the gain in output per unit of time exceeds the premium paid to the more highly skilled worker, this becomes a more cost-effective alternative.

The analysis of FHA data documents the impact on highway costs of utilizing various amounts of labor inputs at varying hourly rates. Gasperow explains: "It substantiates the lack of correlation between labor inputted into a mile of highway and total cost of project. "Using higher skilled, higher hourly cost labor substantially lowers the required labor inputs - often to the extent that cost per mile is lower when paying higher hourly labor rates.

Gasperow's conclusion: "There is no basis to the claim that lower wage rates result in lower construction costs."

Note: To see a full copy of the information above contact the National Alliance For Fair Contracting and ask for a copy of the publication titled, "Wages, Productivity, and Highway Construction Costs". 1 North Old State Capitol Plaza, Suite 525, Springfield, IL 62701

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