Construction Project Bids, Inflation Trends and Material Availability

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Joint Transportation Committee October 14, 2008

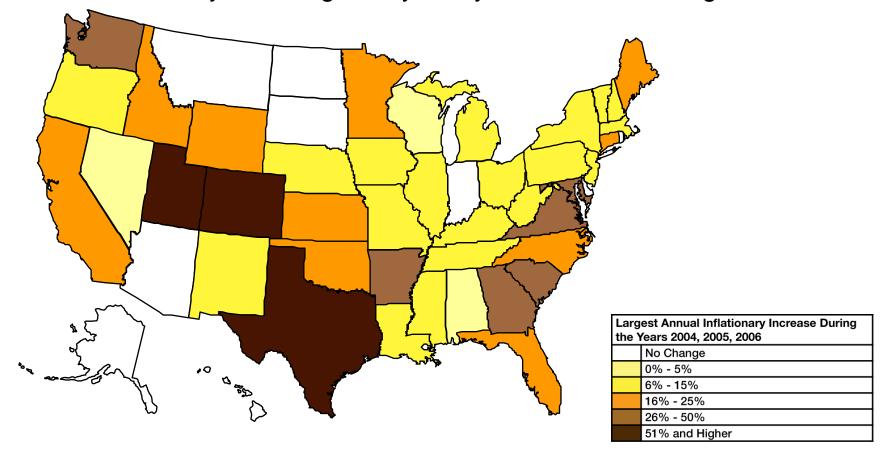


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- WSDOT cost trends
- Comparing estimates to contractors' bids
- Number of bidders on WSDOT projects
- Materials to watch closely
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Background on National Construction Cost Trends: 2004 – 2008

Trends relating to rising costs are affecting state transportation departments across the country, affecting nearly every state and including WSDOT.



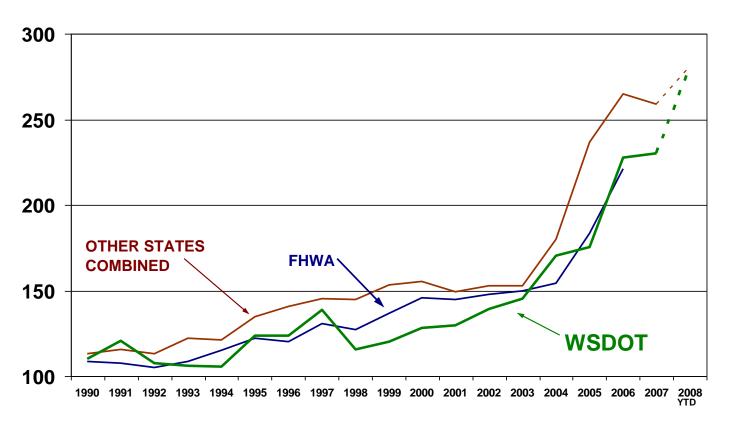
Agencies across the states are experiencing "sticker shock" at bid openings. Some states have been forced to scale-back building programs, cancel or defer projects, or seek additional funding to deliver planned projects:

- Texas has delayed and cancelled projects.
- Wisconsin increased fees.
- The Metropolitan Transportation Authority is facing a construction inflation crisis.
- Virginia called a special legislative session to increase road funding.
- Nebraska went from a per-gallon gas tax to a variable tax based on the price per gallon.

WSDOT Construction Cost Trends

WSDOT calculates a Construction Cost Index (CCI) based on recent bids

CONSTRUCTION COST INDICES



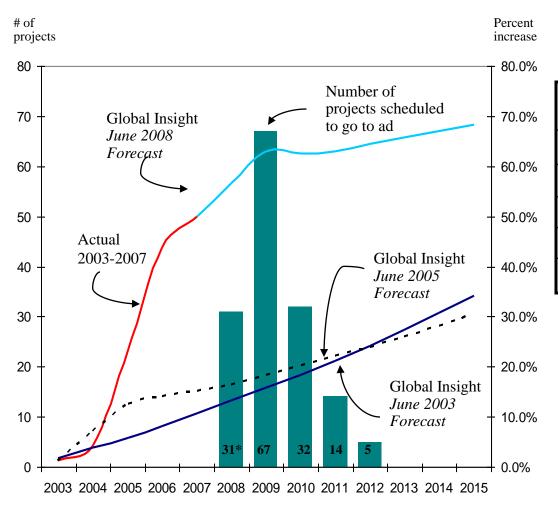
WSDOT BASE 1990 = 110
FHWA AND OTHER STATES BASE 1987 = 100
OTHER STATES: CALIFORNIA, COLORADO, OREGON, SOUTH DAKOTA & UTAH

Note: 2003 and 2004 WSDOT CCI data points adjusted to correct for spiking bid prices on structural steel

WSDOT 2008 INDEX IS FOR QUARTERS 1, 2 & 3
FHWA INDEX DISCONTINUED IN 2007
OTHER STATES 2008 DATA IS THE AVERAGE OF CALIFORNIA,
OREGON, AND UTAH SECOND QUARTER INDICES AND
COLARADO 1ST, 2ND & 3RD QUARTER DATA

Inflation: Extent of Construction Cost Increases Was Not Forecast

Construction cost inflation forecast and impact on projects yet to be put out to ad.



	# of projects scheduled for ad	Estimated value
2008*	31	\$783 m
2009	67	\$2,720 m
2010	32	\$571 m
2011	14	\$268 m
2012	5	\$68 m

Most Frequently Used Materials

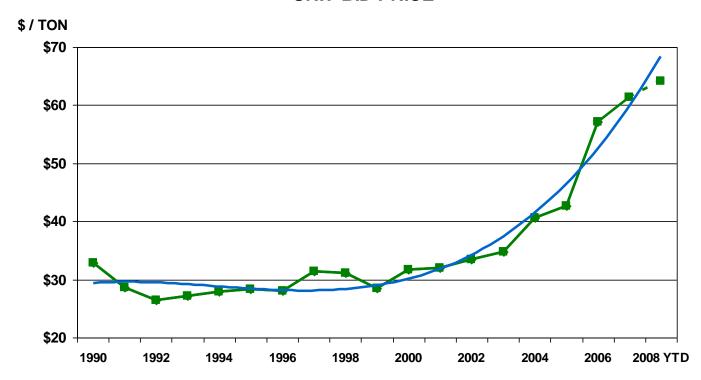
WSDOT projects use a fixed set of materials:

- Hot mix asphalt
- Structural concrete
- Roadway excavation
- Crushed surfacing
- Structural steel
- Steel reinforcing bar
- Concrete pavement

Hot Mix Asphalt Price Trends

HOT MIX ASPHALT

UNIT BID PRICE



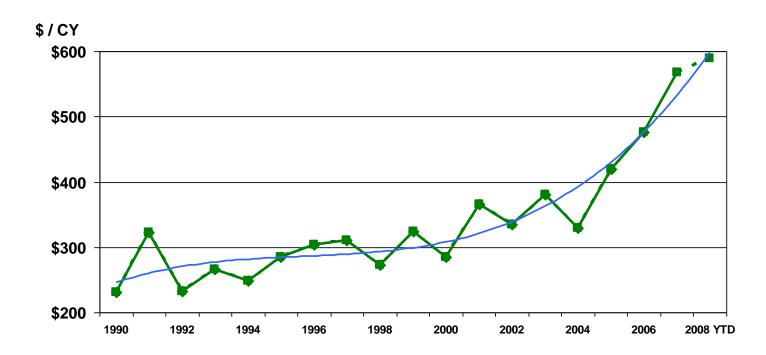
2008 Price: \$64.19 ton – 2003 price: \$34.78 ton <u>85% Increase</u>

Asphalt prices have increased due to crude oil price increases and changes in refinery technology and economics.

Structural Concrete Price Trends

STRUCTURAL CONCRETE

UNIT BID PRICE



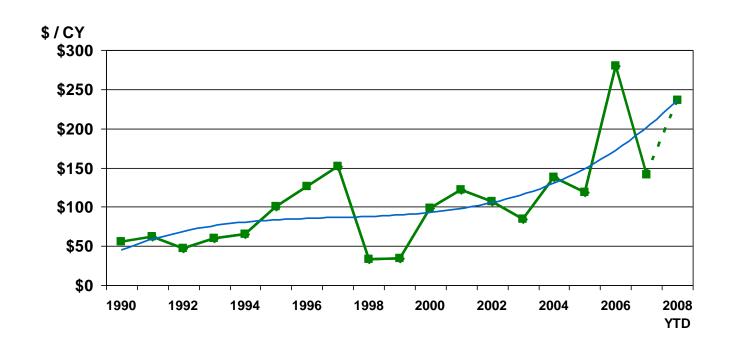
2008 Price: \$589 CY – 2003 price: \$381 CY <u>55% Increase</u>

Mining, crushing, mixing, hauling and placing concrete requires large amounts of fuel. Concrete prices follow crude oil prices.

Concrete Pavement Price Trends

CONCRETE PAVEMENT

UNIT BID PRICE



2008 Price: \$236 CY - 2003 price: \$87.75 CY <u>169% Increase</u>

Like structural concrete, prices for concrete pavement also closely follow crude oil prices.

Roadway Excavation Price Trends

ROADWAY EXCAVATION

UNIT BID PRICE



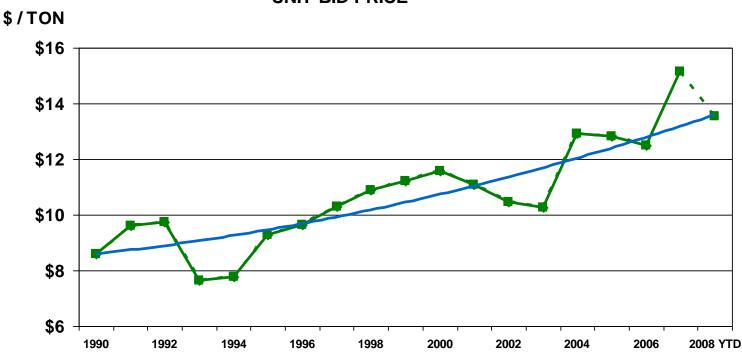
2008 Price: \$11.89 CY - 2003 price: \$5.39 CY 121% Increase

Roadway Excavation the moving of dirt. Costs include labor, equipment and the fuel that runs equipment.

Crushed Surfacing Price Trends

CRUSHED SURFACING

UNIT BID PRICE



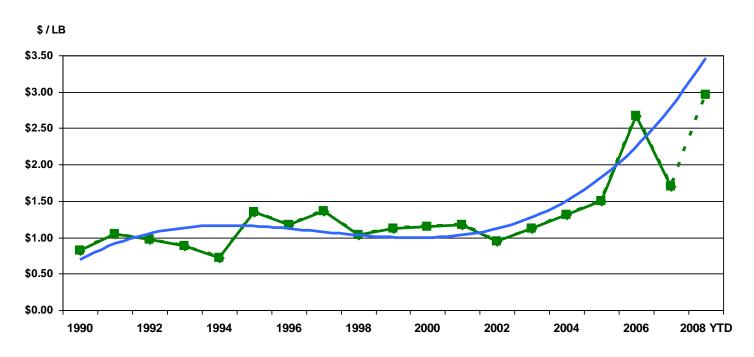
2008 Price: \$13.56 ton – 2003 price: \$10.26 ton 33% Increase

Aggregate is becoming increasingly unavailable as a result of spreading urban and suburban development reducing opportunities for its extraction.

Structural Steel Price Trends

STRUCTURAL STEEL

UNIT BID PRICE



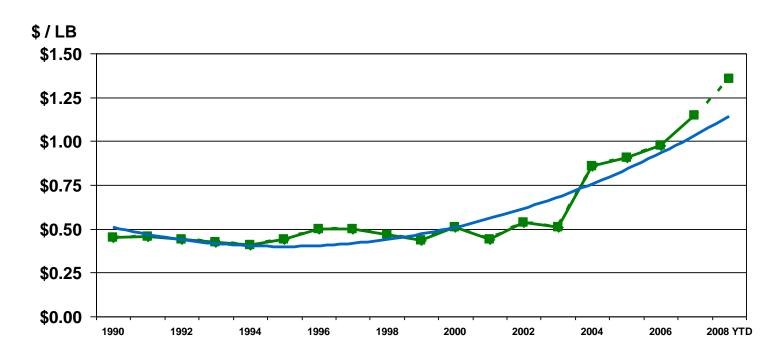
2008 Price: \$2.95 lb - 2003 price: \$1.13 lb 161% Increase

According to the American Road and Transportation Builder's Association, steel prices were up a whopping 100% in August 2008 from August 2007.

Steel Reinforcing Bar Price Trends

STEEL REINFORCING BAR

UNIT BID PRICE



2008 Price: \$1.33 lb - 2003 price: \$0.50 lb <u>166% Increase</u>

In August, prices for rebar were double prices in August 2007. Since spiking in August, prices have decreased about 10%.

Bid Price Increases Compared to General Inflation Rates

Percentage Increase Experienced Since 2003				
Concrete Pavement (WSDOT)	169%			
Steel Reinforcing Bar (WSDOT)	166%			
Structural Steel (WSDOT)	161%			
Roadway Excavation (WSDOT)	121%			
Hot Mix Asphalt (WSDOT)	85%			
Structural Concrete (WSDOT)	55%			
Crushed Surfacing (WSDOT)	33%			
CPI –U General Inflation (USBLS)	17%			
2.5%/Year x 6 Years Inflation Rate	15% 15			

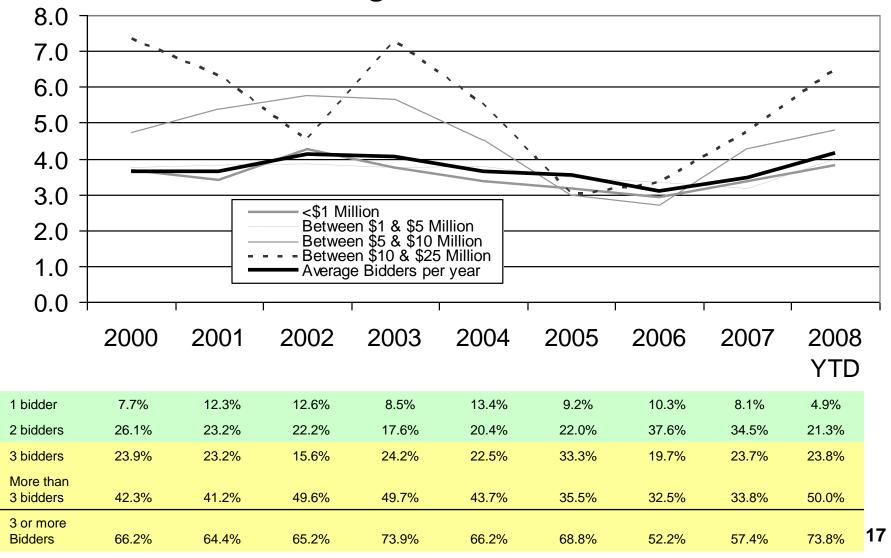
Comparing Estimates to Contractors' Bids

WSDOT updated estimating practices and project budgets. Contract bids are currently coming in below estimates.

Highway Construction Contracts Awarded: Year-to-Year Comparison				
	FY 2006	FY 2007	FY 2008	
Number of Contracts Awarded	135	160	149	
Total award amount for these contracts	\$385,955,115	\$538,967,389	\$544,410,969	
Total Engineers' estimate for these contracts	\$370,262,021	\$533,108,953	\$605,432,380	
Average % awards were above/below the estimate value	1.7	0.4	-5.9	
% Total award is above/below the engineers' estimate	4.2	1.1	-10.14	
Combined contract value awarded below the estimate	32.6	35.5	77.8%	
Number of contracts awarded below the estimate	64	77	99	
% of contracts awarded below the estimate	47.4%	48.1%	66.4%	

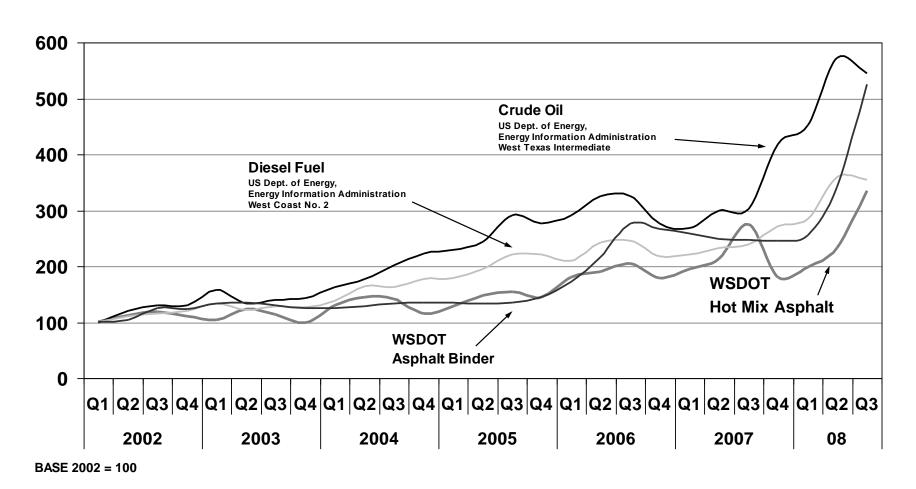
Number of Bidders Continues to Improve

Average Number of Bidders



Materials to Watch Closely

Asphalt, crude oil and diesel fuel



Prices of diesel fuel, asphalt binder and HMA closely follow crude oil prices because all are derived from crude oil.

Asphalt Supply Issues

Washington asphalt markets adjust to loss of a supplier.



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Pierce County cuts paving due to asphalt shortage

The Pierce County Public Works department says it will be able to seal only 22 lane miles of roadway this summer, instead of the planned 70, because of a shortage of asphalt.

The county blames the shortage on the asphalt supplier, a refinery in Anacortes. The road operations manager Bruce Wagner, says liquid asphalt is less profitable than gasoline or diesel.

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Additionally, local supply issues can affect the pricing of these materials.

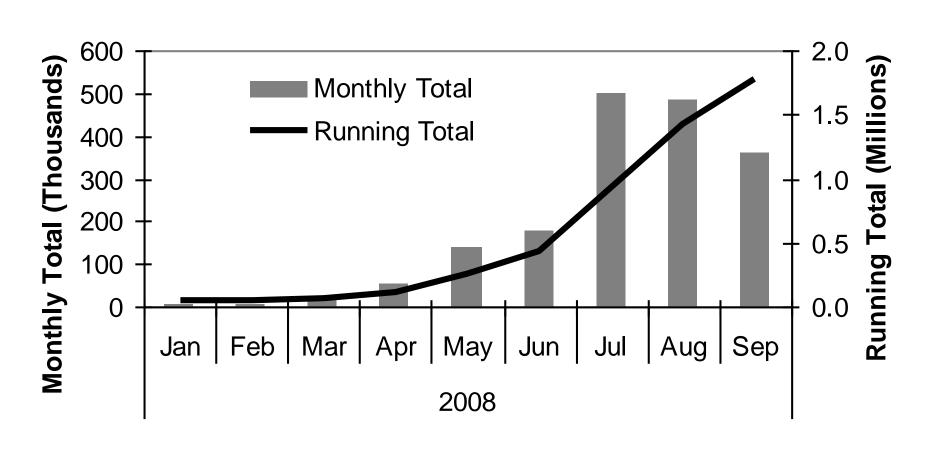
Actions Taken by WSDOT

What is WSDOT doing about rising material costs and supply issues?

- Track construction costs and material trends:
 - Closely review and update inflation rates.
- Maximize bidding opportunities:
 - Contacting eligible bidders
 - Bundle small, similar projects
 - Breaks up very large projects
 - Rejects non-competitive bids
 - Re-advertises contracts
- Focus on risk allocation
- Maintain strong industry relationships

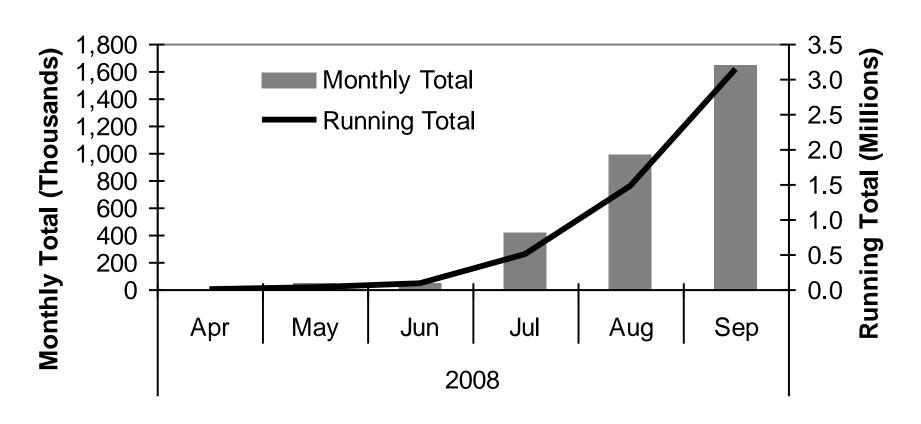
Fuel Escalation Clause

Fuel Cost Adjustment Dollars Paid



Asphalt Escalation Clause

Asphalt Cost Adjustment Dollars Paid



Note: No payments or credits occurred prior to April 2008

What's Coming? / Conclusion

What WSDOT does about rising material costs and supply issues

- Unknown / unstable Market Conditions:
 - Communicate
 - Continue to work with our partners to maximize bidding opportunities
 - Continue trends analysis
- Continue delivering projects on time within budget

Questions?

For more information regarding construction project bids, inflation trends or material availability, contact:

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