



**FOR IMMEDIATE RELEASE**

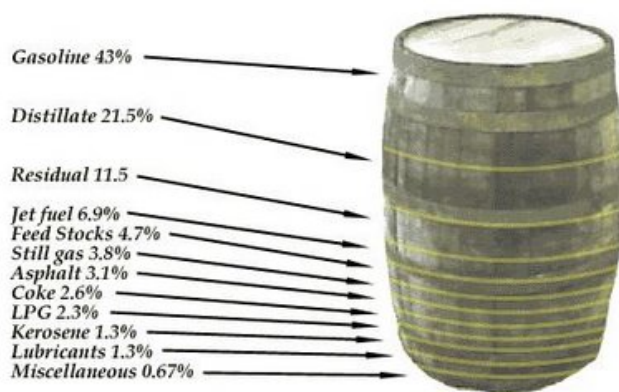
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**OWNER/AGENCY ADVISORY:  
ASPHALT PRICE INCREASES FELT INDUSTRY WIDE**

The rising cost of crude oil and crude oil economics have impacted both the supply and cost of asphalt binder (cement or AC) in Oregon and throughout the country. In addition, these rising prices and continued price volatility has caused a shift in the traditional fixed price format of asphalt binder to monthly pricing format by each of the suppliers. This Advisory is intended to provide an explanation of the cost increases and the impact that it has had on the cost of hot mix asphalt paving materials.

*One Barrel (42 Gal.) of Oil Yields:*



Asphalt binder is a by-product of the crude oil refining process. Approximately 3% of a barrel of crude oil is refined into asphalt. Lighter crude sources produce less asphalt and more fuel products. Furthermore, re-refining or coking of crude oil decreases the yield of asphalt and increases the production of fuel products.

*The primary reason for the reduction in supply of asphalt and the cost increases is the historical disparity in revenue between the more profitable fuel products and the less profitable residual products including asphalt.* To maximize revenue from crude oil, refineries have elected to utilize lighter crude slates and some have installed re-refining or coker units to reduce the yield of asphalt and increase the yield of higher revenue fuel products. It is our understanding that the “decisionpoint” for the supply of asphalt is a crude oil cost multiplier of 5.6. In other words, 5.6 times the cost of a barrel of crude oil is a refineries decision point on whether or not to produce more or less asphalt.

**Crude Oil Economics Example: Crude Oil @ \$110/barrel x 5.6 = \$616/ton asphalt binder**

As reported by ODOT, the price index of asphalt binder has more than doubled since January, 2008.

Date	Price/Ton
August 01, 2008	\$656.00
July 01, 2008	\$513.00
June 01, 2008	\$462.00
May 01, 2008	\$424.00
April 01, 2008	\$391.00
March 01, 2008	\$349.00
February 01, 2008	\$336.00
January 01, 2008	\$315.00

-Source, Oregon DOT, August, 2008

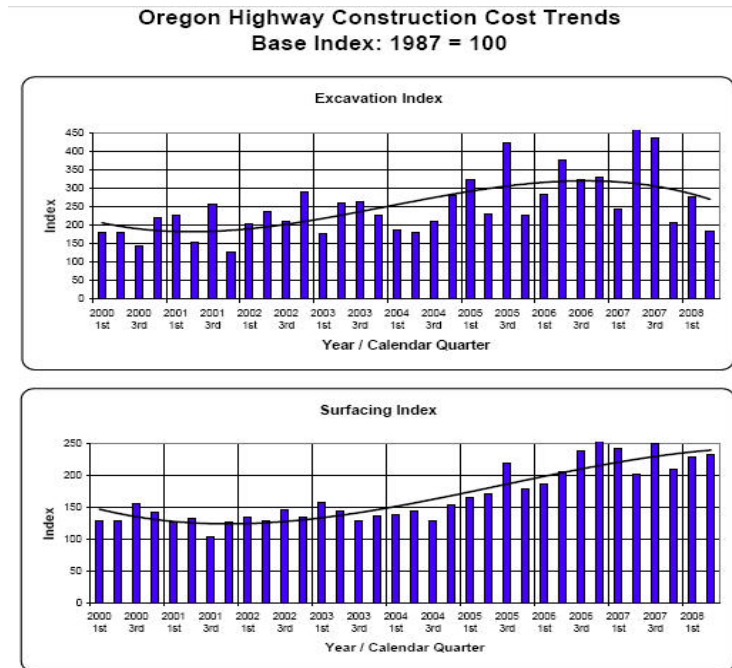
Asphalt binder at \$350/liquid ton results in \$19.25 (assuming a 5.5% asphalt content mix design) towards the cost of hot mix asphalt. Asphalt binder at \$600/liquid ton results in \$33.00 towards the cost of hot mix asphalt. The cost increases in asphalt have all but eliminated the disparity in revenue between fuel products and asphalt. Thus, the result of this market shift is that the higher revenue of asphalt should result in higher production of asphalt by refineries. Furthermore, the recent decline and stability in crude oil prices should result in increased stability in the price structure of asphalt binder.



Hot mix asphalt (HMA) paving material is comprised of rock, sand, and asphalt binder (cement). Asphalt binder represents approximately 5.5% by weight of the paving mixture and traditionally accounted for approximately 40% - 50% of the cost of a

ton of hot mix asphalt paving materials. Although the cost of asphalt binder has doubled in 2008, the cost of a ton of HMA paving materials has increased much less as a percent. Furthermore, total project costs - including traffic control, mobilization, safety improvements, etc. have not increased significantly during this time.

According to bid data on Oregon DOT project in 2008, asphalt mix prices are up less than 5% and total construction bid prices are actually lower through two quarters of 2008 when compared to the same quarters in 2006 and 2007.



One reaction to the cost increase of asphalt is a “use less” approach. However, there are a number of facts that should be considered and include the following:

- Owner/Agency funding NEEDS exceed funding LEVELS
- Asphalt comprises nearly 95% of all Oregon pavements
- Asphalt is used primarily to maintain the top few inches of existing pavement
- Limited cost effective alternatives to asphalt for pavement resurfacing exist
- Significant portions of Oregon’s roads and highways are in poor condition and need repair
- Minimized time of construction, ease of maintenance and repair of utility cuts, smoothness, quiet pavements favor the use of asphalt
- Growth, economic improvements, will result in higher demand

It is our intent to work with owner/agencies throughout Oregon to maximize the use of the limited investment dollars and to continue to advance the use and quality of asphalt pavements. Emerging technology like warm mix asphalt and high RAP mixes will continue to help reduce costs and can improve performance.

