Notes for May 18th, 2022 CCI Report

The forecasted average crude **Oil Price** for 2022 has been revised from $79.35 to $103.09 per barrel, partly due to the Ukraine war with Russia. The pain is expected to continue through the 2nd half of 2022. The EIA forecasts the average price to fall to $97 per barrel in 2023, though they admit this is highly uncertain. Actual price outcomes will largely depend on the degree to which existing, and any future sanctions imposed on Russia affect their oil production.

Residential Building Permit activity was expected to continue cooling into 2022, but the first quarter showed this was not to be the case and has actually increased 9.2%. The *UCF Institute for Economic Forecasting* predicts increasing house prices will decelerate as rising mortgage rates and decreasing affordability results in supply catching up with demand. Since housing construction competes for many of the same resources as highway construction, this could indicate more available resources. *Florida Estimating Conference, 12/20/21*

Florida **Heavy Construction Employment** saw another tick up of 0.8% in the first quarter, boosted by the demand of federal funding for transportation and infrastructure projects.

Statewide **Construction Employment** in major Florida markets had started to wane in recent months, and the Orlando metro area lost construction workers in February and March. But in Jacksonville, employment improved 4% since December.

The latest **Commodity & Labor** composition chart shows how the share of FDOT costs may shift depending on project type, scheduling, and material costs. Asphalt costs make up the largest share in February and March. Labor costs remained consistent as construction labor is back to pre-pandemic levels.

The **National Highway & Street Construction PPI** is up 20.9% from a year ago and increased another 6.2% from the previous quarter. Since April 2020 when cost escalations began, Highway & Street Construction prices have increased nearly 40%.

FDOT Benchmark Input Costs Index – the red line on this chart shows that supplier reported prices for asphalt, concrete, steel, and aggregate products have increased 26% since November 2020. The dark blue line on this chart shows the change in FDOT average bid prices for those same commodities. The light blue line which shows the average winning or awarded bid prices. The average bid prices track much closer to the benchmark input prices, and are much steeper on average at 30% compared to winning bids at 19% in March. This indicates that competition is still working in our favor.

The latest costs of a 1-mile **New Construction Typical Section**, we are seeing the results of the pain felt in the March lettings. Where Superpave traffic level C prices had decreased in December, they have made it up in a big way with the lettings since. For comparison, the average was $5,374,000 per lane mile in April.

The cost of a 1-mile **Resurfacing Typical Section** – as expected, the average cost is up again – now 7.3% since 2021. Superpave and friction course categories account for the most recent increases since April.

The rapid increases in **Asphalt** input costs over the last few months continue to be reflected by steep increases in FDOT's Asphalt bid prices. Our data shows that our asphalt prices increased 14.2%

since December. Overall, supply has been sufficient to meet demand, but severe rail issues are impacting aggregate availability.

Asphalt Binder prices have increased across all districts with higher crude oil prices and higher production costs, with no easing of these issues in sight. PG-76 binder prices have increased 15.5% since just last quarter.

The monthly **Asphalt Binder** trend line shows the increase in costs since the Ukraine war with Russia started in early March.

The good news regarding **Structural Concrete** costs reported in February has now reversed with the war in Ukraine, in which the global supply chain has taken a fresh hit. Making cement prices worse is pressure due to increasing sand scarcity concerns. Industry has stated that demand for cement is exceeding the manufacturing process. Driver shortages and skilled labor recruitment remain top issues for concrete suppliers. Also, renewed increases in reinforcing steel costs since March may lead to higher bid prices for concrete-heavy projects.
(The structural concrete price includes 14 contracts in Q1, and 2 so far thru Apr lets)

The monthly trend for **Structural Concrete** so you can see how the January lettings affected the first quarter average and now the higher costs of February & March continuing and escalating through April.

We're still seeing sharp increases in **Base** average bid prices and **Earthwork** quarterly costs. Driver and operator shortages and higher fuel prices are still affecting earthwork contractors, leading to higher costs, and providers continue to have issues obtaining equipment and parts.

At the beginning of the first quarter, **US steel prices** saw a decline, only to be reversed by the Ukraine conflict. Supply remains tight amid high domestic demand, and global steel demand continues to be impacted by China's zero-COVID strategy, which effectively shut down their exports.

There were no new lettings to report for **Structural Steel** since last October.

There were 16 projects with **Reinforcing Steel** pay items in the 1st Quarter of 2022, and 3 projects in April. There was nearly 3 times as many pounds of reinforcing steel in those 16 projects as there was in the 4th quarter of 2021, and only a fraction of that amount in April, so rebar can be expected to increase in cost through 2022.

Contrary to the January survey, in April the **Steel Producer Survey** respondents reported unexpected price increases in March and they expect them to continue increasing through the 2nd quarter. They also now expect large decreases in production of Structural Steel and most other steel components including pipe.

Guardrail shows a surprising moderation in average bid prices, but not so for **Overhead Sign Structure** prices, **Single Mast Arms,** nor **Double Mast Arms.**

The **Trucking & Freight** graph shows the National Flatbed Load-to-Truck Ratio, which is one measure of flatbed demand and capacity. In April, the ratio was 64, meaning an average 64 loads for every available truck. This is an improvement since January, but the takeaway is that the demand continues to out-pace the supply of available flatbed trucks for the near future. "Available" here means "with qualified drivers". On a good note: AASHTO reports CDL licenses issued in January and February increased 112% from the previous year.

Competition for FDOT construction contracts through January shows another slight decrease in the number of bids per contract, at 3.4, and the number of contracts with two bidders or less was 35%. In order to foster more competition for known problem-project types, my office worked with Construction and adjusted Work Classes affecting contractor pre-qualification. This will result in more contractors becoming qualified to bid on electrical/signalization/ITS projects that also have a near-equal dollar amount of asphalt.