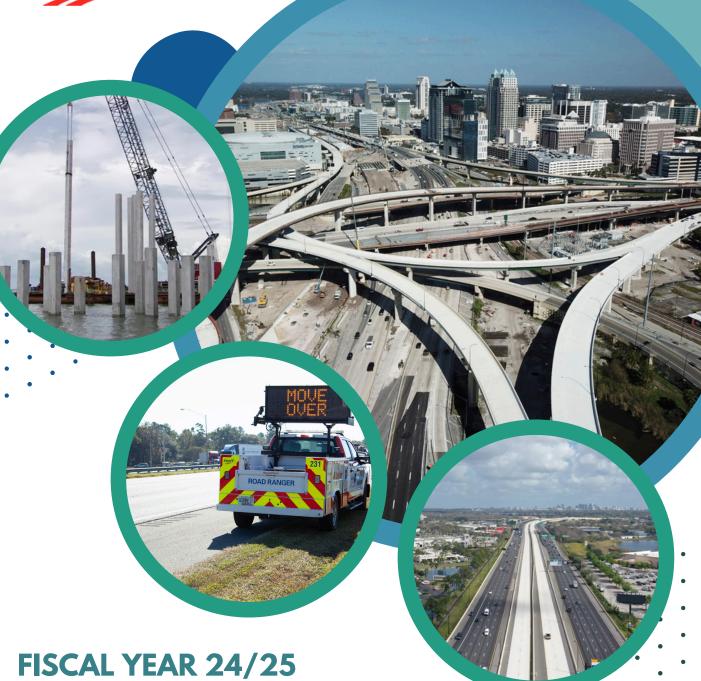


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## **PREPARED FOR**





3RD QUARTERLY REPORT

STRATEGIC RESOURCE EVALUATION STUDY HIGHWAY CONSTRUCTION MATERIALS

**CONTRACT BEC18** 

## **OVERVIEW: FLORIDA'S HIGHWAY CONSTRUCTION MATERIALS**

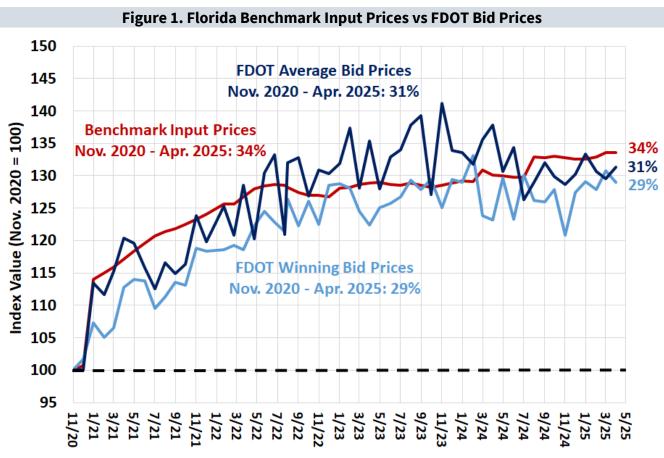
OVEINVIEVV.	FLURIDA'S HIGHWAY CONSTRUCTION MATERIALS
Construction Material	Status
ASPHALT	<b>Asphalt bids declined this quarter</b> , while binder prices remained relatively flat despite significant declines in crude oil pricing. Industry reports solid backlogs for the next quarter and the first half of FY 2026, but high demand in the state could stretch resources. Most suppliers reported uncertainty around the impact of changes in U.S. trade policy, with a few indicating pauses in capital investments. Overall, industry expects flat to slight price increases, and TBG forecasts are flat through FY 2029 on currently available data.
	Concrete bids rose this quarter, with average industry benchmark cement prices
	still double 2024 prices through the third quarter. Tariffs are expected to increase cement prices further, with some Florida cement producers are already reporting higher prices due to tariffs, which are being passed onto to consumers. Updated concrete price projections estimate a 16% increase in bid prices for FY 2025 relative
CONCRETE	to FY 2024. Recessionary concerns could push prices lower in FY 2026 as
	contractors aim to remain competitive, but timing remains uncertain.  Structural steel prices rose this quarter based on limited bids. Some
	interviewees report that tariffs impacted their pricing already and increased costs will be passed on to customers. <b>Reinforcing steel bids were higher as well</b> - national downward trends that started before additional steel tariffs were put into
STEEL	place last quarter have not been felt by FDOT.
	Aggregate base bids were flat this quarter, but continued showing a decline in pricing compared to FY 2024. However, Florida crushed stone production was
	down 9% in the fourth quarter of calendar year 2024 and prices reported by
	publicly traded companies continue to show year-over-year increases through
	March 2025. Competition appears to be outweighing cost increases at this time,
AGGREGATE	but continued high demand makes it unlikely prices will retreat to pre-pandemic levels.
	Earthwork bids fell this quarter with additional pricing for a few large jobs.
<u> </u>	Declining fuel costs do not appear to be influencing earthwork prices as
EARTHWORK	construction employment constraints and driver availability remain the top issues. Equipment prices have resumed increases this quarter.

#### **FDOT Cost Index**

**The Florida Department of Transportation (FDOT) Cost Index** is calculated by assessing awarded and average bids. The share of aggregate, asphalt, concrete, and steel dollars spent on FDOT projects is compared to a baseline index that is calculated from regional industry prices; see **Figure 1** for data from November 2020 forward.

FDOT winning contractor bids tracked under industry benchmark input prices over the last quarter. The industry benchmark increased to 34% higher than November 2020 levels through April 2025. According to April 2025 preliminary data, FDOT winning bids were 29% higher than November 2020 levels. Preliminary average bid prices remained elevated in April 2025 at 31% higher than prepandemic levels. The gap between *average* bid prices (calculated from all bids received) and *winning* (awarded) bid prices widened over the last three months, as did the gap between average bids and the industry benchmark, indicating more competitive bidding activity.

Monthly cost composition by material is provided in **Appendix A**, along with an update on the Bureau of Labor Statistics (BLS) Producer Price Index (PPI).



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost.

Calculating the index on a quarterly basis and updating the reference point to Q1 of 2023 shows that industry benchmark prices have increased about 1% to 2% on average each quarter over the last three years (**Table 1**). Average FDOT bid prices saw larger gains mid-2024 compared to the previous year, but the disparity between high and low bids narrowed in 2025 – indicating fewer bids were on the high end. Winning bids saw a spike in 2024 and remained between 8% to 10% higher than the first quarter 2023 through April 2025.

Table 1. Quarterly Comparison of Florida Benchmark Input Prices and FDOT Bid Prices										
Calendar Year	2023	2023	2023	2024	2024	2024	2025	2025	2025	2025
Quarter	Q1	Q2	Q4	Q1	Q2	Q3	Q1	Q2	Q3	Q4
Benchmark Prices	0%	1%	0%	1%	3%	3%	5%	5%	5%	6%
Average Bid Prices	0%	-1%	1%	1%	8%	9%	7%	4%	5%	6%
Winning Bid Prices	0%	1%	1%	6%	8%	9%	8%	8%	10%	10%

Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost.

#### Disclaimer

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the State of Florida Department of Transportation

Prepared in cooperation with the State of Florida Department of Transportation.

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# **TABLE OF CONTENTS**

OVERVIEW: FLORIDA'S HIGHWAY CONSTRUCTION MATERIALS	i
INTRODUCTION	1
GENERAL OUTLOOK: HIGHWAY CONSTRUCTION MATERIALS	2
Macroeconomy	2
Construction Employment	2
Energy Prices	4
Inflation	4
Tariffs	5
Billings	6
Legislation and Regulations	7
Rail	8
Asphalt	9
Summary	9
FDOT Impacts	9
General Trends	
SUPPLY CHAIN VARIABLES: ASPHALT PAVEMENT MATERIALS	
Asphalt Forecast	12
Concrete	14
Summary	14
FDOT Impacts	14
General Trends	
SUPPLY CHAIN VARIABLES: CONCRETE MATERIALS	
Concrete Forecast	
Steel	
Summary	
FDOT Impacts	
General Trends	
SUPPLY CHAIN VARIABLES: STEEL	
Steel Forecast	
Aggregate	
Summary	
FDOT Impacts	
General Trends	
SUPPLY CHAIN VARIABLES: AGGREGATE	
Aggregate Base-Course Forecast	
Earthwork	
Summary	
FDOT Impacts	
General Trends	
Earthwork Forecast	
Appendix A: Underlying Economic Conditions	
Appendix B: Forecast Details	
References	40

## List of Figures

Figure 1. Florida Benchmark Input Prices vs FDOT Bid Prices	ii
Figure 2. Changes in Construction Employment in Major Florida Markets	3
Figure 3. Bidding activity 2024-2025	3
Figure 4. Monthly Crude Oil Price, 2017 to 2028	4
Figure 5. Architecture Billings Index	6
Figure 6. FDOT HMA Price Forecast	13
Figure 7. Florida HMA Consumption Forecast	13
Figure 8. U.S. Ready-Mix Demand	15
Figure 9. FDOT Concrete Price Forecast	19
Figure 10. Florida Concrete Consumption Forecast	19
Figure 11. U.S. Steel Pricing	21
Figure 12. FDOT Structural Steel Price Forecast	24
Figure 13. FDOT Reinforcing Steel Price Forecast	24
Figure 14. FDOT Aggregate Base Price Forecast	27
Figure 15. Florida Truck Transportation and Driver Employment	29
Figure 16. Earthwork Price Forecast	31
List of Tables	
Table 1. Quarterly Comparison of Florida Benchmark Input Prices and FDOT Bid Prices	iii
Table 2. Tariffs Imposed by the US in March 2025 that Remain Active	5
Table 3. Additional Tariffs Imposed by the US in April 2025	6
Table 4. Supply Chain Summary: Asphalt Materials	11
Table 5. FDOT HMA Price Forecast Results	12
Table 6. Tariff Impacts on Cement Prices & Production	16
Table 7. Structural Concrete Supply Chain Variables & Current Status	
Table 8. FDOT Concrete Price Forecast Results	18
Table 9. Supply Chain Variables for Structural Steel	
Table 10. FDOT Steel Price Forecast Results	
Table 11. Aggregate Supply Chain Variables	26
Table 12. FDOT Aggregate Base Price Forecast Results	27
Table 13. U.S. Equipment Prices, December 2024 vs March 2025	
Table 14. Earthwork Price Forecast Results	30
List of Figures Appendix	
Figure A- 1. Monthly Cost Composition	32
Figure A- 2. Average Bid vs. Official Estimate, 3-month Rolling Average	33
Figure A- 3. Average Bid vs. Official Estimate, 3-month Rolling Average by District	34
Figure A- 4. Producer Price Index Percent Change by Commodity	35
Figure A- 5. Historical and Forecasted Changes in Employment	36
Figure A- 6. Unmodified Binder Price by District	37
Figure A- 7. Modified Binder Price by District	37
Figure A- 8. Average Diesel Price by District	38
List of Tables Appendix	
Table B- 1. Forecast Variable Descriptions	39

### INTRODUCTION

The Florida Department of Transportation commissioned The Balmoral Group (TBG) to evaluate the availability and costs of critical highway construction materials in Florida. The evaluation includes an analysis of existing and planned supply of these materials, and an estimate of future costs and quantity requirements FDOT will face in fulfilling its five-year work program. Materials in the analysis include the bituminous, cement, steel, aggregate and earthwork markets. An annual assessment of the materials markets and significant trends affecting FDOT's supply availability and costs is included in this report.

The report is organized as follows:

- **General Economic Landscape** for highway construction materials,
- Work Program Work Mix allocation and materials quantities estimates,
- Material-specific findings for supply chain variables, including
  - raw material sources,
  - existing and likely future transport and distribution methods,
  - potential impact of external forces including global markets, technological change, foreign materials, and environmental regulatory or permitting issues, as relevant,
  - forecasts of likely Florida supply and FDOT costs for the five-year work plan, and
  - GIS maps of existing supplier locations.

#### GENERAL OUTLOOK: HIGHWAY CONSTRUCTION MATERIALS

#### Macroeconomy

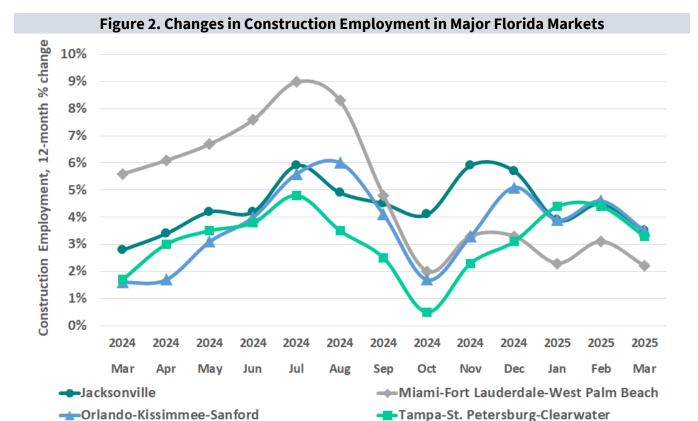
Florida's economic growth has outpaced the nation, with an annualized rate of 3.6% through the end of (calendar year) 2024, but facing strong headwinds. Updated first quarter data for the U.S. economy shows that GDP actually shrunk by 0.3%, and GDP growth is now expected at only 1.4% in 2025, a "stunning" reversal from the end of December, when growth was expected to be 2.4%¹. Florida tends to lag national slowdowns, and in March, Florida's Revenue Estimating Conference revised general revenue projections up by about 1% based on strong sales tax through the winter tourist season, but adjusted other forecasts including corporate earnings taxes, downward. The state's economics panel pointed to "weaker" state and national economic variables and said the "forecasting environment is considerably less stable over the short run than it was in the summer. Further economic uncertainty exists from this point forward²." With inflation expectations and unemployment increasing, hopes for lower interest rates are lower. The ripple effect is a slowing of investment, spending, and hiring – although contractors and suppliers in the highway construction materials segment report "full steam ahead" based on heavy backlogs of work. Against this backdrop, key elements influencing FDOT's costs are described in this section.

### **Construction Employment**

Statewide construction employment trends are shown in **Figure 2**. Overall, employment increased in March 2025 by 1.8% compared to the same month last year, which is a materially lower growth rate than over the past 12 months, with the exception of a dip in October attributed to back-to-back hurricanes. Growth patterns varied by metro area. March data are preliminary and may be revised. BLS made major revisions to historical employment data in April 2025, so some data points may be different than previously reported.

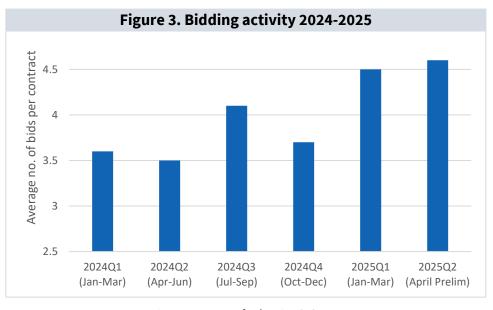
<sup>&</sup>lt;sup>1</sup> https://home.treasury.gov/news/press-releases/sb0121

<sup>&</sup>lt;sup>2</sup> https://edr.state.fl.us/Content/conferences/generalrevenue/index.cfm



Source: Bureau of Labor Statistics.

The slight pause in feverish growth in Florida construction is beginning to show up in FDOT's bidding activity, as the average number of bids has steadily increased over the past year and half, reaching its highest average since just after COVID lockdowns. See **Figure** 3.

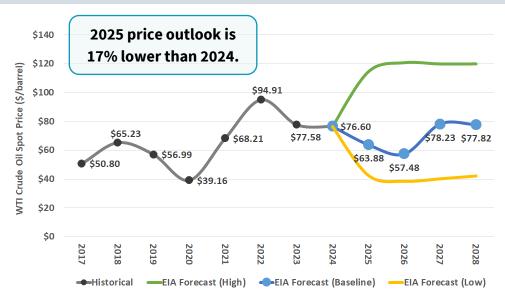


Source: Bureau of Labor Statistics.

### **Energy Prices**

The U.S. Energy Information Administration (EIA) April 2025 Short-Term Outlook forecasted the 2025 crude oil spot price to average \$63.88 per barrel, a 17% decline from the 2024 price of \$76.60 per barrel (Figure 4). On a monthly basis, crude oil prices were down 9% in April 2025 compared to March 2025. Year-over-

Figure 4. Monthly Crude Oil Price, 2017 to 2028



Source: EIA Annual Energy Outlook and Short-term Forecast.

year prices were down 27% in April 2025. With current pricing slipping toward the industry's breakeven point of about \$65 per barrel, evolving domestic policies and ongoing geopolitical conflicts have disrupted the crude oil market as warned in previous reports. EIA's Annual Energy Outlook 2025 was published in April 2025, but does not take this lower crude oil price scenario into consideration for the baseline case. As such, the short-term forecast is a better estimate of year-end prices for 2025 and 2026 at this time.

On April 3rd, 2025, OPEC+ countries reaffirmed their commitment to voluntary production cuts of 2.2 million barrels per day, and will enforce a production adjustment of 411 thousand barrels, similar to 3 monthly increments per day in May 2025. These gradual increments may be paused or reversed dependent on evolving market conditions.

Diesel price detail is located in the Appendix; diesel prices decreased 1.6% in April 2025 and more than 12% since last year at this time.

#### **Inflation**

The Federal Open Market Committee (FOMC) released revised economic projections in April 2025, significantly reducing real Gross Domestic Product (GDP) estimates and citing expectations for GDP growth of only 1.4% in 2025, down from the end of December, when growth was expected to be 2.4%. Forecasts for 2026 and 2027 were also reduced. Unemployment rate rates are now expected to reach 4.6% this year, and inflation estimates for 2025 are now 3.2% this year, from 2.5% in the December.

4

According to a recent National Association for Business Economists (NABE) survey, the largest share of respondents (45%) anticipate the target inflation rate of 2% will not be reached until 2027. In the same NABE survey, 19% of respondents believe a recession will occur in the second half of calendar year 2025, 25% expect a recession to begin in the first half of 2026, 13% predict the second half of 2026 will see a downturn, and 27% believe a recession may occur in 2027 or later.

#### **Tariffs**

Recent changes in U.S. trade policy may impact highway construction costs in the short-term with increased prices, and the long-term with cooling effects on the economy as a whole. Suppliers and contractors interviewed this quarter have mostly not yet felt the effects of the tariffs, which largely went into effect after the end of the quarter (April 2), but the majority of participants in interviews cited geopolitics and tariffs as their primary concern for the rest of the year. Tariff policies have vacillated dramatically over the past 60 days, and at this writing are in various stages of implementation, with some on pause, and some exempted entirely (like crude oil and refined products). Market behavior is presently more dominated by the volume of work available, which is still perceived to be healthy, and less dominated by economic factors, which are rapidly deteriorating from what had been generally healthy levels of economic growth. Significant tariffs imposed in March and April 2025 by the U.S. on foreign imports are summarized in **Table 2** and **Table 3**, respectively.

A number of manufacturers have blamed tariffs and 'market uncertainty' for layoffs. One recent example is Mack Trucks, which announced between 250 and 350 workers will be laid off over the next 90 days, as it blames uncertainty and tariffs for the downsizing.

Table 2. Tariffs Imposed by the US in March 2025 that Remain Active								
Country	Trade Expansion Act of 1962 (Section 232)	Trade Act of 1974 (Section 301)	March 2025 International Emergency Economic Powers Act (IEEPA)					
	Steel and Aluminum	General	General					
Canada	25%	N/A	25%*					
China	25%	7.5% – 25%	20%					
Mexico	25%	N/A	25%*					
Other	25%	N/A	N/A					

Source: TBG Work Product.

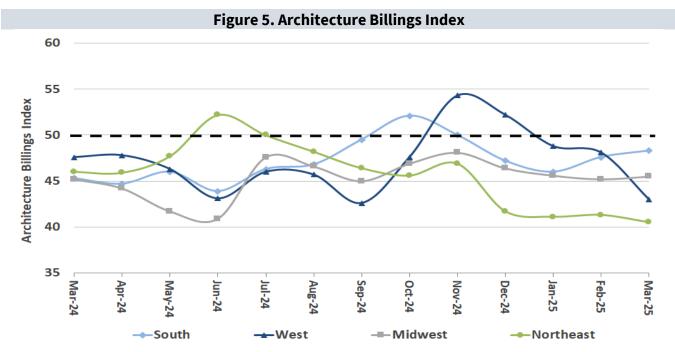
<sup>\*</sup>Only applied to goods not qualified for duty-free treatment under United States-Mexico-Canada Agreement (USMCA).

	Table 3. Additional Tariffs Imposed by the US in April 2025									
Country	Trade Expansion Act of 1962 (Section 232)	ct of 1962 from any country that imports		April 2025 "Reciprocal" Tariffs						
	Vehicles and Parts	General	General	General						
Canada	25%	N/A	N/A	N/A						
China	25%	25%	10%	Initially: 34% Now: 145% (active, no pause)						
Mexico	25%	N/A	N/A	N/A						
Other	25%	25%	10%	Initially: 11–50%, with the EU at 20% Now: 90 day pause						

Source: TBG Work Product.

### **Billings**

The Architecture Billings Index (ABI) is a leading indicator for nonresidential construction activity. <sup>3</sup> Nationally, the index was 41.4 in March 2025, indicating that a majority of architecture firms saw a significant decrease in billings at their firms. Since March 2024, the ABI has remained below 50 for a majority of the year, with a few fluctuations by region (**Figure 5**). The Northeast region has seen the largest drop in billings activity, while the South hovers closest to a neutral balance in billings. Additional information on economic conditions is provided in **Appendix A**.



Source: American Institute of Architects, Architecture Billings Index

<sup>&</sup>lt;sup>3</sup> ABI Billings are considered a leading indicator, meaning that construction activity 9-12 months from now generally follows the current ABI billings activity. A score below 50 indicates declining firm billings.

### **Legislation and Regulations**

State and federal funding and regulatory changes are expected to increase demand for, or otherwise impact, highway construction materials resources:



### FEMA Closes BRIC Grant, **Among Others**

Earlier this month, the Federal Emergency Management Agency (FEMA) announced that i as part of a larger round of funding cuts, the Building Resilient Infrastructure and Communities (BRIC) grant would be cancelled, and all further review of applications would be stopped. Awardees will have until the end of their current period of performance to complete their projects, at which point funding will be cut off. BRIC funding supported a number of projects throughout similar resources to FDOT **Triumph Gulf Coast Awards** Grant **Funds** in Bay, Escambia, Okaloosa, Santa i **Rosa, and Walton Counties** Triumph Gulf Coast, Inc. awarded \$45 million to Bay, Escambia, Okaloosa, Santa Rosa, and Walton counties in an effort to support infrastructure projects including rebuilding of

the DeFuniak Springs Airport,

and multiple manufacturing

centers in Santa Rosa County, have leverage in pricing. The creating demand for construction materials and crews.

#### **New Shipping Levy**

The U.S. government will impose \$50/net ton (nt) on Chinese ship operators and owners starting this fall and fees of \$18/nt on Chinese-built ships. These fees will increase incrementally over the next three years. However, Chinese built vessels that arrive to the U.S. in ballast, with a capacity egual to less than 55,0000dwt and those entering U.S. ports in the continental US Florida that would rely on I from a foreign port less than 2,000 nautical miles away will (concrete, steel, aggregate etc.) be exempted from the fees. Almost all vessels capable of carrying asphalt are less than 55,000 dwt and likely would not be impacted by these fees. Most specialized tankers have been excluded. However, these fees could make transportation more expensive in general; Chinese ships will find it infeasible to ship to the U.S., which will shift demand to non-Chinese providers, who will

goal to increase is U.S. domestic production of large ships, but U.S. shipyards are generally considered not well suited to modern major shipbuilding and have not done so in at least a decade. Industry experts do not believe that the U.S. could produce a new ship before 2029. The exemptions may spare many oil and refined product imports to the U.S.

#### **Trucker Qualifications**

Beginning June 23, 2025, the Federal Motor Carrier Safety Administration (FMCSA) new rule will go into effect, and would require certified medical examiners to electronically transmit DOT medical exam results directly to FMCSA, which will then be passed to state licensing agencies for integration into each driver's CDL record. This process will ensure a smooth, more secure, automated system for verifying a driver's medical qualification.

Resilient Florida	FWHA's PROTECT Grant	
The newest round of funding	Closes for FY24 and FY25	The program is geared towards
for the Resilient Florida grant	The Federal Highway	protecting transportation
program, which aims to protect	Administration is in the process	infrastructure from natural
Florida communities from	of reviewing applications for	disasters and other hazards
disaster and climate hazards,	the FY2025 Promoting Resilient	related to climate.
will reopen soon and provide	Operations for Transformative,	
funding for projects including	Efficient, and Cost-Saving	
seawalls and elevated	Transportation (PROTECT)	
infrastructure.	Program.	

#### Rail

In February 2025, CSX's train and engine employee counts increased 1% year-over-year with counts fluctuating around 7,869 to 8,024 since December 2023. In regards to operating performance, average terminal dwell time (between January 2025 and April 2025) in Jacksonville increased 7.5% year-over-year to 23.4 hours and increased in Waycross, GA by 19.5% to 31.1 hours<sup>4</sup>. The overall system dwell time during the same timeframe increased 11.5% to 23.5 hours year-to-year. Dwell times have worsened in comparison to this time last year with significantly worse increases in Waycross, Georgia. Higher dwell times means that it takes more time to get material out of the station, which leads to delayed material deliveries, primarily for aggregate in the northern half of the state.

<sup>4</sup> Average amount of time in hours between car arrival to and departure from the yard.

### **ASPHALT**

## Summary

- Interviewed asphalt producers report a significant backlog of work due to DOT work but anticipate flat to slight increases in pricing for this year.
- Some producers rely on material imported from Canada, and anticipate price increases due to tariffs on imported material.
- Waivers on Venezuelan asphalt imports and Chevron's Venezuelan oil imports have been revoked, which may increase U.S. asphalt prices and decrease supply on the east and Gulf coasts.
- A new shipping rule placing fees on Chinese ships exempts most asphalt products, but has created uncertainty in the shipping industry overall.

## **FDOT Impacts**

- FY 2025 year-to-date asphalt bids continued trending downward this quarter, falling 7.4% to \$168 per ton compared to FY 2024.
- Updated asphalt price projections estimate a more moderate decline of 5.5% in bids through the end of FY 2025. FY 2026 prices and beyond are forecast to be relatively flat at this time.
- Florida asphalt consumption is expected to range between 18-19 million tons through FY 2029
  due to continued high levels of infrastructure spending and residential construction activity in
  major metro areas. However, a recession would impact asphalt demand and could lower
  consumption.

## **General Trends**

An uncertain economic environment hangs over the asphalt industry as many factors could have contradicting effects on the supply and demand, and therefore price, of asphalt. Tariffs have the ability to increase the price of imported materials and some Florida producers with significant DOT work import aggregate from Canada. This as well as high public construction demand puts upward pressure on pricing. Additionally, asphalt and oil imports from Venezuela are expected to stop as waivers previously allowing these imports have been revoked, which could restrict supply on the Gulf and east coasts and also put upward pressure on asphalt price.

However, an overall weakening global economy is reducing demand for oil and reducing crude oil prices, which are closely correlated to binder prices. Interest rates and affordability issues are reducing demand for residential construction, and therefore construction materials, which will also put downward pressure on price. Publicly traded companies are still reporting price and volume increases of asphalt through quarter one of calendar year 2025, but are cautiously optimistic about

the rest of the year. They believe public infrastructure demand is enough to support the industry. More detail around these factors can be found below.

## **New Shipping Levy**

As noted in the Legislation and Regulatory section, new levies on Chinese ships could dramatically increase costs. The Asphalt Pavement Association filed a public comment against the fees before the rule was announced, as they estimated "costs increasing at least 15 to 25 percent on liquid binder alone." However, with the exemptions, cost increases this high may not materialize and cost increases are likely to be felt more in other areas of the country.

#### Venezuelan Waiver Rescinded

Waivers on Venezuelan asphalt imports will be revoked starting May 27th, which could increase U.S. prices. Imports to the U.S. from Venezuela resumed in late 2023 and this new supply put downward pressure on prices specifically in the Gulf and east coasts. Before these waivers were revoked, analysts expected asphalt imports from Venezuela to grow and help offset tariff impacts. Additionally, Chevron's oil waiver has also been revoked and is expected to put more pressure on asphalt production in the U.S, particularly in the Gulf coast, as heavy sour crude availability declines.

Global oil supply and demand forecasts are being revised downward in light of the worsening global economic situation alongside OPEC's decision to speed up planned output hikes. The supply side revisions are a result of expected declining U.S. supply. IEA expects U.S. supply declines due to the likely oil price impact on drilling activity in the U.S. shale patch, higher costs due to tariffs, as well as reciprocal tariffs Chinese placed on U.S. imports of ethane and LPG from the U.S.

## Longshoremen's Agreement

On March 11<sup>th</sup>, 2025, the International Longshoremen's Association (ILA) and the U.S. Maritime Alliance (USMX) signed an extension to its Master Contract with USMX, finalizing an agreement reached in January 2024, protecting jobs and creating a framework for implementing technologies to modernize US ports on the east and Gulf Coasts. This agreement is expected to last until September 30, 2030.

#### SUPPLY CHAIN VARIABLES: ASPHALT PAVEMENT MATERIALS

**Table 4** provides the current status of selected variables of interest.

#### **Table 4. Supply Chain Summary: Asphalt Materials** The U.S. Geological Survey (USGS) reported that Florida's crushed stone production decreased 8.8% during the fourth quarter of calendar year 2024. Nationally, production declined 4.0% in the same period. Aggregate prices have continued their upward trend, **Aggregate** but the industry expects to see double-digit increases in the rest of 2025. Interviews indicated that aggregate prices have continued to increase. Oil Refinery Utilization on the Gulf Coast was between 79% and 95% in the first quarter of calendar year 2025. Geopolitical factors will continue to influence costs and prices. The EIA estimated that asphalt supplied to the East Coast declined 2% year-over-year, Refinery indicating lower demand for resources, and asphalt production on the Gulf Coast **Capacity** decreased 12% year-over-year. Unmodified (PG 67 & lower) asphalt binder prices remain relatively unchanged from October 2024. For calendar year-end 2025, prices increased by slightly more than 1% compared to March 2024. Rack binder prices were flat in Miami and Tampa, and declined **Asphalt** 2.5% in Jacksonville, year-over-year. **Binder** Polymers and pavement coatings rely on continuous supply of petrochemicals. Production of chemicals, pavement coatings, adhesives and other specialty chemicals increased significantly according to reports by the American Chemistry Council and the U.S. Chemical Regional Production Index. Interviewees did not raise any issues with **Polymers** pavement markings this quarter. Bitumen imports, per ITS data for ports that service the Florida market, were significantly higher in calendar year 2025 through February compared with the same period last year. Interviews have not mentioned any concerns with shipping materials **Imports** this quarter. In Q4 CY 2024, tons of asphalt products shipped by CSX, regardless of the destination, increased by 6% and revenues of asphalt products increased by 8% year-over-year. These indicate price increases compared to the last quarter. Rail Diesel prices decreased 13% in March 2025 year-over-year. According to Freight Transportation Research, specialized trucking rates in Florida have been normal on average since January 2025, while volumes have been 60% to 100% above normal. **Trucking** Through April, total spot rates are up 6.6% year-over-year, and are more than 1% above the five-year average for the week. Skilled labor is an ongoing concern for asphalt plant operators. Statewide construction employment increased 2.6% year-over-year, and went up 1.2% in February 2025 from Labor the previous month. Interview responses were mixed this quarter, with some producers seeing improvement in hiring, while others saw no change. There was no change in the number of asphalt producers in FDOT's approved list in FY 2025. Additionally, there were no new asphalt plants under construction that have been Competition added to FDEP's Air Permitted list.

## **Asphalt Forecast**

Asphalt prices are projected in **Table 5** for the five-year construction work program. Regression modeling was performed using pay item data, supply chain variables, and other macroeconomic indicators to identify models that best predicted FDOT's materials costs and quantities.

Table 5. FDOT HMA Price Forecast Results								
Year 2024 2025 2026 2027 2028 2029								
Price HMA, \$/Tons	\$182	\$172	\$174	\$169	\$165	\$168		
Percent Change, %	8.9%	-5.5%	1.2%	-2.6%	-2.5%	1.9%		

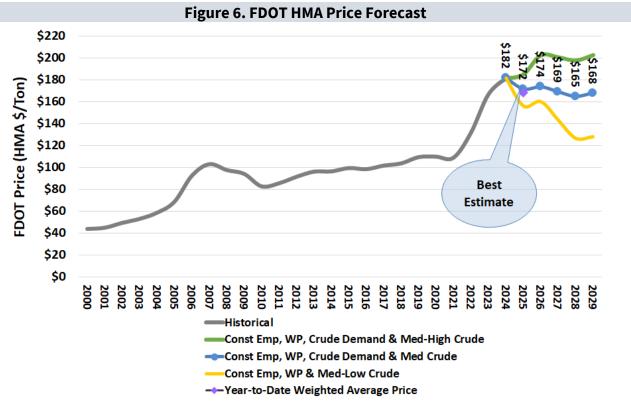
Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.

EIA's April 2025 Short-Term Outlook crude oil price projections continue showing significant declines in both 2025 and 2026, which should put downward pressure on asphalt binder and fuel costs in the short-term. However, with crude oil prices expected to range below the industry's break-even point of about \$65 per barrel for the next two years, binder availability could eventually be impacted as drilling new wells becomes less profitable. EIA also recently released the Annual Energy Outlook 2025, which forecasts long-term trends in energy and fuel prices, but the reference base case does not take recent changes in economic policy into account. According to the long-term forecast, prices in the later years of the Work Program are expected to recover to about \$78 per barrel by 2029. The EIA short-term forecast is a better estimate of year-end prices for 2025 and 2026 at this time and was used in the analysis.

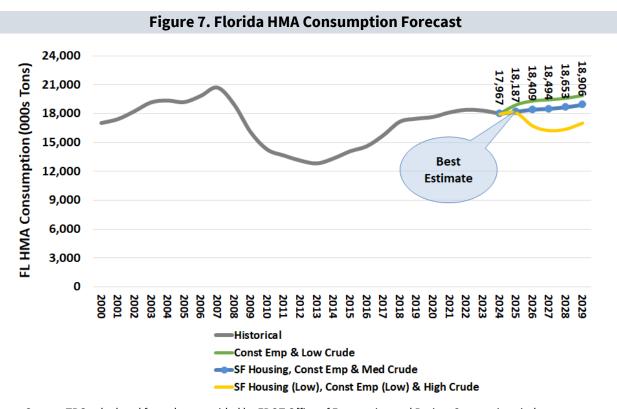
Similar to last quarter, the current FY 2025 forecast was adjusted to take lower than expected crude pricing into account. In addition, after the tumultuous changes in trade policy over last two months, industry outlooks are now considering how soon the U.S. economy will go into recession rather than if it will. Industry is split on whether a recession may occur in the second half of 2025 or sometime in 2026 or 2027.

The updated FY 2025 best estimate forecasts FDOT's weighted average price of asphalt falling by 5.5% before moving with changes in projected construction employment, work program allocations, crude oil demand, and crude oil prices through FY 2029. The upper bound scenario is supported by higher crude prices, which is less likely at this time. The lower bound reflects a recessionary scenario, with lower crude prices, construction employment, and infrastructure demand. **Figure 6** shows the potential range of estimates over the five-year work program.

For Florida HMA consumption, **Figure 7** shows a best estimate of gradual production growth through FY 2029 based on single family housing starts, construction employment growth, and medium crude oil price projections. The upper bound is based on significantly lower fuel costs that would allow for increased production. The lower bound requires recessionary conditions and higher crude oil prices.



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.



 $Source: TBG\ calculated\ from\ data\ provided\ by\ FDOT\ Office\ of\ Forecasting\ and\ Project\ Cost,\ various\ industry\ sources.$ 

### CONCRETE

### **Summary**

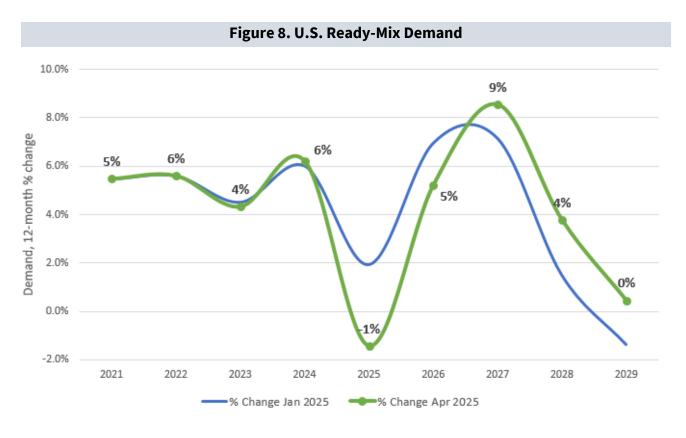
- U.S. Ready-Mix demand forecast has sharply declined over the past quarter, as a result of an expected weakening of the U.S. economy and lower construction demand.
- Tariffs are expected to increase cement prices. Florida cement producers are already reporting higher prices due to tariffs and are passing them off to consumers.
- Immigration policies may impact the labor force supporting concrete work, adding to cost pressures. Some Florida producers are concerned, others are not.
- Year-to-date fly ash imports are down significantly.
- Consolidation of the industry continues this quarter with the finalized merger between Quickrete and Summit Materials and two other acquisitions of concrete companies.

## **FDOT Impacts**

- Average industry benchmark cement prices doubled in some markets early in the fiscal year and have remained there through the last quarter.
- FY 2025 year-to-date concrete bids hit a new high with updated data, averaging over \$1,700 per cubic yard. Additional concrete pay items were considered this quarter to boost the sample and better account for different types of concrete products.
- Updated concrete price projections estimate a 16% increase in bid prices for FY 2025 relative to FY 2024, with updated economic outlooks and industry data. Upper bound estimates may still hold for individual high-cost, low-quantity bids, but recessionary concerns could push prices lower in FY 2026 as contractors aim to remain competitive.
- Florida concrete consumption is forecasted between 28,000 to 30,000 cubic yards through FY 2029 due to high infrastructure, housing, and industrial demand and resiliency efforts.

## **General Trends**

U.S. Ready-Mix demand forecasts have been significantly revised downward for 2025 since January (**Figure 8**). This is a result of an expected decline in the U.S. economy and its impact on construction activity. According to Ed Sullivan (previous PCA (Portland Cement Association) economist), the U.S. construction and cement markets will not strengthen unless job markets remain strong and interest rates decline significantly, which are not considered likely this year.



Source: Dodge Data Analytics Jan. 2025 and April 2025

Tariffs and the immigration crackdown are also expected to raise the costs of construction and cement. Due to a weakening U.S. economy, exporters of materials to the U.S. are likely to absorb more of the cost of the tariffs (as they won't be able to significantly pass off cost increases), but regardless, some increase in price is expected. The amount of the tariffs that will be passed onto consumers depends on the level of competition and the alternatives to imports in the local market, as well as on market demand and excess global capacity. Depending on how much the tariffs are passed through, Sullivan expects the South Atlantic could see cement prices increase 1-2.0%. Texas and the Gulf Coast could see cement price increases anywhere from 2.1% to 2.8%. Domestic production increases are related to how much the tariffs are passed through to the consumer as well. **Table 6** shows a breakdown of Ed Sullivan's projected impacts to cement prices and production as a result of the tariffs. Florida cement producers are reporting price increases as a result of tariffs over the past quarter. They are able to pass all of it off to customers.

Table 6. Tariff Impacts on Cement Prices & Production									
Region	Weighted	Baseline Pass Through, Baseline Price		Low Pass Through, Low Price		High Pass Through, High Price			
	Tariff Cost	Price Increase (%)	Production Increase (000 MT)	Price Increase (%)	Production Increase (000 MT)	Price Increase (%)	Production Increase (000 MT)		
South Atlantic	7.0%	1.6%	77,157	1.2%	58,439	2.0%	95,876		
Texas and the Gulf									
Coast	9.5%	2.5%	145,999	2.1%	116,799	2.8%	175,198		
Total U.S.	8.5%	1.4%	387,147	1.0%	240,502	1.8%	533,792		

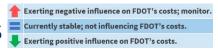
Source: The Sullivan Report, "Cement Tariffs Boost Prices & Production", April 14th, 2025, Cement Tariffs Boost Prices & Production

The share of undocumented workers is estimated at about 25% of the masons & concrete workforce and about 23% of construction laborers<sup>5</sup>. While FDOT projects require e-verify to ensure work rights, the reality is that communities with heavy immigrant populations are seeing deportations. Typically, the undocumented worker has extended family that may also leave, for fear of deportation or financial concern, reducing the overall workforce that other sectors also rely on. As the construction industry already faces a labor shortage, crackdown on the undocumented population will likely impact the construction workforce and further contribute to the labor shortage. This will add to cost pressures. Some, but not all, Florida concrete producers are worried about the impact of immigration crackdowns on their labor supply.

-

 $<sup>^5</sup>$  See for example, https://www.nahb.org/advocacy/industry-issues/labor-and-employment/immigration-reform-is-key-to-building-a-skilled-workforce/concentration-of-immigration-in-construction-trades

### SUPPLY CHAIN VARIABLES: CONCRETE MATERIALS



**Table 7** provides an overview of supply chain variables and a summary of their current status.

#### Table 7. Structural Concrete Supply Chain Variables & Current Status



During Q4 of calendar year 2024 (Q2 FY 2025), publicly traded companies reported mixed results in production volumes, and increased pricing. Contractors indicated no issues with availability but reported continued and more frequent price increases.



Cement



**Aggregate** 

The U.S. Geological Survey (USGS) reported that Florida's crushed stone production decreased 8.8% during the fourth quarter of calendar year 2024. Nationally, production declined 4.0% in the same period. Prices, however continued upward and the industry expects to see double-digit increases in the rest of 2025. Interviews indicated that aggregate prices have continued to increase.





Fly Ash

Through February of calendar year 2025, fly ash imports were down 76% compared to the same period in 2024. Imports were primarily sourced from Turkey into Tampa and Miami in calendar year 2025 through February. Producers continue to report difficulty obtaining fly ash, though diversification of sources may help, some are using strictly cement.





Rail

In February 2025, CSX train and engine employment increased 1.2% year-over-year. Higher dwell times are reported also. In Q4 of calendar year 2024, overall tons and revenues of concrete products shipped by CSX increased 4.3% and 4.8%, respectively.





**Truck** 

Diesel prices decreased 13% in March 2025 year-over-year. Interviews have indicated an increase in trucking costs and a lack of employees causing bottlenecks. According to Freight Transportation Research, specialized trucking rates in Florida have been normal on average since January 2025, while volumes have been 60% to 100% above normal. Through April, total spot rates are up 6.6% year-over-year, and are more than 1% above the five-year average for the week.





Labor



Competition

Interviews have indicated that labor is still an issue, especially with drivers for concrete trucks. Competition remains high for workers. Some producers are expressing concern about immigration policies impacting their workforce.



On February 10<sup>th</sup>, 2025, Summit Materials completed the merger with Quikrete. In addition, this quarter, Breedon Group, a British construction and materials (including ready-mix) firm acquired Lionmark Construction Companies, a diversified construction materials firm. On March 6<sup>th</sup>, 2025, Big 7 Ventures, a leading private equity firm based in California announced the acquisition of Modern Concrete Inc. Competition for resources from other sectors, including continued demand for industrial warehouses, port upgrades and data centers, as well as sustained residential demand in the metropolitan districts, continues to influence bids.

#### **Concrete Forecast**

Regression modeling was performed using pay item data, supply chain variables, and other macroeconomic indicators to identify models that best predicted FDOT's materials costs and quantities. **Table 8** provides the updated forecast average price for concrete<sup>6</sup>.

Table 8. FDOT Concrete Price Forecast Results									
Year 2024 2025 2026 2027 2028 2029									
Price Concrete, \$/CY	\$1,466	\$1,702	\$1,515	\$1,511	\$1,529	\$1,558			
Percent Change, %	19.7%	16.1%	-11.0%	-0.3%	1.2%	1.9%			

Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.

The year-to-date FY 2025 price was revised to \$1,731 per cubic yard this quarter with updated data, a 18% increase from FY 2024. The best estimate FY 2025 forecast came in slightly lower, as industry outlooks have become more negative over the last quarter and some contractor inputs, like fuel, continue to decline. While concrete costs are expected to remain high due to the increased cost of cement and aggregates, a decline closer to FY 2024 levels may occur due to general economic decline. As such, the best estimate of concrete prices reflects changes in construction employment, fly ash demand, falling fuel prices, and uncertainty surrounding changes in U.S. trade policy (**Figure 9**).

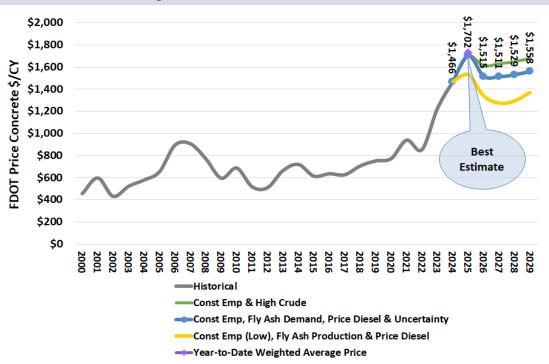
The upper bound reflects construction employment and higher crude oil prices, while the lower bound scenario incorporates declines in construction labor, fly ash production, and updated diesel price projections.

**Figure 10** shows the output of several quantity models forecasting statewide consumption of concrete and the scenario identified as the best estimate. The best estimate tracks Florida housing and construction employment, fly ash production, and cement production capacity. The upper bound reflects moderate housing start growth and cement production capacity. Declining production is shown in the lower bound where recessionary conditions of lower housing starts and construction employment, along with fly ash consumption, would drive down production.

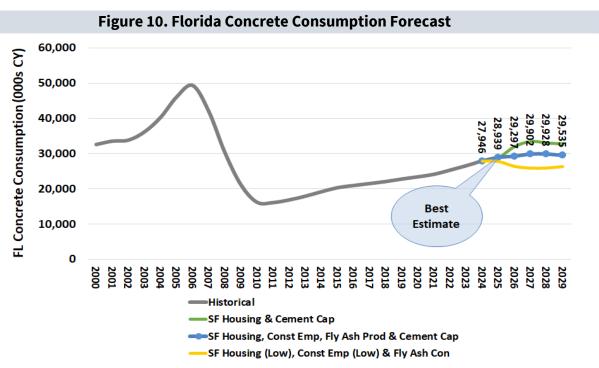
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<sup>&</sup>lt;sup>6</sup> To better capture overall concrete prices, culvert pay items estimated in cubic yards were added to the analysis this quarter, expanding the concrete list by six pay items 0400 4 1, 0430950, 0400 2 1, 0400 1 1, 0400 3 1, and 0121 70 15.





Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry source.

### STEEL

### **Summary**

- U.S. steel prices spiked over the past quarter and then seem to have stabilized or started declining.
- There is uncertainty about future pricing direction due to the different factors at play. Tariffs put upward pressure on domestic prices, while a weakening U.S. economy and declining demand may not be able to support higher prices.

## **FDOT Impacts**

- Florida producers are seeing price increases at their facilities or have received warnings from their suppliers that increases are coming.
- Structural steel prices are forecast to rise 2.8% in FY 2025 with revised industry expectations.
- FY 2025 year-to-date reinforcing steel bids rose to \$1.65 per pound with updated bid data. Price fluctuations seen in other parts of the country did not materialize over the last quarter in Florida. Uncertainty over potential tariff-related price changes and other policies, as well as high demand, supported current pricing.
- FY 2025 reinforcing steel prices are currently forecast to gain back the decline seen in FY 2024, rising about 20% in FY 2025. If the U.S. economy cools, bid prices could come down in FY 2026. However, additional tariffs on steel products and heightening geopolitical conflicts could support prices on the upper bound.

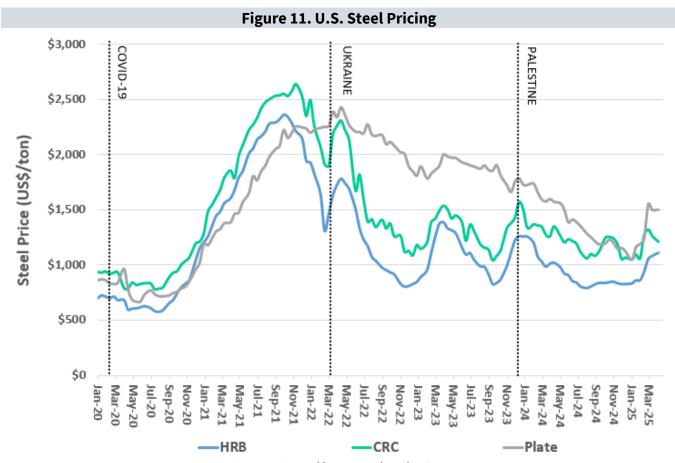
### **General Trends**

If producers haven't experienced price increases yet, they expect to. This quarter producers reported price increases at their facilities of 1% to 10%, with some noting that they've received warnings of future price increases from suppliers due to tariffs but that pricing has stayed the same so far. Some producers are reporting that domestic steel and aluminum producers are increasing their prices. Producers who are seeing cost increases are fully passing those increases off to customers.

Nationally, it is expected that domestic production will increase with the implementation of the tariffs, but so will U.S. prices. Some analysts believe an increase in domestic production still may not be enough to cover the gap in supply that may be created by the declining imports from the tariffs. However, with a weakening U.S. economy and declining manufacturing sector, some believe that increasing prices may not hold as they foresee declining demand. The beginning of this trend may be playing out, as increasing prices during the first quarter of calendar year 2025 appear to be slowing or starting to decline again. There is uncertainty about future pricing direction and demand.

Steelbenchmarker data show prices for plate, cold-rolled coil, and hot rolled band have all increased since January (**Figure 11**). Cold-rolled coil (CRC) prices increased but then started to decline in late

March, plate prices spiked and have remained level since late March, and HRB prices continue to increase, but at a slower rate. U.S. CRC prices were down 6% month-over-month over the same period and down 7% year-over-year. However, that is after prices reached their highest level in early March since April of 2024. U.S. Plate prices were down 1% month-over-month and down 5% year-over-year. U.S. HRB prices are up 4% month-over-month and up 9% year-over-year.







#### SUPPLY CHAIN VARIABLES: **STEEL**

**Table 9** summarizes select variables that impact the steel supply chain and their current status.

#### Table 9. Supply Chain Variables for Structural Steel



**Raw Materials** 

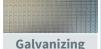
Nationally, prices for hot-rolled steel increased 5.9% in March 2025 year-over-year. Prices increased from January 2025 until March for all products, but decreased slightly for a few products towards the end of March 2025 and the beginning of April. Iron ore prices declined 8.8% year-over-year as of March 2025 after decreasing 24% in 2024. Interviewees continue to be optimistic about rebar prices, but structural steel prices could be on the rise again. Price increases from tariffs are expected to come soon, if they haven't been felt already.



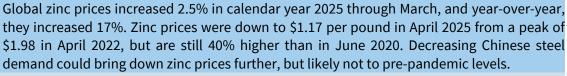


United States scrap steel prices are up 8.7% year-over-year. For Florida providers reporting scrap prices increases, prices are up 10% this quarter.





**Galvanizing** Steel







China

In April 2025, Chinese steel prices declined 12% year-over-year to an average of \$448 per ton. Prices declined 1.6% from January 2025 to April 2025. Concerns around China's role in excess global capacity remain. Other countries including Turkey and Indonesia have instituted antidumping duties on Chinese steel. Chinese exports of steel are expected to increase in 2025, even with declining domestic production, because of weakening demand in China (3.3% decline in 2023, 3% decline in 2024, and 1% decline in 2025 according to the World Steel Association forecast).





**Transportation** 

Diesel prices decreased 13% in March 2025 year-over-year. According to Freight Transportation Research, specialized trucking rates in Florida have been normal on average since January 2025, while specialized trucking volumes in Florida have been between 60% to more than 100% above normal for the most of the first quarter of calendar year 2025. In calendar year 2025 through April, total spot rates have been at or below 2023/2024 levels and during the week ended of April 18, 2025, total spot rates were up 6.6% year-over-year, and were more than 1% above the five-year average for the week. The demand for trucking is expected to increase in 2025. Interviews still indicate a lack of drivers.





Year-to-data production through April 12th, 2025 was 24,213,000 net tons, down 1.3% from the 24,534,000 net tons during the same period in 2024. The capacity utilization rate measured 74.6% as of April 12<sup>th</sup>, 2025.





Labor issues remain. TBG estimates a shortage of about 4,000 workers for the highway construction sector in Florida every year, and steel fabricators are among the most specialized within this group. Labor shortages continue to constrain industry capacity.





Competition

President Trump recently ordered the Committee on Foreign Investments to conduct a new review on the proposed acquisition of U.S. Steel by Japan's Nippon Steel, after the deal was blocked by the Biden Administration in early January, 2025. Tariffs may cause increased competition for domestically produced steel.

#### **Steel Forecast**

Steel prices were forecasted over the five-year work program. Regression modeling was performed using pay item data, supply chain variables, and other macroeconomic indicators to identify models that best predicted FDOT's materials costs. **Table 10** provides the forecast average price for structural and reinforcing steel.

Table 10. FDOT Steel Price Forecast Results								
Year 2024 2025 2026 2027 2028 2029								
Price Structural Steel, \$/lb.	\$4.52	\$4.99	\$4.90	\$4.72	\$4.87	\$4.88		
Percent Change, %	28.6%	10.5%	-1.8%	-3.8%	3.3%	0.1%		
Price Reinforcing Steel, \$/lb.	\$1.34	\$1.61	\$1.41	\$1.36	\$1.38	\$1.46		
Percent Change, %	-12.2%	20.4%	-12.3%	-3.7%	1.8%	5.8%		

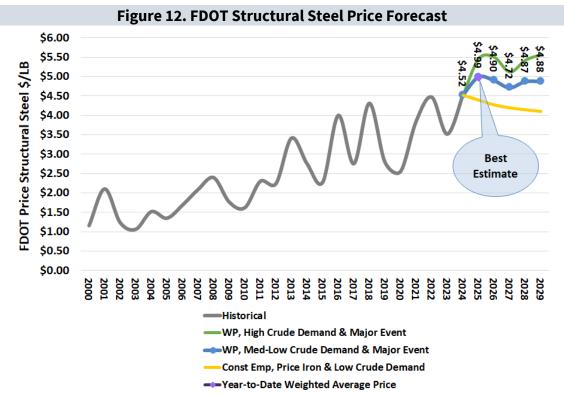
Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.

Structural steel costs saw a significant increase of about 10% with updated bid data, the rise consistent with fabricator interviews. With limited bid data and updated industry forecasts, the best estimate of FY 2025 structural steel costs was \$4.99 per pound, a 10.5% increase from FY 2024. The best estimate takes work program spending levels, moderating crude oil demand, and impacts of major events that affect steel prices into consideration. On the upper bound, higher crude oil demand would lift structural steel prices above \$5.50 per pound for much of the Five-Year Work Program. Changes in construction employment, commodity prices, lower crude oil demand, and recessionary events could influence prices toward the lower bound.

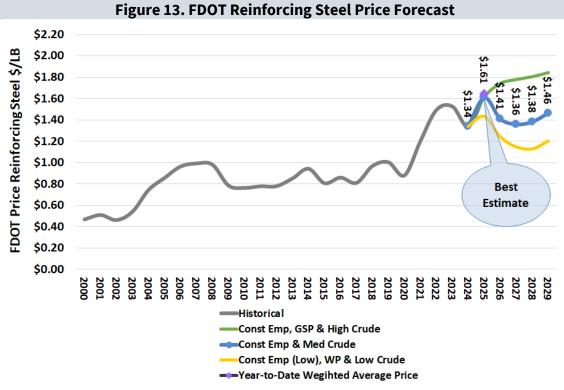
Any improvement to U.S. reinforcing steel costs have been wiped out over the last quarter. The 25% tariff on steel products remains in effect at this writing. FY 2025 year-to-date FDOT bids remain high, topping \$1.60 per pound with updated bids. If current pricing trends continue, average reinforcing steel prices are forecast to rise in FY 2025 by more than 20%.

The best estimate of reinforcing steel costs currently predicts some cooling in prices in FY 2026 if economic conditions continue to cool; based on updated construction employment projections and crude oil price forecasts. The upper bound takes construction employment, economic activity, and higher crude oil prices into account. The lower bound measures declining construction employment and crude oil prices and FDOT infrastructure demand. With current expectations on recessionary conditions, this scenario is considered more likely than in previous reports.

**Figure 12** and **Figure 13** show the output of several price models and the scenario identified as best estimate for structural steel and reinforcing steel, respectively.



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources. (Variable descriptions available in the **Appendix**.)



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources. (Variable descriptions available in the **Appendix**)

### **AGGREGATE**

### **Summary**

- Florida crushed stone production continues to decline. Production declined 8.8% in the fourth quarter of calendar year 2024 year-over-year. Nationally, production declined 4% in the fourth quarter of 2024.
- Prices reported by publicly traded companies continue to show year-over-year increases through March 2025, although volumes are declining.

## **FDOT Impacts**

- FY 2025 year-to-date aggregate base prices were \$32 per square yard with updated bid data.
- FDOT aggregate base prices are currently forecast to decline by about 10% in FY 2025, with further declines through FY 2029 due to less optimistic economic outlooks and falling energy costs.
- Three new mines were added to FDOT's approved producer list in April 2025 (in Districts 4, 5, and 7), which should increase supply for FDOT projects.

### **General Trends**

According to quarterly data released by the USGS, crushed stone production in Florida for the fourth quarter of calendar year 2024 was down 8.8% compared to production in the fourth quarter of 2023. Nationally, crushed stone production in the second quarter fell 4%, which was better than in Florida. Although the threat of a weakening U.S. economy may lower demand, publicly traded companies remain optimistic due to the demand for public infrastructure expected to realize over the next few years as a result of the Infrastructure Investment and Jobs Act (IIJA). They expect this to be able to prop up demand. Prices from most publicly traded companies also increased year-over-year and ranged from 5%-10%. These price increases are consistent with reports from Florida producers.

Labor supply remains the top concern for Florida producers, with some expecting the shortage to worsen over the next two years. Others expect a slowing economy to make more skilled workers available.



### SUPPLY CHAIN VARIABLES: **AGGREGATE**

Exerting positive influence on FDOT's costs.

**Table 11** provides current status of selected supply chain variables.

#### Table 11. Aggregate Supply Chain Variables



**Raw Materials** 

USGS reported that Florida's crushed stone production declined 8.8% in the fourth quarter of calendar year 2024 compared to the same period in 2023. Nationally, production declined 4.0% in the fourth quarter of 2024. Prices from publicly traded companies showed significant year-over-year increases between 5% and 10% in the fourth guarter of 2024, while volumes fluctuated between -7% and 3%.



Access to land with suitable deposits is essential to cost-effective material extraction for FDOT Aggregate. On March 12th, 2025, the U.S. Environmental Protection Agency (EPA) announced that it will revise the WOTUS rule to ensure it aligns with the Supreme Court rulings, lower permitting costs for developers, reduce the cost of doing business in communities, and protect the waters from pollution. Nonetheless, uncertainty in the industry would continue due to a recent ruling on Florida's 404 permitting program.



Rail

Rail is the primary transportation for aggregates from Georgia, and from Lake Belt to Central and Northeast Florida. In the fourth quarter of calendar year 2024, tons of aggregate products shipped by CSX increased by 1.1% year-over, while revenues of aggregate products shipped also increased by 1.1% year-over-year. Note these statistics are for CSX's whole system as location specific data is not available.





**Trucking** 

In March 2025, diesel prices were at \$2.50, down 13% year-over year. No major changes or improvements in trucking costs or availability occurred this quarter according to interviewed contractors.





Labor

Producers continued reporting issues with finding and retaining skilled labor in the first quarter of 2025. Statewide construction employment increased in February 2025, yearover-over. Wage increases continued to slow. Nationally, stone mining and quarrying employment rose marginally in February 2025, year-over year. Interviews indicate that labor is hard to find and producers expect this to continue.





Competition

So far in calendar year 2025, the number of FDOT approved aggregate producers increased with three new mines added to FDOT's approved producer list in April 2025 in Districts 4, 5, and 7.



In March 2025, the Federal Reserve maintained its target federal funds interest rates between 4.25% and 4.50%. With worsening inflation data in April, the Fed is backing off more interest rate cuts that would have decreased acquisition costs of equipment and vehicles. Exemptions for electronic components in tariffs was a big relief as almost all construction equipment has sensors and other components made in China.



**Capital Costs** 

## **Aggregate Base-Course Forecast**

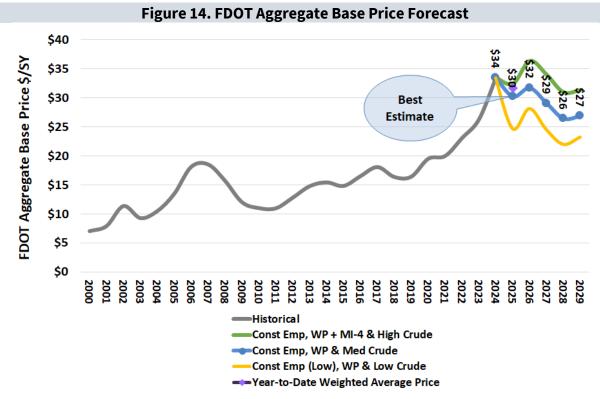
Regression modeling was performed to estimate aggregate base costs using pay item data, Work Program funding, and supply chain variables and other macroeconomic indicators. **Table 12** provides the forecast average price for aggregate base.

Table 12. FDOT Aggregate Base Price Forecast Results									
Year 2024 2025 2026 2027 2028 2029									
Price Aggregate Base, \$/SY	\$34*	\$30	\$32	\$29	\$26	\$27			
Percent Change, %	27.3%	-9.8%	4.9%	-8.3%	-9.1%	1.7%			

Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.

Note: \*One extremely high-cost, high-quantity bid from September 2023 was excluded, adjusting the FY 2024 weighted average earthwork price from \$38 per cubic yard to \$34 per cubic yard.

With updated bid data and industry outlooks, the best estimate shows a decline in FY 2025 aggregate base pricing based on changes in construction employment, FDOT infrastructure demand, and crude oil prices, supporting moderating bids through FY 2029 (**Figure 14**). The upper bound includes construction employment, higher energy costs, and additional consideration for resources needed for MI-4 projects on top of the Five-Year Work Program rolled out in July 2024. The lower bound takes lower construction employment growth, work program funding, and low crude oil prices into account and would yield lower aggregate base prices. This scenario is more likely than in previous quarters.



Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources. (Variable descriptions available in the **Appendix**.)

### **EARTHWORK**

### **Summary**

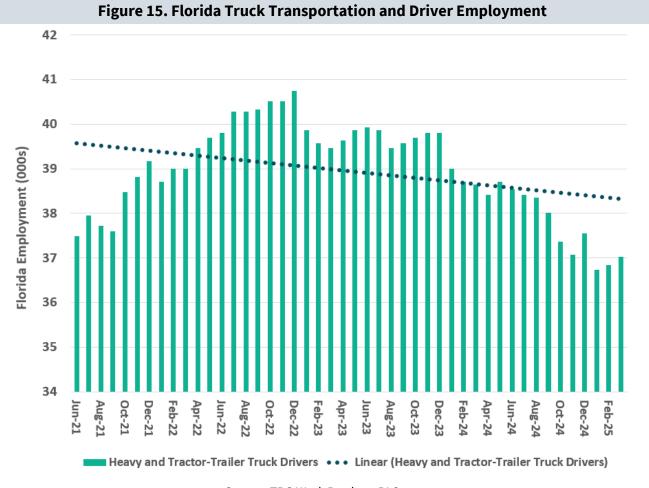
- It is estimated that trucking employment in Florida decreased 4% year-over-year with revised BLS data.
- In general, equipment prices have resumed increases, although most heavy equipment used in highway construction shows flat pricing so far this (calendar) year.
- Prices are expected to rise with the impact of tariffs, although the exemption for electronic components was a relief to suppliers, since almost all construction equipment has some electronic component manufactured overseas.

## **FDOT Impacts**

- FY 2025 year-to-date earthwork bids declined to about \$17 per cubic yard.
- Current models forecast earthwork bids to increase by at about 2.5% annually through FY 2029 after a significant correction this year.
- Skilled labor, driver availability, and trucking cost challenges continue.

#### **General Trends**

Trucking and labor costs are the primary factors in this sector. On average truck transportation employment decreased 4% year-over-year, however, March numbers are preliminary and are subject to change (**Figure 15**). The Bureau of Labor Statistics (BLS) edited their data and new data was brought in for the past 3 years, which is why this chart differs from the chart presented last quarter. As mentioned in other areas of the report, in December 2024, diesel prices were at \$2.50, down 13% year-over year. According to Freight Transportation Research, specialized trucking rates in Florida have been 0%-10% below normal since January 2025. There was a brief spike in rates on April 24th to 10% to 20% above normal, but things have returned to normal. However, volumes since January appear to be much higher than normal. Over the past quarter spot rates have increased up to the 5-year average. Total spot rates were up 5% year-over-year and were at the 5-year average this past week.



Source: TBG Work Product, BLS.

## **Earthmoving Equipment and Trucking**

The April 2025 Equipment Report released by Rouse analyzes price trends of different construction equipment in the U.S. The report includes a Fair Market Value (FMV) Index and Forced Liquidation Value (FLV) Index (equipment sold at auctions) for Heavy as well as Light and Medium Earthmoving equipment. Somewhat surprisingly, since January, prices for many equipment and trucking categories have been increasing, although generally reported as flat for heavy equipment most commonly used in highway construction (**Table 13**). Auction sales volumes were down and retail sales volumes were up year-over-year in March 2025 for both General Construction Equipment and Heavy Earthmoving Equipment.

Table 13. U.S. Equipment Prices, December 2				
Equipment Type	Auction (FLV) Prices	Retail (FMV) Prices		
General Construction Equipment	=	=		
Heavy Earthmoving Equipment	=	1		
Light and Medium Earthmoving Equipment	=	1		
Excavators	1	1		
Dozers				
Wheel Loaders	1	1		
Articulated Trucks				
Forklift Trucks				
Truck Tractors	1	1		



Source: Rouse April 2025 Equipment Report.

#### **Earthwork Forecast**

Regression modeling was performed to estimate earthwork costs using pay item data, supply chain variables and other macroeconomic indicators. **Table 14** provides the forecast average price for earthwork.

Table 14. Earthwork Price Forecast Results						
Year	2024	2025	2026	2027	2028	2029
Price Earthwork, \$/CY	\$21	\$17	\$18	\$18	\$18	\$19
Percent Change, %	117.4%	-30.2%	2.5%	2.3%	2.2%	2.5%

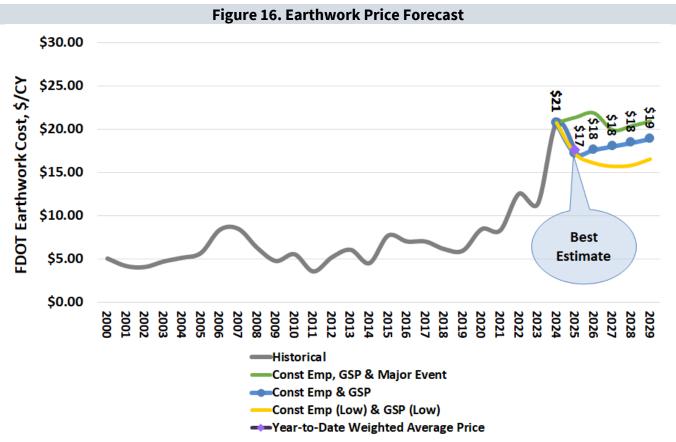
Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources.

Note: \*One extremely high-cost, high-quantity bid from September 2023 was excluded, adjusting the FY 2024 weighted average earthwork price from \$24 per cubic yard to \$21 per cubic yard.

FY 2025 year-to-date earthwork costs declined from about \$21 per cubic yard last quarter to \$17 per cubic yard with updated FDOT bid data. Several large projects are steering the overall weighted average price this year.

The best estimate of FY 2025 earthwork costs, revised with the latest industry employment and economic forecasts, shows earthwork bids continuing to grow at a steady rate close to general inflation through the end of the five-year work program. The updated upper bound, which takes forecasted construction employment and economic growth into account, as well as an indicator for major events that may disrupt supply chains shows a return to FY 2024 pricing in the short-term. In the lower bound scenario, recessionary conditions (employment and economic conditions) would drive down costs, but not to pre-pandemic bid levels.

**Figure 16** shows the output of potential price models and the scenario identified as best estimate for earthwork.

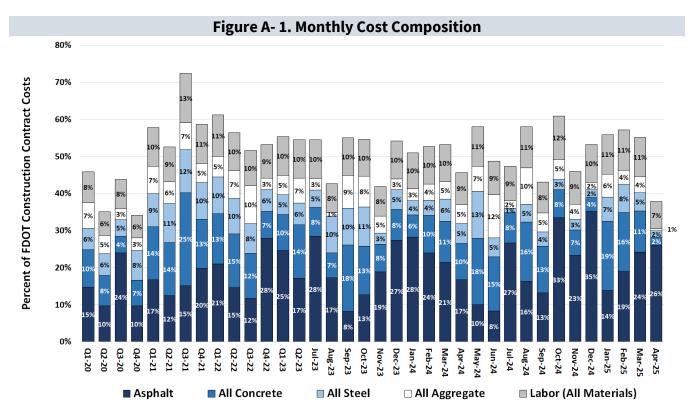


Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost, various industry sources. (Variable descriptions available in the Appendix.)

# **APPENDIX A: Underlying Economic Conditions**

# **FDOT Cost Composition**

Tracking FDOT's costs by month shows how the cost composition may shift depending on project type, scheduling, and material costs (**Figure A-1**). Asphalt costs were the largest share of total costs over the last three months according to revised March 2025 and preliminary April 2025 data. Concrete costs were the next largest share of total costs over the quarter due to high bid prices. Steel costs grew as a share of total costs as prices picked back up over the last quarter, while Aggregate costs moderated. Labor costs continued fluctuating over the past few months between 7% to 11% of total costs.

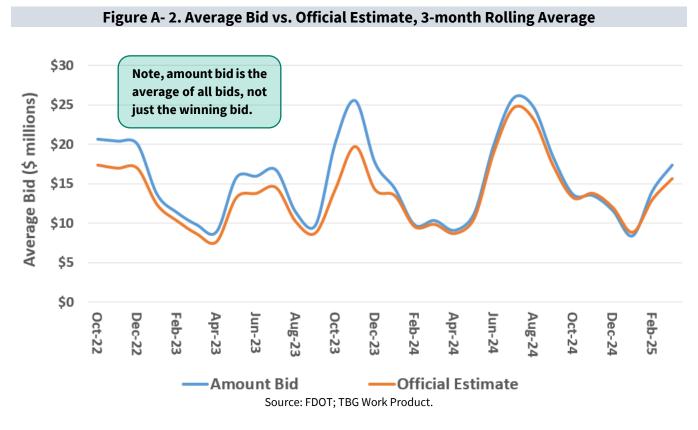


Source: TBG calculated from data provided by FDOT Office of Forecasting and Project Cost.

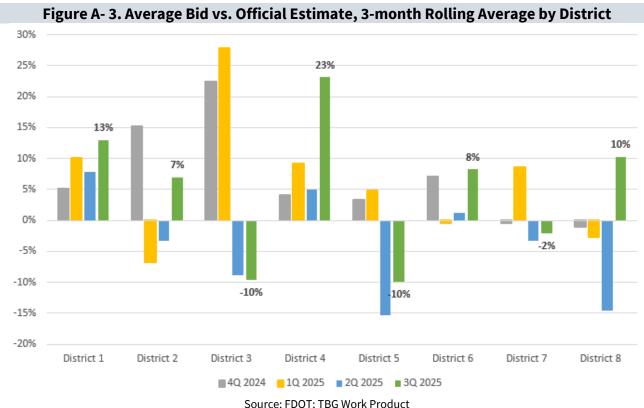
Note: IBIS industry reports are used to estimate the share of award by material type that may be attributed to labor.

#### **Bid Data**

Average bids provide insight to market trends; in economic terms, the expected value of a contract or project is the average of all bids. In this analysis, the average of all bids, or the mean, is compared to the official preliminary estimate. Using a 3-month rolling average, in the second quarter of Fiscal Year 2024-25 (FY 2025), the average deviation of all bids from the mean of all official preliminary estimates was 6%; higher than the previous quarter (**Figure A- 2**). Excluding contracts exceeding an official estimate of \$100 million from the analysis finds different results, with bids being 2% higher than the official estimate.



**Figure A- 3** illustrates the average bid versus their official estimate by District on a three-month rolling average. Differences in district-level percentages compared to overall statewide averages are driven by the total amount of dollars for both the official estimate and bids, as well as the total number of bids. Over the past 4 quarters, most districts have average bids higher than the official estimates.

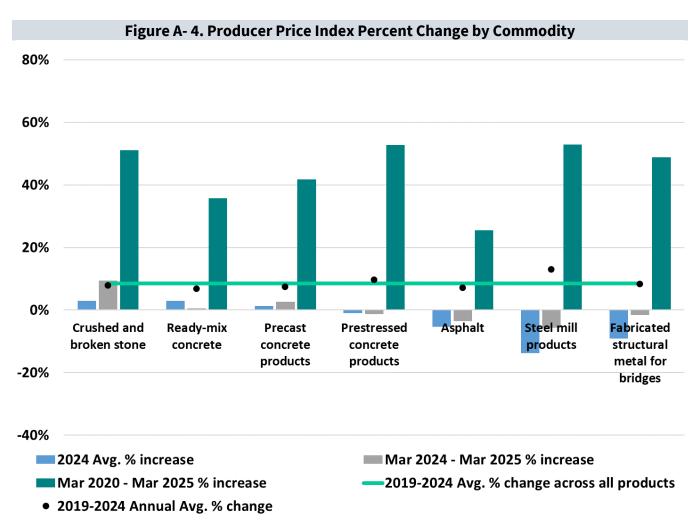


Source: FDOT; TBG Work Product

# **U.S. Inflation**

Another measure of inflation for the construction industry is the BLS PPI by commodity type. Nationally, the average change across all commodities tracked in this analysis between March 2024 and March 2025 was flat (0%). Crushed and broken stone had the largest increase (9%), while structural metal for bridges declined 2% in the same time period. Ready-mix, precast, prestressed, and asphalt (refinery production) changed by 0%, 3%, -1%, and -4%, respectively. Steel mill products declined by 6%. <sup>7</sup> Figure A- 4 illustrates select PPI in the U.S. for relevant commodity types.

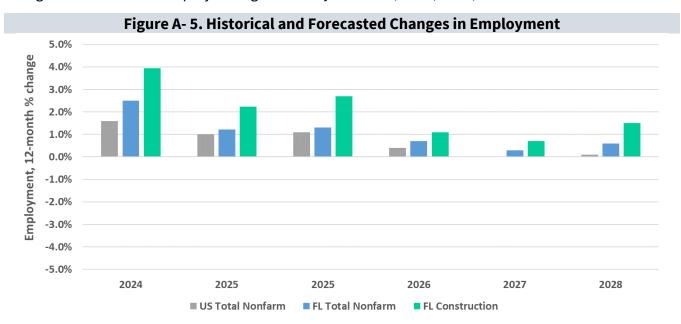
<sup>&</sup>lt;sup>7</sup> As a processed good for intermediate demand; i.e. asphalt used at refineries as an input by producers and not the final prices seen by FDOT.



Source: BLS (Producer Price Index, not seasonally adjusted); TBG Work Product.

# **Construction Employment Forecast**

According to the Economic Estimating Conference results from Florida's Office of Economic & Demographic Research (EDR), statewide construction employment is expected to grow by 2.7% in 2025, above the most recent statewide construction employment growth estimate from the Bureau of Labor Statistics (BLS) at 2.2%. EDR expects construction employment growth to grow further, but slower, over the next three years, with 2026 estimated to rise by 1.1%, 2027 by 0.7% and 2028 by 1.5%. The Institute for Economic Forecasting's (IEF) most recent nationwide report elucidates their predictions for non-farm employment growth across the U.S., estimating a 1.1% increase in 2025, coming in just barely over what the BLS has estimated at 1.0%. For further years, IEF estimates growth slowing down across the U.S., with 2026 expected to bring 0.4% employment growth, 0.0% expected in 2027, and 0.1% expected in 2028. In **Figure A- 5**, BLS estimates for U.S. nonfarm, Florida nonfarm, and Florida construction employment growth in years 2024 and 2025 (preliminary) are shown alongside the IEF and EDR projected growth for years 2025, 2026, 2027, and 2028.

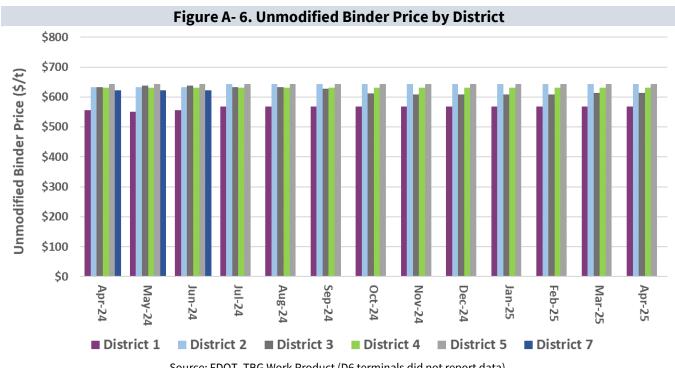


Source: UCF Institute for Economic Forecasting Spring 2024 Florida & Metro Forecast; Florida's Office of Economic & Demographic Research; TBG work product.

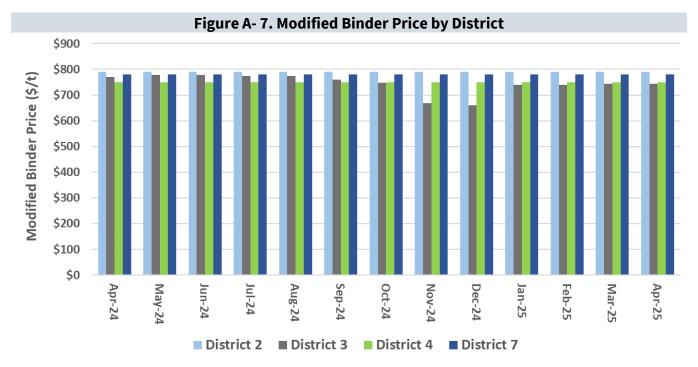
### **Binder Prices by District**

Where available, the average prices for unmodified (**Figure A- 6**) and modified (**Figure A- 7**) binder were calculated from monthly terminal price quotes at the district level. Unmodified binder is the average of PG 52-28 and PG 58-22 prices, while modified binder is a quote for the price of PG 76-22 (PMA) in the dataset. Unmodified binder prices increased in Districts 1 and 2, year-over-year (April to April) at 2% while District 3 decreased by 3%. Modified binder prices in Districts 2, 4, and 7 remained flat year-over-year, while District 3 decreased by -3.34% year-over-year. Prices in all Districts were

relatively stable through the year and no price changes were observed in the modified or unmodified binders month-over-month (March to April).



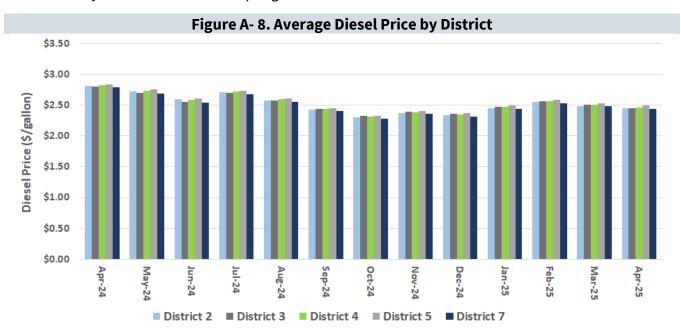
Source: FDOT, TBG Work Product (D6 terminals did not report data).



Source: FDOT, TBG Work Product (D1, D5, and D6 terminals did not report data).

# **Diesel Prices by District**

Diesel price quotes from suppliers at terminals around the state decreased from April 2024 to April 2025. On average, prices in April 2025 were \$2.46 per gallon, a 12.5% decrease year-over-year and a 1.6% decrease month-over-month. Prices in all districts ranged between \$2.44 and \$2.50 per gallon (**Figure A- 8**). The April 2025 EIA Short-Term Energy Outlook for the U.S. diesel market was revised downward from \$3.78 per gallon in 2024 to \$3.44 per gallon in 2025, a 9% decline. Prices are forecast to increase by 2.6% in 2026 to \$3.53 per gallon.



Source: FDOT, TBG Work Product (D1 and D6 terminals did not report data).

### APPENDIX B: FORECAST DETAILS

A description of the variables used in forecasting are provided in **Table B-1**.

Table B-1. Forecast Variable Descriptions				
Variable Reference	Description			
Chinese Imports	The value of imports to global partners originating from China.			
Const Emp	Baseline FL construction employment forecast.			
Const Emp (Low)	Lower (less optimistic) FL construction employment forecast.			
<b>Crude Demand</b>	Total world petroleum consumption.			
FL Cement Price	Average price of cement in Florida.			
Fly Ash Demand	U.S. production of fly ash as a share of total consumption.			
Fly Ash Production	U.S. fly ash production.			
GSP	FL Gross State Product.			
GSP (Low)	Lower (less optimistic) FL gross state product forecast.			
Historical	Historical pricing or quantity.			
Housing Starts	FL housing starts forecast.			
Housing Starts (Low)	Lower (less optimistic) FL housing starts forecast.			
Low/Med/High Crude	Average crude price (low, medium, or high forecast).			
Major Event	Major geo-political, health, or weather-related events that strongly affect			
Major Event	market forces; i.e. 9/11, the Great Recession, hurricanes, pandemics.			
Non-farm Emp <sup>8</sup>	FL Non-Farm employment forecast.			
Non-farm Emp (Low)	Lower (less optimistic) FL total non-farm employment forecast.			
Price Binder	Average price of HMA binder (PG-76 & higher).			
Price Coal	Average price of coal.			
Price Diesel	Average diesel price.			
Price Iron	Average price of iron ore.			
Price Stone	Average price of crushed stone.			
Price Zinc	Average price of crushed stone.			
SF Housing	FL Single-Family housing starts forecast.			
SF Housing (Low)	Lower (less optimistic) FL Single-Family housing starts forecast.			
<b>US Cement Price</b>	Average price of cement in the U.S.			
WP	FDOT Five-Year Work Program.			

Pay items that are partially or wholly used in the analysis are listed in **Appendix B** of the FDOT SRES <u>FY 2023-24 Final Report</u><sup>9</sup>, starting on page 89. It should be noted that the lists may include some pay items that are no longer in use by FDOT, or are not represented in the lettings data every year, but are retained for historical record.

<sup>&</sup>lt;sup>8</sup> Workers in the agriculture sector are excluded from government and industry estimates; Nonfarm Payrolls: Why Farmers Aren't Included in Jobs Data | St. Louis Fed (stlouisfed.org)

<sup>&</sup>lt;sup>9</sup> Main page: <u>Strategic Resource Evaluation Study Reports (fdot.gov)</u>

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