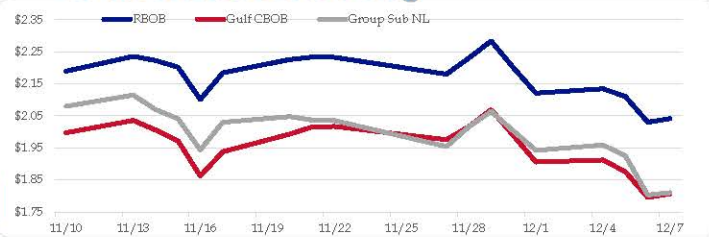


Gasoline

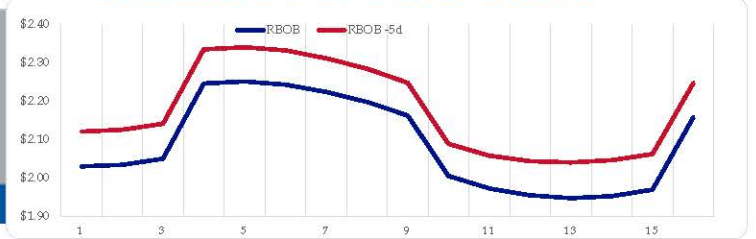
	RBOB	Change	Gulf CBOB	Change	Group Sub NL	Change	Gulf Basis	Group Basis	LA Basis
12/7	\$2.0413	\$0.0111	\$1.8067	\$0.0114	\$1.8103	\$0.0076	\$ (0.2351)	\$ (0.2313)	\$ 0.4445
12/6	\$2.0302	-\$0.0801	\$1.7953	-\$0.0802	\$1.8027	-\$0.1228	\$ (0.2349)	\$ (0.2275)	\$ 0.4460
12/5	\$2.1103	-\$0.0239	\$1.8755	-\$0.0365	\$1.9255	-\$0.0333	\$ (0.2348)	\$ (0.1848)	\$ 0.2760
12/4	\$2.1342	\$0.0131	\$1.9120	\$0.0061	\$1.9588	\$0.0167	\$ (0.2222)	\$ (0.1754)	\$ 0.1710
12/1	\$2.1211	-\$0.0787	\$1.9059	-\$0.0819	\$1.9422	-\$0.0604	\$ (0.2152)	\$ (0.1790)	\$ 0.1795
11/30	\$2.1998	-\$0.0838	\$1.9878	-\$0.0815	\$2.0026	-\$0.0612	\$ (0.2120)	\$ (0.1973)	\$ 0.1957
11/29	\$2.2836	\$0.0536	\$2.0693	\$0.0531	\$2.0638	\$0.0486	\$ (0.2143)	\$ (0.2198)	\$ 0.2183
11/28	\$2.2300	\$0.0501	\$2.0162	\$0.0410	\$2.0152	\$0.0614	\$ (0.2139)	\$ (0.2148)	\$ 0.2394

RBOB Technicals		
Indicator	Direction	Resistance
MACD	Neutral	2.9936 2023 High
Stochastics	Oversold	2.7703 Sep High
RSI	Oversold	2.0752 2023 Low
ADX	Bearish	2.0204 Dec 2022 Low
Momentum	Bearish	
Bias:	Neutral	

Gasoline History



Gasoline Forward Curve

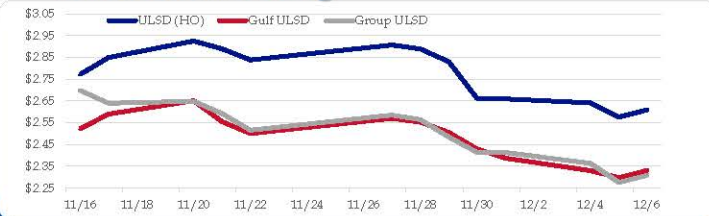


Diesel

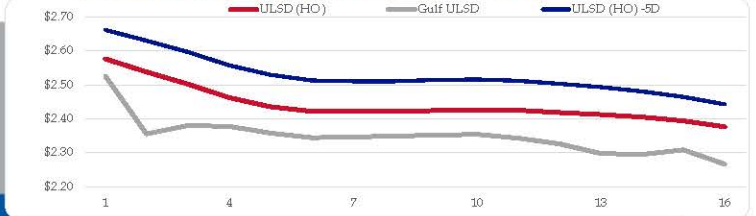
	ULSD (HO)	Change	Gulf ULSD	Change	Group ULSD	Change	Gulf Basis	Group Basis	LA Basis
12/7	\$2.6087	\$0.0325	\$2.3315	\$0.0325	\$2.3093	\$0.0327	\$ (0.2782)	\$ (0.2996)	\$ 0.0105
12/6	\$2.5762	-\$0.0649	\$2.2985	-\$0.0317	\$2.2766	-\$0.0874	\$ (0.2777)	\$ (0.2996)	\$ 0.0095
12/5	\$2.6411	-\$0.0186	\$2.3302	-\$0.0576	\$2.3640	-\$0.0497	\$ (0.3110)	\$ (0.2771)	\$ 0.0095
12/4	\$2.6597	-\$0.0018	\$2.3877	-\$0.0422	\$2.4137	-\$0.0004	\$ (0.2720)	\$ (0.2460)	\$ 0.0145
12/1	\$2.6615	-\$0.1690	\$2.4299	-\$0.0758	\$2.4141	-\$0.0703	\$ (0.2316)	\$ (0.2474)	\$ 0.0595
11/30	\$2.8305	-\$0.0580	\$2.5057	-\$0.0466	\$2.4844	-\$0.0796	\$ (0.3248)	\$ (0.3461)	\$ (0.0168)
11/29	\$2.8885	-\$0.0185	\$2.5523	-\$0.0180	\$2.5640	-\$0.0210	\$ (0.3362)	\$ (0.3245)	\$ 0.0197
11/28	\$2.9070	\$0.0691	\$2.5703	\$0.0693	\$2.5850	\$0.0693			

HO Technicals		
Indicator	Direction	Resistance
MACD	Neutral	3.5800 2003 High
Stochastics	Oversold	3.5092 Sep High
RSI	Neutral	2.6172 Dec Low
ADX	Bearish	2.3750 July Low
Momentum	Neutral	
Bias:	Neutral	

Diesel History



Diesel Forward Curve



Crude

WTI		Change	Brent		Change	Vs WTI				Vs Brent				Group / WCS	
12/7	\$70.11	\$0.73	\$74.90	\$0.60		Gulf Gas	Gulf Diesel	3/2/1	5/3/2	Gulf Gas	Gulf Diesel	3/2/1	5/3/2		3/2/1
12/6	\$69.38	-\$2.94	\$74.30	-\$2.90		\$6.02	\$27.16	\$13.07	\$14.48	\$1.10	\$22.24	\$8.15	\$9.56	\$	22.03
12/5	\$72.32	-\$0.72	\$77.20	-\$0.83		\$6.45	\$25.55	\$12.82	\$14.09	\$1.57	\$20.67	\$7.94	\$9.21	\$	26.69
12/4	\$73.04	-\$1.03	\$78.03	-\$0.85		\$7.26	\$27.24	\$13.92	\$15.26	\$2.27	\$22.25	\$8.93	\$10.27	\$	27.60
12/1	\$74.07	-\$1.89	\$78.88	-\$4.22		\$5.98	\$27.99	\$13.31	\$14.78	\$1.17	\$23.18	\$8.50	\$9.97	\$	26.11
CPL	Line 1	Change	Line 2	Change		\$7.53	\$29.28	\$14.78	\$16.23	\$0.39	\$22.14	\$7.64	\$9.09	\$	26.89
space	0.0975	-\$0.0025	\$0.1205	-\$0.0388											

Refinery Margins

Economic Indicators

Commodity Futures

	Settle	Change		Settle	Change
S&P 500 Futures	4,558	2.25	US NatGas	2.710	-0.141
DJIA	36,054	-70.13	TTF NatGas	12.46	0.4
EUR/USD	1.0773	-0.0007	Gold	2,031	4.2
USD Index	104.11	-0.16	Silver	23.89	0.0
US 10 YR YIELD	4.12%	-0.06	Copper	361.80	
US 2 YR YIELD	4.60%	0.03	FCO J	1295.50	11.50
Oil Volatility Index	36.36	3.36	Wheat	615.75	
S&P Volatility Index (VIX)	12.85	0.12	Butane	1.015	0.027
Nikkei 225 Index	33,170	-775.00	Propane	0.683	-0.016
			Bitcoin	42,935	-485

RINs and Price Drivers

Current Year Biodiesel RINs			Current Year Ethanol RINs		
	Settle	Net Change		Settle	Net Change
	0.8270	-0.008		0.8260	-0.008
Price Drivers			Price Drivers		
Soybeans	1295.50	11.500	Ethanol	1.71	-0.068
Soybean Oil	49.29		Com	464.75	0.250
BOHO Spread	1.121		Com Crush	0.050	
Soy Crush	538.57		RVO Estimate		
			Per Gallon	\$ 0.1040	\$ (0.0010)
			Per Barrel	\$ 4.37	\$ (0.04)

*SOURCES: Nymex, CBOT, NYSE, ICE, NASDAQ, CME Group, CBOE. Prices delayed.

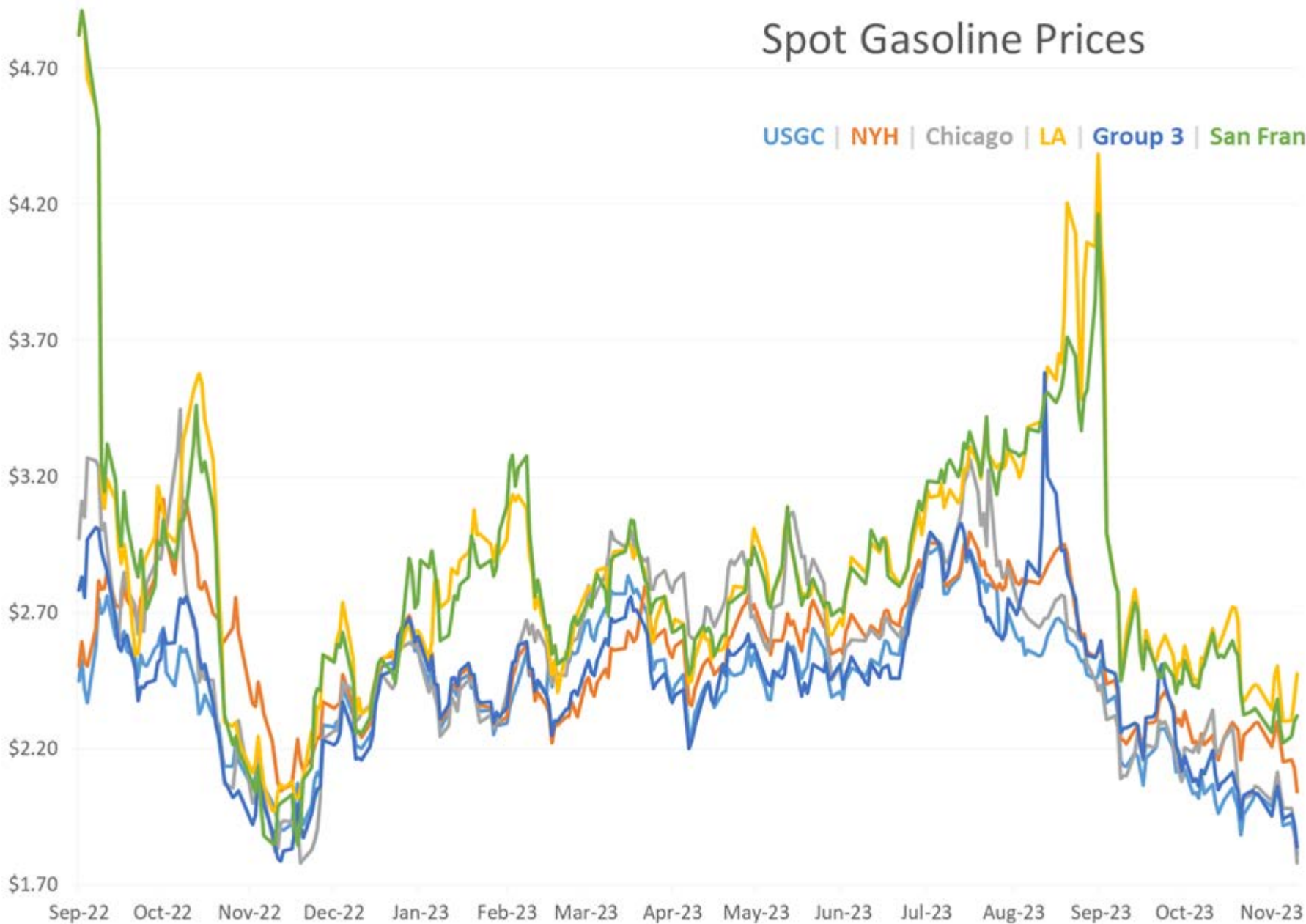
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Jan RBOB Futures, finding a floor?

	2021	2022	2023
Date of Low	2-Dec	12-Dec	6-Dec
Low Trade	\$ 1.8799	\$ 2.0204	\$ 2.0184
Dec Close	\$ 2.2285	\$ 2.4595	??
Change	\$ 0.3486	\$ 0.4391	

Spot Gasoline Prices

USGC | NYH | Chicago | LA | Group 3 | San Fran

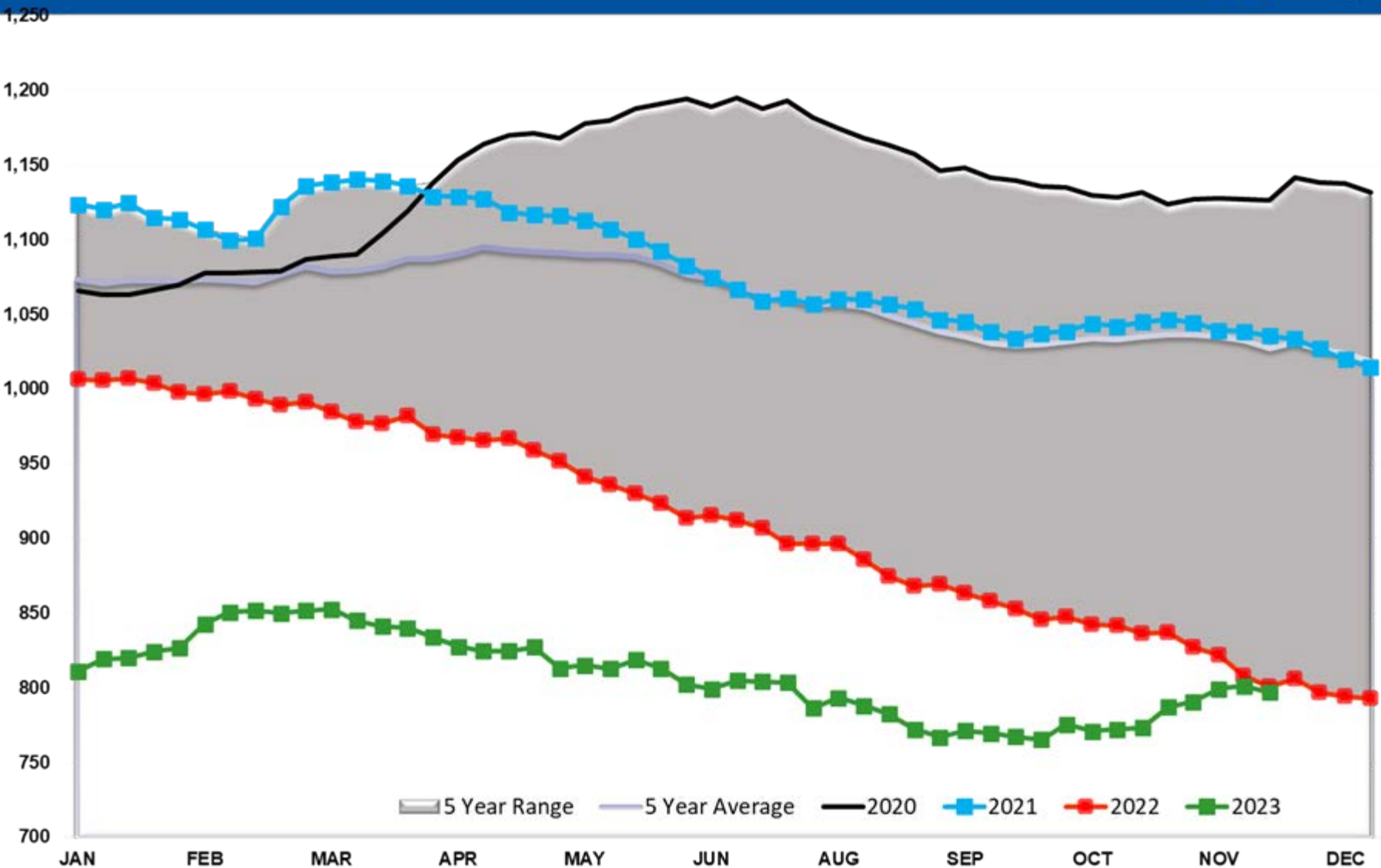


Spot Diesel Pricing

USGC | ULSD Futures | LA CARB #2 | Group 3 | San Fran CARB #2 | NYH Barge #2 | Chicago



Total Crude Oil w/ SPR



Crude Stocks TOTAL US

575

550

525

500

475

450

425

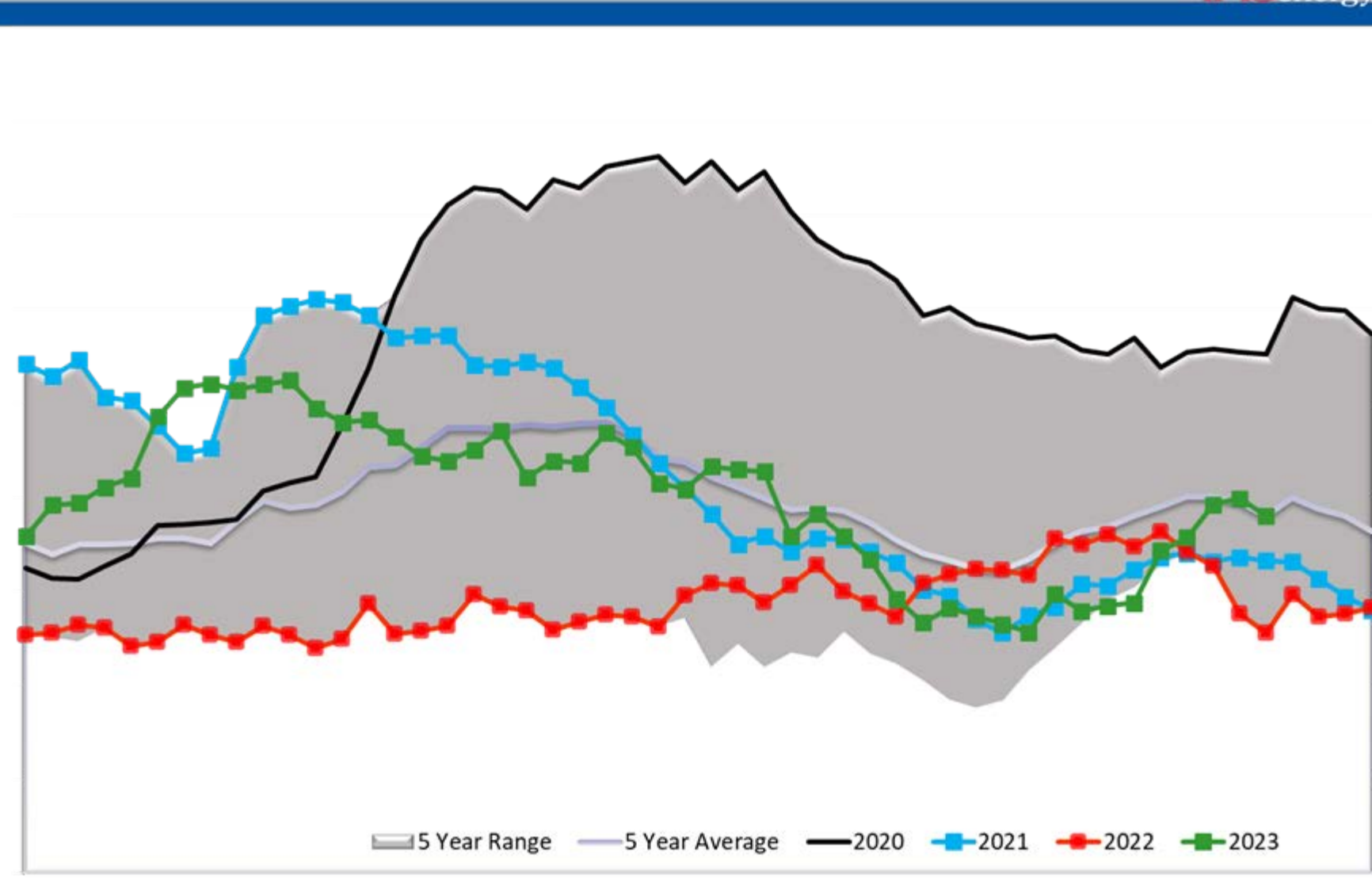
400

375

350

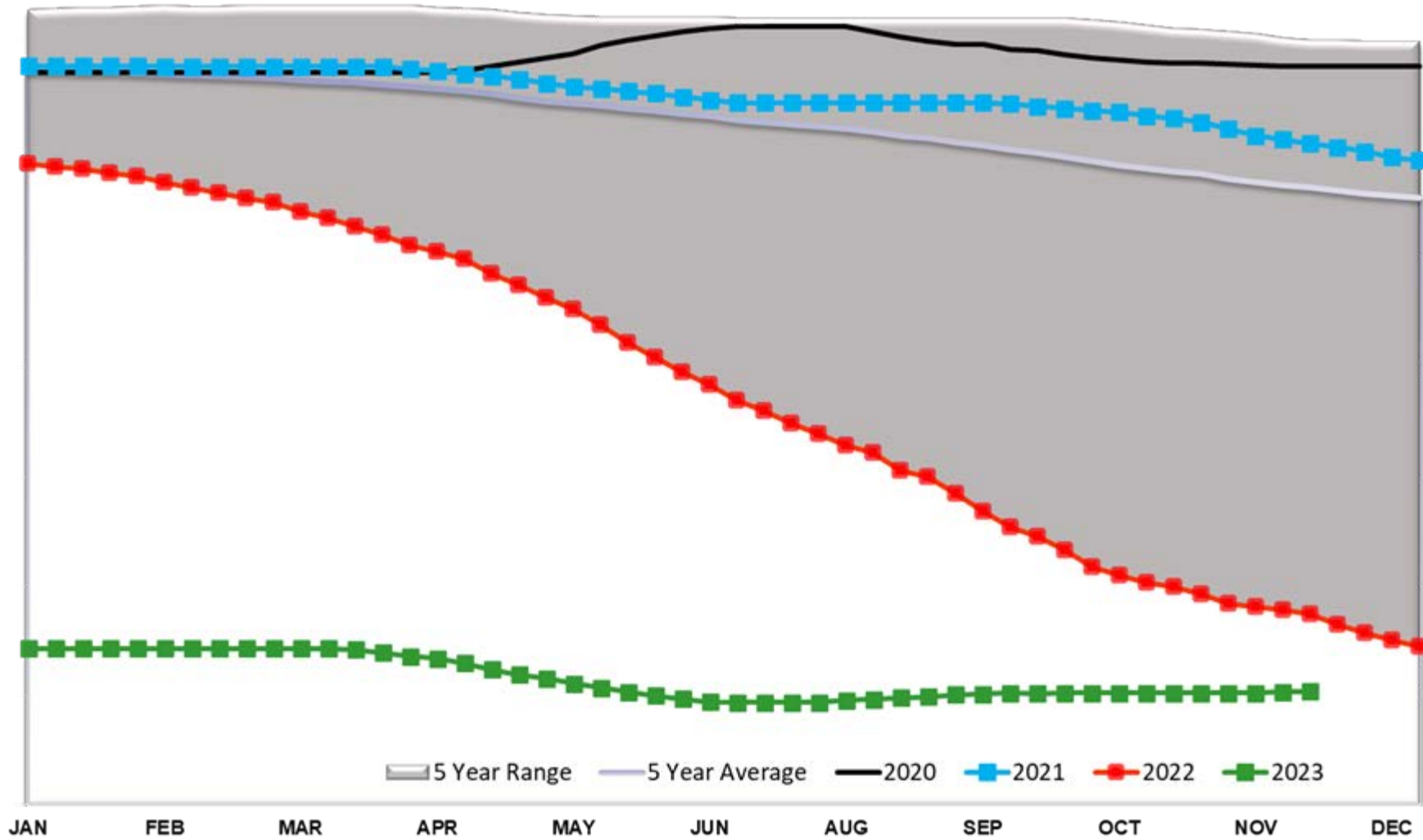
JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC

5 Year Range 5 Year Average 2020 2021 2022 2023

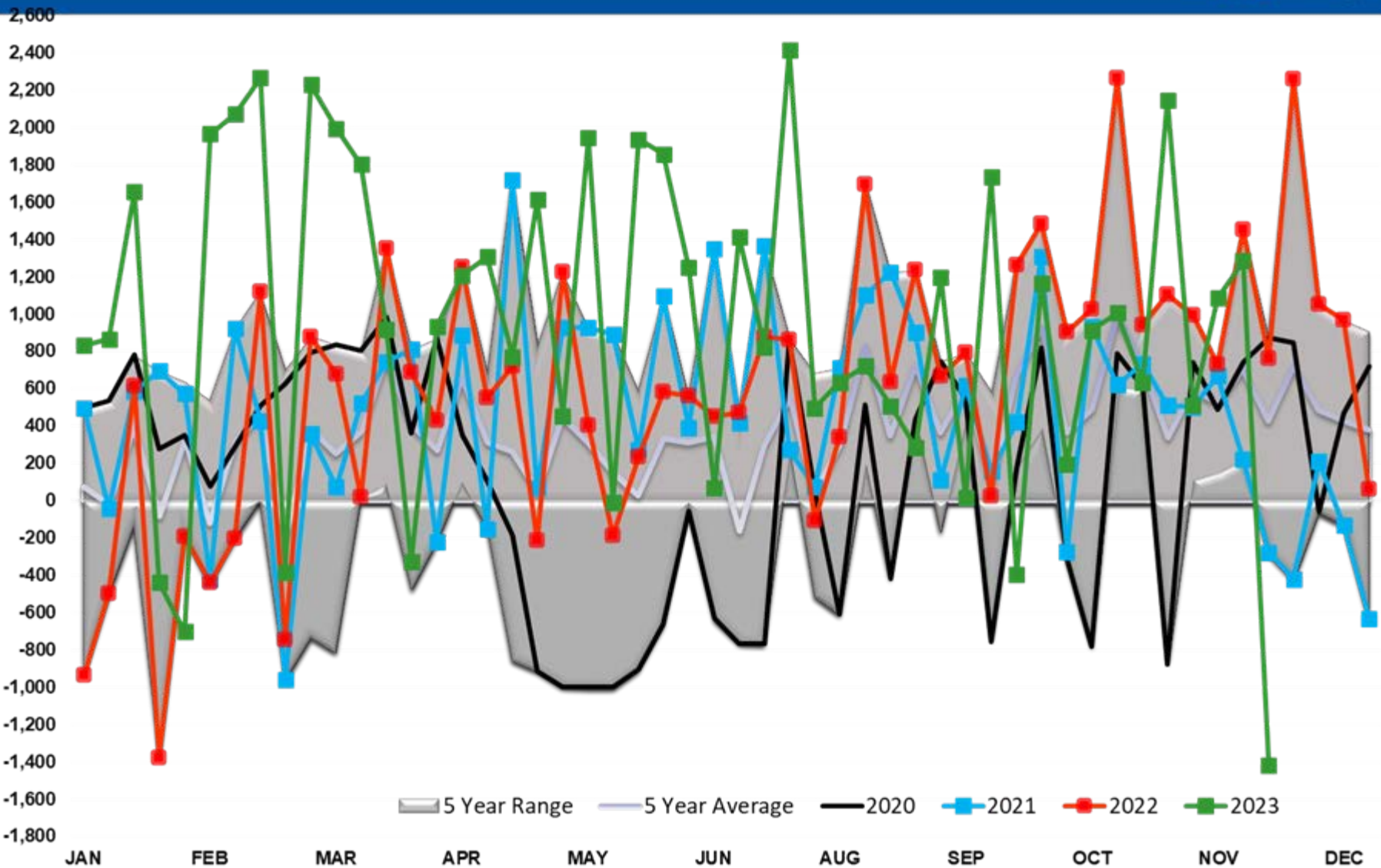


Crude Oil SPR

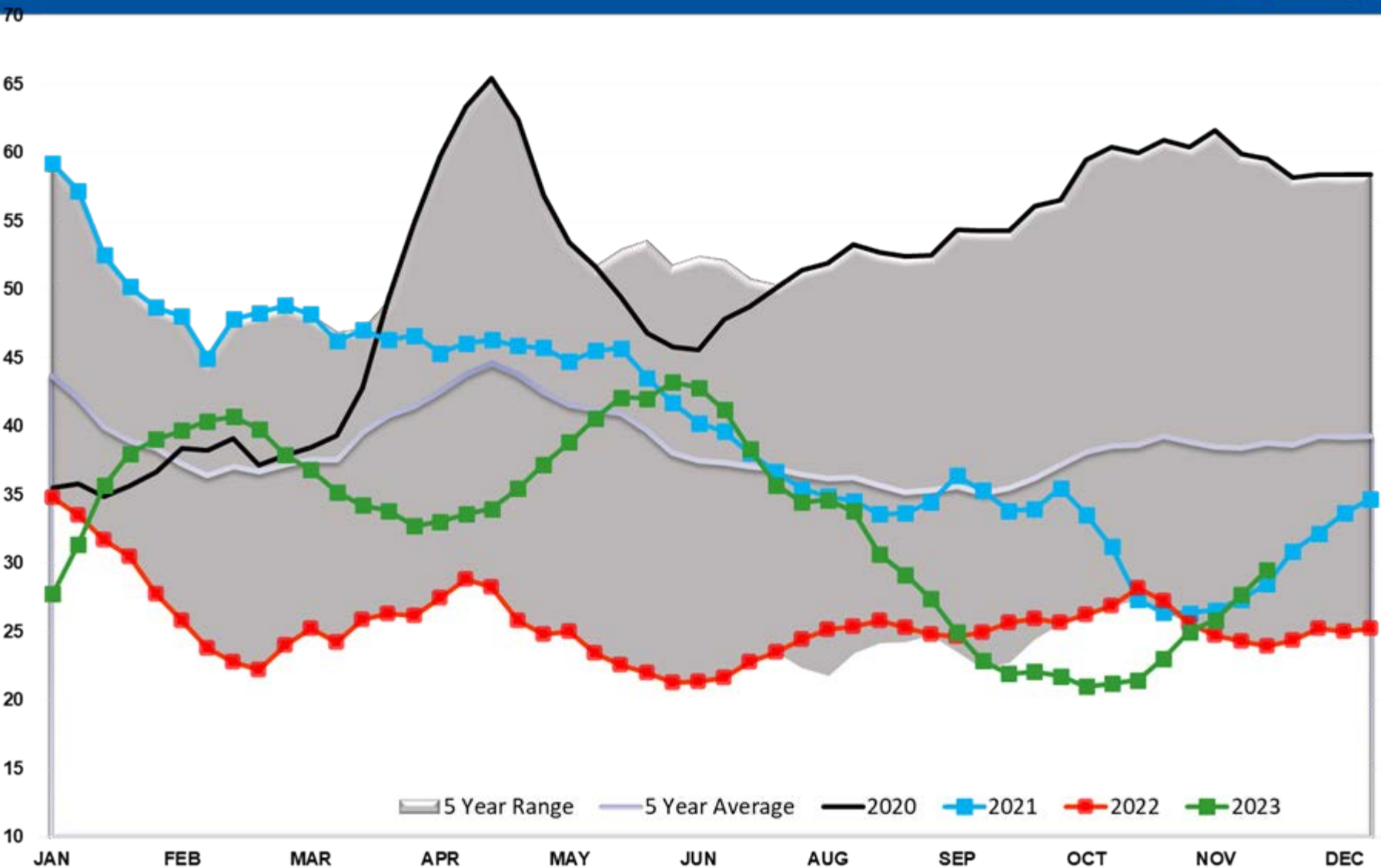
700



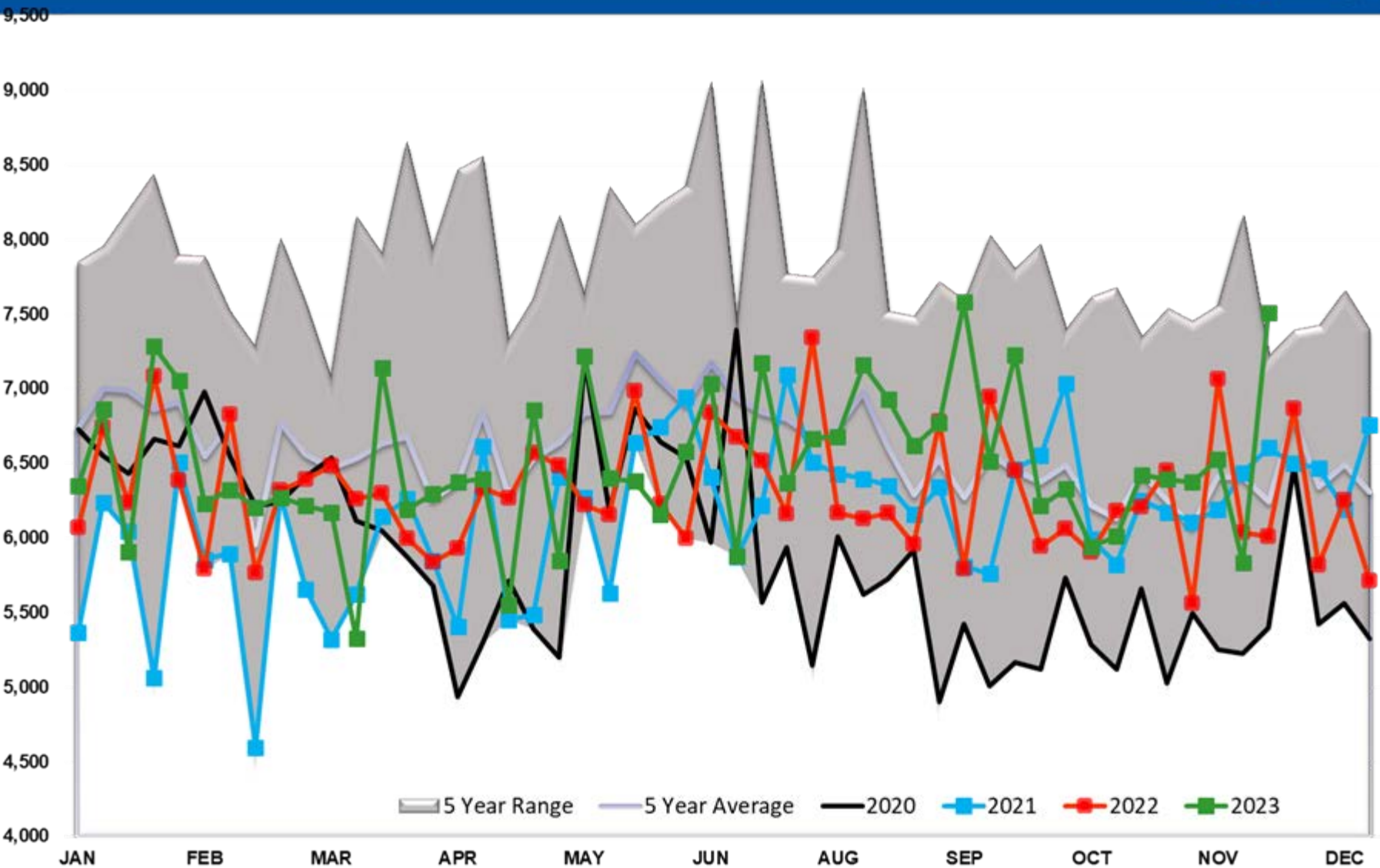
Crude Oil Supply Adjustment



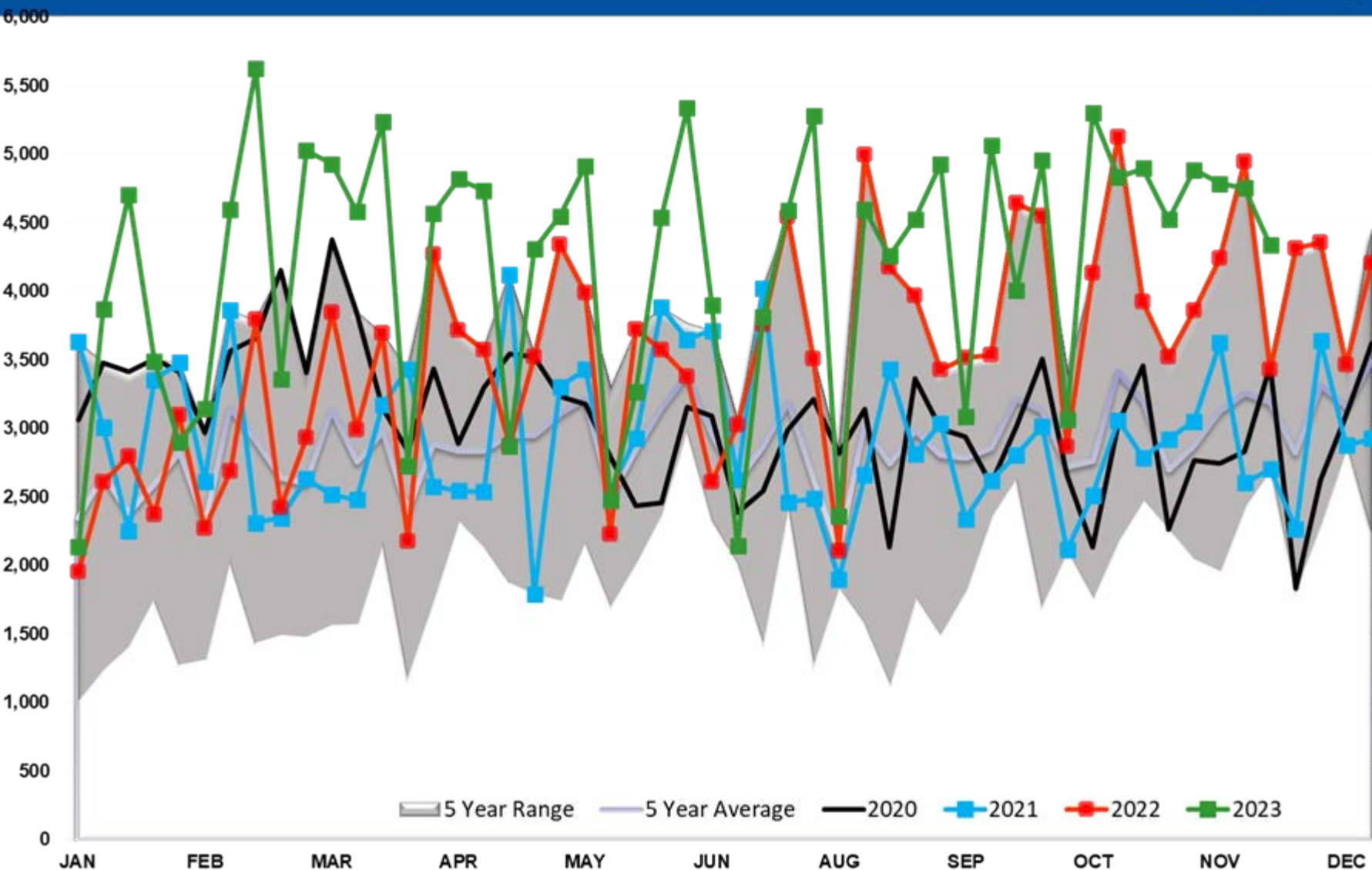
Cushing Crude Stocks



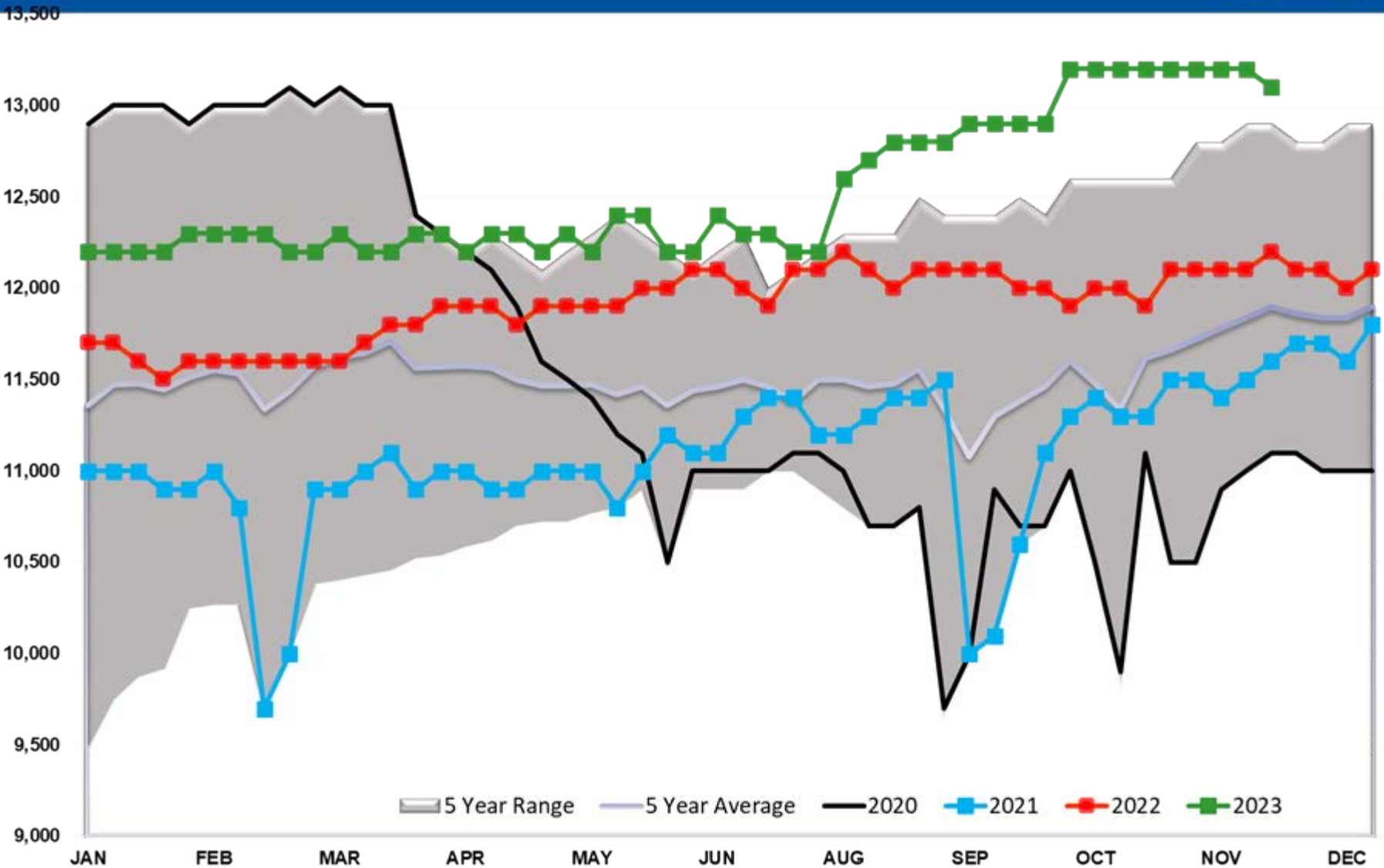
Crude Imports



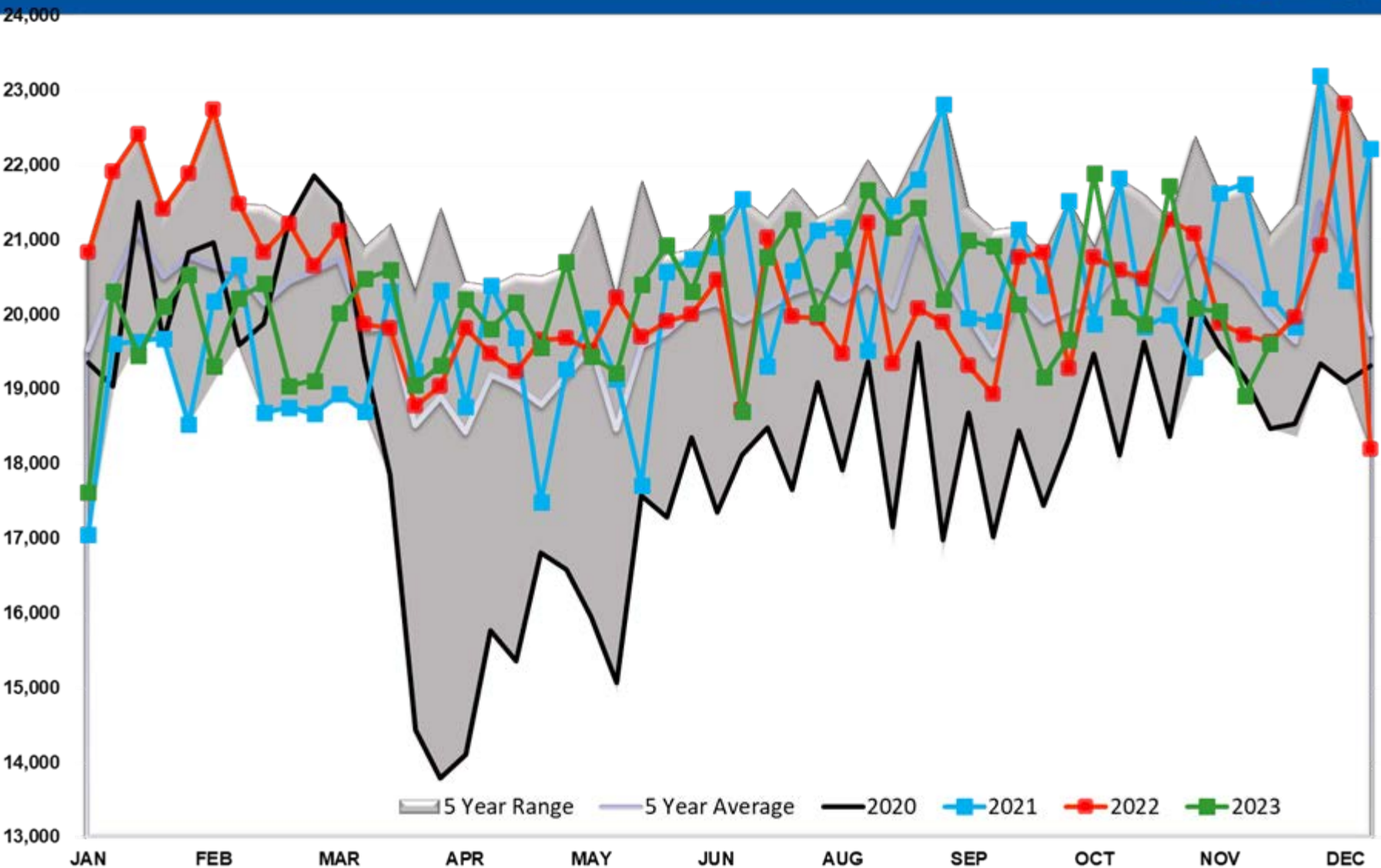
CRUDE OIL EXPORTS (mb/day)



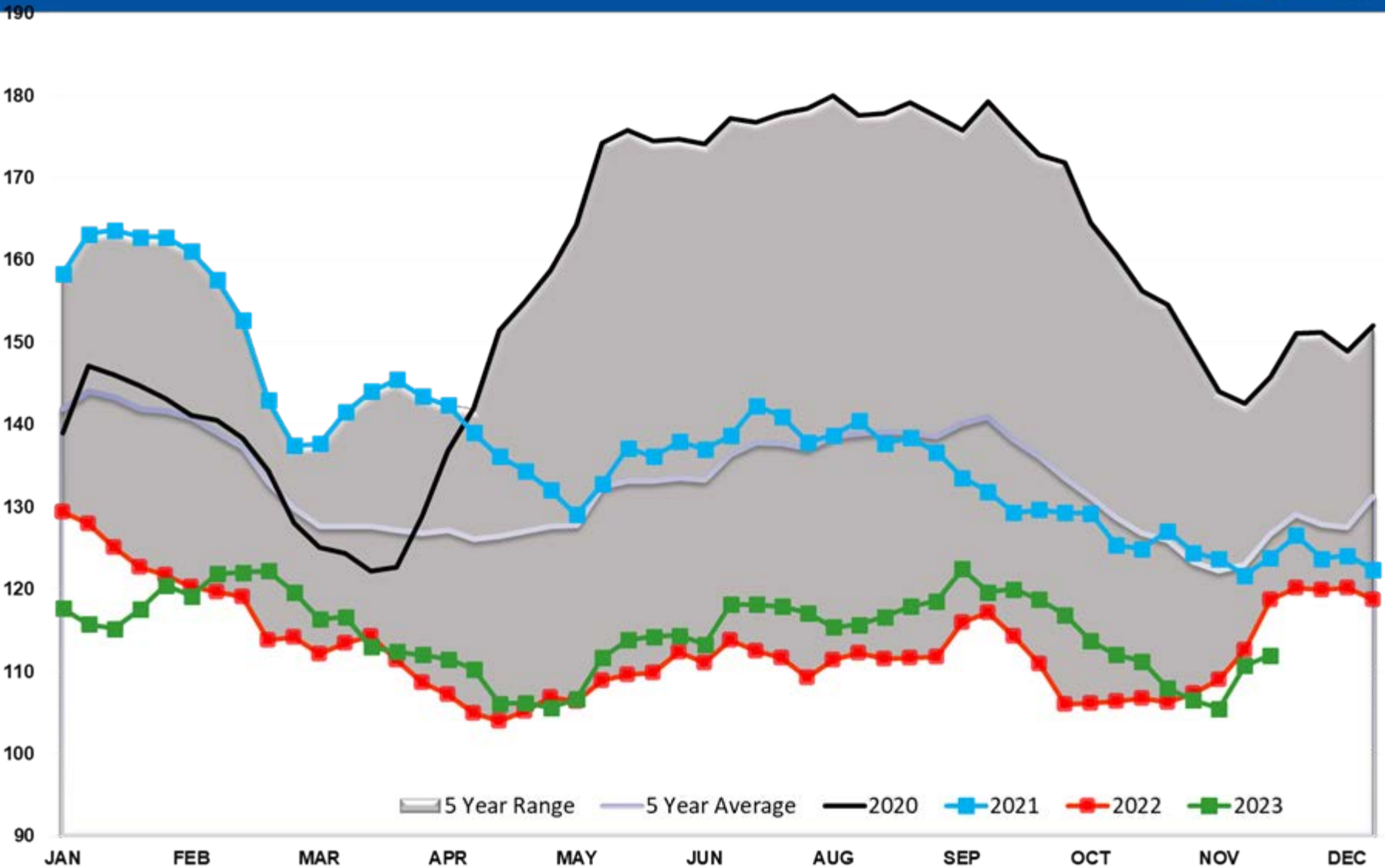
Crude Output



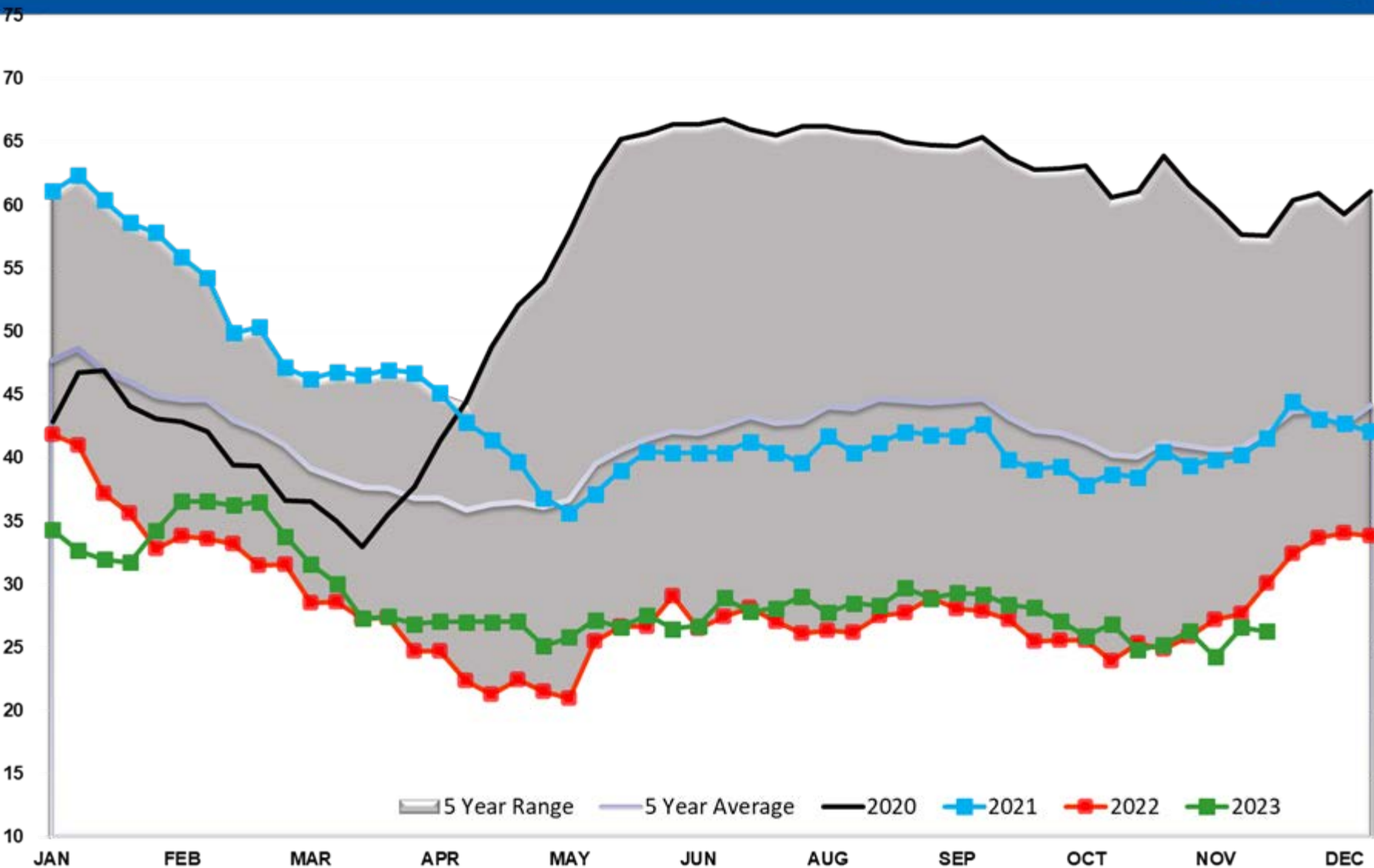
Total US Petroleum Demand



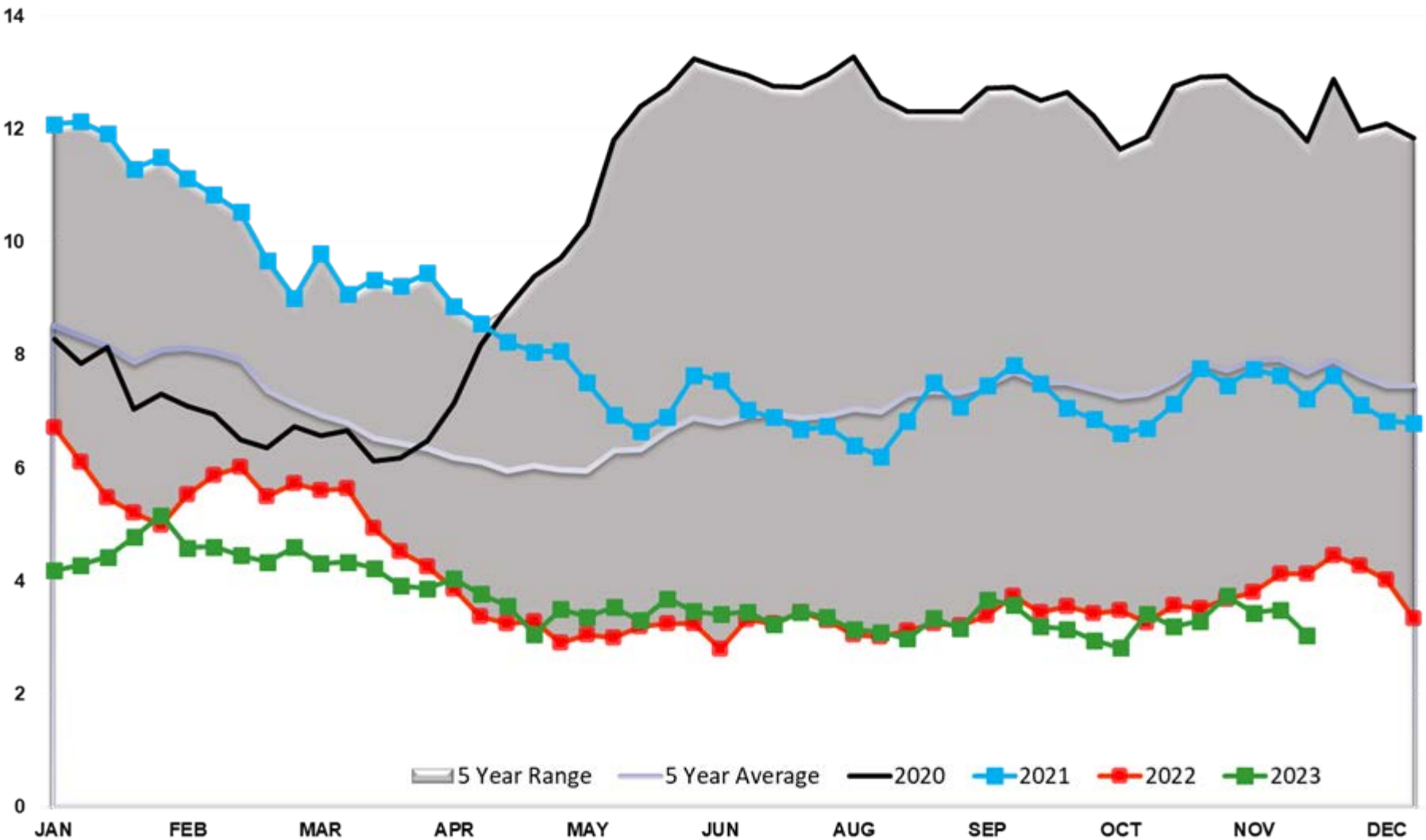
Diesel TOTAL US



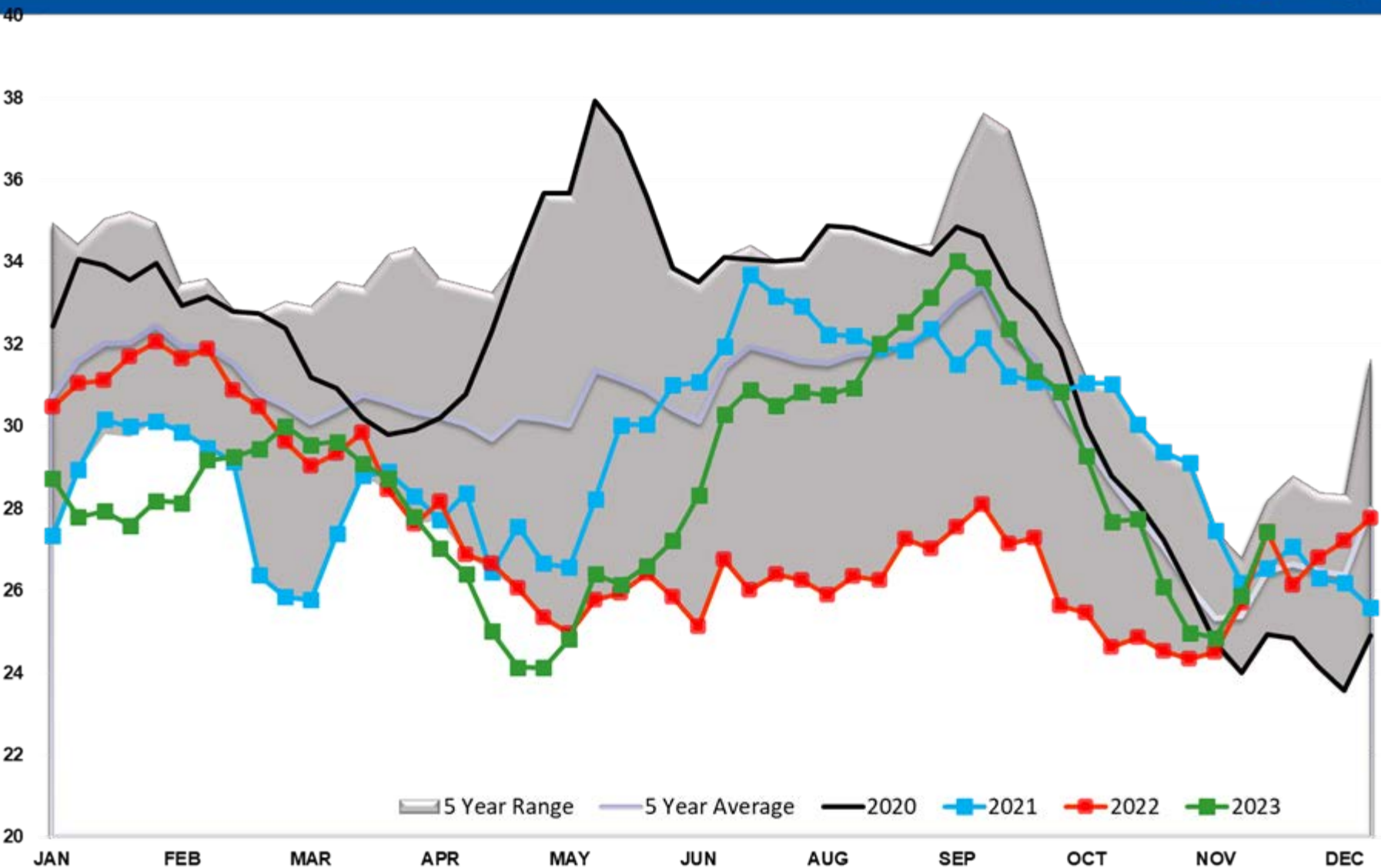
Diesel PADD 1



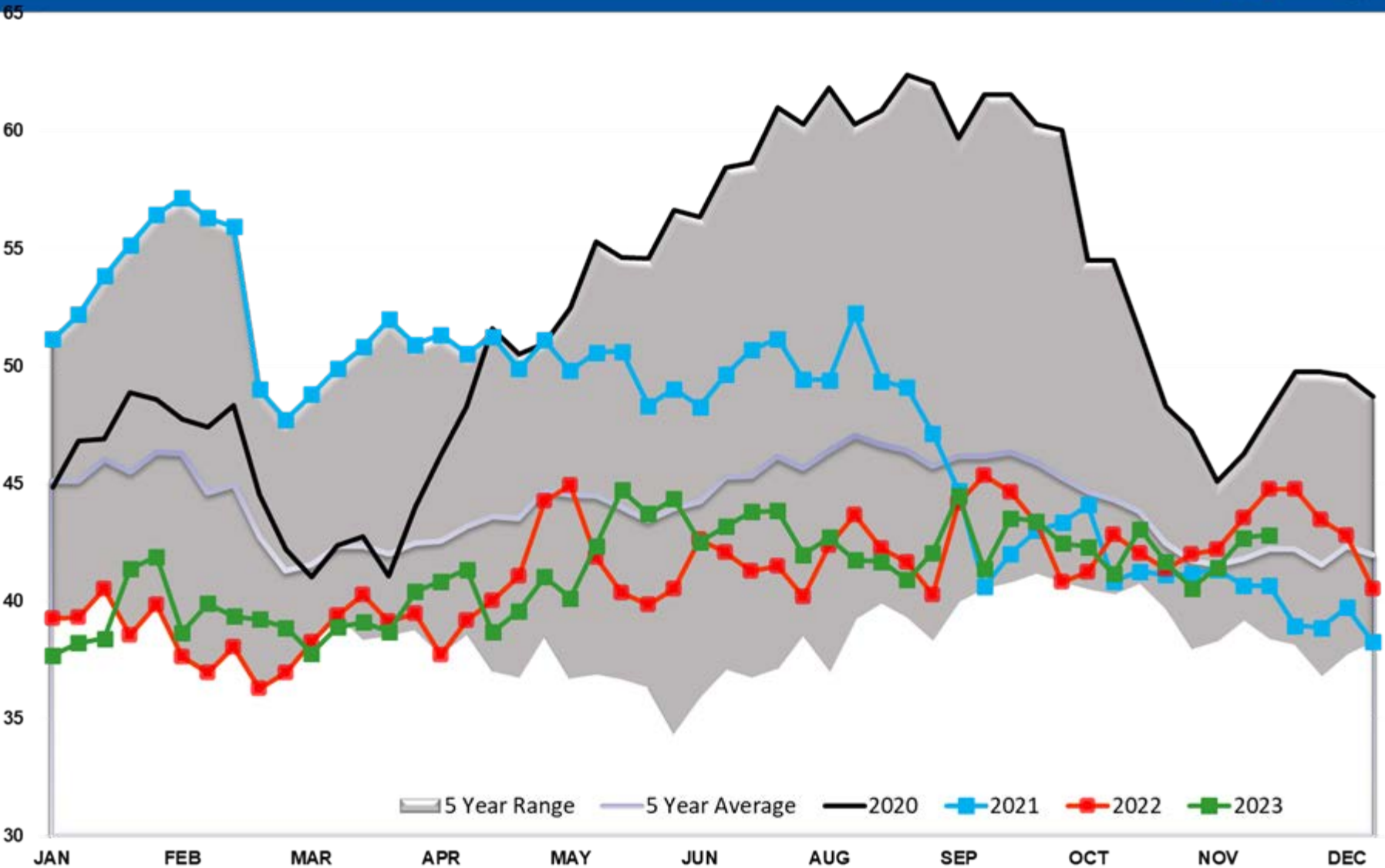
Diesel PADD 1A



Diesel PADD 2

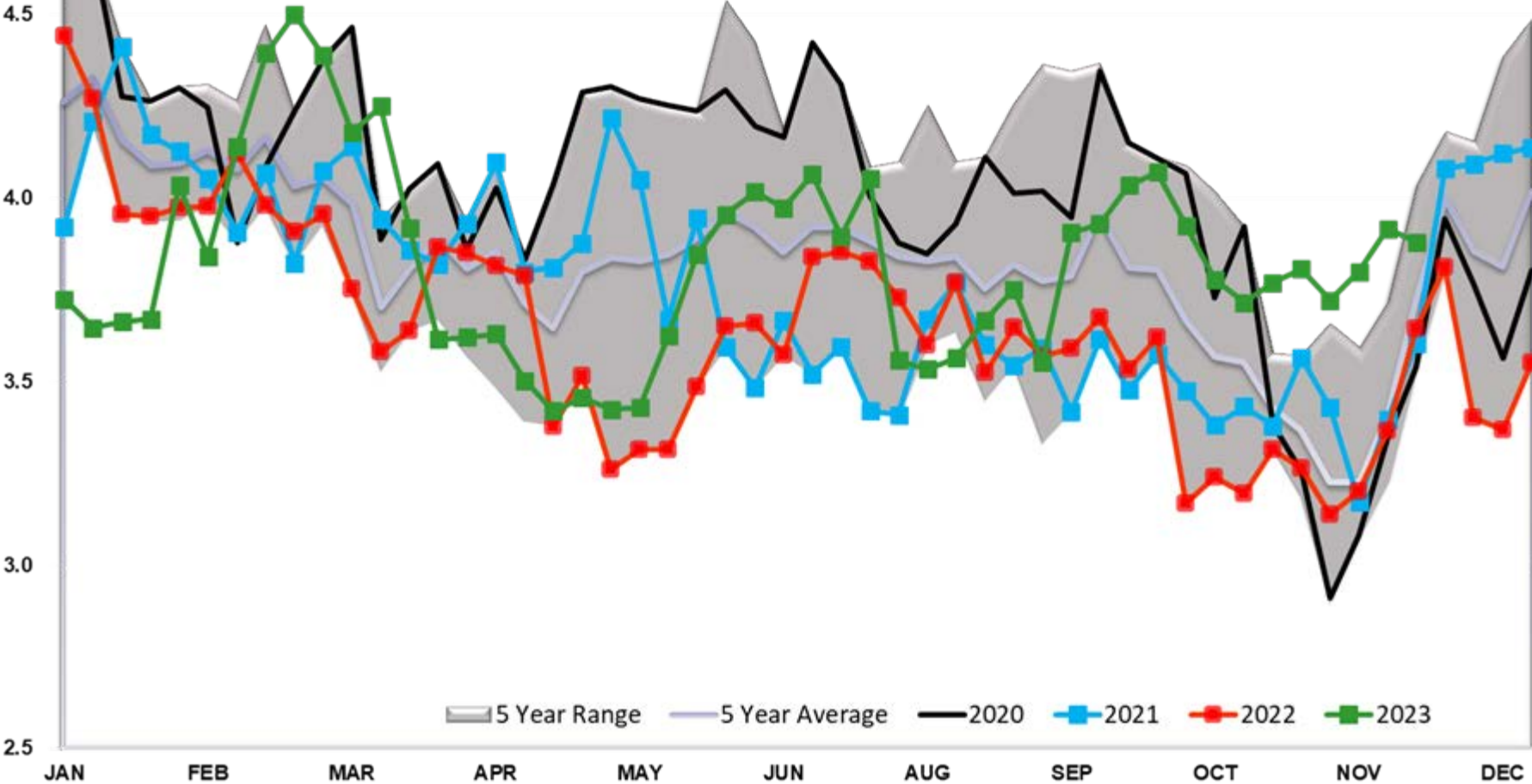


Diesel PADD 3



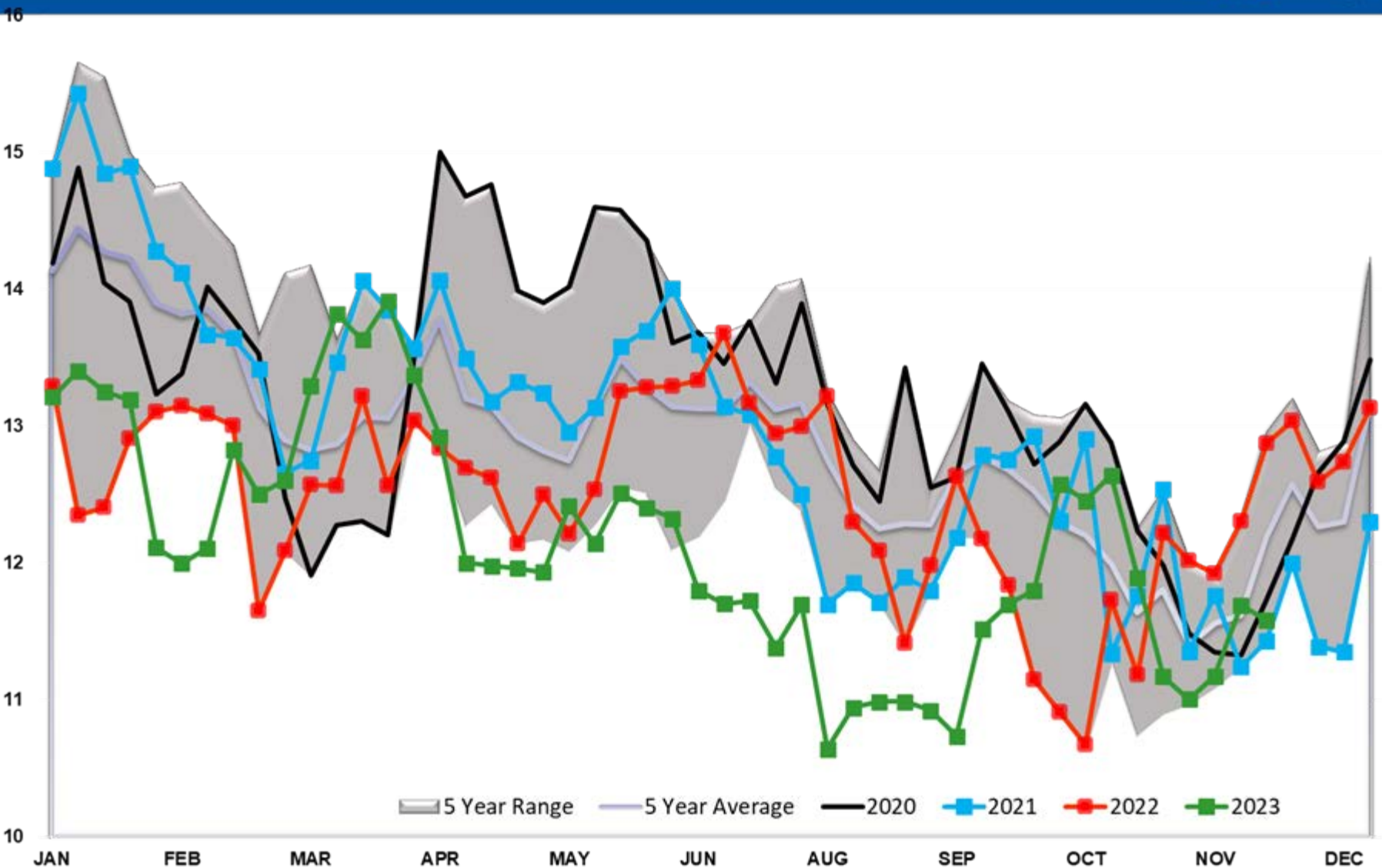
Diesel PADD 4

5.0

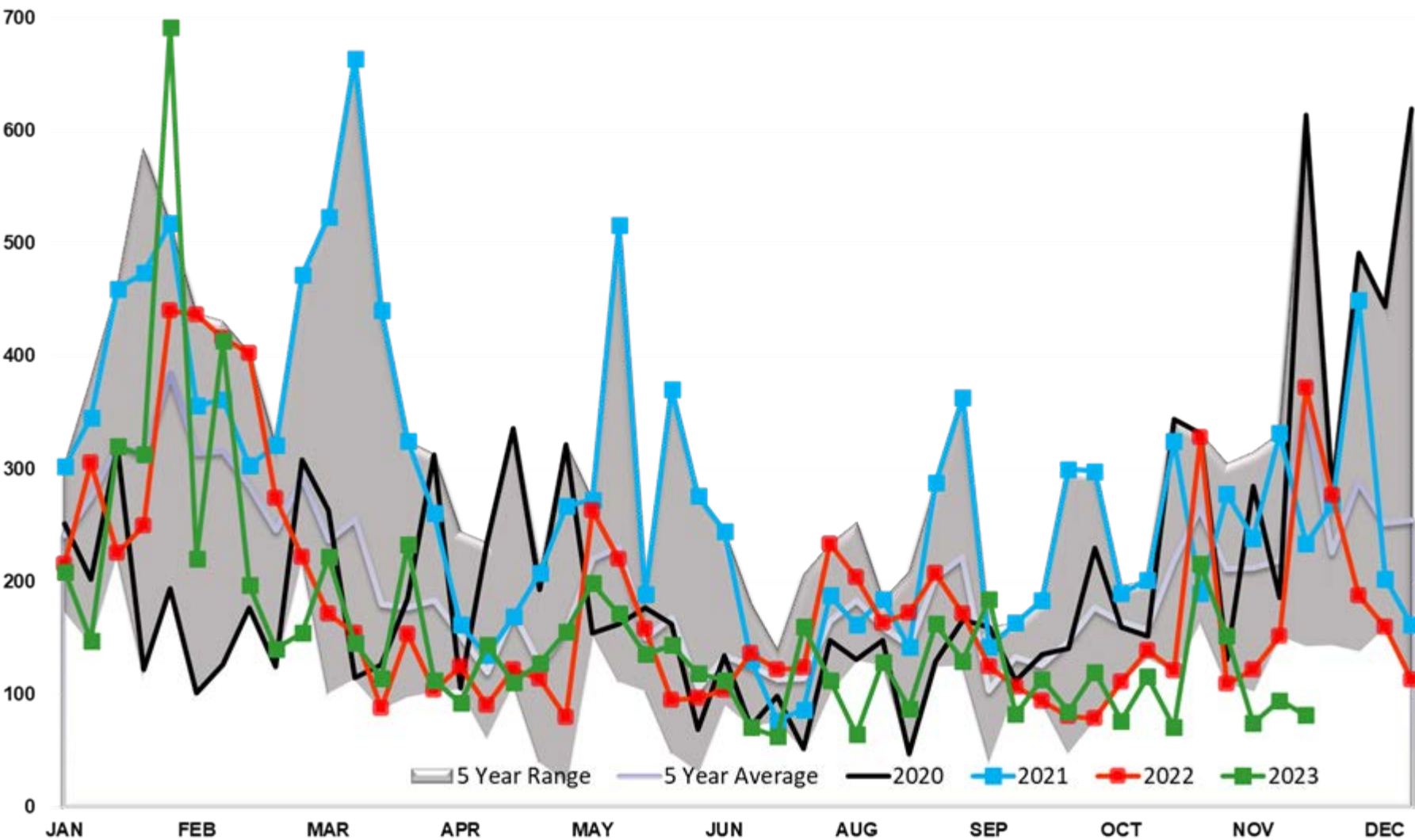


2.5

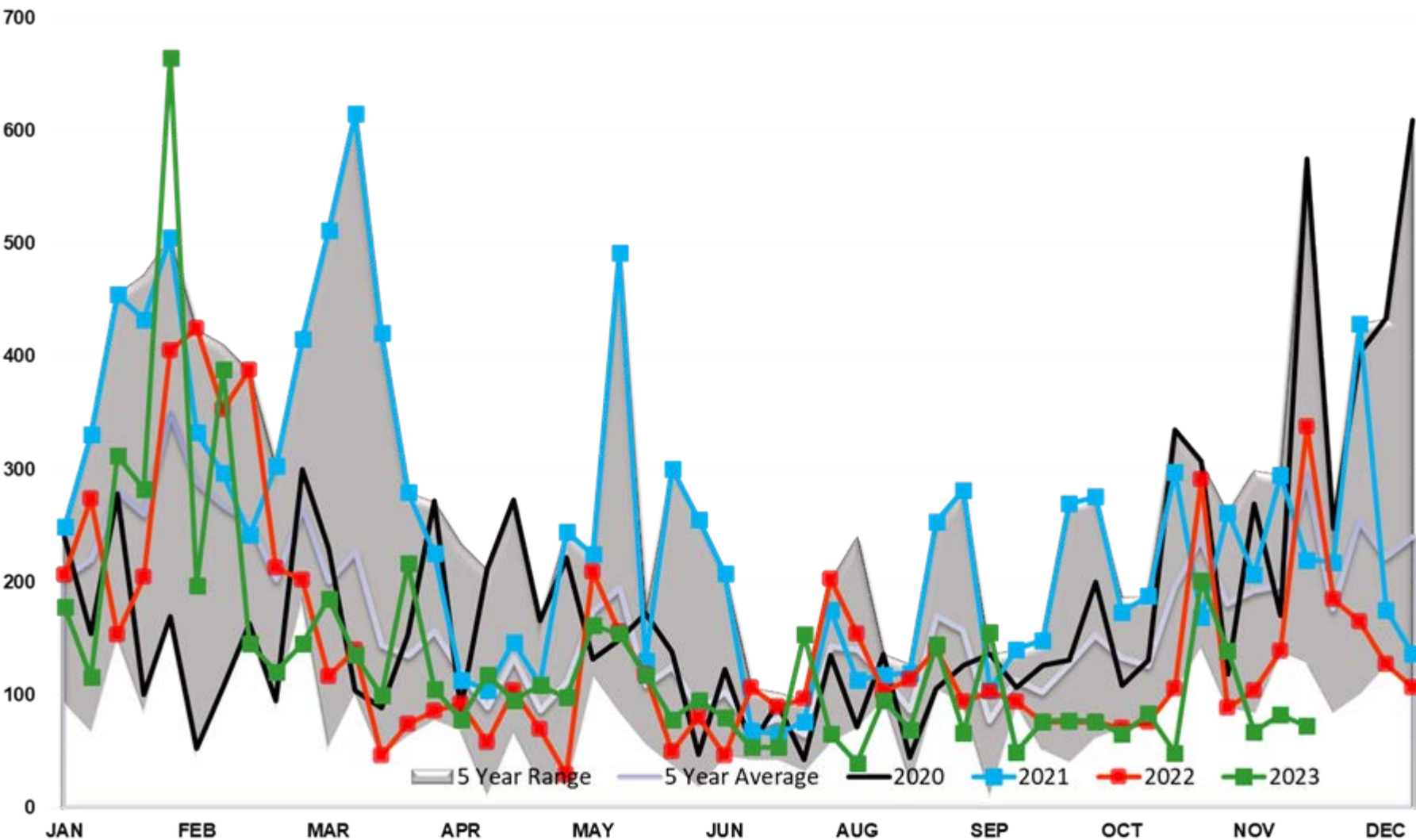
Diesel PADD 5



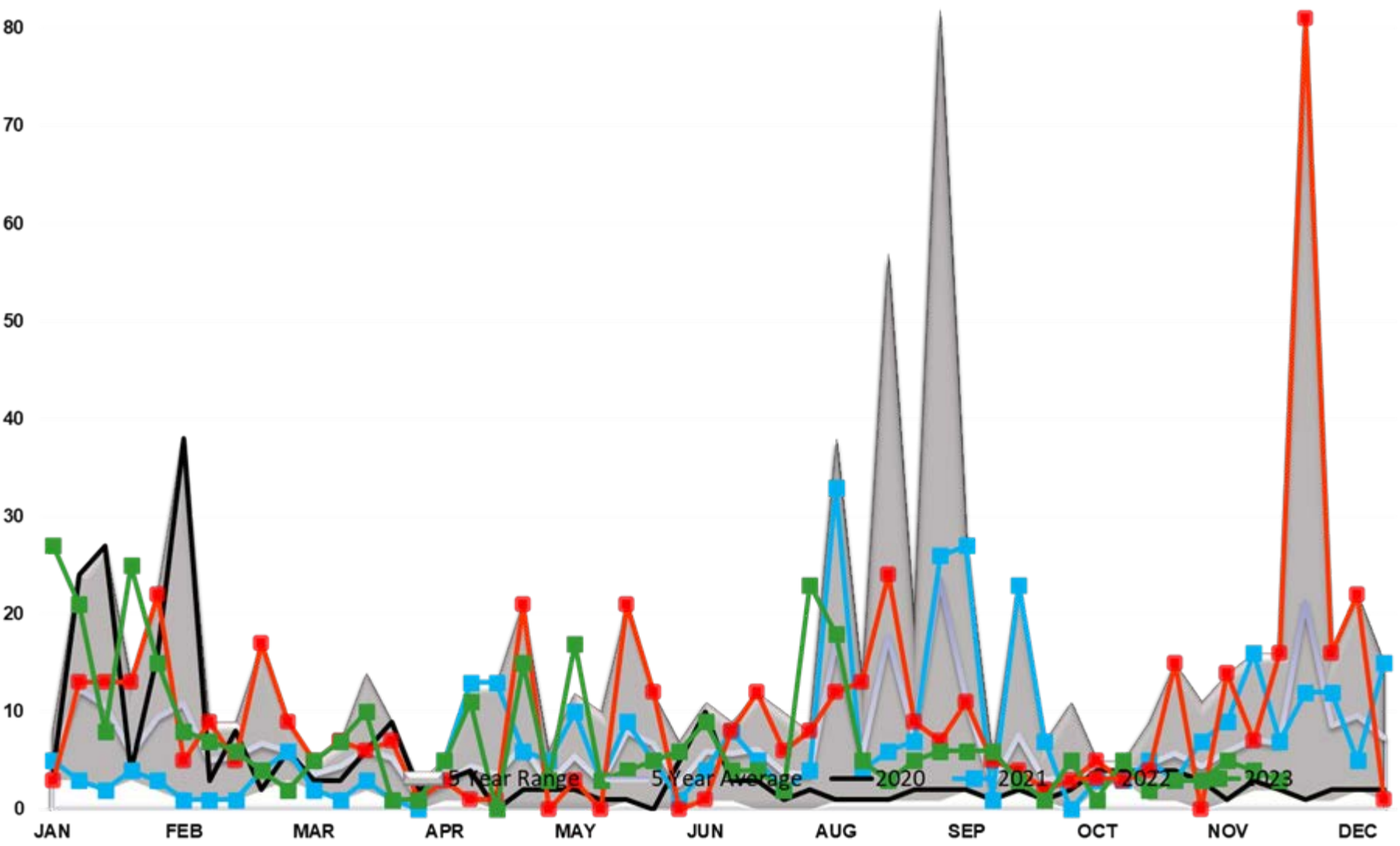
Diesel Imports



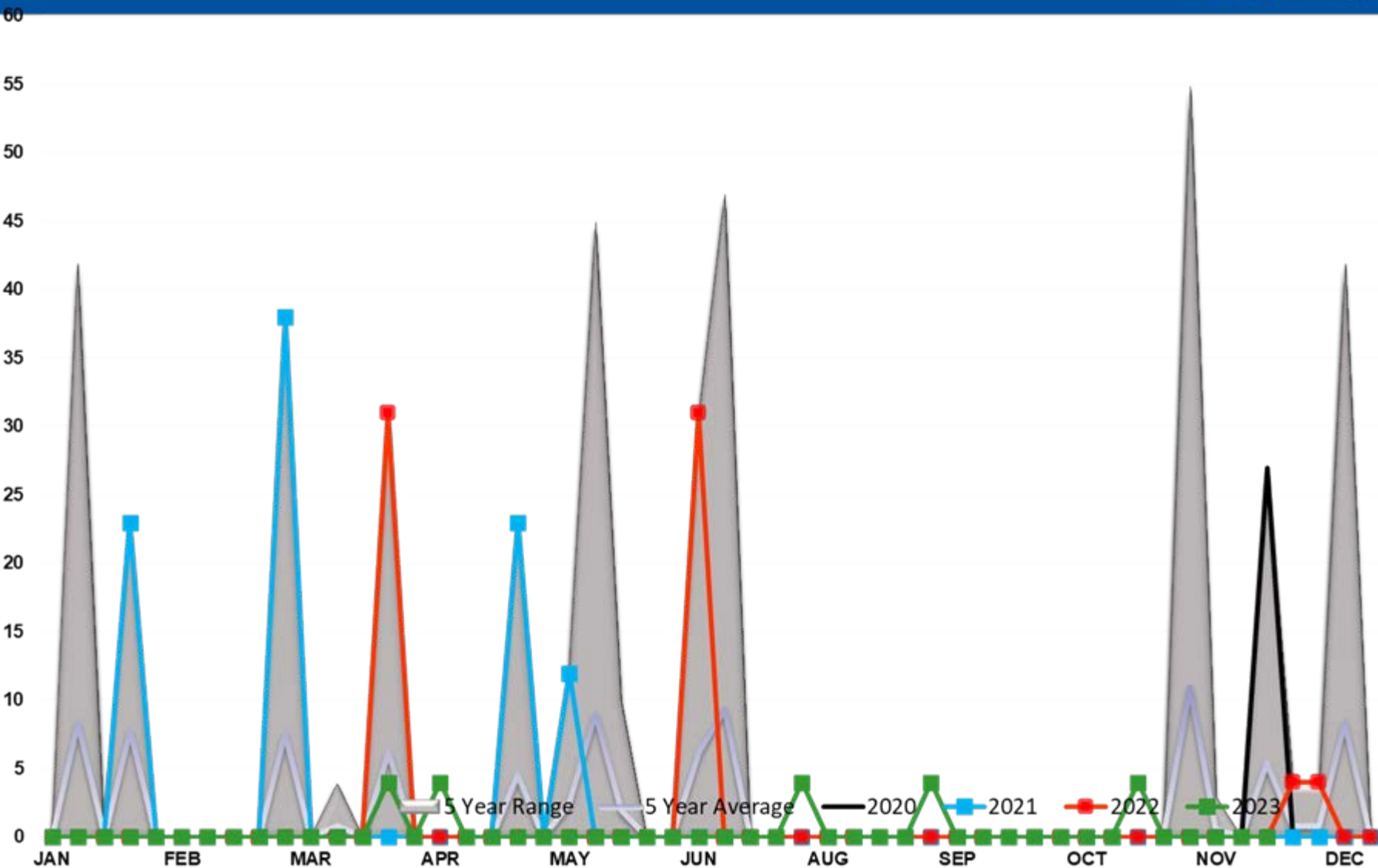
Diesel Imports PADD 1



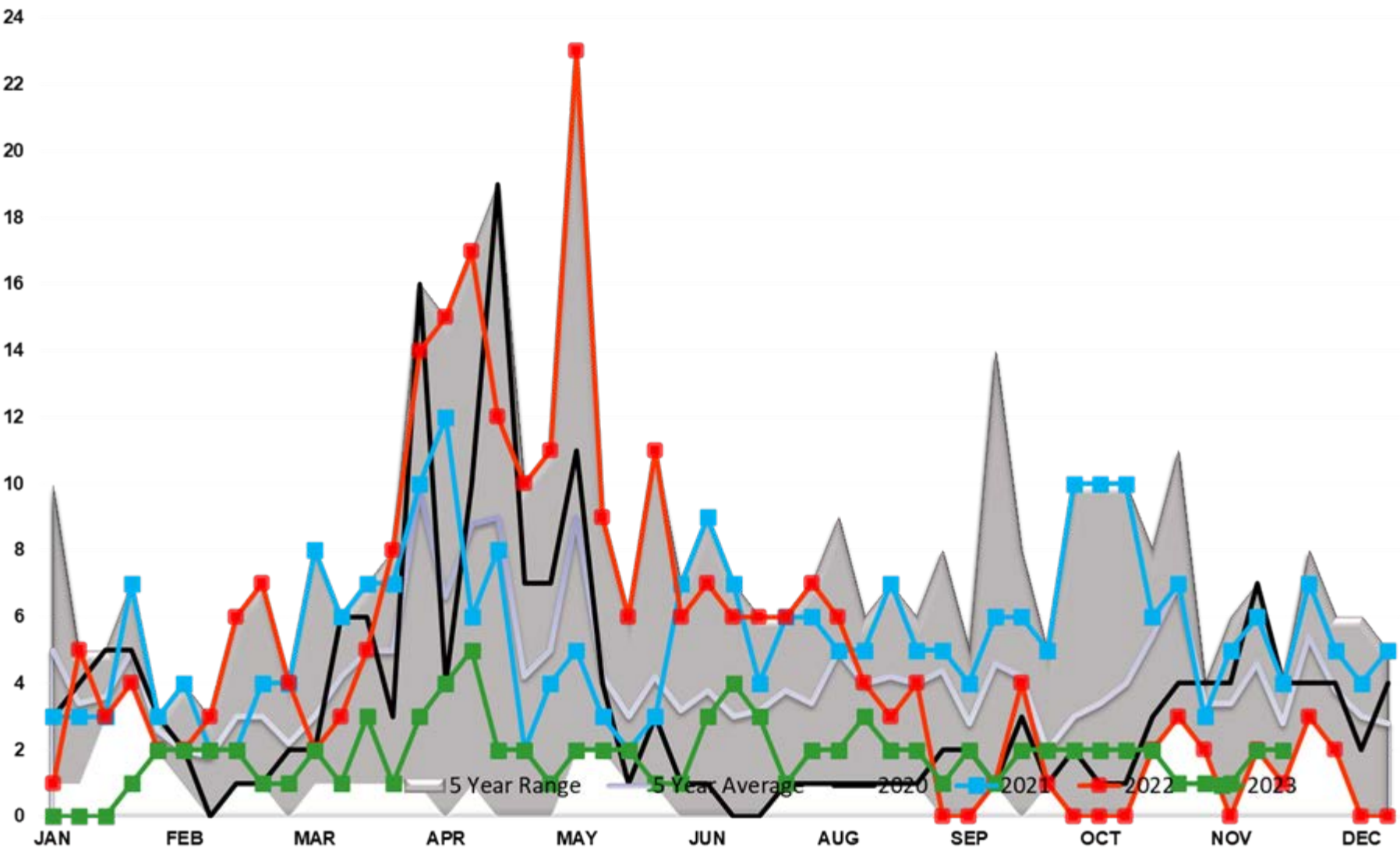
Diesel Imports PADD 2



Diesel Imports PADD 3



Diesel Imports PADD 4



Diesel Imports PADD 5

100

90

80

70

60

50

40

30

20

10

0

JAN

FEB

MAR

APR

MAY

JUN

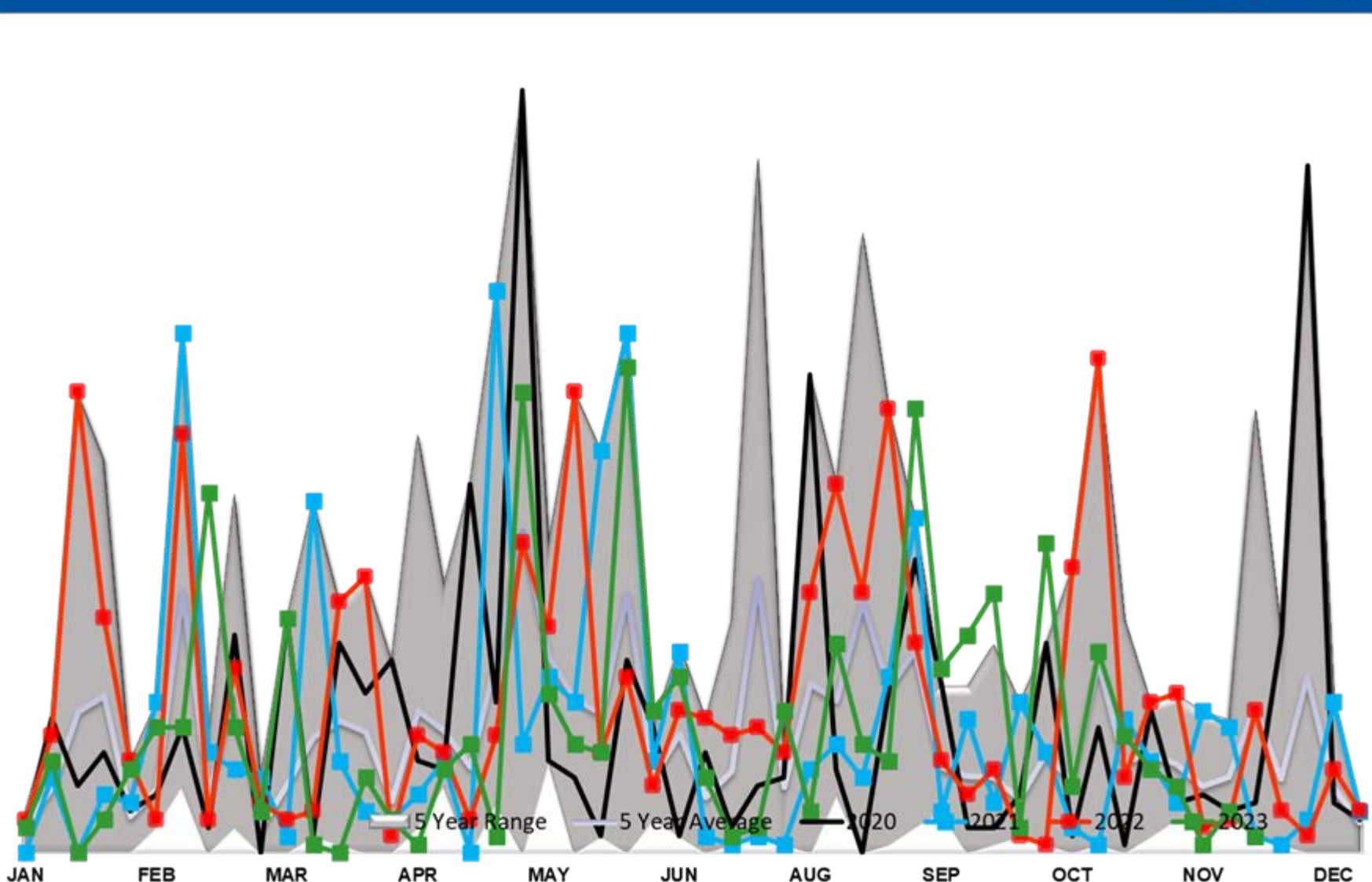
AUG

SEP

OCT

NOV

DEC



DIESEL EXPORTS (mb/day)

2,000

1,750

1,500

1,250

1,000

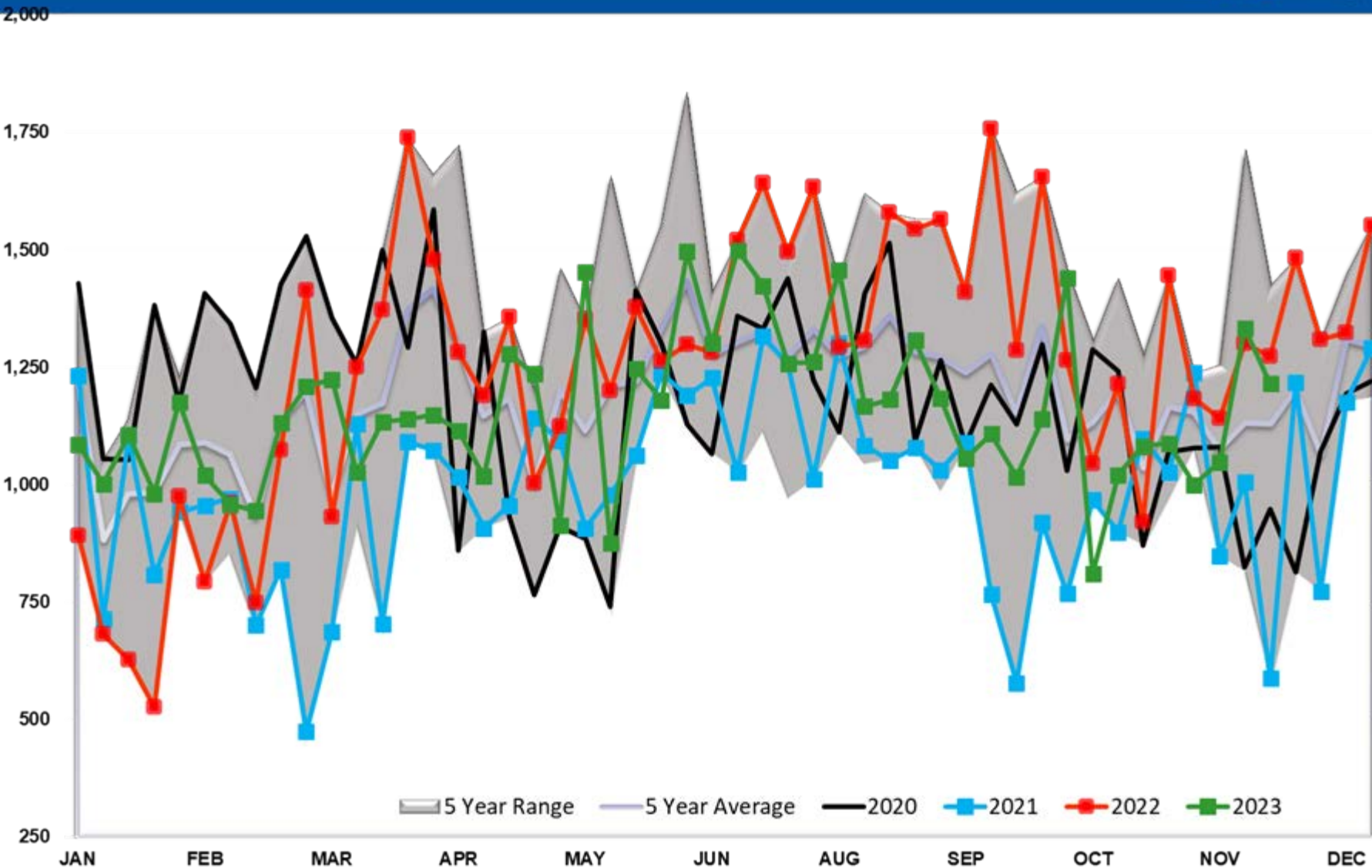
750

500

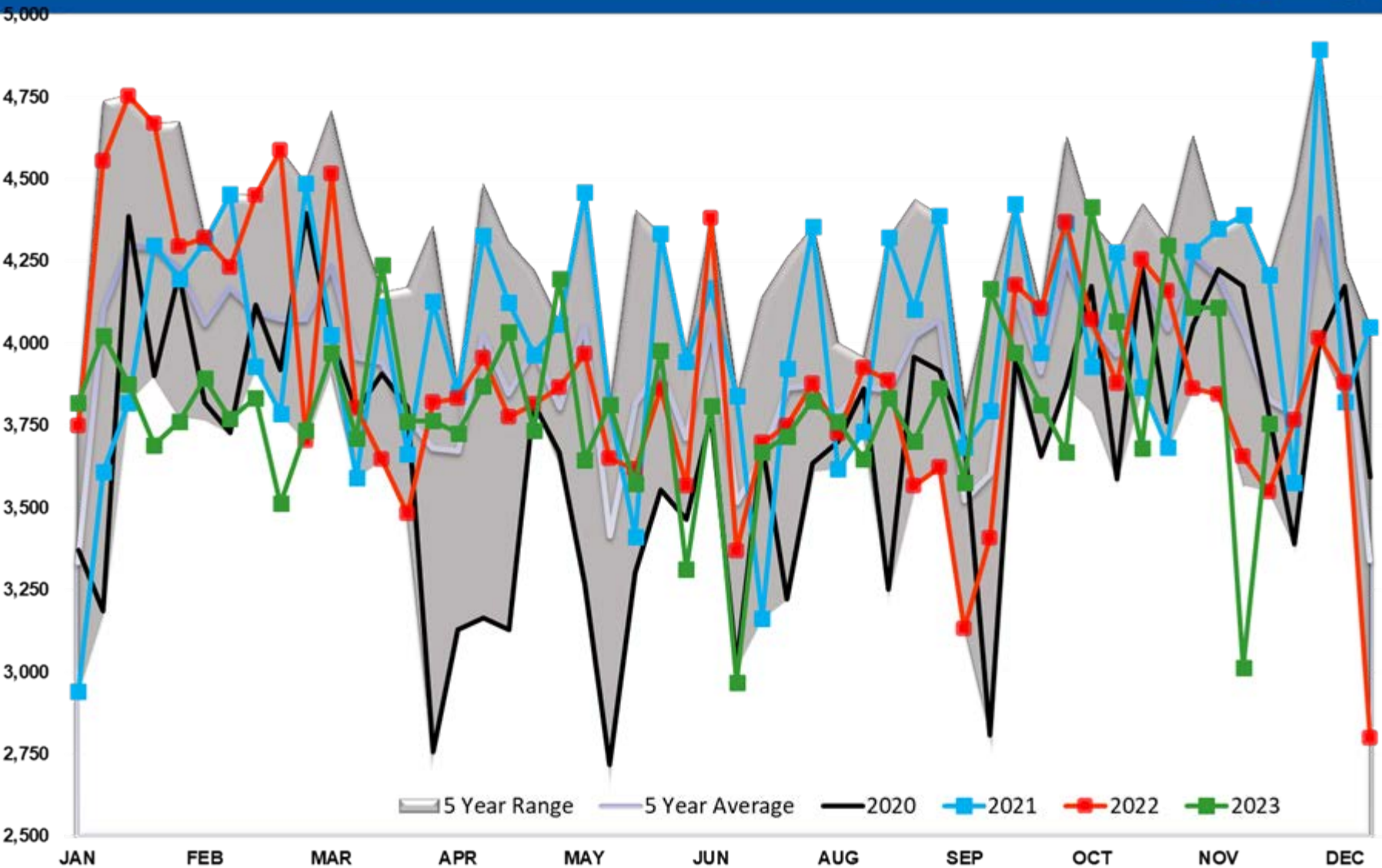
250

JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC

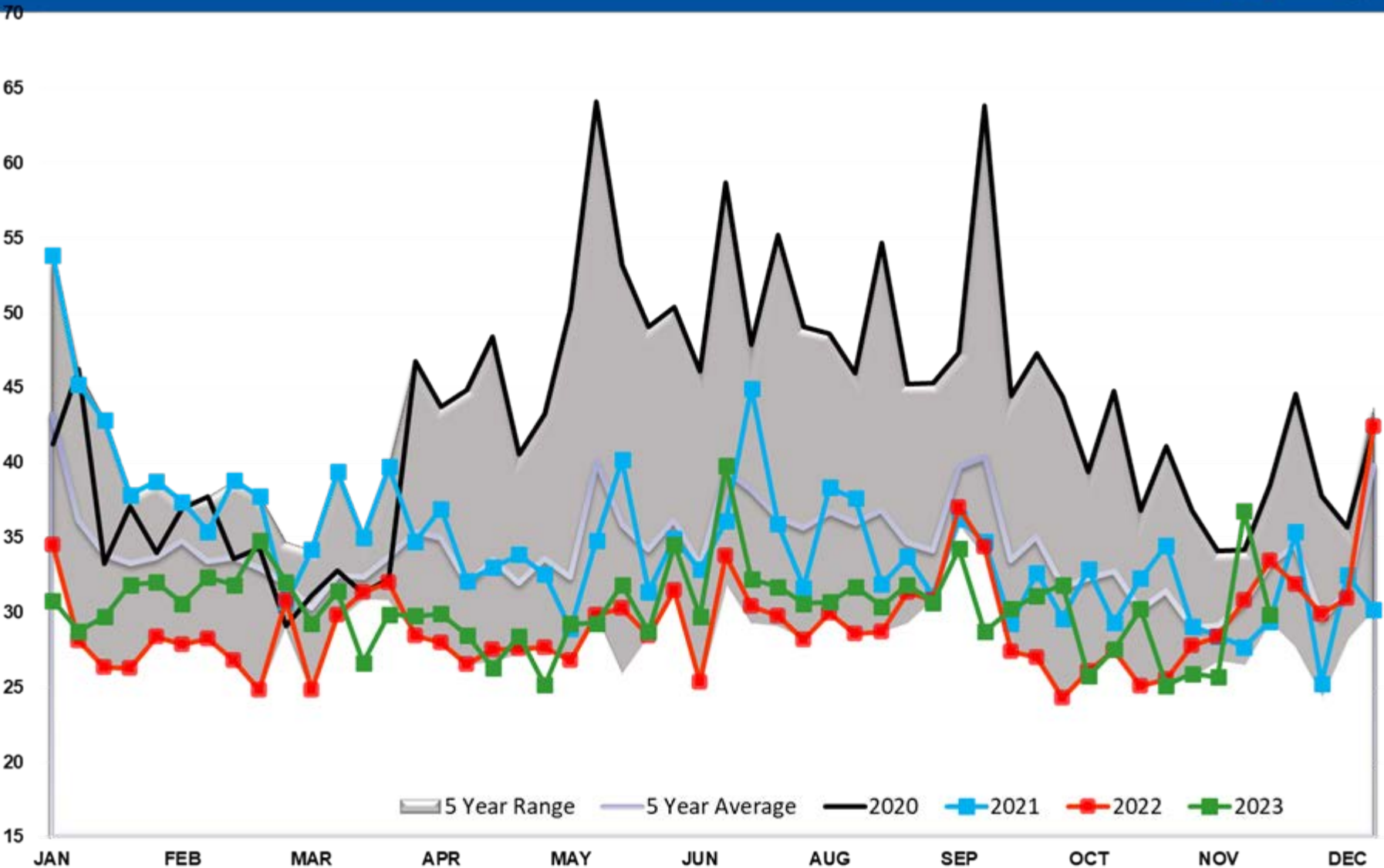
5 Year Range 5 Year Average 2020 2021 2022 2023



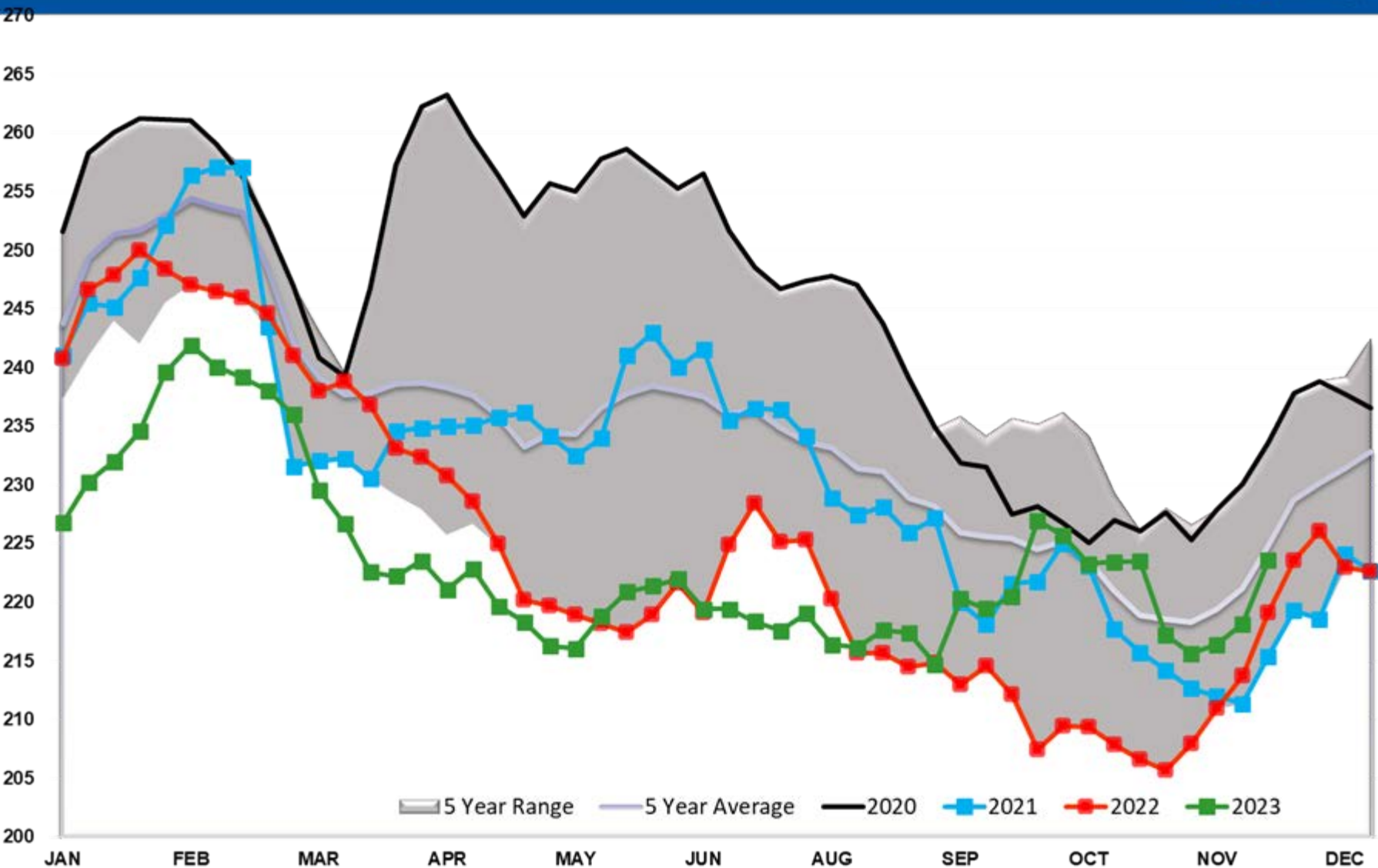
Diesel Implied Demand



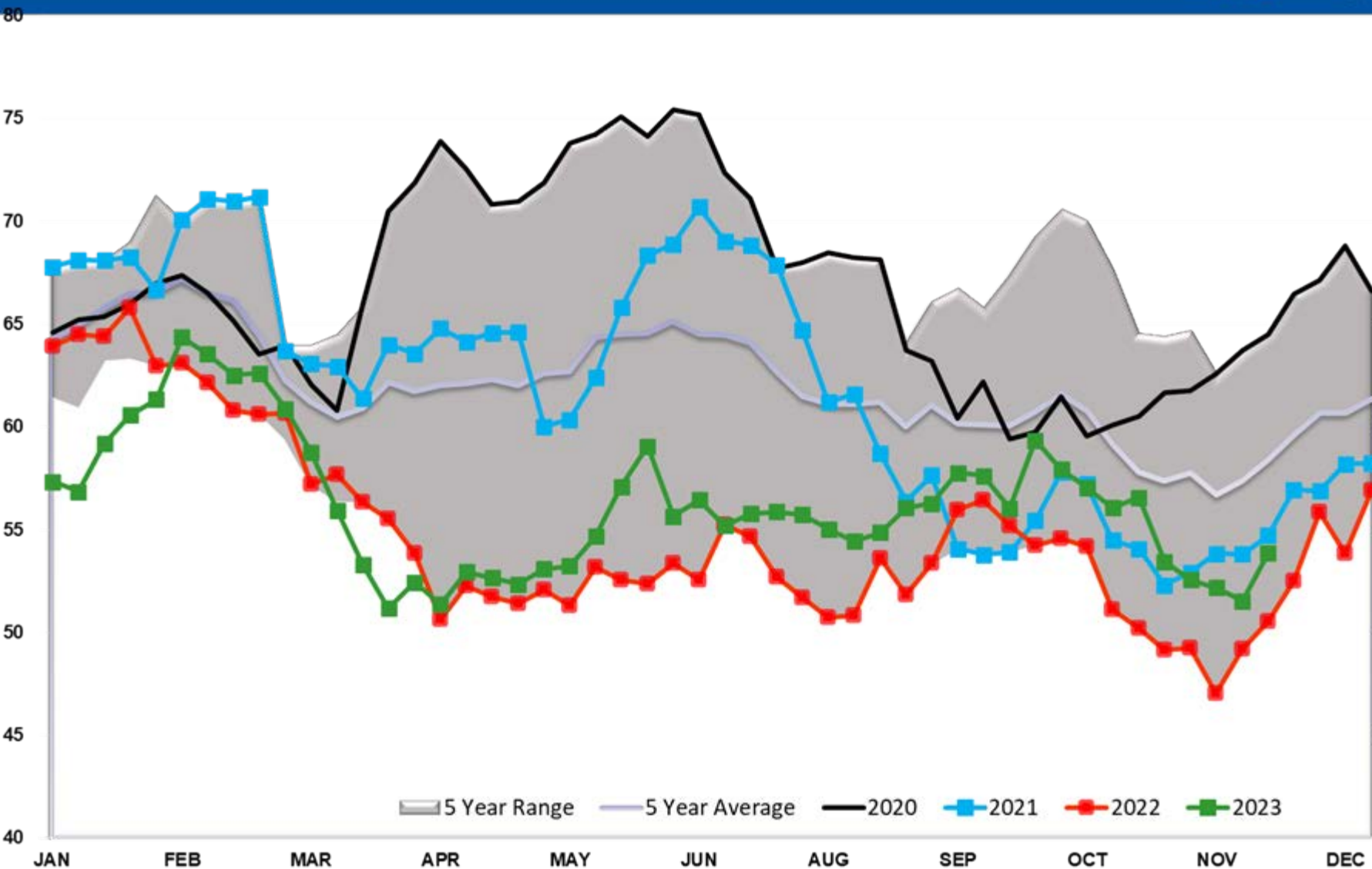
Diesel Days fwd Cover



Gasoline TOTAL US

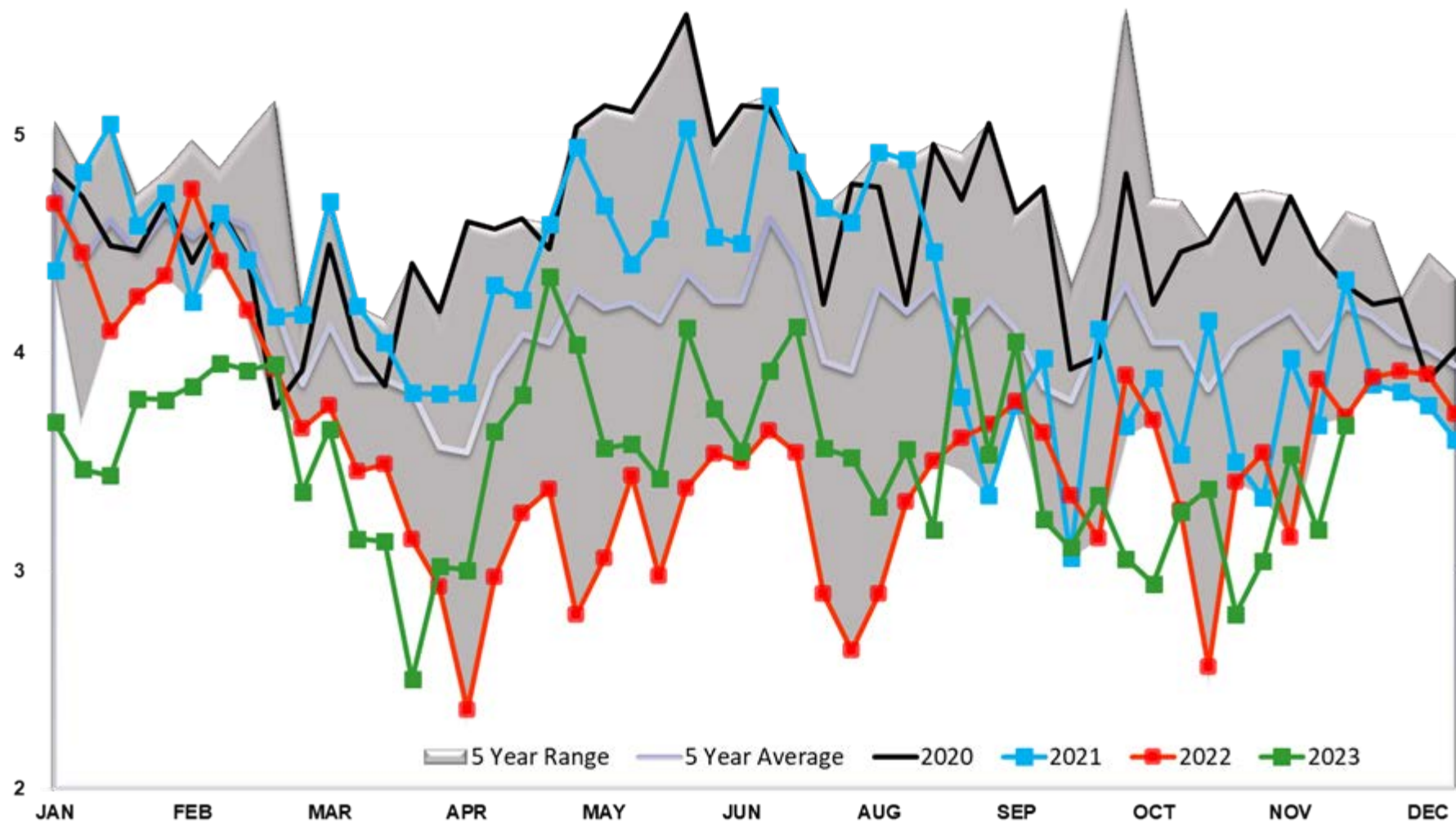


Gasoline PADD 1



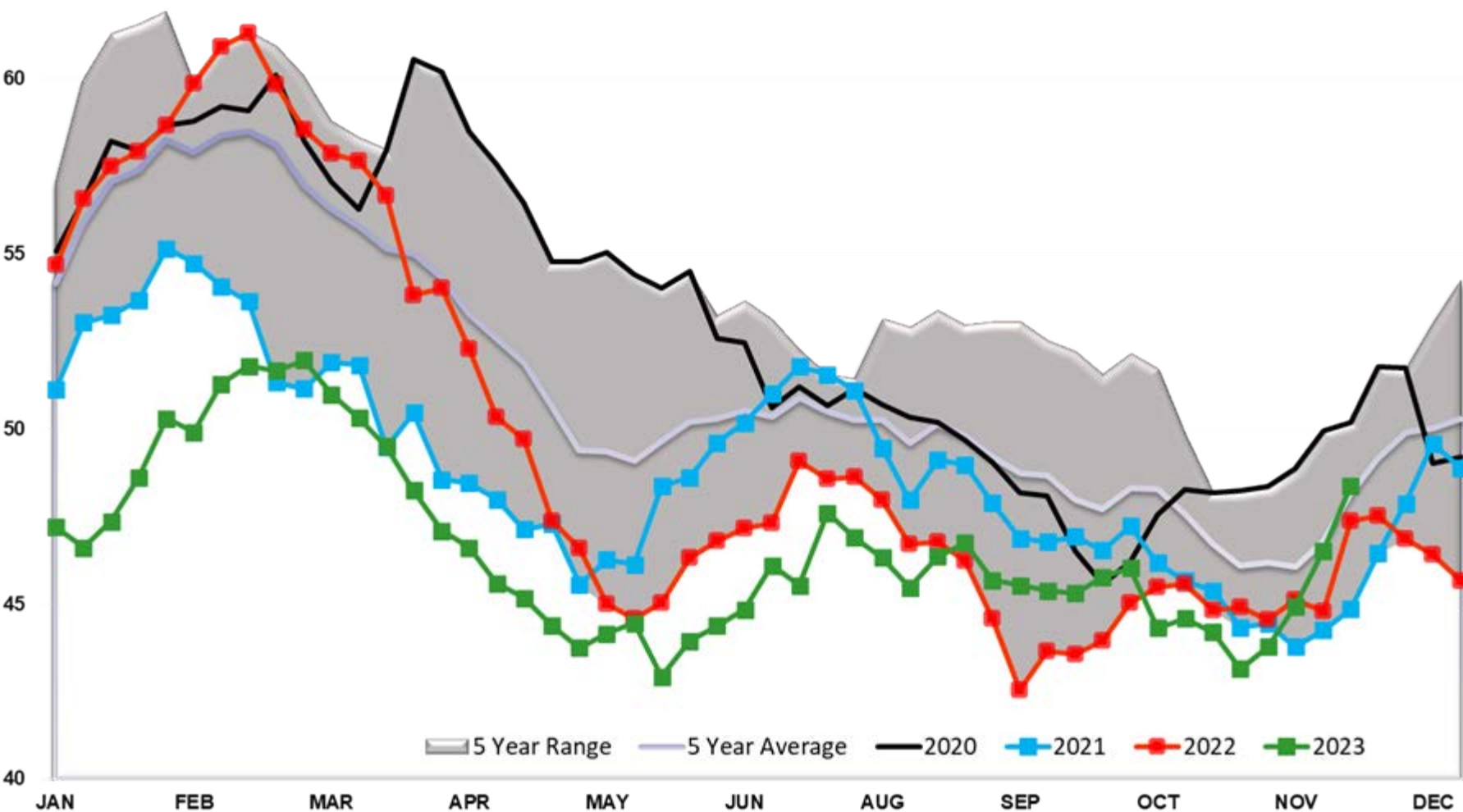
Gasoline PADD 1A

6



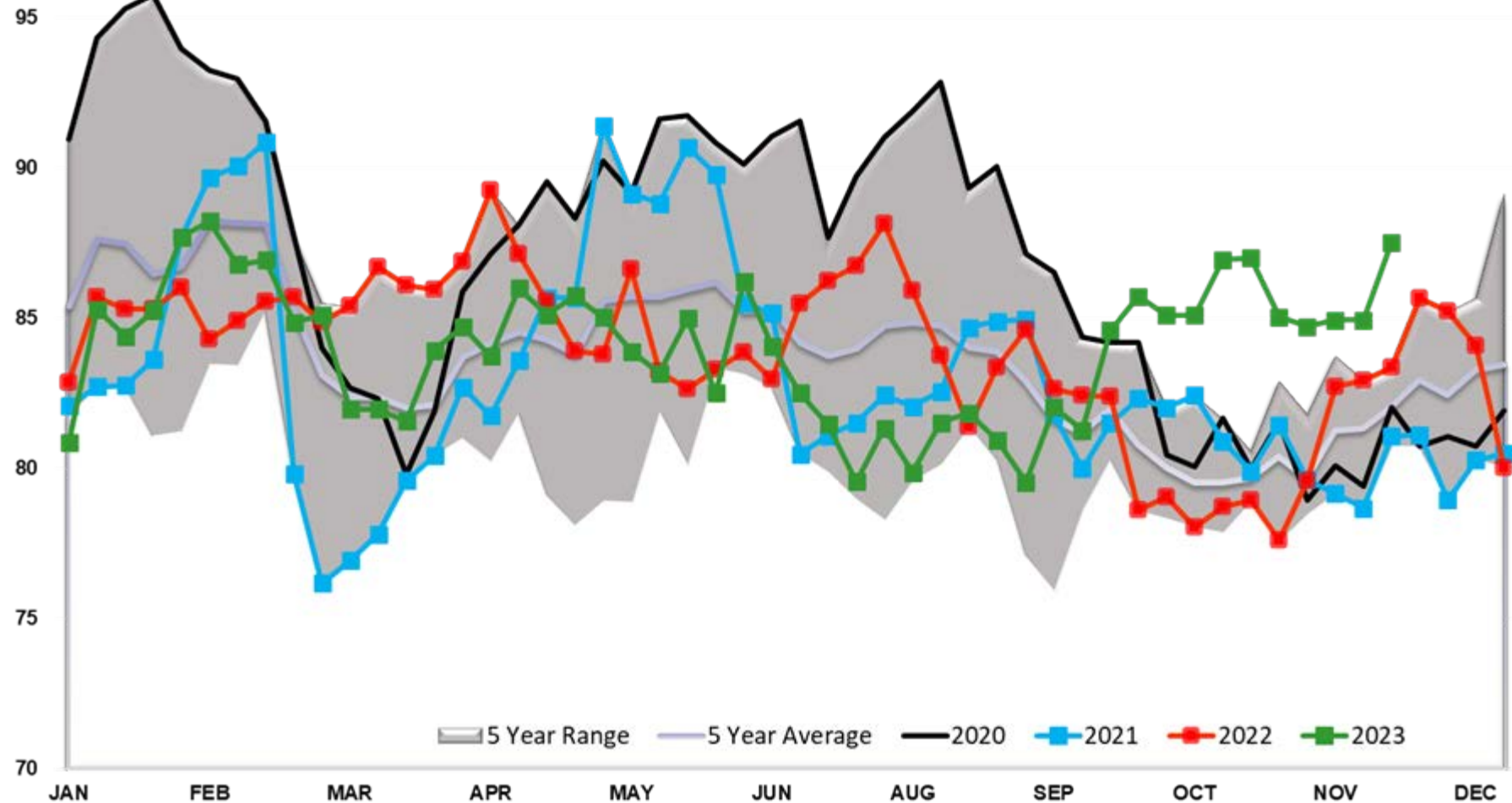
Gasoline PADD 2

65



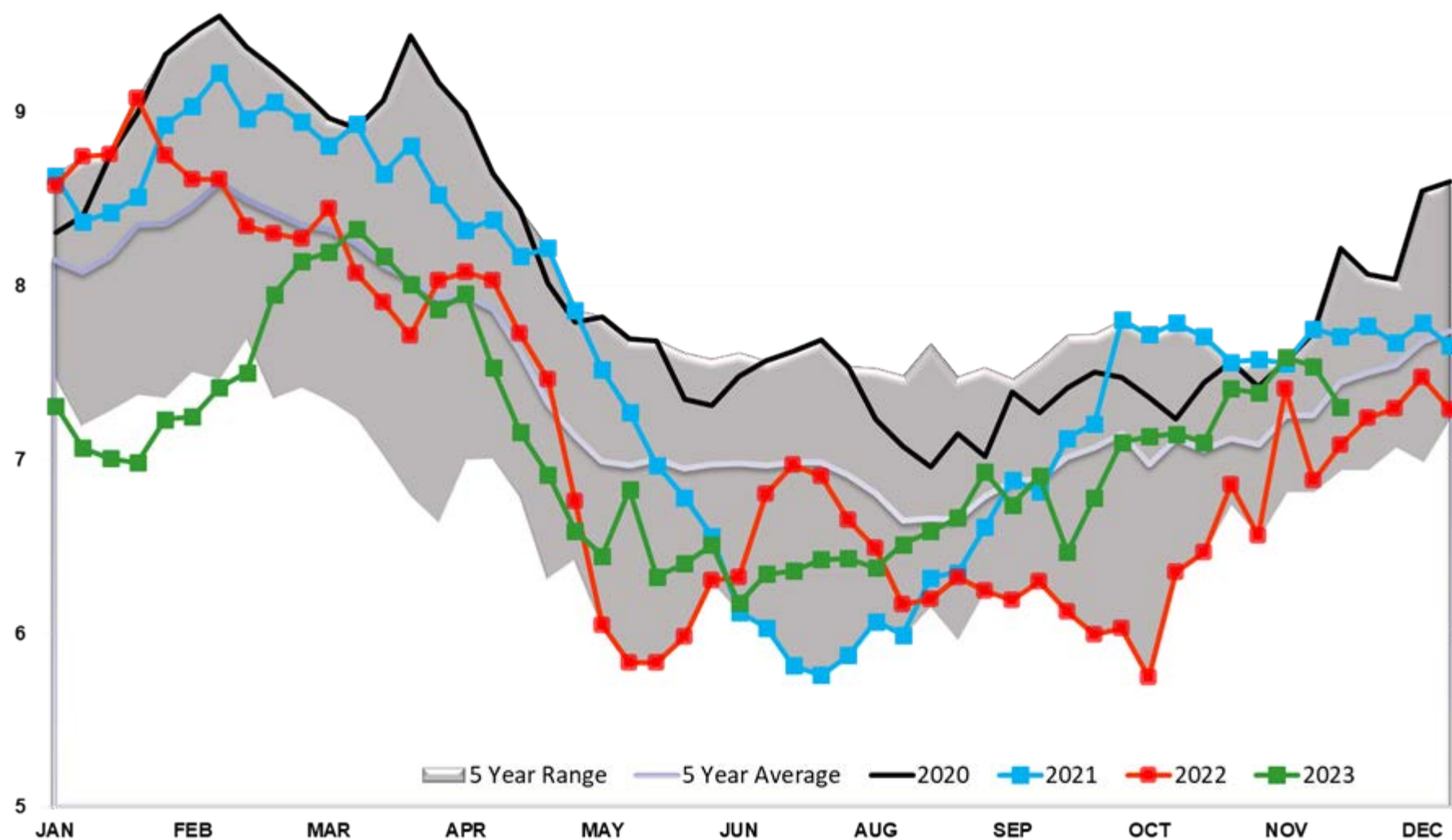
Gasoline PADD 3

100



Gasoline PADD 4

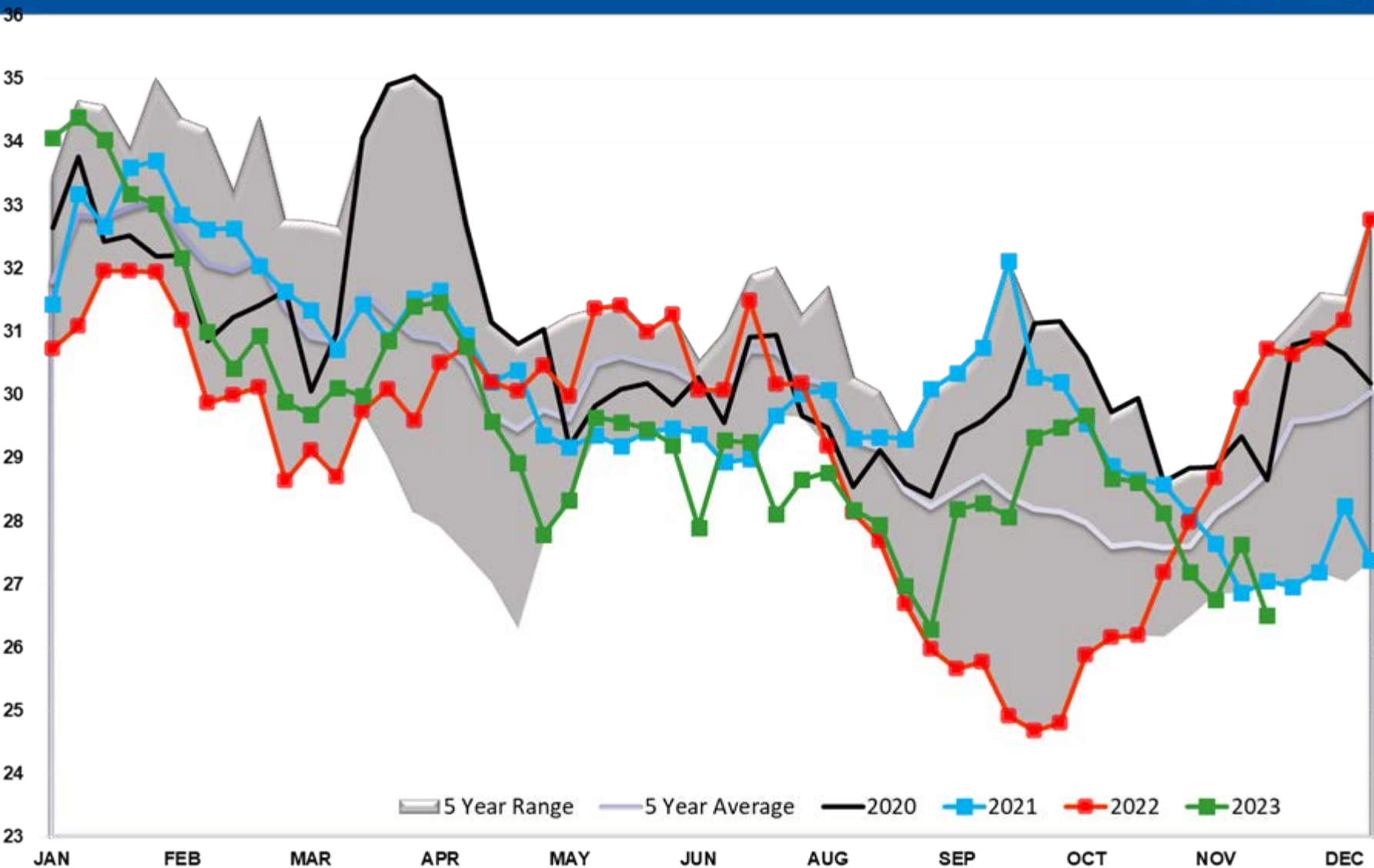
10



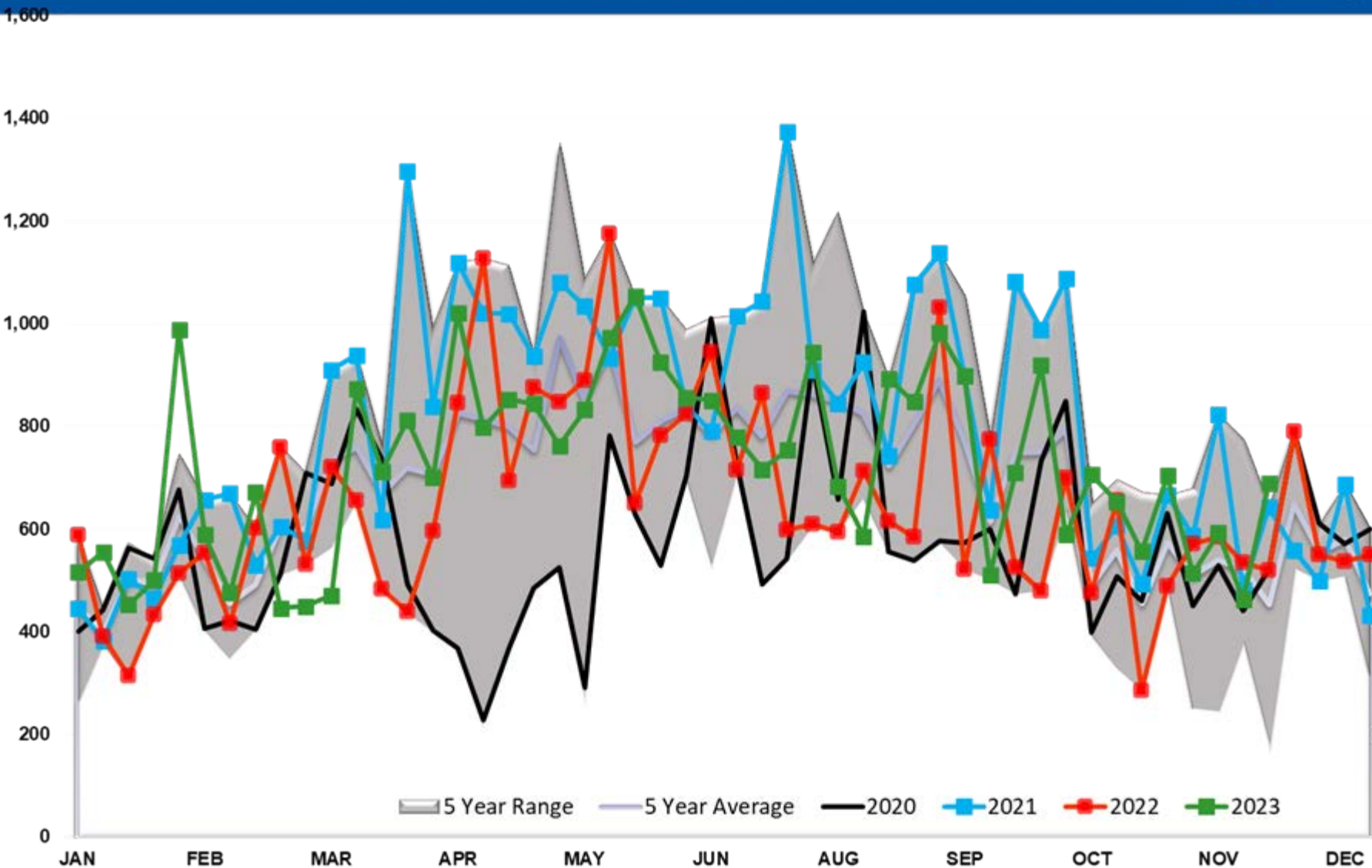
5 Year Range 5 Year Average 2020 2021 2022 2023

JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC

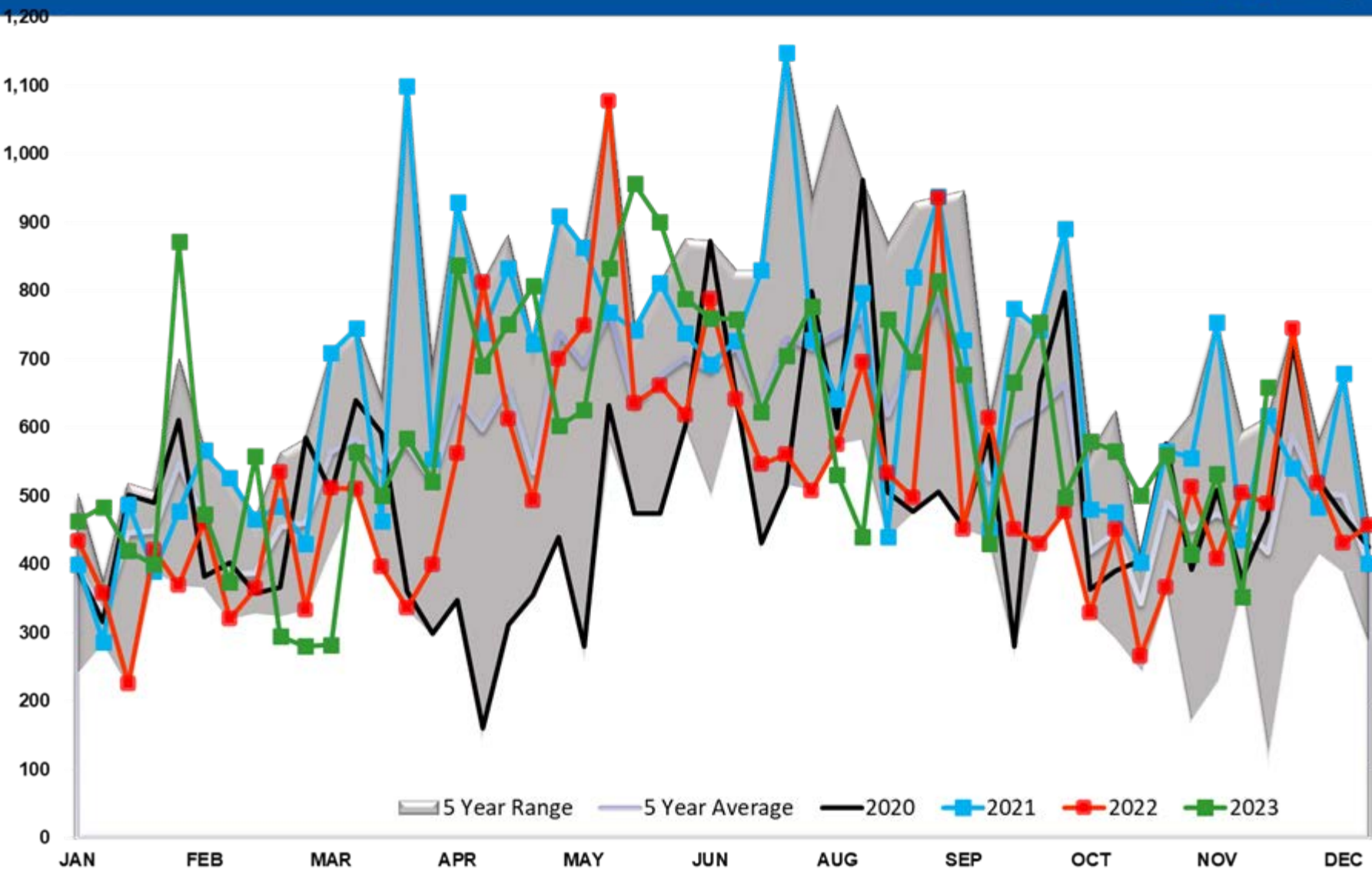
Gasoline PADD 5



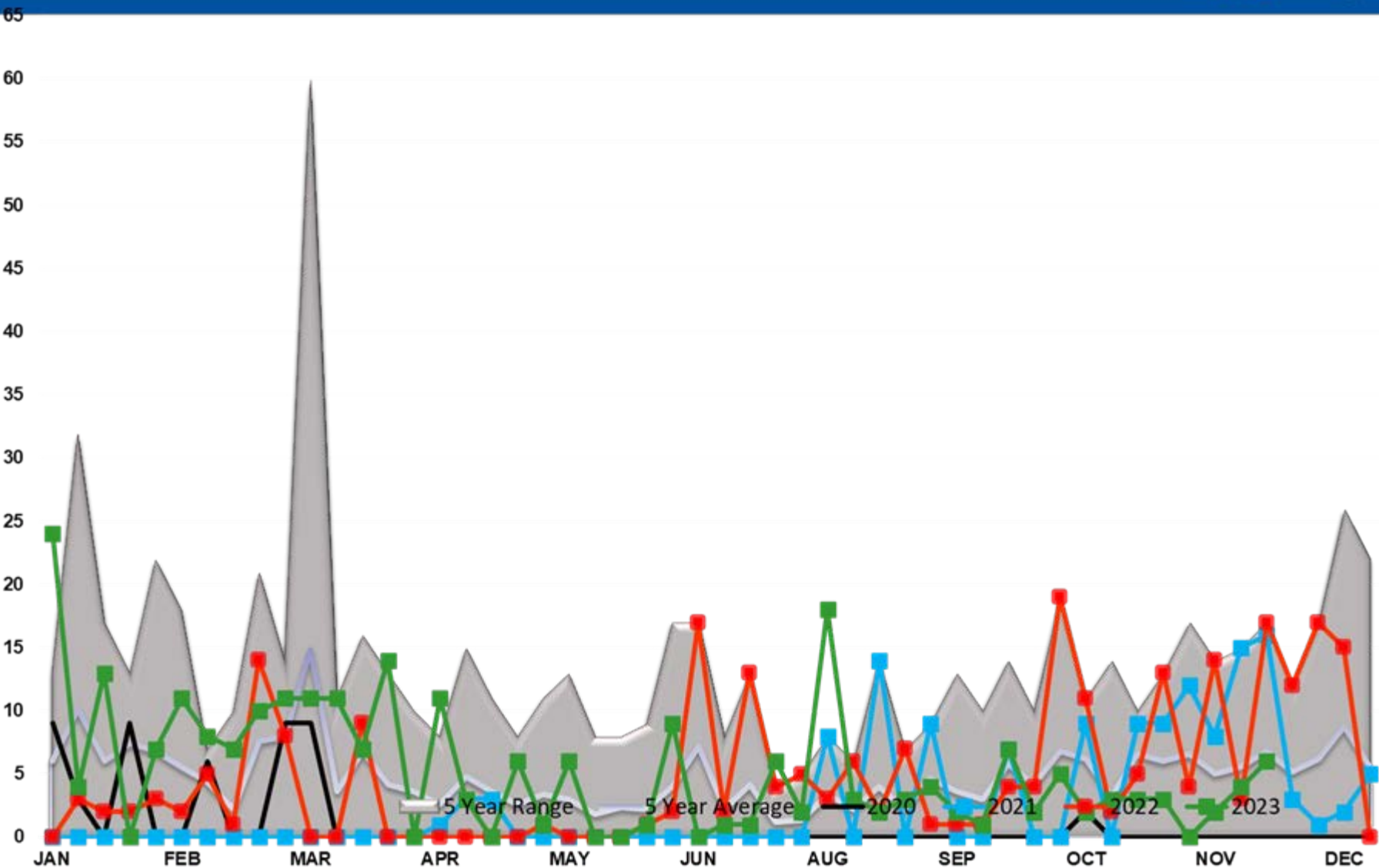
Gasoline Imports



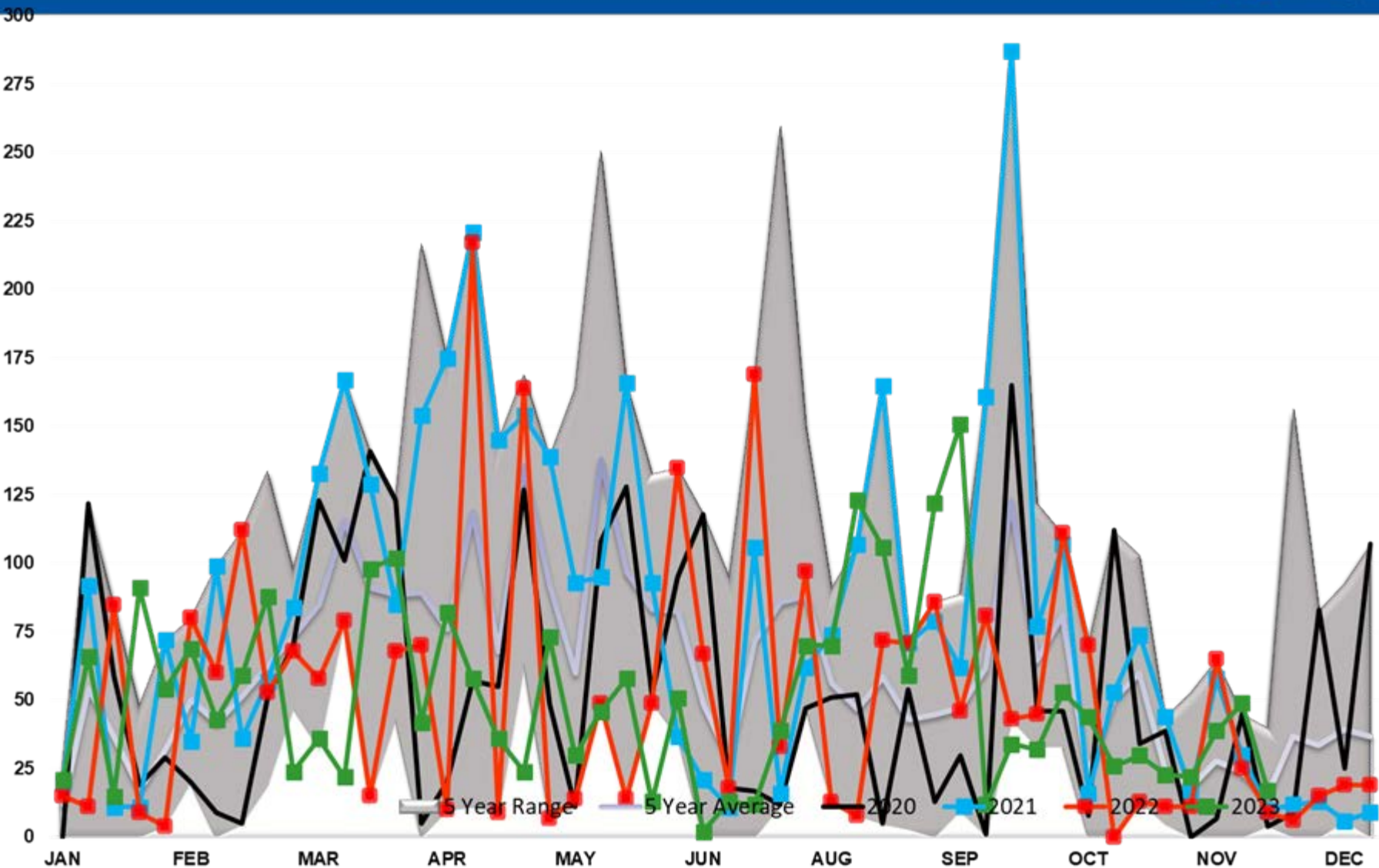
Gasoline Imports PADD 1



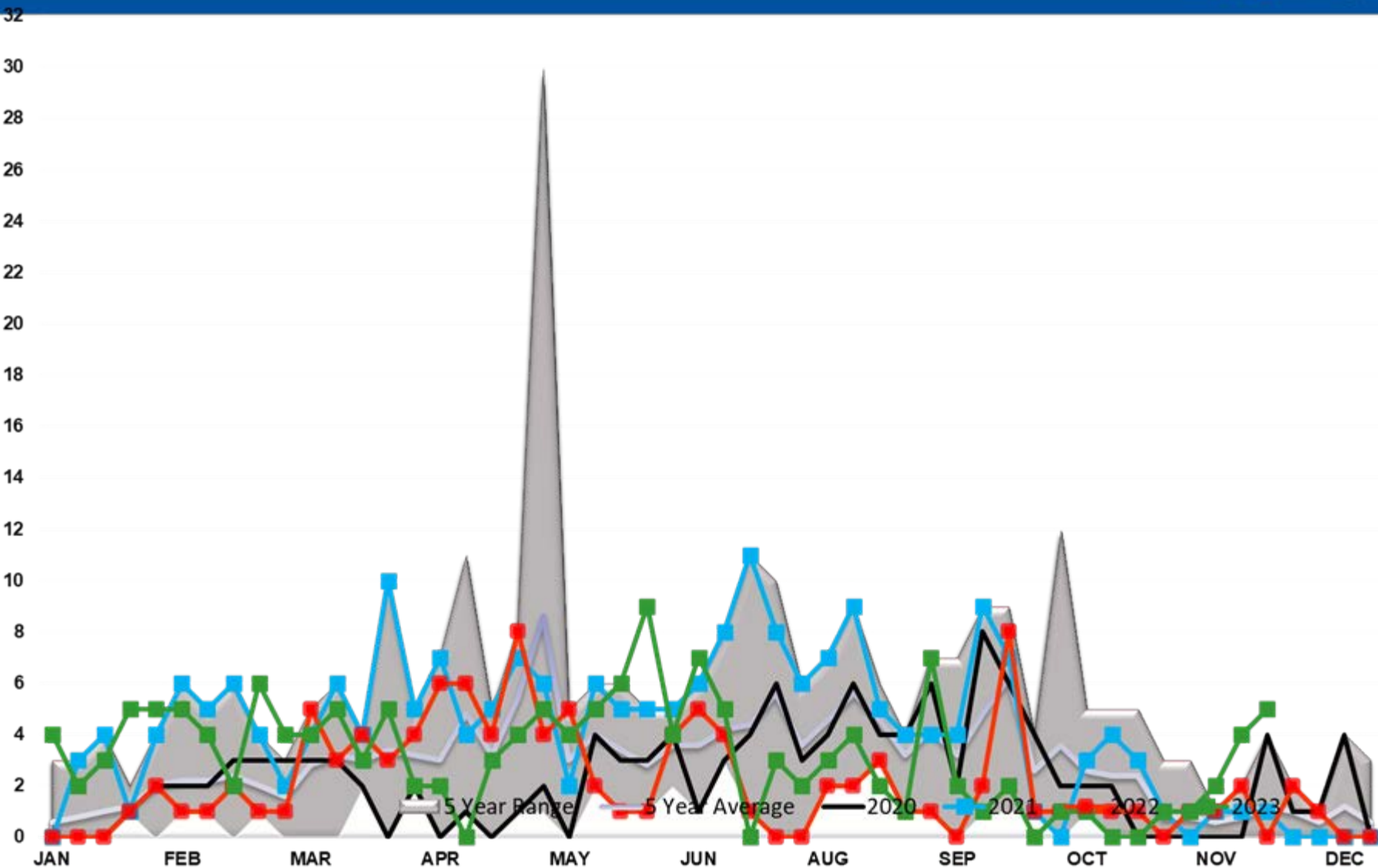
Gasoline Imports PADD 2



Gasoline Imports PADD 3



Gasoline Imports PADD 4



Gasoline Imports PADD 5

450

400

350

300

250

200

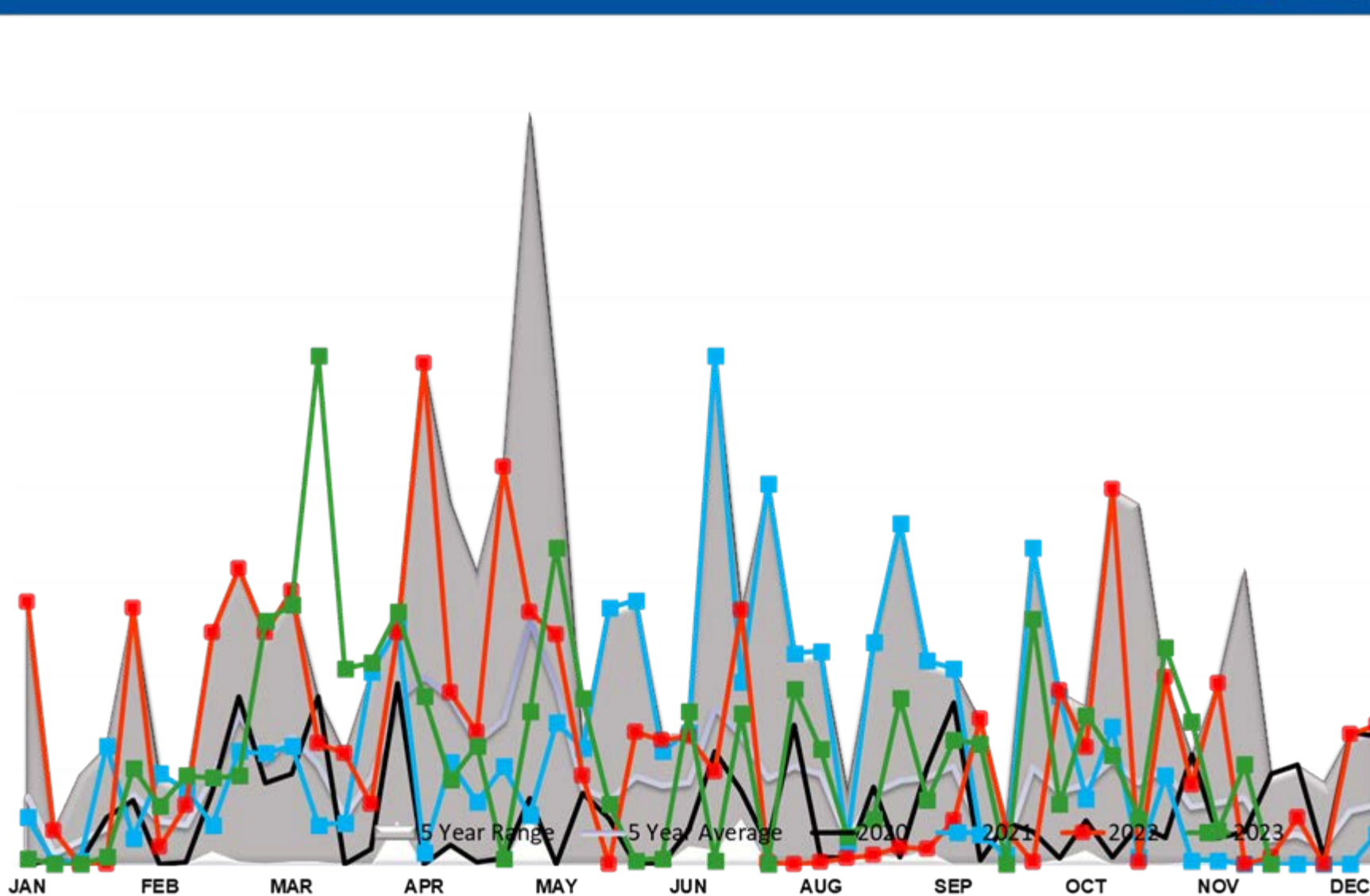
150

100

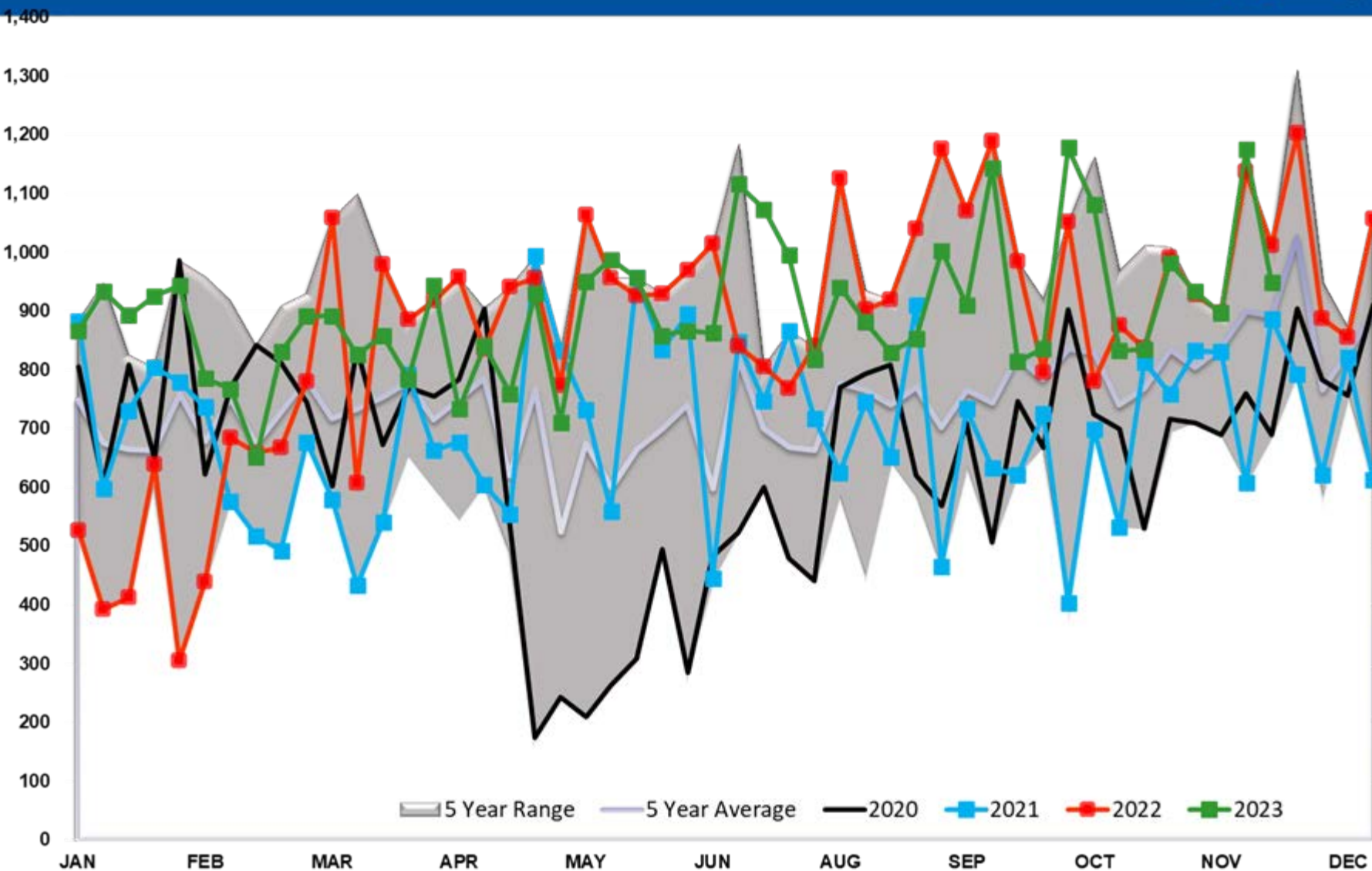
50

0

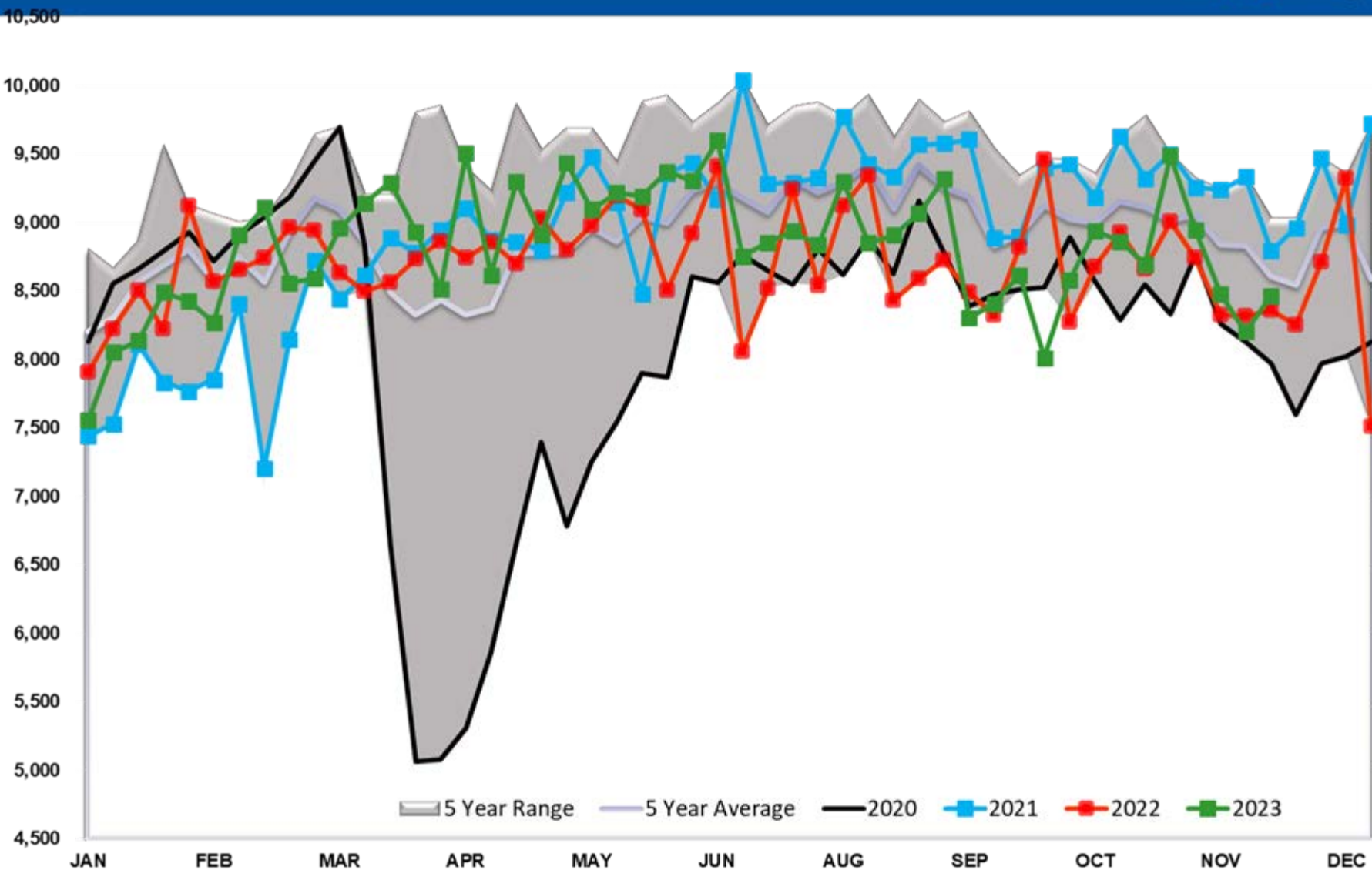
JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC



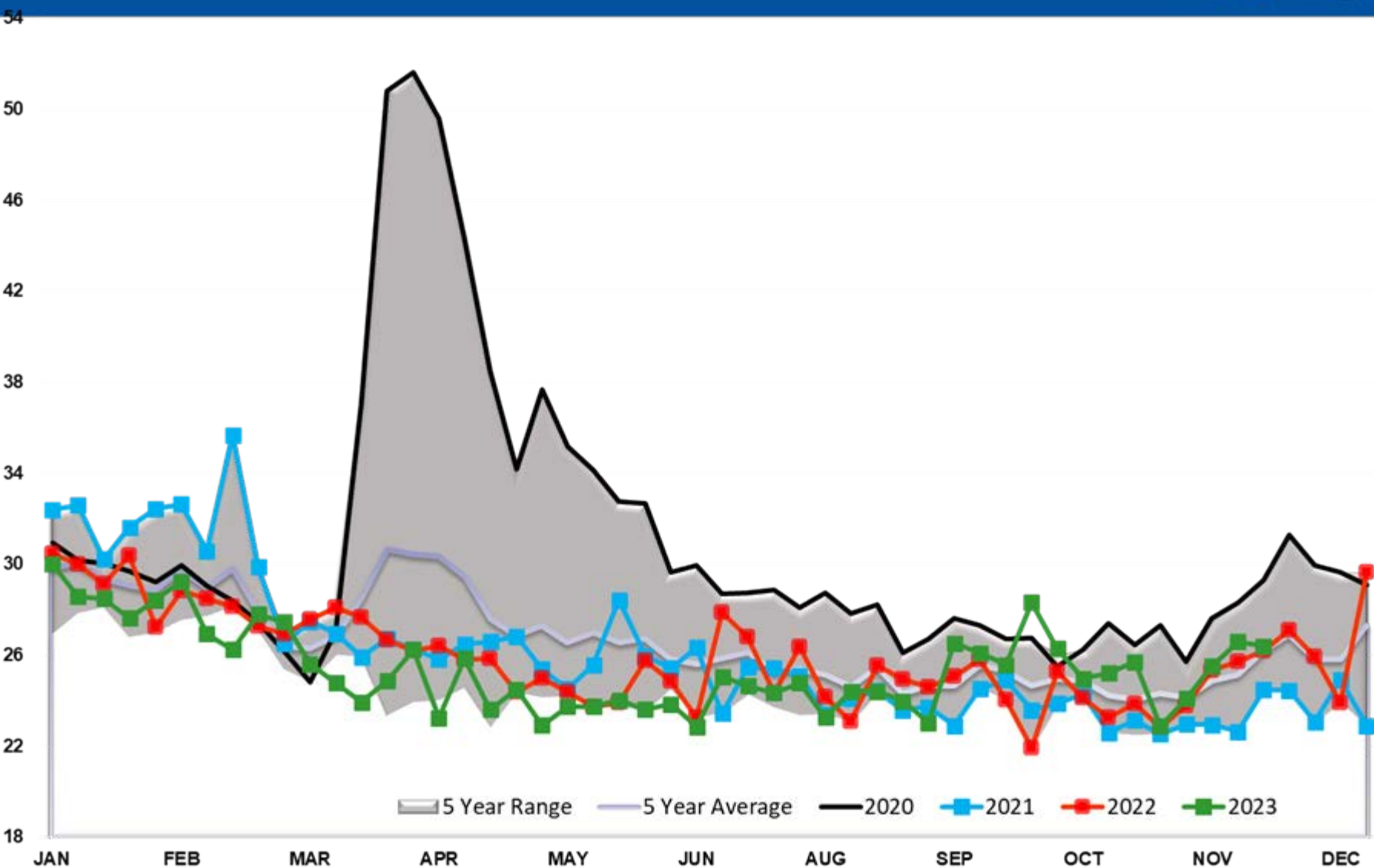
GASOLINE EXPORTS (mb/day)



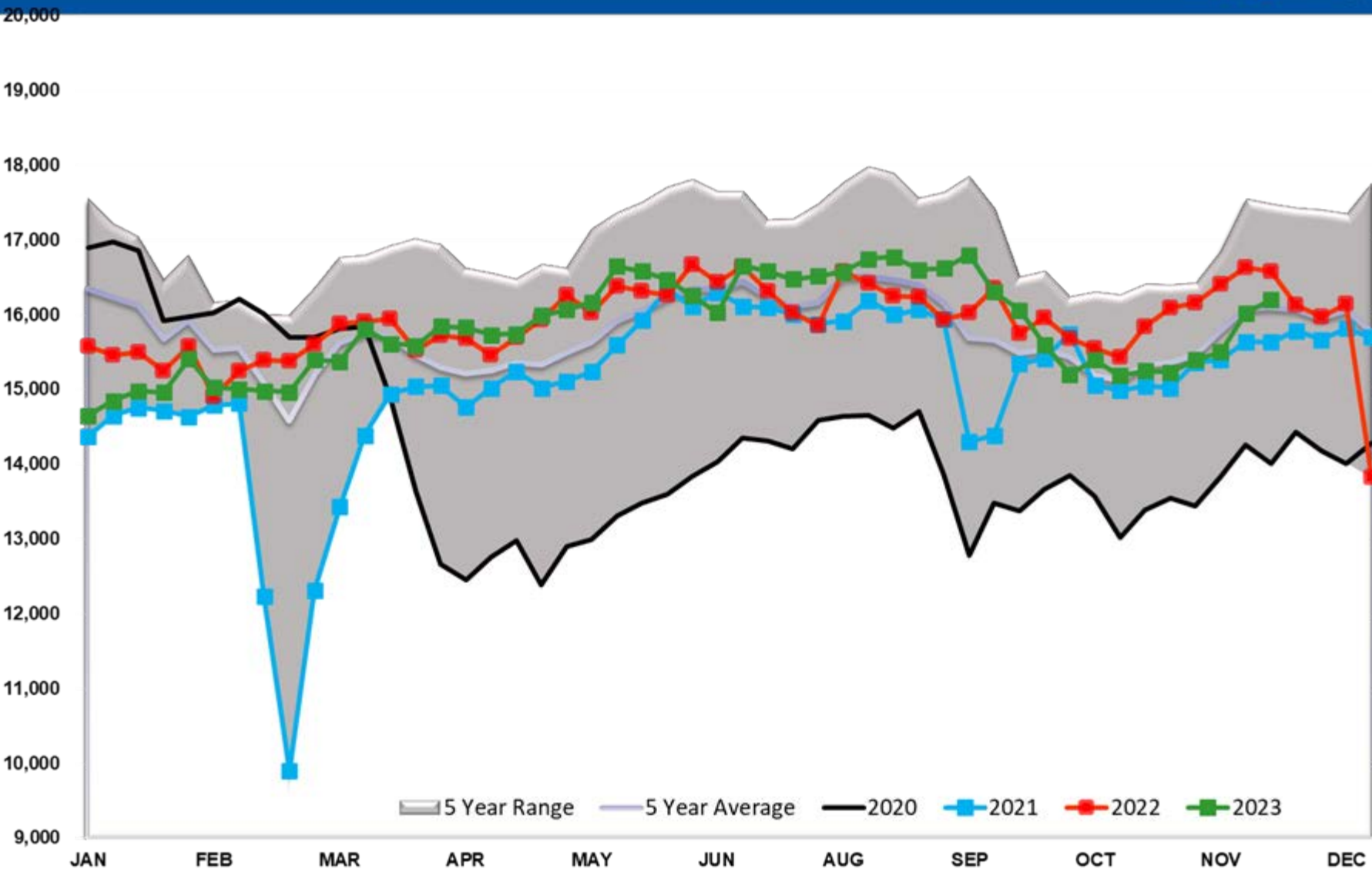
Gasoline Implied Demand



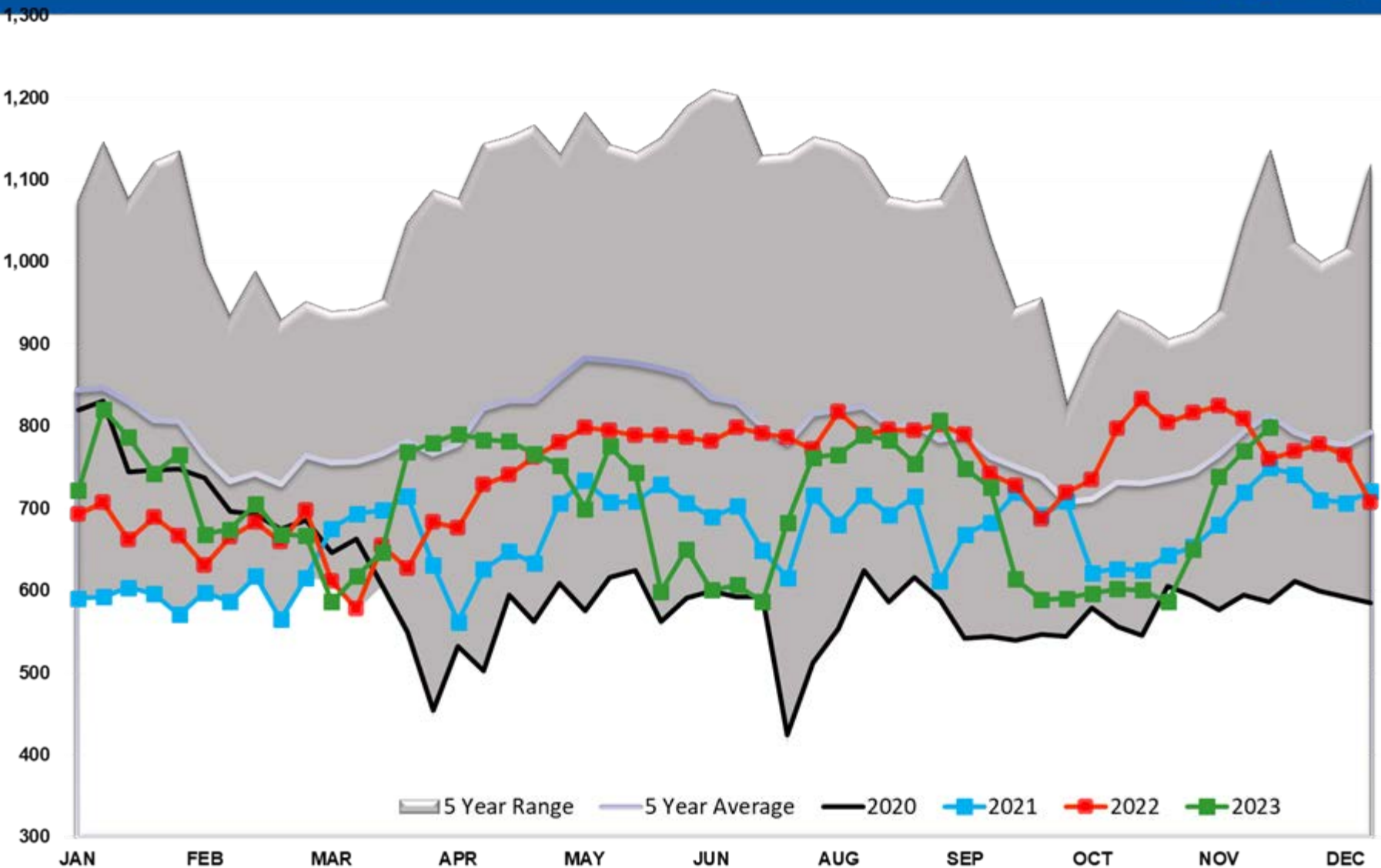
Gasoline Days fwd Cover



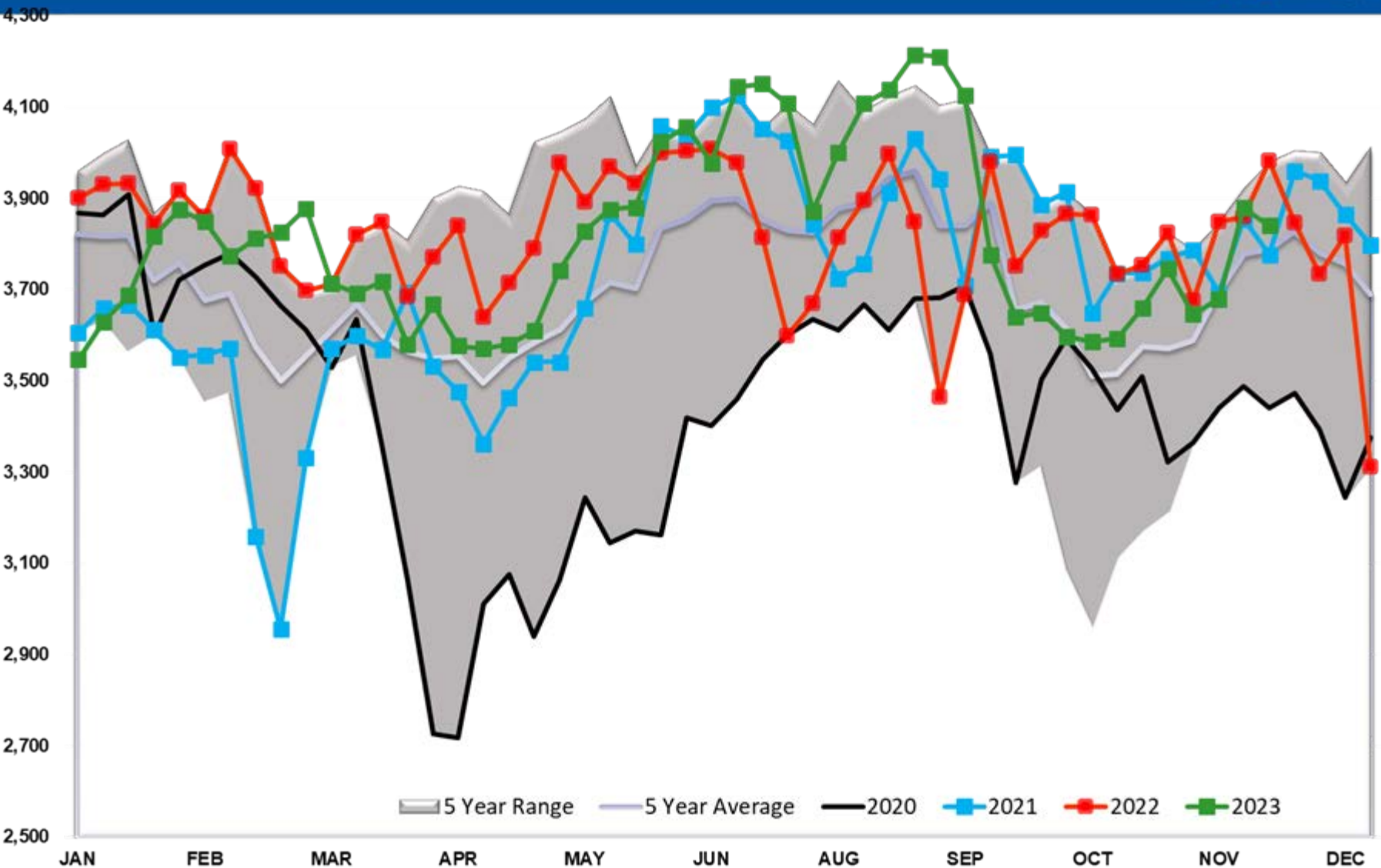
Refinery Thruput TOTAL US



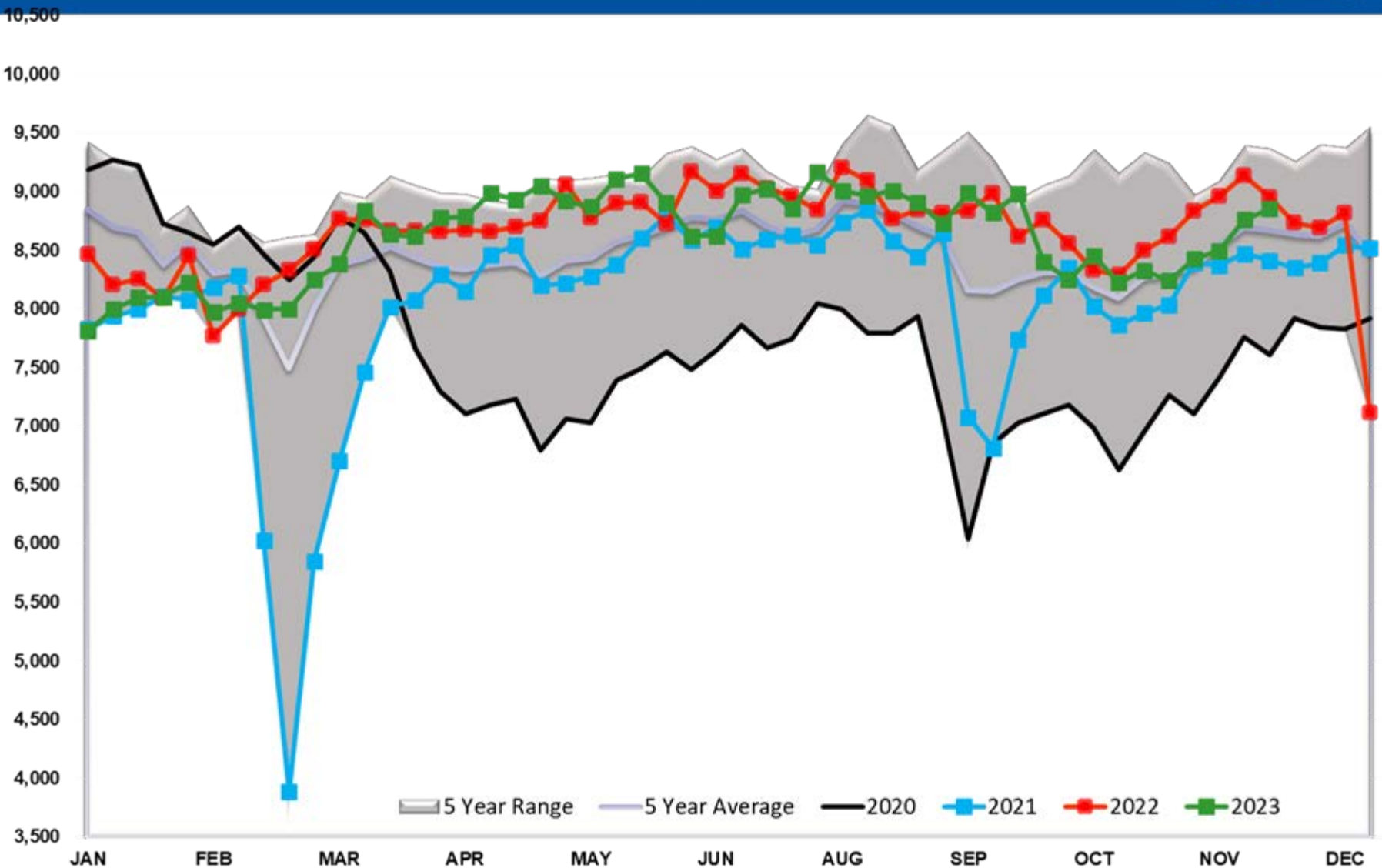
Refinery Thruput PADD 1



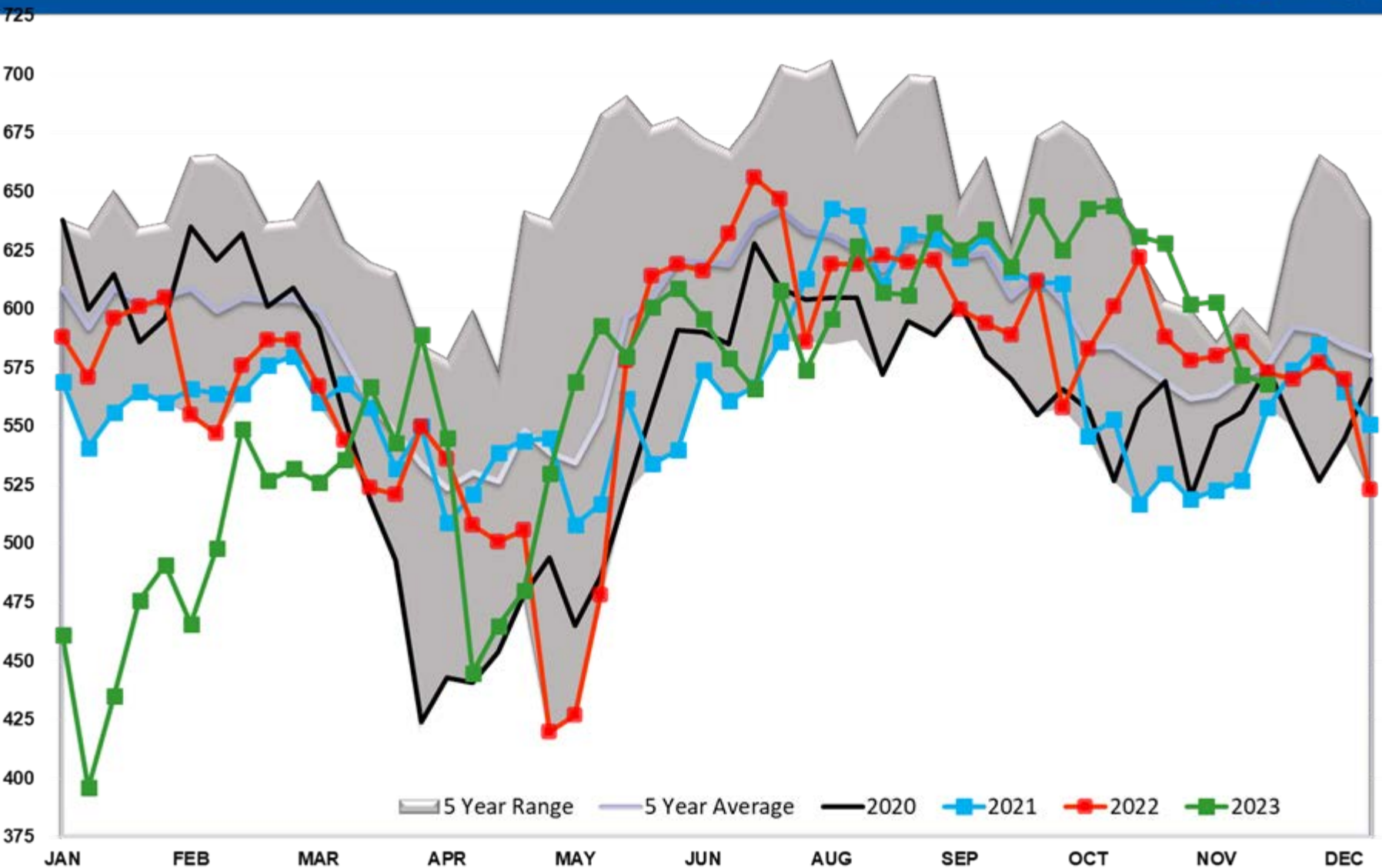
Refinery Thruput PADD 2



Refinery Thruput PADD 3



Refinery Thruput PADD 4



Refinery Thruput PADD 5

2,800

2,600

2,400

2,200

2,000

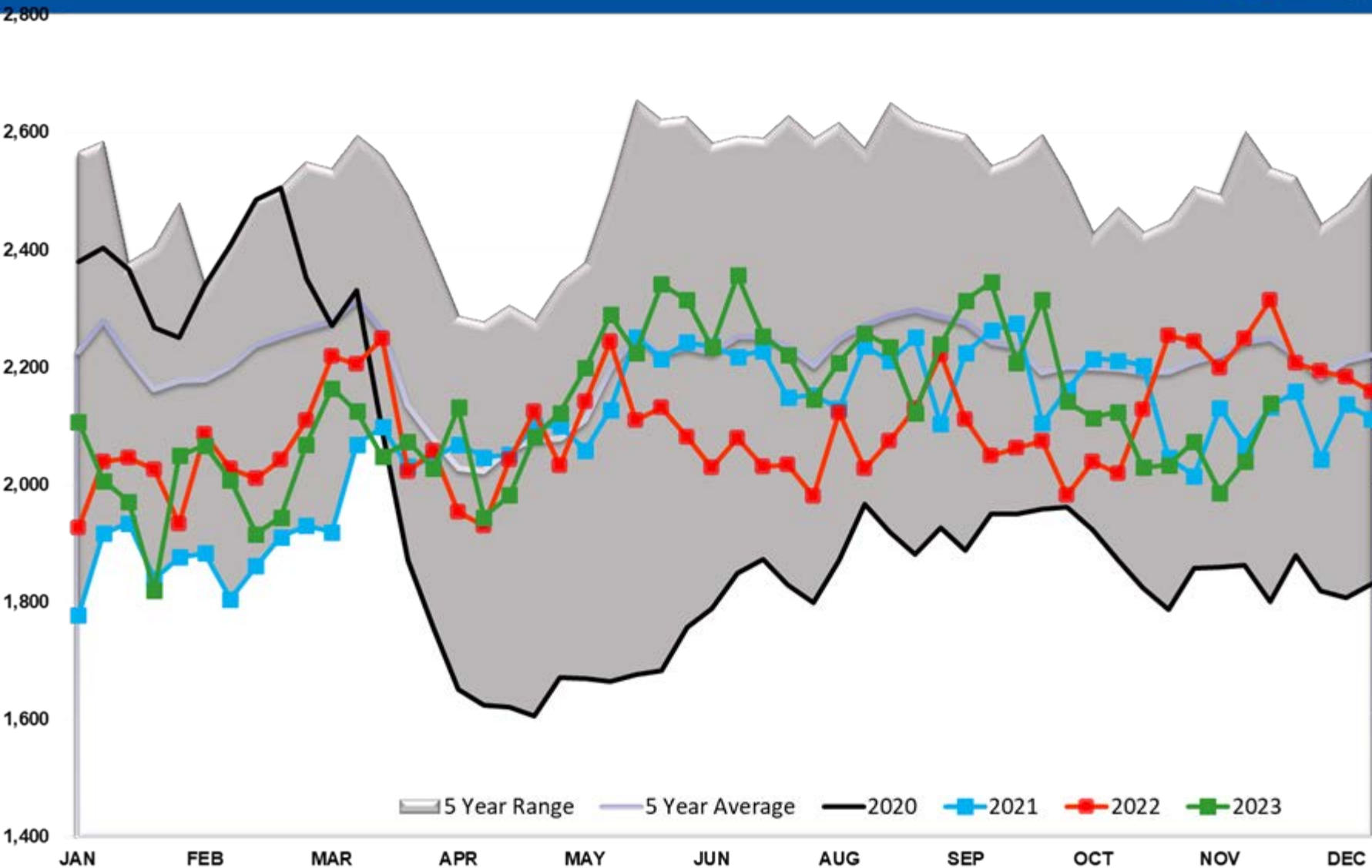
1,800

1,600

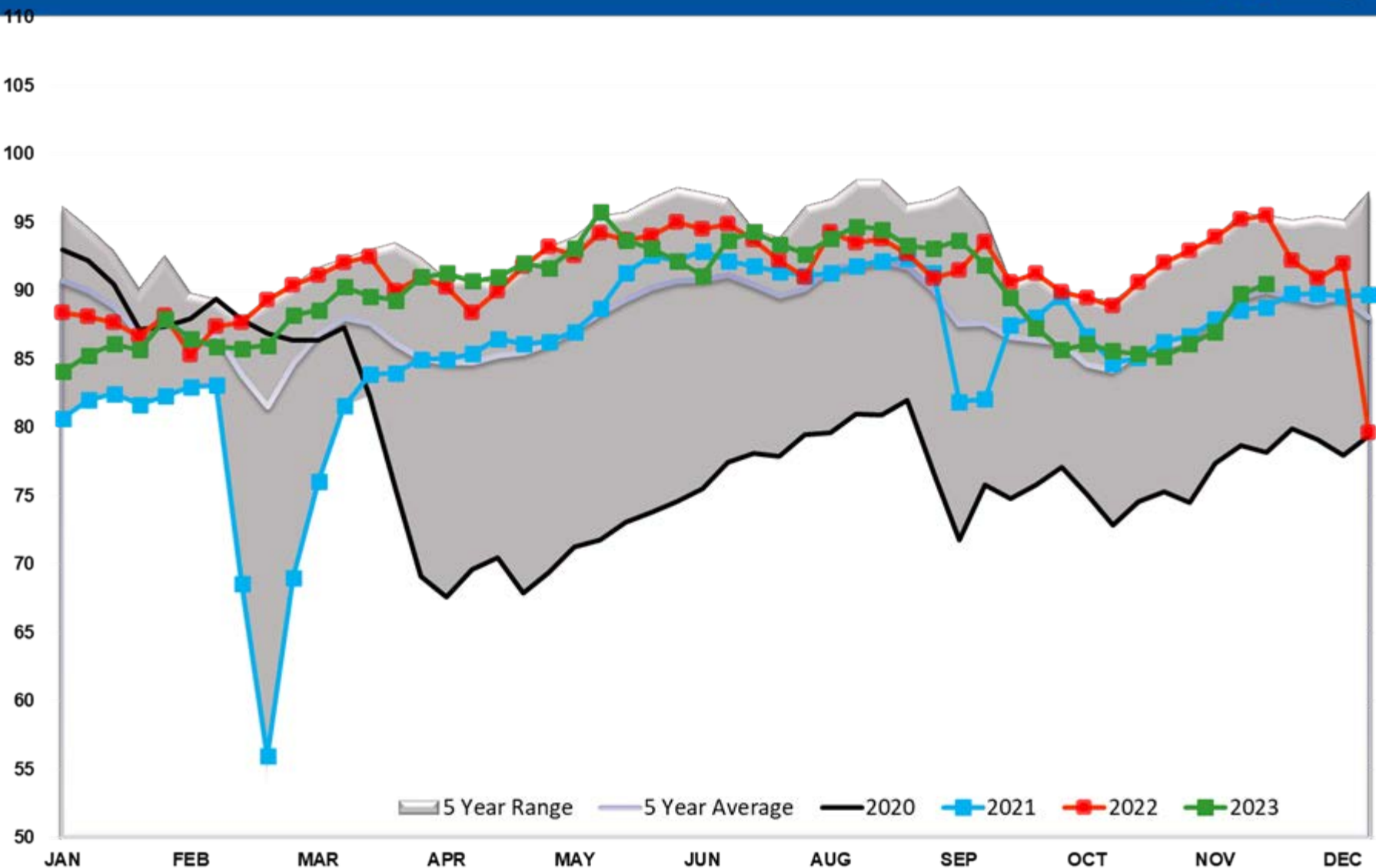
1,400

JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC

5 Year Range 5 Year Average 2020 2021 2022 2023



Refinery Thruput Utilization



Refinery Thruput Capacity

19,250

19,000

18,750

18,500

18,250

18,000

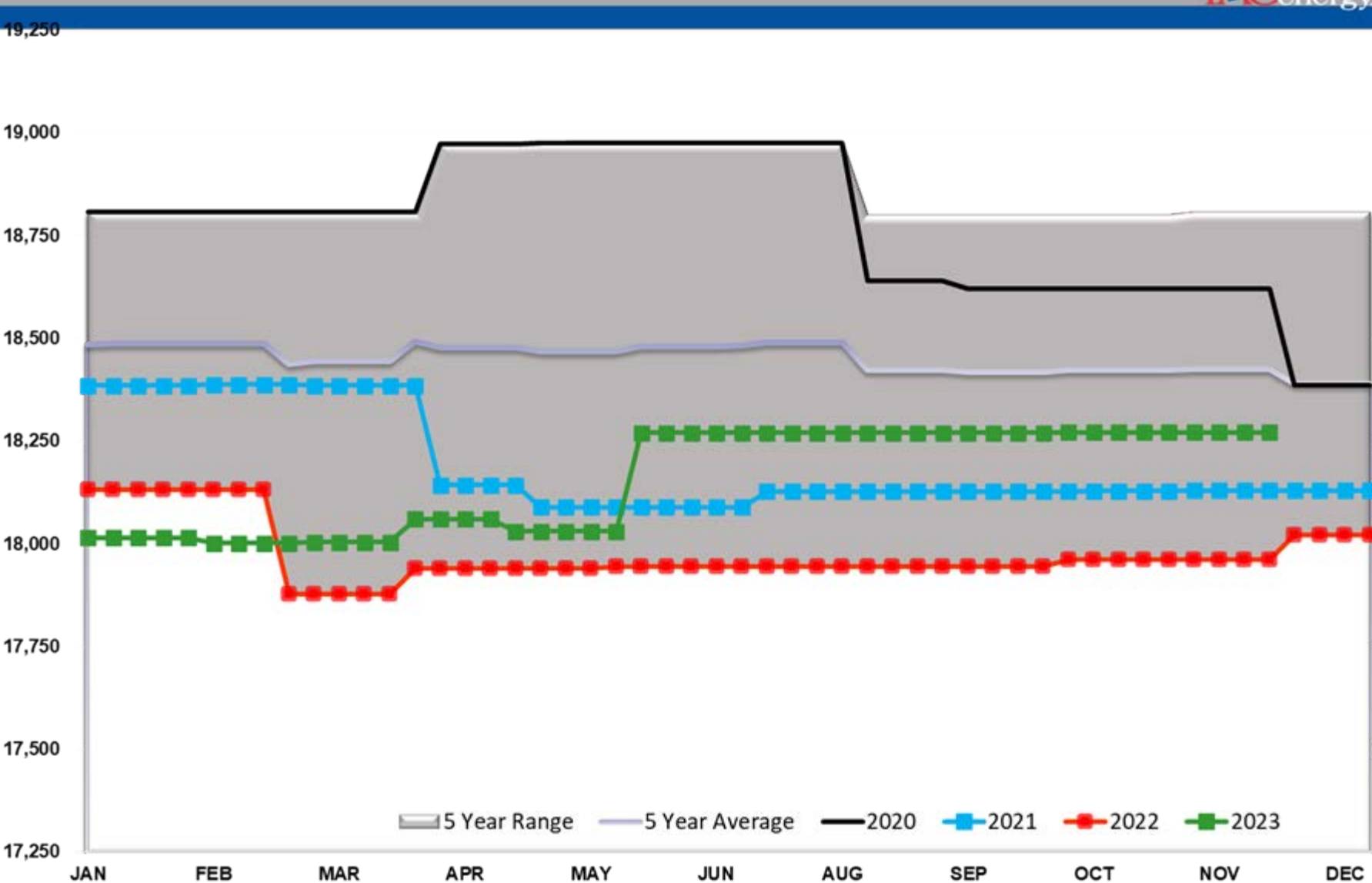
17,750

17,500

17,250

JAN FEB MAR APR MAY JUN AUG SEP OCT NOV DEC

5 Year Range 5 Year Average 2020 2021 2022 2023



Refinery Thruput Capacity PADD 1

1,400

1,300

1,200

1,100

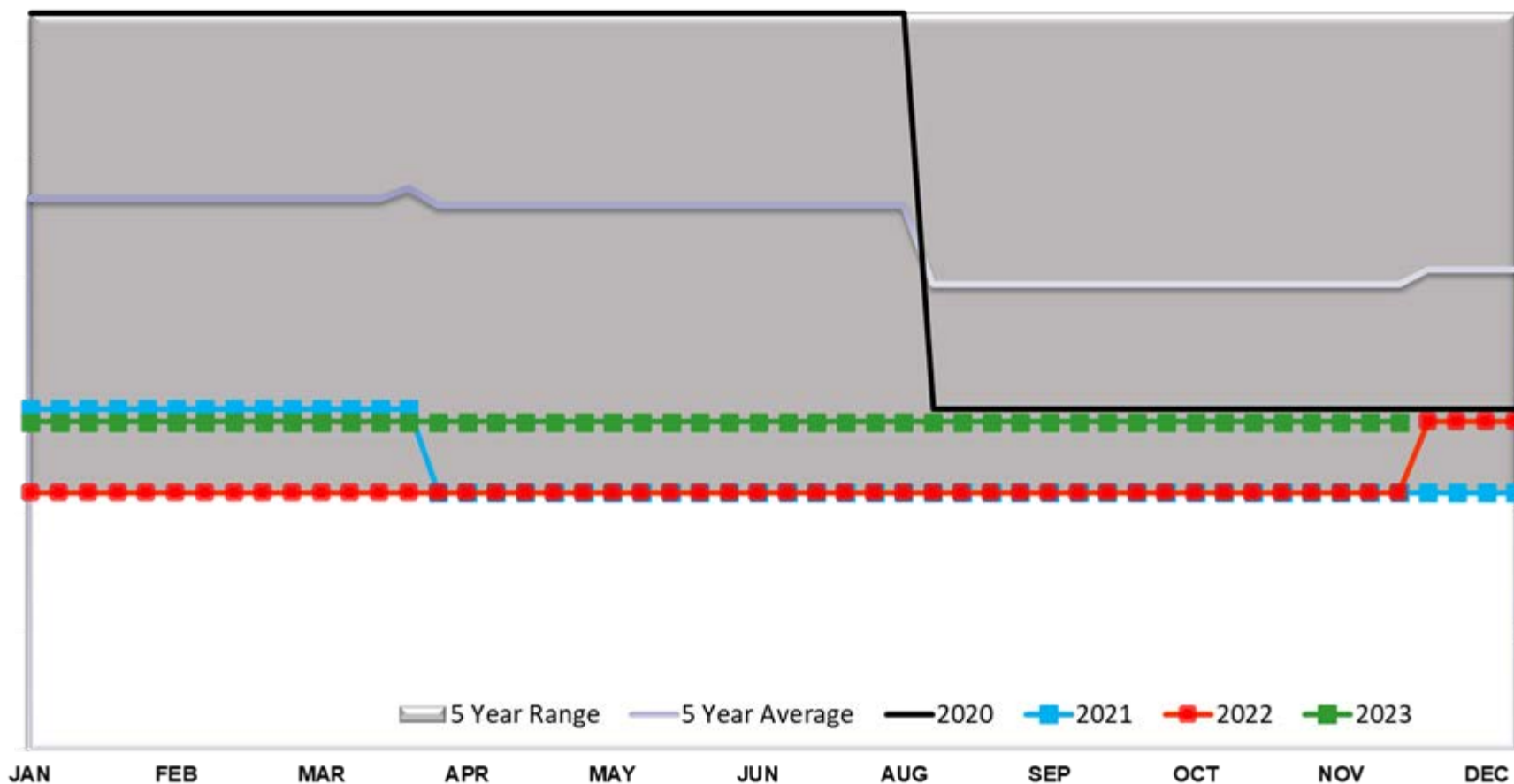
1,000

900

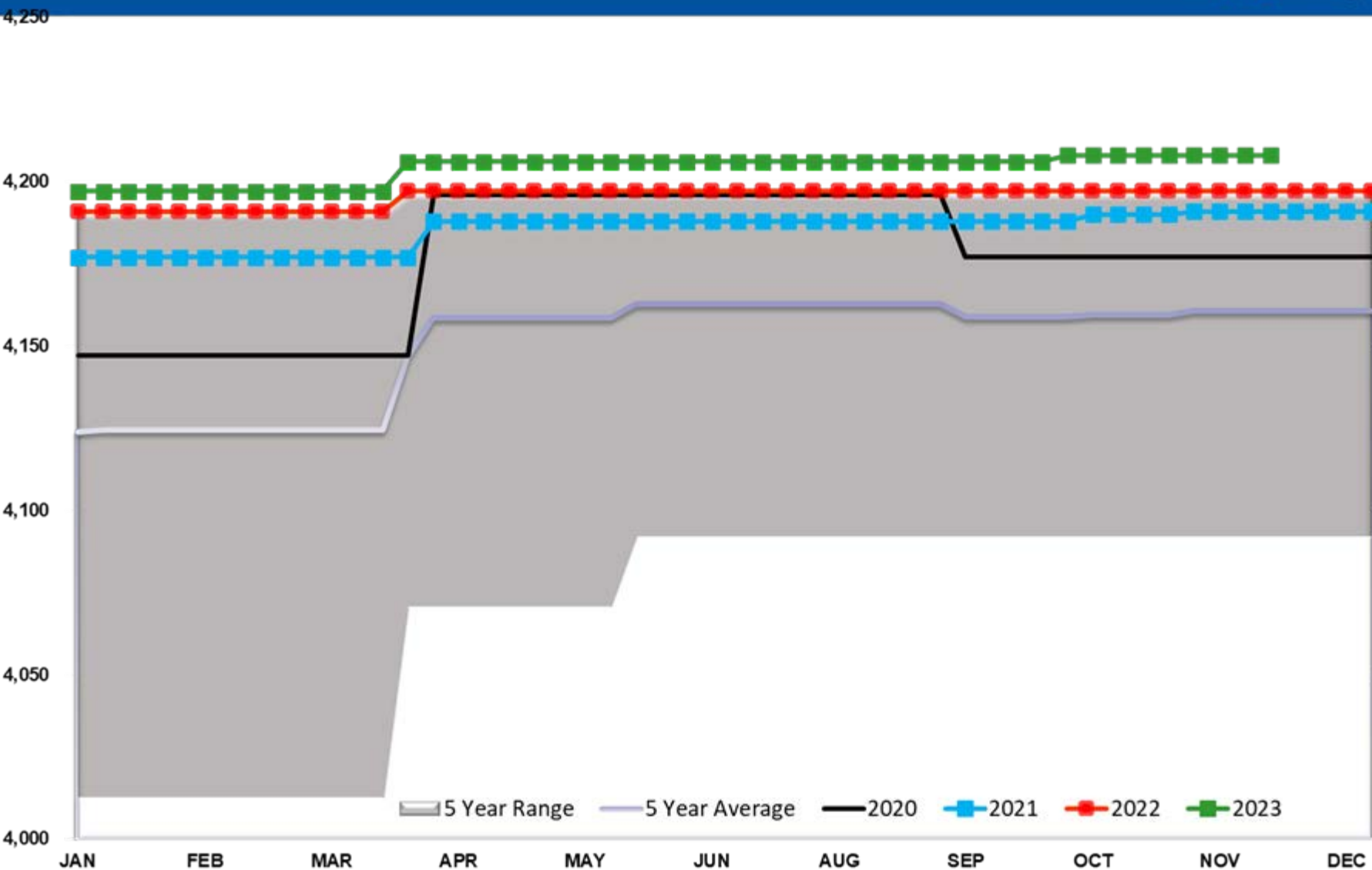
800

700

600



Refinery Thruput Capacity PADD 2



Refinery Thruput Capacity PADD 3

10,100

10,000

9,900

9,800

9,700

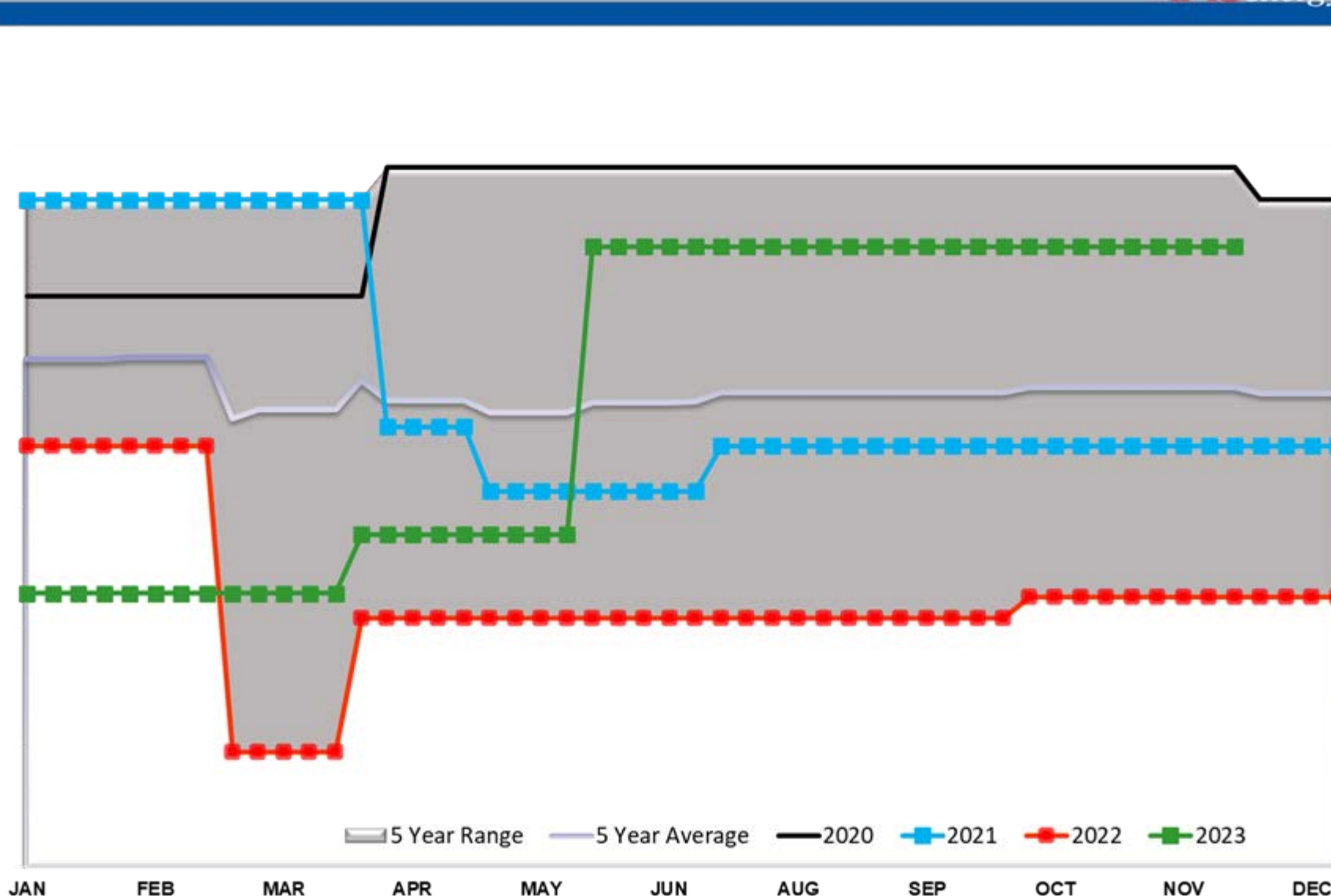
9,600

9,500

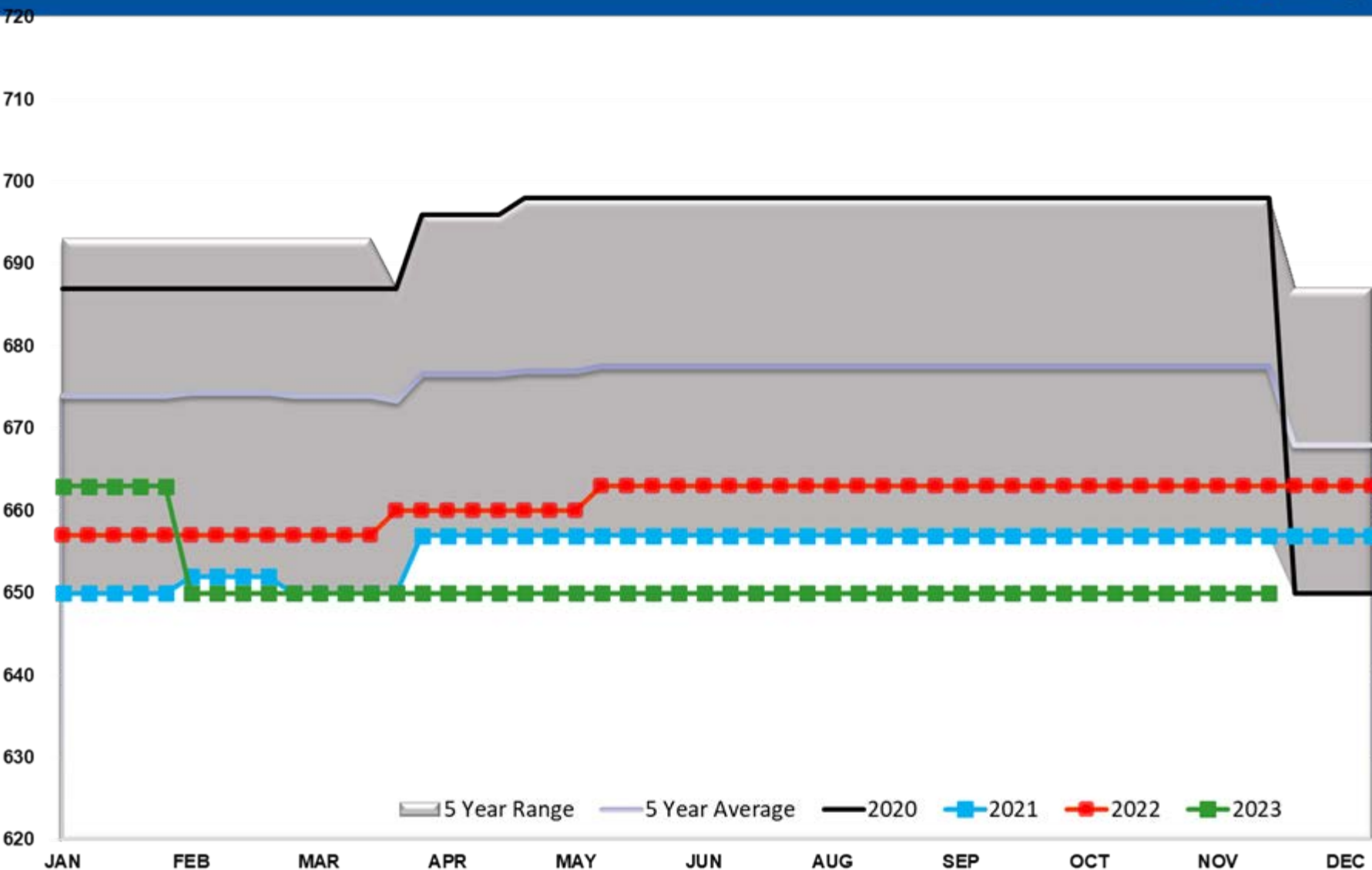
9,400

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5 Year Range 5 Year Average 2020 2021 2022 2023



Refinery Thruput Capacity PADD 4



Refinery Thruput Capacity PADD 5

2,950

2,900

2,850

2,800

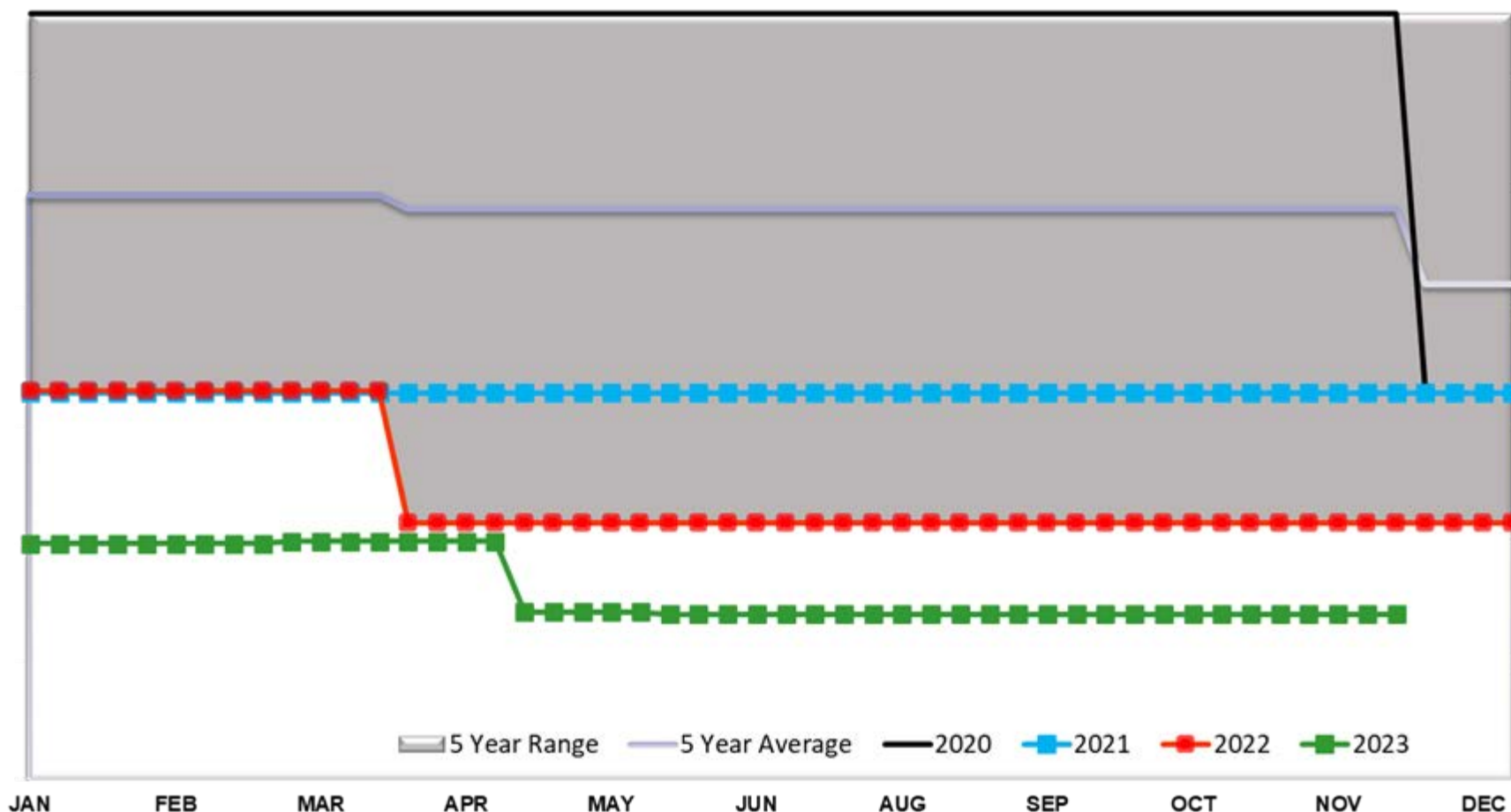
2,750

2,700

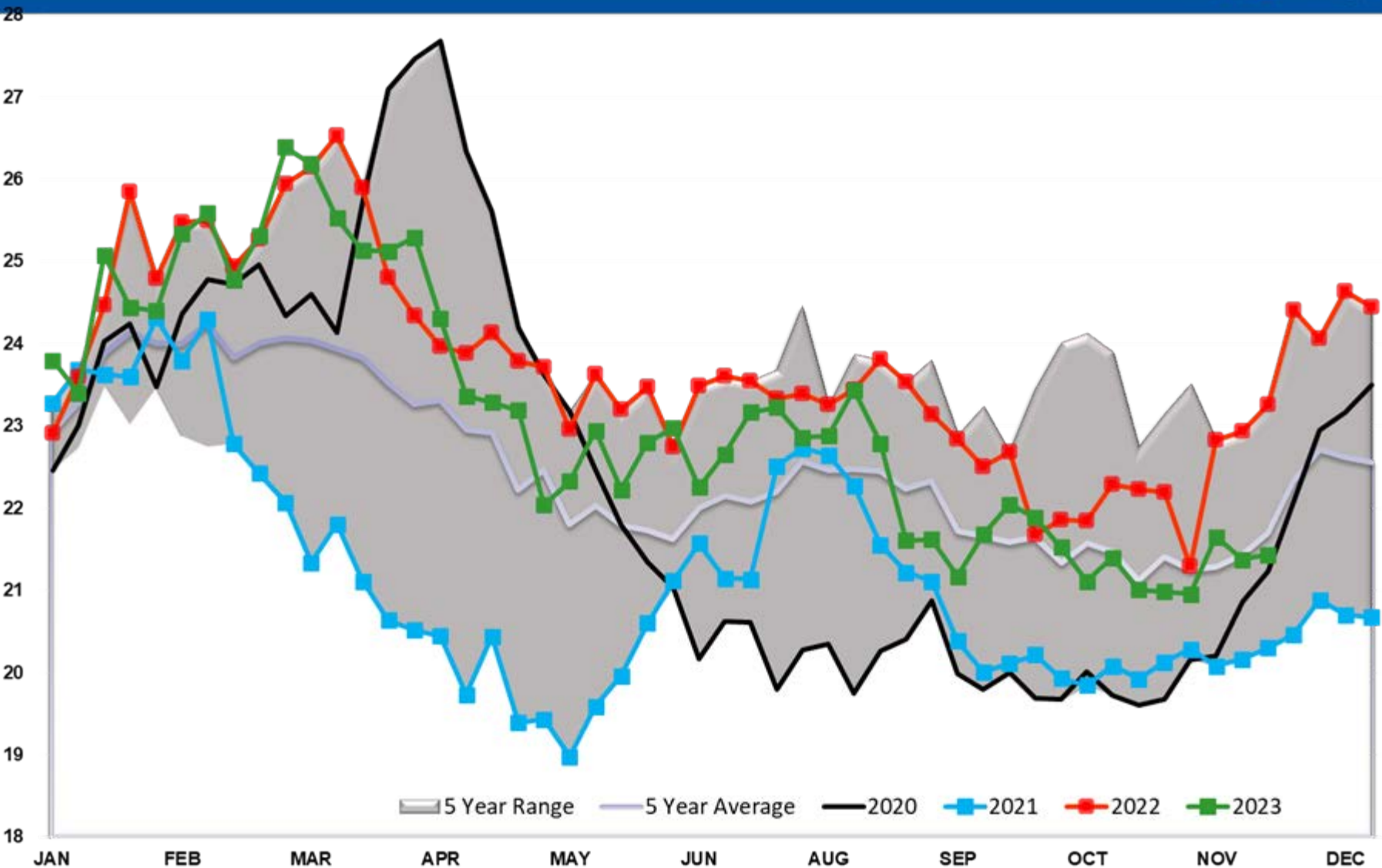
2,650

2,600

2,550



Ethanol Total US



Ethanol Output Total

1,200

1,100

1,000

900

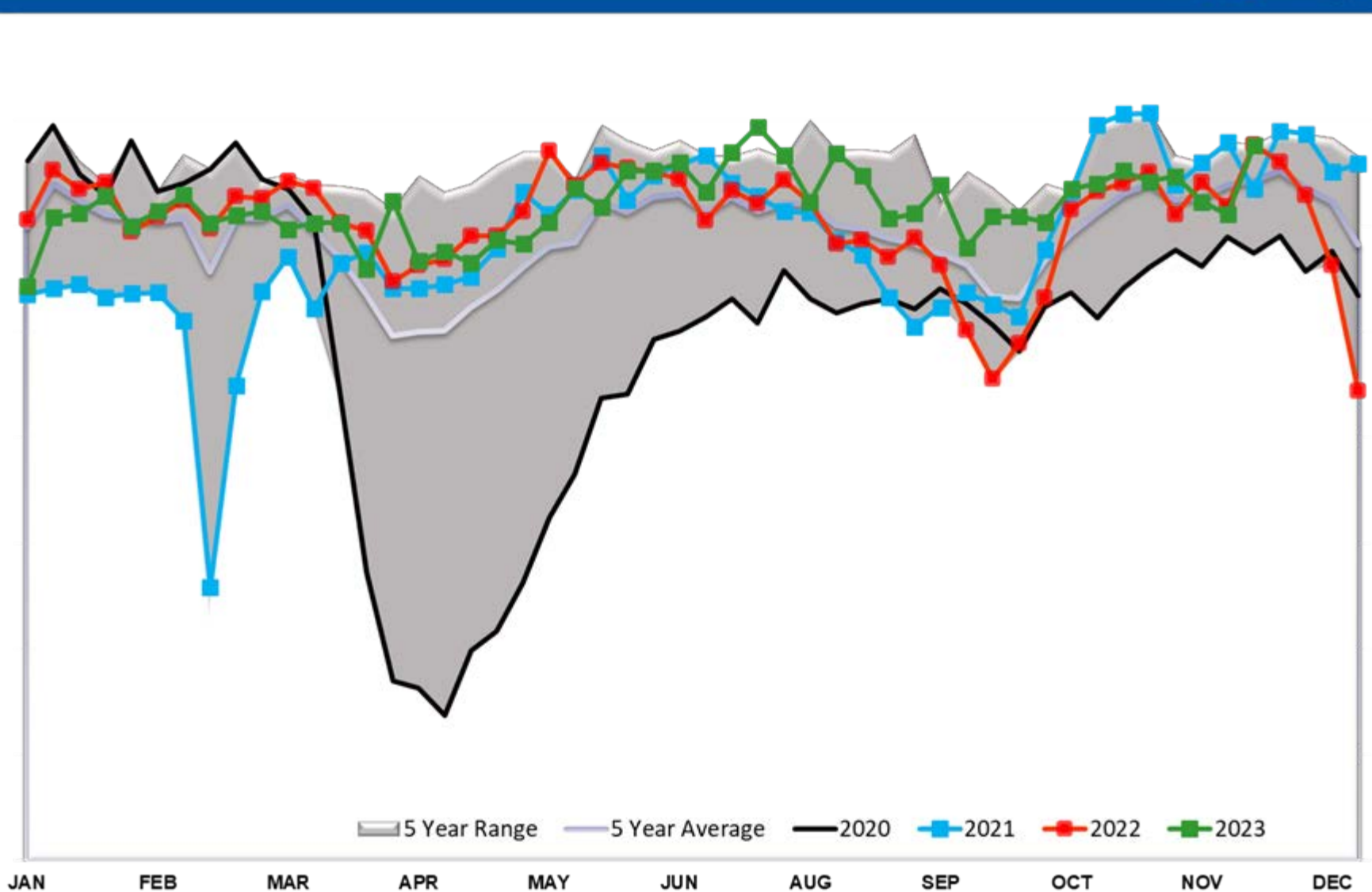
800

700

600

500

400



Propane/Propylene Exports (mb/day)

2,200

2,000

1,800

1,600

1,400

1,200

1,000

800

600

400

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5 Year Range 5 Year Average 2020 2021 2022 2023

