



Researched by Industrial Info Resources (Sugar Land, Texas)--IIR's weekly North American Refining Report gives you the latest inside intelligence on outages, derates, shutdowns, closures, delays and more.

.. & now there is an interactive, dynamic North America Refining Capacity Dashboard available to further power your refinery capacity research ..

and IIR has recently formalized an Alliance with Refinery Calc who will play an integral role in producing IIR's North America Refinery MarketIntel Platform -- the first of its kind in the industry providing Intel & Insights on crude slates; runs; margins; utilization; product yields and so much more..

-- just ask iirteam@iirenergy.com about a trial..

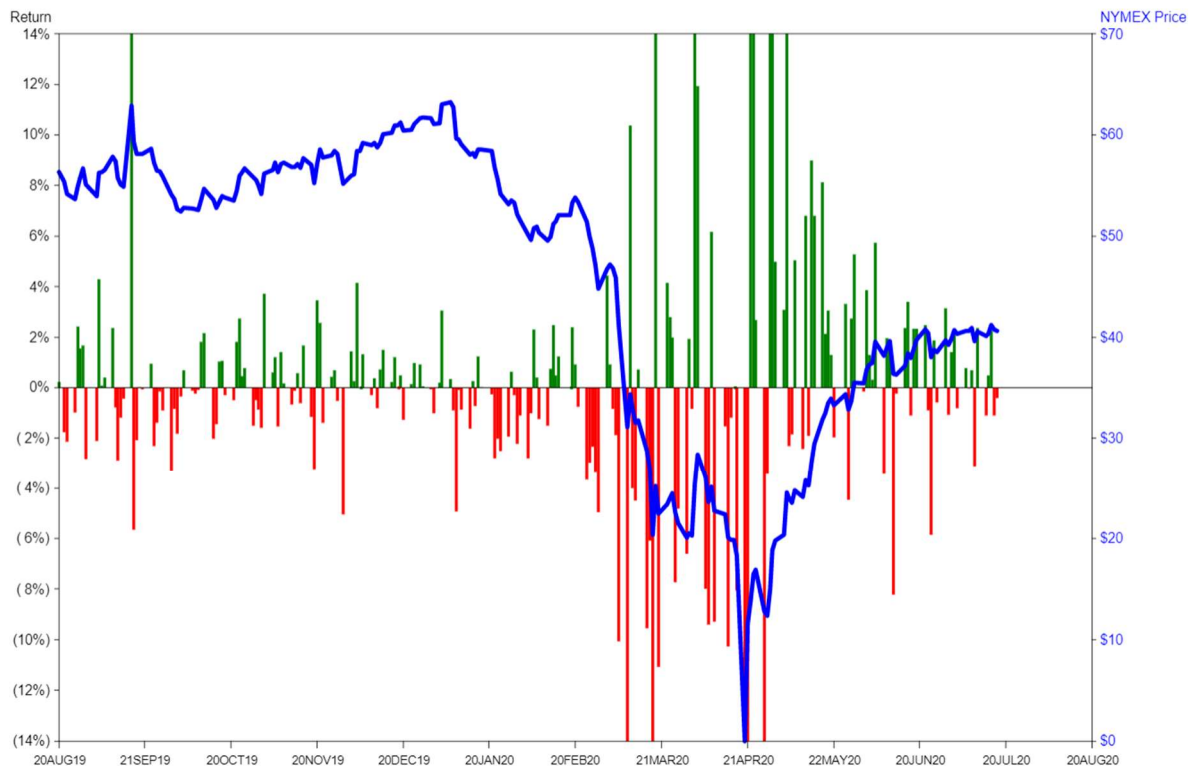
Market Commentary:

Returns. WTI is still above \$40. Promising, [bullish news from the eia](#) this week. Albeit balanced by [OPEC+ news](#). All tempered by oil demand which for now is returning [with a possible uptick expected](#)...

Friday, July 17, 2020

NYMEX Daily Crude Oil Return
Settle: \$40.59 Change: -0.16 Day Return:(0.39%)

30 Up Day Statistics Max Up Day: 8.98% Min Up Day: 0.32% Mean: 3.04% Median: 2.35% Max Up:\$44.23 Median Up:\$41.54
30 Down Day Statistics Max Down Day:(306%) Min Down Day:(0.02%) Mean:(17.9%) Median:(1.94%) Max Down:-83.60 Median Down:\$39.80



[IIR Fundamental Analytics](#)

Tomorrow's news, Today

iirteam@iirenergy.com

July 17, 2020



Mayhap this means that WTI will break out to the upside. A return for Producers & Traders who are carrying length in these markets.



Not so much of a return though for refineries whose margins have been improving somewhat of late.

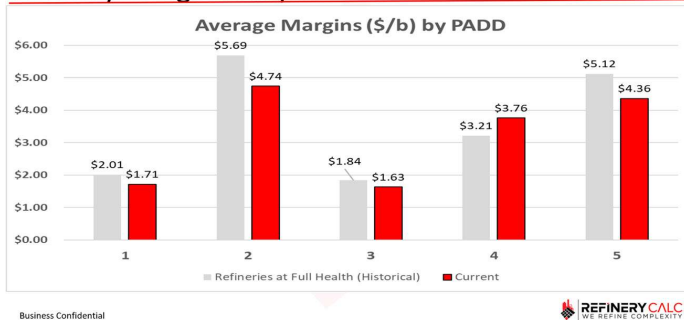
As gasoline & distillate pricing has been showing signs of returning strength of late, even as recent COVID surges lead to decisions around some State re-openings.

Fortunately, in regards to Refinery Operations IIR's recent Alliance with Refinery Calc will provide Key Performance Indicators(KPI's) & Intel here in North America.

IIR Unit Capacity. Reviewing their crude slates, crude runs, product yields, margins, utilizations and more. This modeling will provide a slew of actionable intelligent insights into what is happening in regard to refinery operations in North America.

Especially to their returns. Margins.

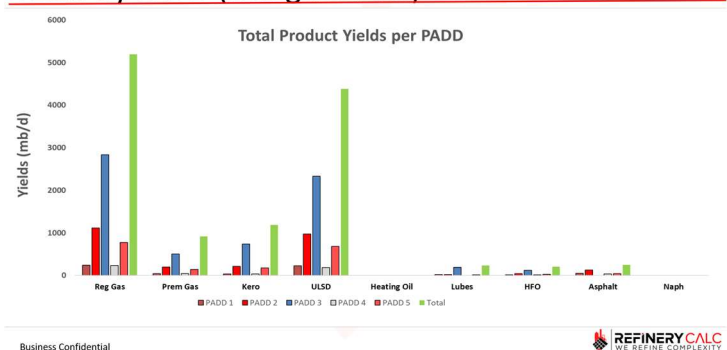
Refinery Margin Analysis



level in Canada. Incorporating a North America Refinery Map as well as Area Chart to illustrate collectively when we can expect refinery capacity to return over the next month or so. For the U.S., IIR is even providing a chart to indicate when we might expect PADDs themselves to become healthier.

Refinery Calc models all of North America's refineries with

Yields by PADD (Using IIR Data)



So intriguing times indeed here in North America as one tries to get a good handle on the overall SnD picture and its impact on the energy industry. Therefore, within this North America Refining Report, IIR hopes to shed some light on what is transpiring from a refinery operations perspective all the way down to the refinery

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Petroleum Refining Highlights

July 17, 2020 North America - US, PADD III: **Valero**, yesterday, July 16, 2020, restarted the 36,000 b/d Unicracker on the West Side of its 240,000 b/d **Bill Greehey Refining Complex** located in Corpus Christi, Texas. The unit had been shut down since March 31, 2020 due to lack of product demand. Separately, planned maintenance on this unit remains tentatively set for 1Q2021.

July 17, 2020 North America - US, PADD III: **Valero**, yesterday evening, July 16, 2020 restarted the 30,000 b/d Hydrocracker at its 95,000 b/d **Three Rivers Refinery** after the unit was shut down due to a process upset on July 15, 2020. The facility remains at reduced rates due to the COVID-19 pandemic.

July 17, 2020 North America - US, PADD III: **Phillips 66**, today, July 17, 2020 has restarted its 259,000 b/d **Sweeny, Texas refinery** after the facility suffered a power blip yesterday, July 16, 2020 on the West End of the site. Units involved include the 175,000 b/d Crude 25-1, 84,000 b/d Delayed Coker, 107,000 b/d Gas Oil Hydrotreater (GOHT) (Old ARDS). The facility remains at reduced rates due to the COVID-19 pandemic.

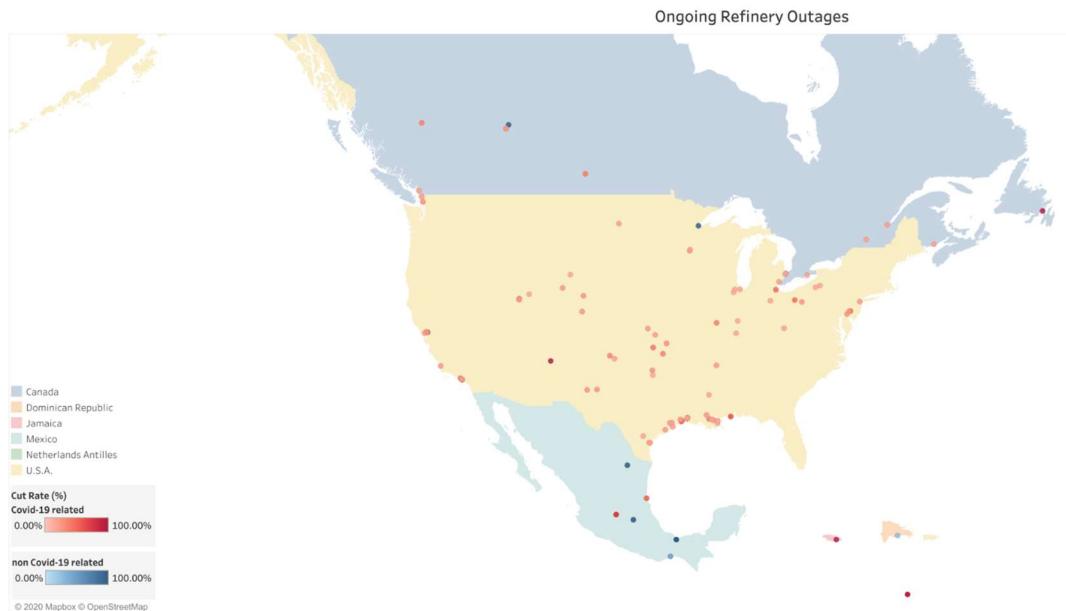
July 17, 2020 North America - US, PADD II: **Citgo** initiated restart on their 58,000 b/d FCCU 112 and associated 16,200 b/d HF Alkylation 120 today, July 16, 2020, after completing planned maintenance that began on May 22, 2020 at its 167,000 b/d **Lemont, Illinois Refinery**. *Restart has been further confirmed by Orbital Insight*. Both units will return to service with a 20 percent rate reduction in-line with the remainder of the refinery due to COVID-19 pandemic.

July 17, 2020 IIR has confirmed that **Petroleum Corporation of Jamaica** completed the 21-day planned plant-wide turnaround at its 35,000 b/d **Kingston, Jamaica Refinery**. The turnaround had begun on June 13, 2020, units were restarted the second week of July. The whole refinery is processing at 70 percent of normal capacity due to the COVID-19 pandemic. IIR continues to monitor the situation and will issue an update when more information becomes available.

July 17, 2020 IIR has confirmed that **Petrocedeno SA** continues to operate its 240,000 b/d **Petrocedeno Venezuela** Crude Upgrader at minimum rates due to financial restrictions and Covid-19. Planned repairs on the 50,000 b/d Delayed Coker, Diesel Hydrotreater (MDHDT1), Naphtha Hydrotreater (NDHDT2), Hydrocracker and associated processing units, extended due to COVID-19 pandemic, were completed by late June.



Map of North American Refineries impacted by COVID-19/non-COVID -- OnGoing Offline Events



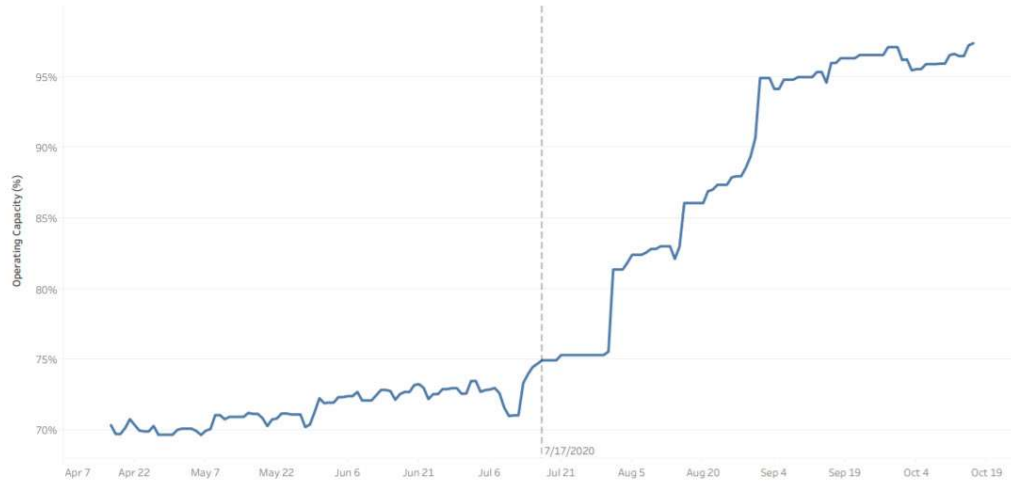
North America Refining Index

NA Refinery Index Table- July 17, 2020

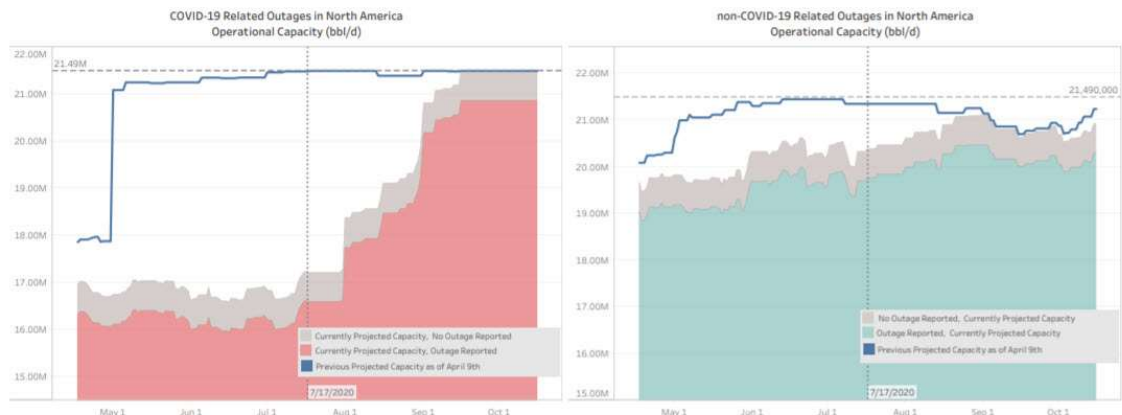
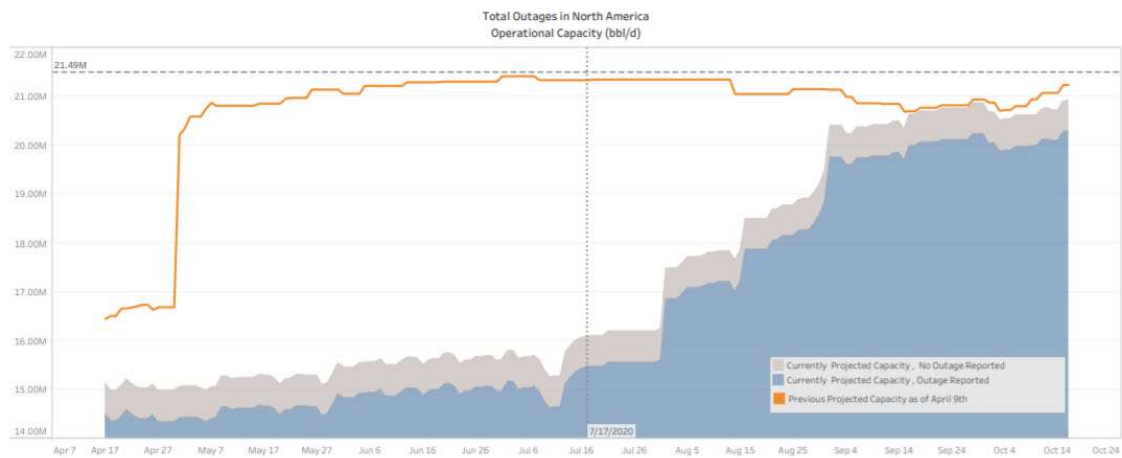
Country	Pad Dist	Market Reg	U Capacity (bbl/d)	Covid Related cap off (bbl/d)	non-COVID-19 related cap off (bbl/d)	Available capacity (bbl/d)	COVID-19 Related Cut Rate (%)	non-COVID-19 Related Cut Rate (%)	Operating capacity (%)
Mexico	Total		1,615,000	230,800	731,500	652,700	14%	45%	40%
	Central Canada	Ontario	392,000	53,350	130,500	208,150	14%	33%	53%
Canada	Eastern Canada	Atlantic Canada	430,000	190,000	0	240,000	44%	0%	56%
		Quebec	395,000	79,000	0	316,000	20%	0%	80%
	Western Canada	Western Canada	848,080	101,665	116,600	629,815	12%	14%	74%
	Total		2,065,080	424,015	247,100	1,393,965	21%	12%	68%
U.S.A.	I	Mid Atlantic	23,000	6,900	0	16,100	30%	0%	70%
		Northeast	883,500	231,000	0	652,500	26%	0%	74%
	II	Great Lakes	2,374,000	540,600	45,000	1,788,400	23%	2%	75%
		Midwest	928,000	194,750	0	733,250	21%	0%	79%
		Southeast	190,000	38,000	0	152,000	20%	0%	80%
		Southwest	481,500	137,650	0	343,850	29%	0%	71%
	III	Rocky Mountains	121,000	54,500	0	66,500	45%	0%	55%
		Southeast	510,100	150,850	0	359,250	30%	0%	70%
		Southwest	8,710,800	1,448,885	80,000	7,181,915	17%	1%	82%
	IV	Rocky Mountains	685,900	96,580	0	589,320	14%	0%	86%
U.S.A.	V	Rocky Mountains	5,000	0	0	5,000	0%	0%	100%
		West Coast	2,898,300	723,900	0	2,174,400	25%	0%	75%
	Total		17,811,100	3,623,615	125,000	14,062,485	20%	1%	79%
Grand Total			21,491,180	4,278,430	1,103,600	16,109,150	20%	5%	75%



Operating (%) Chart North America - North America



North American Refining Area Chart



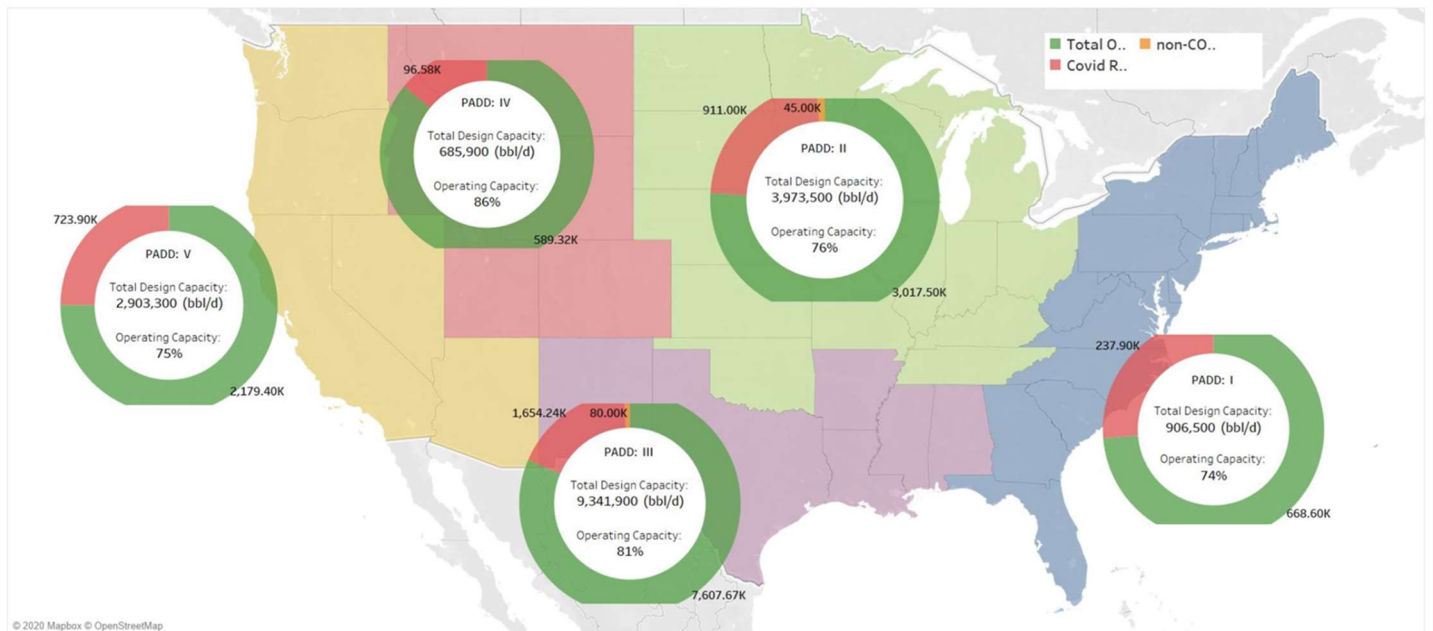


Canada Refineries

Canada Refinery Index Table- July 17, 2020

Pad Dist	Unit State	Plant Name	U Capacity (bbl/d)	Covid Related cap off (bbl/d)	non-COVID-19 related cap off (bbl/d)	Available capacity (bbl/d)	COVID-19 Related Cut Rate (%)	non-COVID-19 Related Cut Rate (%)	Operating capacity (%)
Central Canada	Ontario	Nanticoke Refinery	112,000	28,000	0	84,000	25%	0%	75%
		Sarnia Refinery	280,000	25,350	130,500	124,150	9%	47%	44%
		Total	392,000	53,350	130,500	208,150	14%	33%	53%
		Total	392,000	53,350	130,500	208,150	14%	33%	53%
Eastern Canada	New Brunswick	Saint John Refinery	300,000	60,000	0	240,000	20%	0%	80%
		Total	300,000	60,000	0	240,000	20%	0%	80%
	Newfoundland	Come By Chance Refinery	130,000	130,000	0	0	100%	0%	0%
		Total	130,000	130,000	0	0	100%	0%	0%
	Quebec	Jean Gaulin Refinery	265,000	53,000	0	212,000	20%	0%	80%
		Montreal Refinery	130,000	26,000	0	104,000	20%	0%	80%
		Total	395,000	79,000	0	316,000	20%	0%	80%
	Total		825,000	269,000	0	556,000	33%	0%	67%
Western Canada	Alberta	Edmonton Refinery	129,500	11,625	16,600	101,275	9%	13%	78%
		Fort Saskatchewan Pilot Plant Bi..	1,000	0	0	1,000	0%	0%	100%
		Lloydminster Refinery	30,000	0	0	30,000	0%	0%	100%
		Scotford Refinery	96,500	0	0	96,500	0%	0%	100%
		Scotford Upgrader	100,000	0	100,000	0	0%	100%	0%
		Strathcona Refinery	191,000	41,250	0	149,750	22%	0%	78%
		Sturgeon Refinery	105,080	0	0	105,080	0%	0%	100%
		Total	653,080	52,875	116,600	483,605	8%	18%	74%
	British Columbia	Burnaby Refinery	50,000	10,000	0	40,000	20%	0%	80%
		Prince George Refinery	11,000	4,070	0	6,930	37%	0%	63%
		Total	61,000	14,070	0	46,930	23%	0%	77%
	Saskatchewan	Moose Jaw Asphalt Refinery	22,000	0	0	22,000	0%	0%	100%
		Regina Refinery	112,000	34,720	0	77,280	31%	0%	69%
		Total	134,000	34,720	0	99,280	26%	0%	74%
	Total		848,080	101,665	116,600	629,815	12%	14%	74%
Grand Total			2,065,080	424,015	247,100	1,393,965	21%	12%	68%

US PADDs



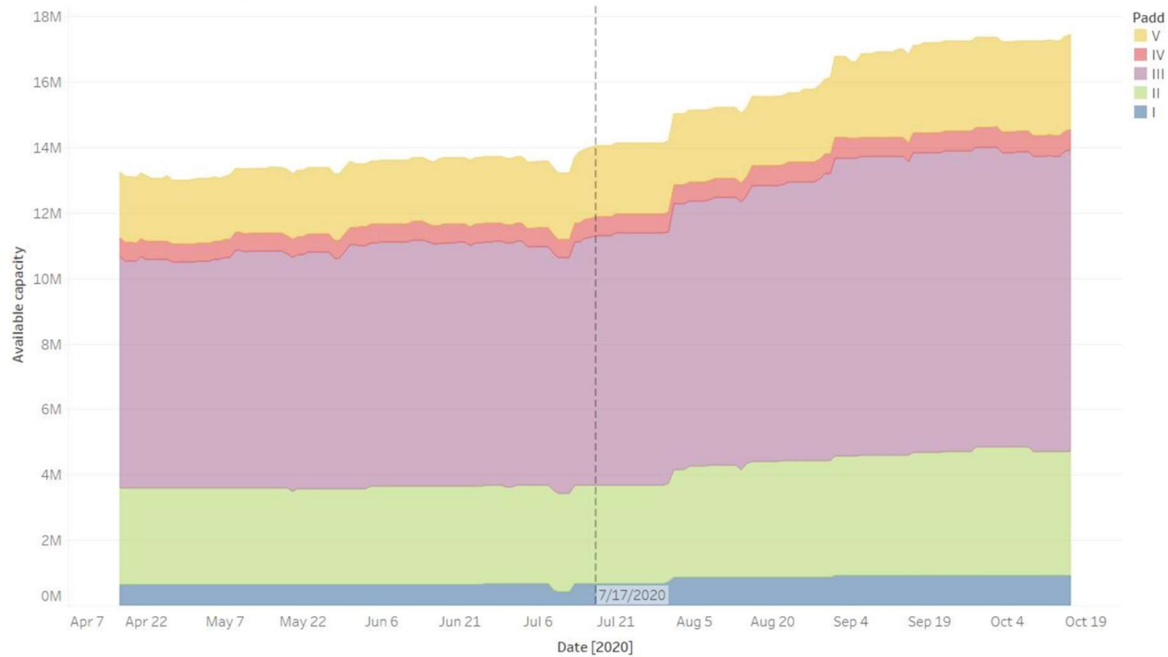
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Available Capacity (bbl/d) by PADDs



Map of North American Refineries impacted by COVID-19/non-COVID -- Future Offline Events

