

Chart of the Week #26:

California Retail Gasoline Prices vs the U.S.

Max Pyziur

September 15, 2021

Washington, DC

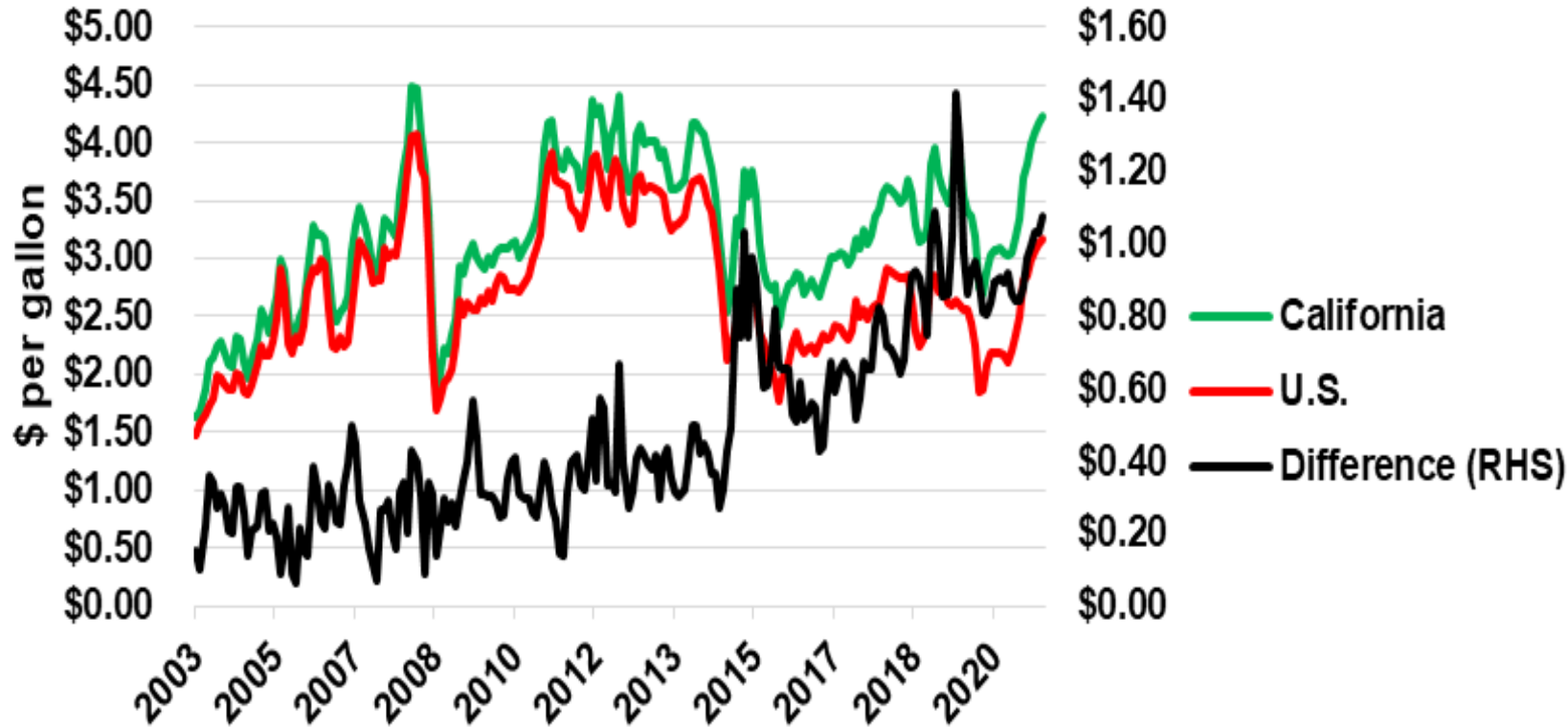


Los Angeles filling Station
— May 20, 2021
Source: Sport/Zuma Press

California Retail Gasoline Prices vs the U.S.



California Retail Regular Gasoline Prices vs U.S.



Analysis Based on Monthly EIA Data

EPRINC

	Average Annual California Premium to National Retail Regular Prices	Total Estimated Difference Based on Annual California Vehicle Miles Traveled (\$Billion\$)
2005	\$0.20	\$2.7
2006	\$0.24	\$3.2
2007	\$0.28	\$3.6
2008	\$0.27	\$3.4
2009	\$0.33	\$4.3
2010	\$0.31	\$4.0
2011	\$0.30	\$3.8
2012	\$0.42	\$5.4
2013	\$0.38	\$4.9
2014	\$0.39	\$5.1
2015	\$0.74	\$10.4
2016	\$0.59	\$8.5
2017	\$0.61	\$8.7
2018	\$0.76	\$10.8
2019	\$1.00	\$14.2
2020	\$0.88	\$10.6
Analysis based on EIA, FHWA Data		EPRINC

California Retail Gasoline Prices vs the U.S.

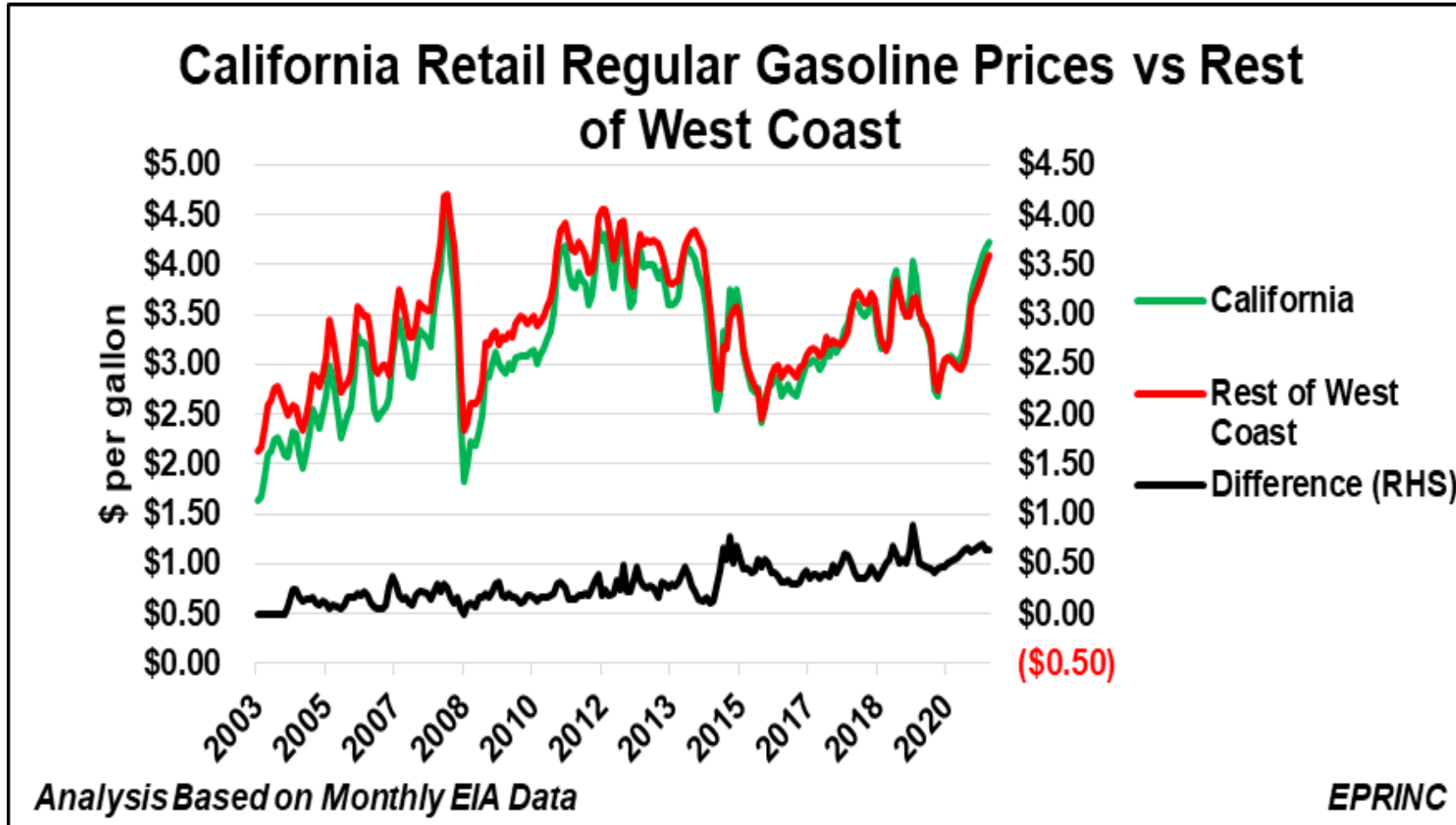


- Historically, California has had higher gasoline prices than the rest of the U.S, and higher than even other West Coast states. This is due to a combination of logistical and regulatory factors.
- Beginning in the 1970s, California received special waivers under the U.S. Clean Air Act (CAA) to more aggressively pursue pollution from the combustion of transportation fuels. This led to California developing its own gasoline formulation standard (known as California Air Resources Blendstock - CARB) in the 1990s in order to reduce smog and other air-borne pollutants. This program was highly successful. As a result, all gasoline consumed in California is only produced by the state's refineries.
- Furthermore, because of its high consumption, the Los Angeles region needs to import gasoline from the San Francisco one. ~~With no product pipelines in California,~~ no direct product pipelines between the two regions, the fuels are moved by Jones Act tankers.
- Additional environmental policies causing higher California gasoline prices include the MTBE ban, the Renewable Fuel Standard (RFS), and most importantly California's Low Carbon Fuel Standard. Enacted in 2009, the last seeks to both lower carbon intensity and lower consumption of petroleum-based fuels. In order to achieve compliance, California gasoline formulation becomes increasingly stringent.
- In the 2000s California's retail regular gasoline premium was between approximately 20 and 30 cents compared to the rest of the U.S., leading to California motorists paying an additional annual total \$2.7 to \$4.3 billion for gasoline.
- In the last five years with increasingly aggressive LCFS and other regulatory policies, this premium has risen to an average between 75 cents to \$1.05 with motorists paying an additional annual total between \$8.5 and 14.2 billion.
- On July 2021, San Francisco's Bay Area Air Quality Management District's Board voted to require scrubbers at Chevron and PBF's area refineries. Costs are disputed, ranging between \$0.2 and \$1.5 billion per facility. The costs and implementation would further raise California gasoline prices.
- The expanded version of this slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org)



Additional Slides

California Retail Gasoline Prices vs the Rest of the West Coast

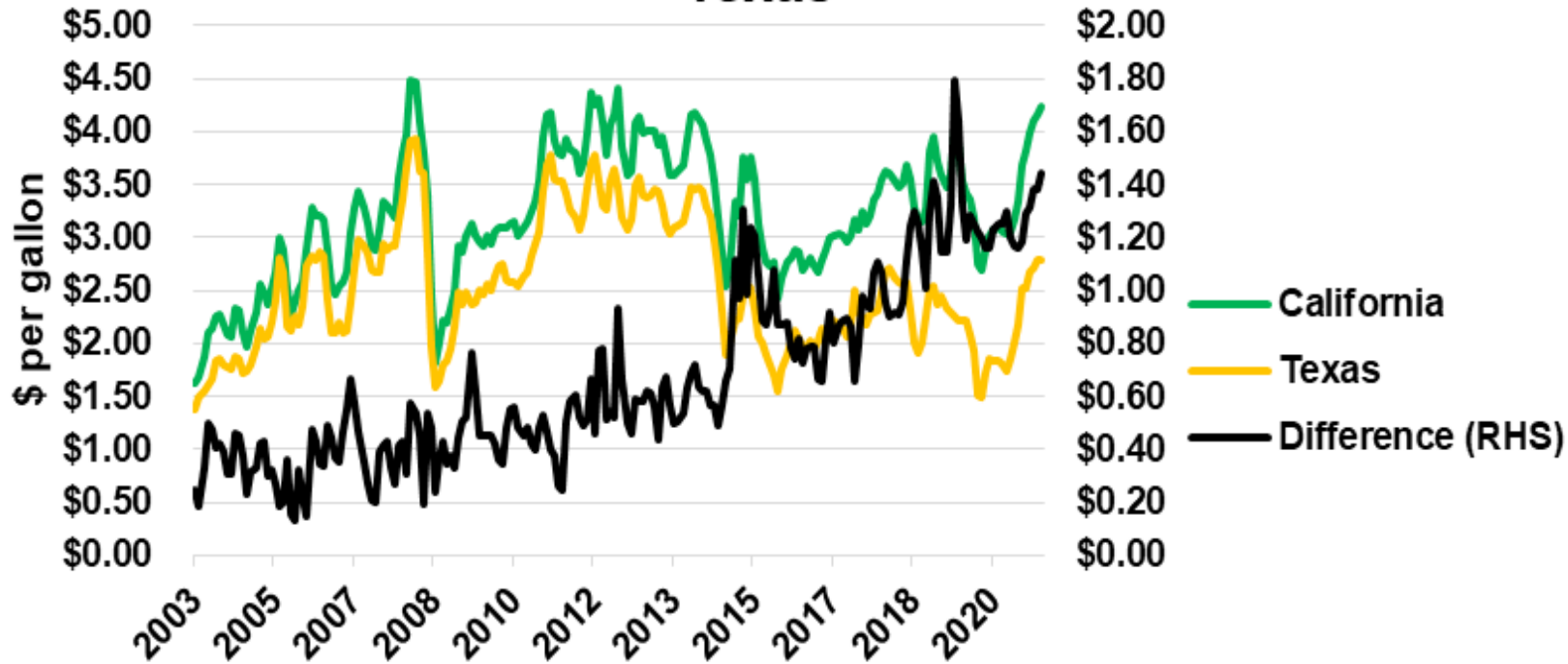


	Average Annual California Premium to Rest of U.S. West Coast Retail Regular Prices	Total Estimated Difference Based on Annual California Vehicle Miles Traveled (\$Billion\$)
2005	\$0.10	\$1.4
2006	\$0.14	\$1.9
2007	\$0.20	\$2.6
2008	\$0.18	\$2.2
2009	\$0.18	\$2.4
2010	\$0.16	\$2.1
2011	\$0.21	\$2.6
2012	\$0.28	\$3.5
2013	\$0.30	\$3.8
2014	\$0.26	\$3.3
2015	\$0.52	\$7.3
2016	\$0.40	\$5.8
2017	\$0.39	\$5.6
2018	\$0.44	\$6.2
2019	\$0.58	\$8.3
2020	\$0.50	\$6.0
Analysis based on EIA, FHWA Data		EPRINC

California Retail Gasoline Prices vs Texas



California Retail Regular Gasoline Prices vs Texas



Analysis Based on Monthly EIA Data

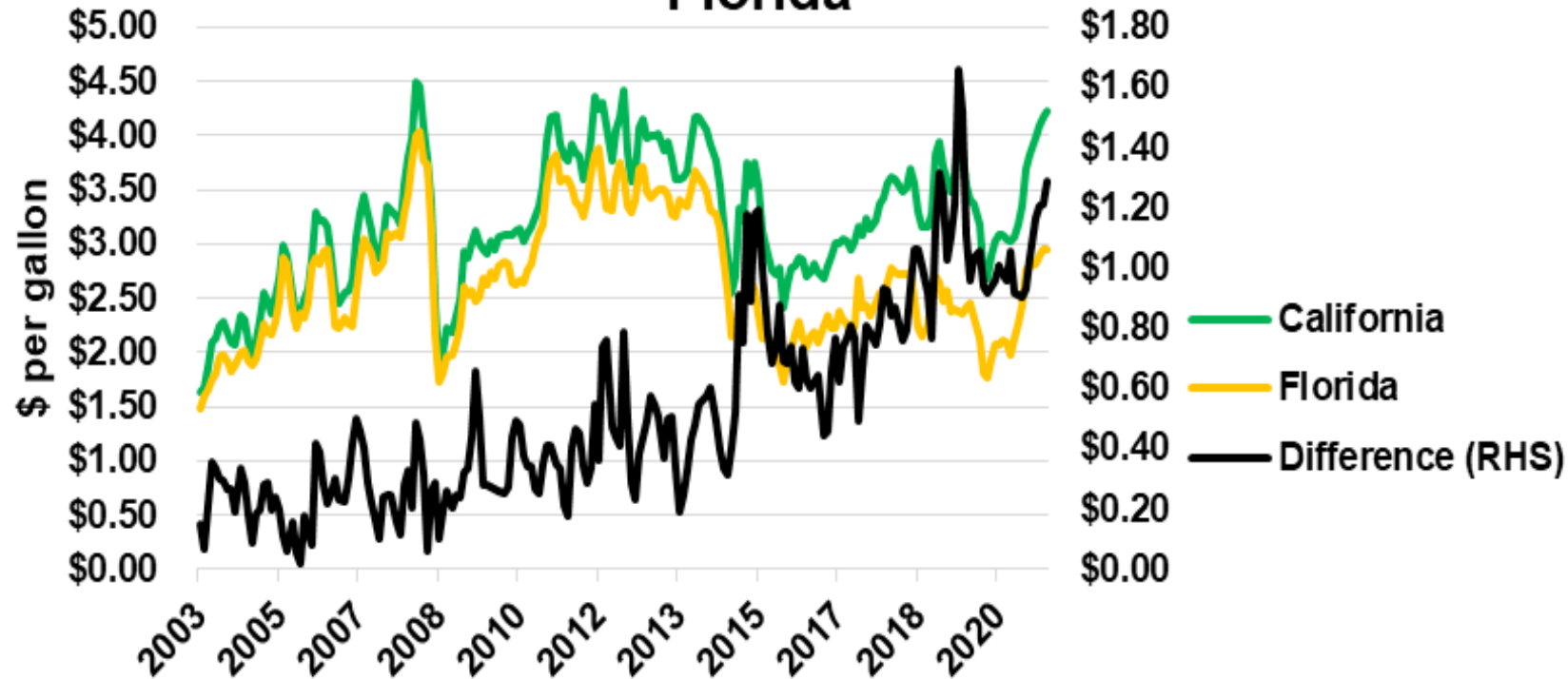
EPRINC

	Average Annual California Premium to Texas Retail Regular Prices	Total Estimated Difference Based on Annual California Vehicle Miles Traveled (\$Billion\$)
2005	\$0.29	\$3.9
2006	\$0.34	\$4.6
2007	\$0.42	\$5.3
2008	\$0.40	\$5.0
2009	\$0.47	\$6.1
2010	\$0.46	\$5.9
2011	\$0.45	\$5.7
2012	\$0.61	\$7.8
2013	\$0.57	\$7.3
2014	\$0.60	\$7.9
2015	\$0.99	\$14.0
2016	\$0.81	\$11.8
2017	\$0.84	\$12.0
2018	\$1.04	\$14.7
2019	\$1.32	\$18.7
2020	\$1.23	\$14.7
Analysis based on EIA, FHWA Data		EPRINC

California Retail Gasoline Prices vs Florida



California Retail Regular Gasoline Prices vs Florida



Analysis Based on Monthly EIA Data

EPRINC

	Average Annual California Premium to Florida Retail Regular Prices	Total Estimated Difference Based on Annual California Vehicle Miles Traveled (\$Billion\$)
2005	\$0.17	\$2.3
2006	\$0.23	\$3.1
2007	\$0.30	\$3.8
2008	\$0.25	\$3.1
2009	\$0.33	\$4.3
2010	\$0.34	\$4.4
2011	\$0.35	\$4.4
2012	\$0.49	\$6.4
2013	\$0.42	\$5.5
2014	\$0.44	\$5.9
2015	\$0.85	\$12.0
2016	\$0.66	\$9.5
2017	\$0.70	\$9.9
2018	\$0.88	\$12.5
2019	\$1.17	\$16.5
2020	\$0.98	\$11.7
Analysis based on EIA, FHWA Data		EPRINC