WHAT'S DRIVING GAS PRICES
Zones of Contention in Gasoline Pricing
Refiners charge each dealer a different rate for the same fuel. They say it's fair, but critics contend the practice helps them boost profits and suppress competition.
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June 19, 2005
Second in a Series

On a recent Wednesday, 72-year-old veterinarian Charles Hendricks filled up his Mercury Grand Marquis at a Chevron in west Anaheim. On the other end of town, 22-year-old sandwich store manager Ryan Ketchum gassed up his Nissan Sentra at a Chevron in Anaheim Hills.

Both men bought regular gasoline. Both pumped the gas themselves. But there was one important difference: Hendricks paid $2.399 a gallon, whereas Ketchum paid $2.539 — 14 cents more a gallon for the same Chevron gas.

Such price variations may seem odd, but they are not unique to Anaheim. On any given day, in any major U.S. city, a single brand of gasoline will sell for a wide range of prices even when the cost to make and deliver the fuel is the same.

The primary culprit is zone pricing, a secret and pervasive oil company strategy to boost profits by charging dealers different amounts for fuel based on traffic volume, station amenities, nearby household incomes, the strength of competitors and other factors.

It's a controversial strategy, but the courts have thus far deemed it legal, and the Federal Trade Commission recently said the effect on consumers was ambiguous because some customers got hurt by higher prices while others benefited from lower ones.

To be sure, other industries vary prices by area too. Supermarkets, for instance, price the same brand of bread or cheese differently in different neighborhoods. But gasoline price patterns provoke a response that bread can't match, partly because other commodities don't fluctuate as wildly as gasoline does and their prices aren't posted by the side of the road.

Oil companies say the practice allows them to adapt to local market conditions by, for example, lowering prices to dealers who face stiff competition from high-volume sellers such as Costco Wholesale Corp.

Most California gasoline retailers, however, declined to discuss their pricing practices, referring questions to industry groups.

"It is a perfectly acceptable form of pricing," said Joseph Sparano, president
of the Western States Petroleum Assn., a Sacramento-based industry trade group. Zone pricing, he said, "is a way for companies to price fairly in different areas."

Said Trilby Lundberg, who produces the widely quoted Lundberg Survey of gasoline prices: "The flip side … is that locational pricing allows for prices to be lower in some areas than others."

Such explanations haven't appeased consumer groups, lawmakers and state government critics such as Connecticut Atty. Gen. Richard Blumenthal, who has tried to outlaw the pricing method, calling it "invisible and insidious."

"Zone pricing, on paper, sounds reasonable; in practice, it's despicable," said Michael Shames, executive director of the Utility Consumers' Action Network, a San Diego group that has tracked regional gasoline prices for almost a decade. "It undercuts price competition."

The issue has particular resonance with consumers in California, where retail fuel prices are among the nation's highest and annual gasoline consumption outpaces demand in all but Japan and the United States as a whole.

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Dissecting Prices

Quantifying the effects of gasoline zone pricing on consumers, however, remains a difficult task. That's partly because the mechanics of the strategy are kept secret and partly because the effects on consumers – in terms of cents per gallon – are constantly changing.

In addition, zone pricing kicks in at the end of a chain of complex transactions that take place between the oil well and the corner gas station.

The largest chunk of the price of gasoline, about 50%, is a reflection of the cost of crude oil, the raw material used by refineries to make fuel. Experts say that for every $1 jump in the cost of a 42-gallon barrel of crude, there will be a 2.5-cent-per-gallon increase in gasoline prices.

In California, sales and excise taxes also are a big part of the final tally. At today's prices, taxes represent about 55 cents a gallon – a number that rises and falls along with retail prices because the sales tax is assessed as a percentage of the bill.

Critics say zone pricing is another factor that keeps the state's retail prices well above the national average; California prices have been as much as 50 cents higher than the average for the country as a whole.

"The whole reason that people care about zone pricing is that they believe that this causes higher gas prices," said Justine Hastings, a Yale economics professor who has studied the phenomenon. Consumer groups and others are suspicious of the practice, she said, because to make it work, "it requires a substantial amount of market power on the part of refiners."

In California, refiners have that power in the form of an oligopoly in which a handful of companies control the market, according to consultants for the California Energy Commission and economists.
Oil companies in California have that kind of control because they sell and deliver their fuel directly to most of the state's branded stations — those that sell gasoline under brand names such as Chevron, Arco, Shell and 76. The refiners charge those dealers a wholesale price for the fuel, known as the dealer tank wagon price, based mostly on a carefully delineated map of price zones that have nothing to do with differences in costs.

The strategy is not unique to California, but it is especially powerful here because the five largest refiners, as sole suppliers to about 70% of the retail market, can readily influence pump prices by changing how much the dealers pay for fuel. Nationwide, refiners directly supply 35% of gasoline retailers, according to the Energy Department. That control sticks because branded dealers are bound by long-term contracts that require them to buy fuel from the refiner at prices that are not negotiable.

In other markets, refiners have less retail control because there are more unbranded competitors to challenge their pricing moves and because most branded stations can shop for fuel and buy through middlemen instead of directly from the oil companies, said Richard Gilbert, who heads the economics department at UC Berkeley.

"Large refiners in California have considerable power to elevate prices without having to conspire with a competitor or exclude other competitors," Gilbert testified last year before the state Assembly. A tight hold on branded stations "reduces competition at the wholesale level, and wholesale prices influence retail prices," added Gilbert, a former Justice Department deputy assistant attorney general for antitrust economics.

Consumers see the differences in wholesale prices because dealers move their retail prices up and down in sync with changes in what they pay for fuel. Whether gas sells for $2.25 a gallon or $1.89, most dealers make the same profit — a target amount set by the oil companies that is typically 5 to 10 cents a gallon, according to retail studies and dealer interviews. The industry categorically denies that refiners dictate retail prices or dealer profits.

Shell Oil Co., in response to written questions, said: "Street pricing is set by the local marketplace in California and elsewhere. By law, our retailers and wholesalers are free to set their own prices. While we do not tell them what prices to charge, we do encourage them to act responsibly."

On April 7, a sampling of retail prices at more than 1,200 gas stations in Los Angeles and Orange counties showed prices that varied widely within the same brand. In many cases, nearby stations charged vastly different amounts.

The prices were collected by the Oil Price Information Service, an industry trade publisher that sells retail gas price data gleaned from credit card transactions and dealer surveys. The sample taken April 7, a day selected at random by The Times, represents about 62% of the total stations in the two counties, though Arco sites were underrepresented because they don't take credit cards, said Fred Rozell, director of retail pricing at the Lakewood, N.J., firm.

Chevron stations surveyed that day in Anaheim ranged from $2.479 to $2.669 for a gallon of self-serve regular — a 19-cent spread. Anaheim stations selling the 76 brand varied by 22 cents a gallon.

"There's no rhyme or reason to it," said Roy Littlefield, spokesman for Service Station Dealers of America, a national trade group based in Maryland. "The sad
part is that the dealer who has the highest price on the street may actually be making the lowest margin."

On May 18, Deepak Patel, co-owner of a Chevron on Katella Avenue about two miles from Disneyland, was charging $2.479 a gallon for self-serve regular. A Chevron less than two miles away was charging 8 cents a gallon less; other stations close by were charging slightly more.

Patel said the fact that other stations nearby were cheaper was costing him.

"We lose business because of the prices -- definitely," he said. "But we can't lower the prices more than this because we lose money." He said he was grossing 8 or 9 cents a gallon. Credit card fees eat up about 6 cents of that profit if the customer uses a non-Chevron credit card, which happens about half the time, he said.

Dealers aren't told how Chevron decides on its prices and zones, Patel said. "I have no idea how they [the oil companies] determine the prices, but everywhere they have different prices."

Without knowing the underlying wholesale prices charged to dealers at the sampled stations, it's impossible to tell how much of the price gaps on any given day can be attributed to decisions by individual dealers and how much to zone pricing and refiners' desire to capture higher profits. But dealers contend that the refiners keep tight control over gas station profits through wholesale fuel and other charges.

* Location May Be Factor

As for pricing patterns, the Oil Price Information Service data suggested only one strong correlation in the two counties: that higher-income areas tend to have higher gasoline prices.

The April 7 sampling showed that the highest prices tended to fall within wealthier areas, including Irvine, east Anaheim, West Los Angeles, Beverly Hills and Malibu. The lowest prices were concentrated in the middle-income areas of the San Fernando and San Gabriel valleys and northwest Orange County. And in the low-income South Los Angeles area, prices fluctuated from high to low.

"They know that there are certain pockets and certain areas where they can extract a higher price, and that's what they do," said Andre van der Valk, who sued Shell for assessing him different prices for fuel at his two Shell stations in Southern California that are about three miles apart.

James Bushnell, research director of the University of California Energy Institute, said the oil companies and their stations charge more for gasoline in relatively affluent areas "because they can." It's a function of the value of time, he added, and "people in those areas are less inclined to spend the time looking for cheaper gas."

Valero Energy Corp., a relatively small retailer in California, was the only oil company willing to discuss its zone pricing in the state. Valero uses Tulsa, Okla.-based MPSI Systems Inc. to design an economic model that creates price zones, said Ken Applegate, Valero's vice president for wholesale marketing.
"What you're trying to do as a branded marketer is ensure that you have a competitive price out there for your locations," he said.

Applegate said he wasn't sure why the Oil Price Information Service data showed a link between high incomes and high retail gasoline prices. But he did note that property and other costs could be higher in those areas.

MPSI Systems sets zone boundaries using specialized mapping software, market characteristics and models of consumer buying habits and demographics.

"It's an economic model," said Don Spears, MPSI's managing director of pricing systems and consulting. "It's a simple thing, but it's a difficult thing for people to understand."

To model Los Angeles, Spears said, MPSI would send a crew to scour the city, locating every gasoline station and collecting about 150 bits of information about each site — noting such things as the size of the property, number of nozzles, type of convenience store, hours of service, ease of entry and ancillary services such as a carwash.

Next, the company would map out the locations, add information about traffic volumes and sort through characteristics that help estimate fuel demand at each site, including population, housing density and household income, Spears said. To get an estimate of sales at competing gas stations, MPSI might take readings from station pumps, which are required by law to display an odometer-like meter totaling up the amount of fuel dispensed.

"The whole notion behind zone pricing is to make sure two dealers serving the same customers get the same price" from the oil company, Spears said. Federal law, in fact, prohibits oil companies from selling fuel at different prices to dealers serving the same market.

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Small Rivals Targeted?

Over the years, many dealers have sued oil companies over price zones, accusing them of inflating wholesale fuel costs to drive customers to more-favored company-owned locations or to discipline gas station operators. Consumer advocate Shames argues that oil companies also tinker with wholesale prices to weaken competitors, particularly unbranded stations that charge less.

"If an independent tries to undercut an oil company's branded price by more than a few cents, then that oil company uses zone pricing to lower the price for the dealer nearby, so much so that the independent loses money," Shames said. "Customers in other places are paying higher prices to create a slush fund that's used to discipline an independent somewhere else."

In 2000, the FTC seemed to agree with that assessment, calling the use of zone pricing "an earmark of oligopolistic market behavior."

In a report on the merger of Exxon and Mobil, the agency said, "Market incumbents also use price zones to target entrants without having to lower price throughout a broader marketing area... By targeting price-cutting competitors, incumbents can [and have] deterred entrants from making significant investments in gasoline stations ... and thus from expanding to a scale at which the entrant could affect price throughout the broader metropolitan area."
Last year, however, the FTC said about zone pricing: "Neither economic principles nor empirical evidence provides a basis for a presumption that these practices result in higher gasoline prices."

Back in Anaheim, Ketchum, the sandwich store manager, explained that he had pulled into the higher-priced Chevron station because he "needed gas very badly."

"This is a high-class area. They can charge 10 cents more a gallon and still have people come to them," Ketchum said. "It bothers me, but there's nothing I can do about it."

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Times staff writer Doug Smith contributed to this report.