



Comparing Cardlock, Retail and Truck Stop Diesel Pricing

2017 Year in Review

Contents

Introduction.....	2
Methodology	2
Part 1: Retail vs. Cardlock Pricing.....	4
Arizona.....	5
California.....	6
Nevada.....	7
Oregon.....	7
Washington	8
Part 2: Truck Stop vs. Cardlock Pricing.....	9
Arizona.....	10
California.....	11
Nevada.....	12
Oregon.....	12
Washington	13
Conclusion.....	14
About P-Fleet.....	14

Introduction

Commercial fleets and businesses that use a card-based fleet fueling solutions have different types of fuel networks from which to choose. There are various [fuel card products](#) available that provide access to retail stations, truck stops, commercial fuel sites, also known as cardlocks, or some combination of these fuel locations. Figuring out [which fuel card product is right for your fleet](#) can be challenging, but a more fundamental issue is identifying which type of fuel network – retail, truck stop or cardlock – gives your company the best chance of realizing lower diesel fuel prices.

The pricing models for retail stations, truck stops and cardlocks differ and can significantly affect the diesel fuel prices that companies pay. Retail stations and truck stops typically price fleet customers off of the pump price with any discounts referred to as “retail-minus.” Cardlocks, like CFN, offer fleet customers “cost-plus” diesel prices with the price per gallon based on the wholesale cost as reported by [OPIS](#) (Oil Price Information Service), plus any network fee and margin charged by the card issuer.

It’s important to note that discounts and margins for fuel cards vary by card issuer and should be carefully evaluated. For the purposes of this analysis, however, we focused solely on the underlying pricing models to which card products (and their accepting fuel locations) are tied, not on specific vendor discounts or margins. Our goal is to help fleet managers first identify which fuel network – retail, truck stop or cardlock – offers the most savings potential with diesel fuel prices. Because understanding which fuel network performs best, enables fleet managers to narrow their search to qualifying card products and to implement the best possible fuel program for their fleet.

Methodology

Retail, truck stop and cardlock diesel fuel prices were compiled and analyzed for AZ, CA, NV, OR and WA for 2017. We focused on the Western U.S. because of the concentration of retail, truck stop and cardlock fuel locations available to fleets. While present in other states, the number of cardlocks are highest in the West, making cardlock fueling an ideal option for fleets that operate there. With fewer cardlock sites in other parts of the U.S., it is less likely cardlock fueling would be considered. Moreover, cardlocks are most often used by diesel truck fleets, hence our focus on diesel fuel prices. Our intent was to measure the potential difference in prices for fleets that fueled at cardlocks as opposed to retail stations or truck stops.

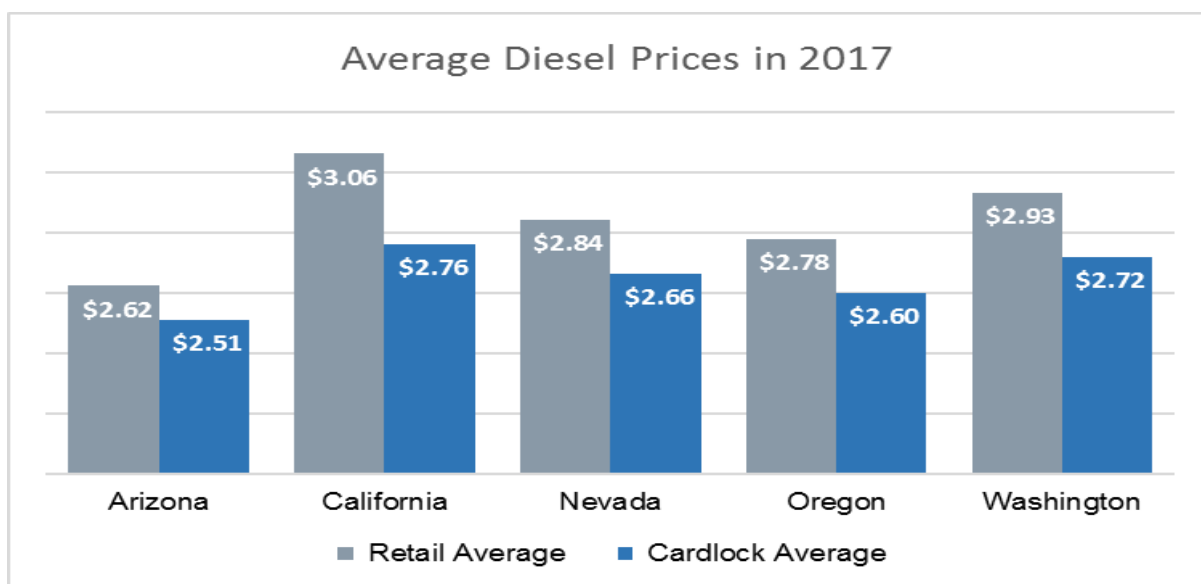
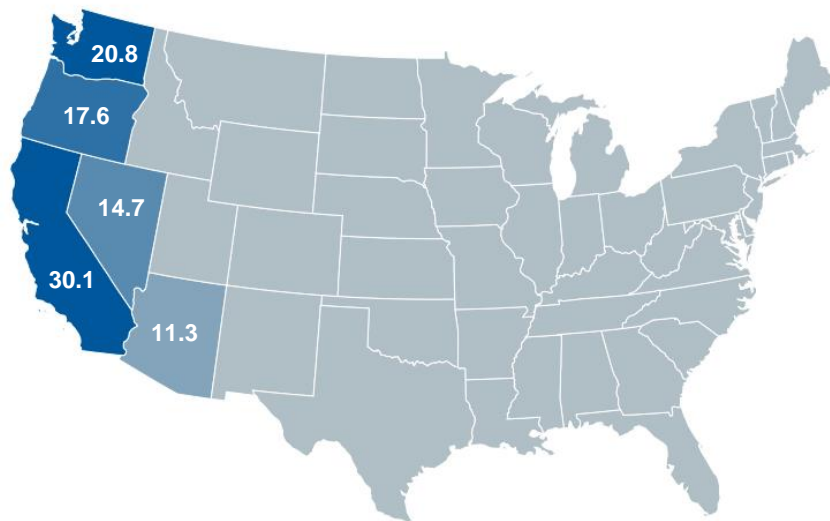
Our analysis is divided into two side-by-side comparisons. Part 1 compares full-tax retail and cardlock pricing for western states; part 2 compares full-tax truck stop and cardlock pricing. It is important to note, however, that we narrowed our intrastate analysis to geographic regions with either a) retail and cardlock locations or b) truck stop and cardlock locations to accurately reflect the fueling choices available to fleets. We then calculated the annual average for each state and intrastate market.

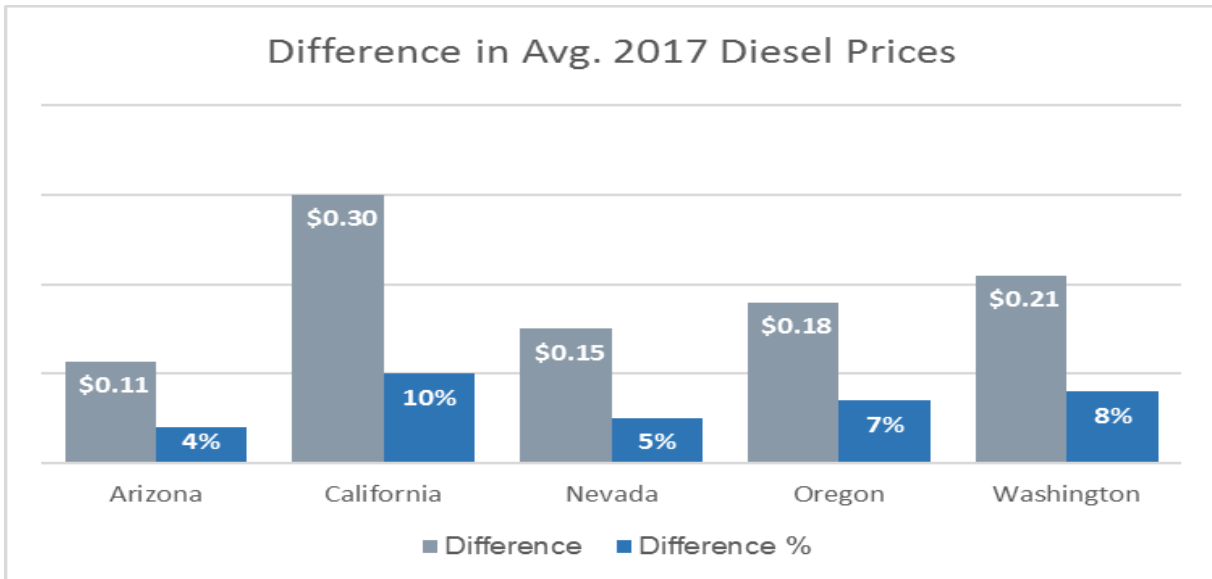
Data sources included wholesale, retail and truck stop diesel fuel prices as reported by OPIS. For retail pricing, we used data available through OPIS Retail Fuel Watch. For truck stop pricing, we used data from the OPIS Truck Stop Spread Report and looked at major brands in the West: Pilot Flying J, Love's Travel Stops and Travel Centers of America (TA). For cardlock pricing, we used data from network cost files and included transfer and freight fees common for cardlock networks like CFN to give a more accurate baseline for comparison. The results of our analysis follow.

Part 1: Retail vs. Cardlock Pricing

The average price of diesel for retail and cardlock fuel networks differed significantly in 2017 for the western states that we reviewed. Cardlock fueling offered lower diesel fuel prices on average of 19.0 cents per gallon or 7% (before vendor margins). Price differences ranged from 11.3 to 30.1 cents per gallon, with the smallest and largest differences in Arizona and California, respectively.

Per Gal Difference between Retail & Cardlock Pricing
(in cents, based on avg. diesel prices in 2017)





Arizona

The average price of diesel in Arizona in 2017 was \$2.262 for retail locations compared to \$2.510 for cardlocks, a difference of nearly 11 cents per gallon or 4.31%. The market within Arizona with the largest difference between retail and cardlock diesel prices was Flagstaff, with a difference of 19.5 cents per gallon. In contrast, Tucson the average cardlock price was 7.0 cents per gallon above the retail price. Tucson was one of only two regions where the average cardlock price was higher than the retail average, the other being Clarkston, WA. 3 of the 5 markets with the smallest difference between retail and cardlock diesel prices were in Arizona. In descending order, they were Yuma, Phoenix, and Tucson.

Avg. Retail & Cardlock Diesel Prices by Market

Market	Retail Price	Cardlock Price	Per Gal Difference	% Difference
Flagstaff, AZ	\$2.727	\$2.523	\$0.203	7.4%
Lake Havasu-Kingman, AZ	\$2.720	\$2.528	\$0.192	7.0%
Prescott, AZ	\$2.649	\$2.496	\$0.153	5.7%
Yuma, AZ	\$2.570	\$2.437	\$0.133	5.18%
Phoenix, AZ	\$2.510	\$2.443	\$0.067	2.67%
Tucson, AZ	\$2.561	\$2.631	- \$0.069	- 2.27%
State Avg.	\$2.623	\$2.510	\$0.113	4.31%

California

The difference between retail and cardlock diesel pricing was greatest in California. The average price of diesel in 2017 was \$3.06 for retail locations and \$2.76 for cardlocks, a difference of 30.1 cents per gallon or 10.17%. The market within California with the largest difference was, not surprisingly, San Francisco at 43.54 cents. El Centro had the smallest difference at 14.9 cents. California also included 14 of the 15 markets with the largest overall difference between retail and cardlock diesel prices.

Avg. Retail & Cardlock Diesel Prices by Market

Market	Retail Price	Cardlock Price	Per Gal Difference	% Difference
San Francisco, CA	\$3.177	\$2.742	\$0.435	13.70%
San Diego, CA	\$3.065	\$2.631	\$0.434	14.17%
San Louis Obispo, CA	\$3.198	\$2.815	\$0.383	11.98%
San Jose, CA	\$3.103	\$2.735	\$0.367	11.83%
Oakland, CA	\$3.113	\$2.746	\$0.366	11.78%
Napa, CA	\$3.110	\$2.745	\$0.365	11.76%
Redding, CA	\$3.146	\$2.785	\$0.361	11.48%
Madera-Chowchilla, CA	\$3.118	\$2.758	\$0.359	11.53%
Hanford-Corcoran, CA	\$3.101	\$2.744	\$0.356	11.50%
San Rafael, CA	\$3.091	\$2.739	\$0.351	11.38%
Salinas, CA	\$3.133	\$2.783	\$0.350	11.17%
Fresno, CA	\$3.088	\$2.745	\$0.343	11.12%
Los Angeles, CA	\$3.103	\$2.770	\$0.333	10.73%
Orange County, CA	\$3.088	\$2.758	\$0.329	10.68%
Santa Rosa, CA	\$3.076	\$2.761	\$0.315	10.26%
Visalia-Porterville, CA	\$3.094	\$2.779	\$0.315	10.20%
Modesto, CA	\$3.056	\$2.743	\$0.313	10.25%
Sacramento, CA	\$3.041	\$2.735	\$0.306	10.07%
San Bernardino, CA	\$3.055	\$2.752	\$0.302	9.89%
Stockton, CA	\$3.053	\$2.757	\$0.295	9.67%
Bakersfield, CA	\$3.120	\$2.832	\$0.288	9.23%
Vallejo-Fairfield, CA	\$3.037	\$2.760	\$0.277	9.13%
Merced, CA	\$3.053	\$2.779	\$0.274	8.98%

Santa Barbara, CA	\$3.089	\$2.827	\$0.262	8.48%
Riverside, CA	\$3.037	\$2.775	\$0.261	8.62%
Santa Cruz, CA	\$3.000	\$2.746	\$0.254	8.49%
Ventura, CA	\$3.028	\$2.782	\$0.245	8.12%
Chico, CA	\$2.975	\$2.730	\$0.244	8.22%
Yuba City, CA	\$2.986	\$2.766	\$0.219	7.39%
El Centro, CA	\$2.967	\$2.817	\$0.149	5.05%
State Avg.	\$3.062	\$2.751	\$0.311	10.17%

Nevada

Nevada's retail pricing was consolidated into two major markets: Las Vegas and Reno-Carson City. The average price of diesel in 2017 between those two markets was \$2.811 for retail locations and \$2.663 for cardlock locations, a difference of 14.7 cents per gallon or 5.25%. Las Vegas had a larger per gallon difference of 18.9 cents compared to 10.5 cents for Reno-Carson City.

Avg. Retail & Cardlock Diesel Prices by Market

Market	Retail Price	Cardlock Price	Per Gal Difference	% Difference
Las Vegas, NV	\$2.763	\$2.573	\$0.189	6.87%
Reno-Carson City, NV	\$2.859	\$2.754	\$0.105	3.68%
State Avg.	\$2.811	\$2.663	\$0.147	5.25%

Oregon

The average price of diesel in Oregon in 2017 was \$2.776 for retail locations compared to \$2.599 for cardlocks, a difference of over 17 cents per gallon or 6.8%. The market with the largest difference was Portland at 23.5 cents per gallon. Albany, by contrast, had the smallest difference at 11.1 cents per gallon.

Avg. Retail & Cardlock Diesel Prices by Market

Market	Retail Price	Cardlock Price	Per Gal Difference	% Difference
Portland, OR	\$2.760	\$2.524	\$0.235	9.34%
Medford, OR	\$2.852	\$2.637	\$0.215	8.16%

Salem, OR	\$2.756	\$2.546	\$0.210	8.24%
Grants Pass, OR	\$2.928	\$2.739	\$0.188	6.88%
Eugene, OR	\$2.758	\$2.590	\$0.167	6.47%
Philomath, OR	\$2.726	\$2.565	\$0.160	6.24%
Bend, OR	\$2.764	\$2.636	\$0.127	4.82%
Albany, OR	\$2.669	\$2.558	\$0.111	4.34%
State Avg.	\$2.776	\$2.599	\$0.177	6.81%

Washington

The average price of diesel in Washington in 2017 was \$2.933 for retail locations compared to \$2.724 for cardlock locations, a difference of 20.8 cents per gallon or 7.67%. Within the state, it was a tale of two cities: Seattle and Clarkson. Seattle had a difference of 39.7 cents per gallon, the largest difference of any market not in California. In contrast, Clarkson's prices are so close that it makes no difference.

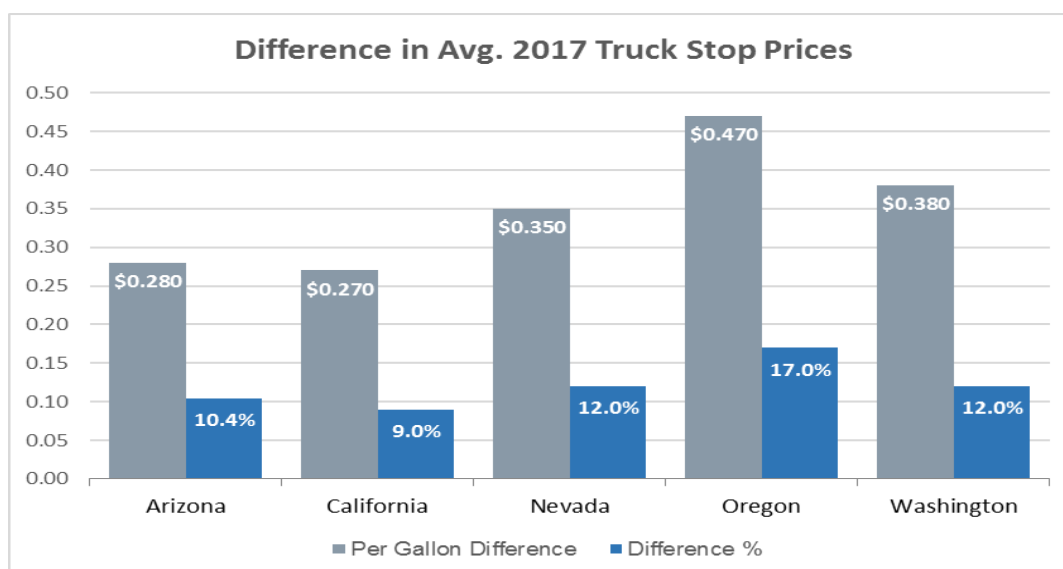
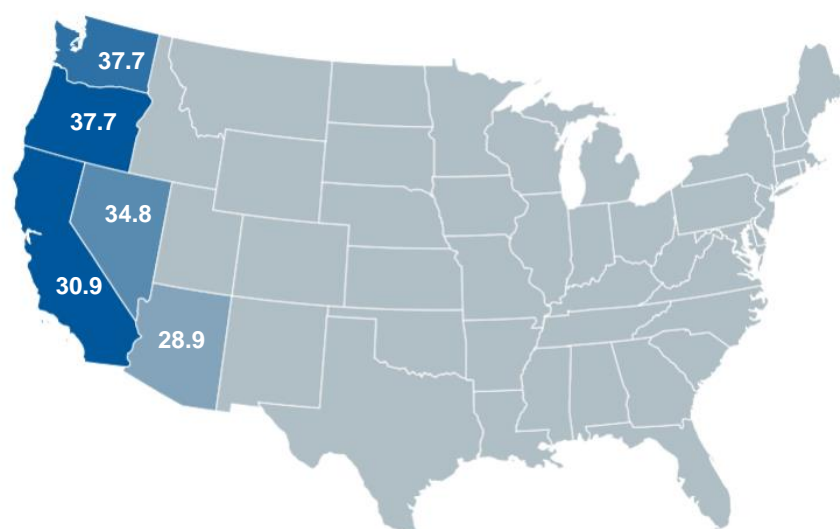
Avg. Retail & Cardlock Diesel Prices by Market

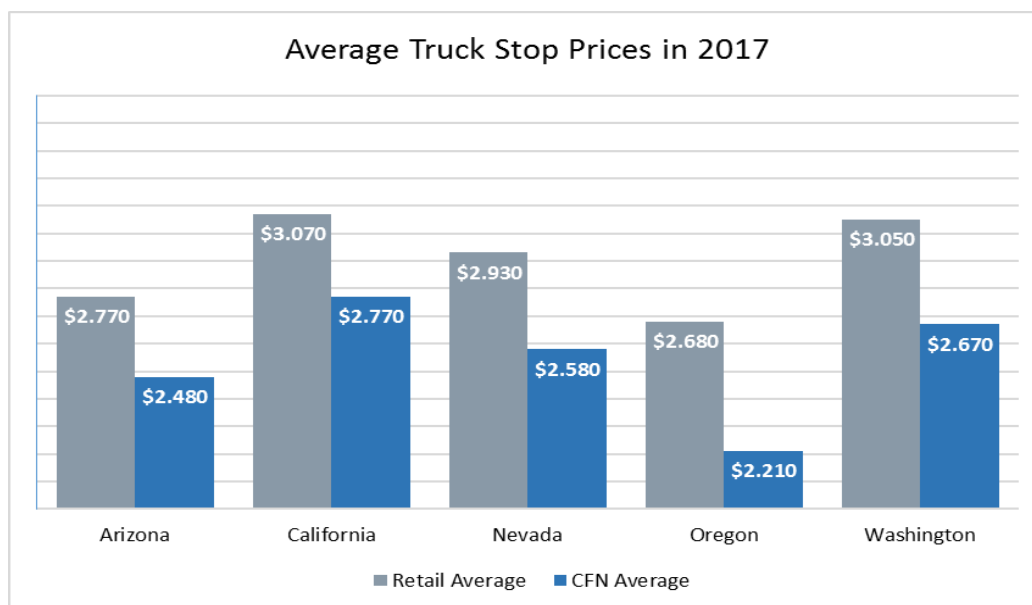
Market	Retail Price	Cardlock Price	Per Gal Difference	% Difference
Seattle, WA	\$2.993	\$2.655	\$0.337	12.7%
Tumwater, WA	\$2.979	\$2.664	\$0.314	11.8%
Tacoma, WA	\$2.953	\$2.664	\$0.288	12.8%
Bremerton, WA	\$2.948	\$2.674	\$0.273	10.21%
Vancouver, WA	\$2.934	\$2.701	\$0.232	8.61%
Pasco, WA	\$2.892	\$2.663	\$0.229	8.59%
Bellingham, WA	\$2.865	\$2.626	\$0.228	8.67%
Longview, WA	\$2.947	\$2.727	\$0.219	8.05%
Mt. Vernon, WA	\$2.844	\$2.626	\$0.218	8.30%
Walla Walla, WA	\$3.001	\$2.807	\$0.193	6.89%
Spokane, WA	\$2.944	\$2.772	\$0.172	6.20%
East Wenatchee, WA	\$2.961	\$2.851	\$0.103	3.85%
Yakima, WA	\$2.948	\$2.844	\$0.103	3.65%
Clarkston, WA	\$2.850	\$2.846	\$0.035	.012%
State Avg.	\$2.933	\$2.724	\$0.208	7.67

Part 2: Truck Stop vs. Cardlock Pricing

Similar to our retail comparison, the average price of diesel for truck stop and cardlock networks also differed significantly in 2017. Overall, cardlock fueling offered lower diesel fuel prices on average of 32 cents per gallon or 11.0% (before vendor margins). Price differences ranged from 4.3 to 19.7 cents per gallon, with the smallest savings found in Arizona while Oregon and Washington battle for first place.

Per Gal Difference between Truck Stop & Cardlock Pricing
(in cents, based on avg. diesel prices in 2017)





Arizona

Again, Arizona had the least overall difference in prices. The average price of diesel in 2017 was \$2.77 for truck stops and \$2.48 for cardlocks, a difference of 28.9 cents per gallon or 10.41%. The market within Arizona with the largest difference between truck stop and cardlock diesel prices was Yuma at 41.7 cents per gallon. The market with the smallest difference – both within Arizona and among all markets – was Benson, which showed a 4-cent difference between retail and cardlock pricing.

Avg. Truck Stop & Cardlock Diesel Prices by Market

Market	Truck Stop Price	Cardlock Price	Per Gal Difference	% Difference
Yuma, AZ	\$2.855	\$2.437	\$0.417	14.6%
Bellemont, AZ	\$2.819	\$2.523	\$0.295	10.4%
Casa Grande, AZ	\$2.735	\$2.453	\$0.282	10.3%
Chandler, AZ	\$2.735	\$2.453	\$0.282	10.3%
Eloy, AZ	\$2.735	\$2.453	\$0.282	10.3%
Ehrenberg, AZ	\$2.802	\$2.527	\$0.275	9.82%
Quartzsite, AZ	\$2.802	\$2.527	\$0.275	9.82%
Kingman, AZ	\$2.799	\$2.528	\$0.271	9.68%
Gila Bend, AZ	\$2.674	\$2.433	\$0.241	9.01%
Joseph City, AZ	\$2.755	\$2.536	\$0.219	7.95%

Rio Rico, AZ	\$2.845	\$2.631	\$0.289	7.51%
Avondale, AZ	\$2.644	\$2.433	\$0.211	7.98%
Buckeye, AZ	\$2.634	\$2.433	\$0.201	7.64%
Wilcox, AZ	\$2.762	\$2.700	\$0.062	2.24%
Benson, AZ	\$2.743	\$2.700	\$0.043	1.56%
State Avg.	\$2.776	\$2.487	\$0.29	10.41%

California

California ranked second behind Oregon for the largest difference between truck stop and cardlock diesel prices. The average price of diesel in 2017 was \$3.07 for truck stops and \$2.77 for cardlocks, a difference of 30.0 cents per gallon or 9.77%. The market with the largest difference in price – both in California and among all markets – was San Diego at 50.5 cents per gallon. The smallest difference within California was Boron at 20.6 cents per gallon.

Avg. Truck Stop & Cardlock Diesel Prices by Market

Market	Truck Stop Price	Cardlock Price	Per Gal Difference	% Difference
San Diego, CA	\$3.136	\$2.631	\$0.505	16.10%
Sacramento, CA	\$3.181	\$2.735	\$0.445	14.01%
Salinas, CA	\$3.179	\$2.783	\$0.396	12.45%
Ripon, CA	\$3.087	\$2.746	\$0.341	11.05%
Madera, CA	\$3.097	\$2.758	\$0.338	10.93%
Redding, CA	\$3.114	\$2.785	\$0.328	10.55%
Castaic, CA	\$3.127	\$2.804	\$0.323	10.33%
Corning, CA	\$3.067	\$2.755	\$0.311	10.16%
Livingston, CA	\$3.103	\$2.794	\$0.305	9.86%
Dunnigan, CA	\$3.073	\$2.770	\$0.302	9.85%
Tulare, CA	\$3.081	\$2.780	\$0.300	9.76%
Arvin, CA	\$3.152	\$2.872	\$0.277	8.80%
Coachella, CA	\$3.099	\$2.824	\$0.275	8.88%
Barstow, CA	\$3.037	\$2.767	\$0.270	8.88%
Lost Hills, CA	\$3.116	\$2.862	\$0.253	8.12%
Hesperia, CA	\$3.043	\$2.791	\$0.252	8.29%

Weed, CA	\$3.074	\$2.834	\$0.239	7.80%
Gustine, CA	\$2.993	\$2.766	\$0.226	7.56%
Santa Nella, CA	\$2.965	\$2.754	\$0.210	7.10%
Tehachapi, CA	\$2.965	\$2.758	\$0.206	6.97%
Boron, CA	\$2.986	\$2.779	\$0.206	6.92%
State Avg.	\$3.079	\$2.778	\$0.300	9.77%

Nevada

The average price of diesel in Nevada in 2017 was \$2.933 for truck stops compared to \$2.584 for cardlocks, a difference of 34.8 cents per gallon or 11.8%. The market with the largest difference between truck stop and cardlock diesel prices was Fernley at 40.6 cents per gallon. Sparks had the smallest difference at 15.2 cents per gallon.

Avg. Truck Stop & Cardlock Diesel Prices by Market

Market	Truck Stop Price	Cardlock Price	Per Gal Difference	% Difference
Fernley, NV	\$2.891	\$2.485	\$0.406	14.05%
Imlay, NV	\$2.940	\$2.534	\$0.405	13.79%
Winnemucca, NV	\$2.947	\$2.571	\$0.376	12.76%
West Wendover, NV	\$2.959	\$2.583	\$0.376	12.70%
Wells, NV	\$2.948	\$2.583	\$0.365	12.38%
Las Vegas, NV	\$2.931	\$2.573	\$0.358	12.22%
Sparks, NV	\$2.913	\$2.760	\$0.152	5.24%
State Avg.	\$2.933	\$2.584	\$0.348	11.8%

Oregon

Oregon had the greatest overall difference between truck stop and cardlock diesel prices in 2017 with a difference of 47.4 cents per gallon or 17.6%. The average price of diesel was \$2.504 and \$2.136 for truck stops and cardlocks, respectively. The market with the largest difference in Oregon was Aurora at 47.4 per gallon. The market with the smallest price difference in Oregon was Stanfield at 20.4 cents per gallon.

Avg. Truck Stop & Cardlock Diesel Prices by Market

Market	Truck Stop Price	Cardlock Price	Per Gal Difference	% Difference
Aurora, OR	\$2.708	\$2.206	\$0.502	18.5%
Ontario, OR	\$2.687	\$2.218	\$0.468	17.4%
Salem, OR	\$2.661	\$2.206	\$0.453	17.0%
Troutdale, OR	\$2.553	\$2.221	\$0.332	13.0%
Wasco, OR	\$2.550	\$2.246	\$0.304	11.9%
Stanfield, OR	\$2.514	\$2.312	\$0.202	8.0%
State Avg.	\$2.685	\$2.210	\$0.474	17.6%

Washington

The average price of diesel in Washington in 2017 was \$3.058 for truck stops and \$2.676 for cardlocks, a difference of 37.7 cents per gallon or 12.2%. The market with the largest difference between truck stop and cardlock diesel prices was Ellensburg at 53.1 cents per gallon. The smallest difference was in Napavine at 30.9 cents per gallon.

Avg. Truck Stop & Cardlock Diesel Prices by Market

Market	Truck Stop Price	Cardlock Price	Per Gal Difference	% Difference
Ellensburg, WA	\$3.257	\$2.726	\$0.531	16.3%
Ferndale, WA	\$2.998	\$2.726	\$0.531	16.3%
Olympia, WA	\$3.013	\$2.664	\$0.348	11.5%
Tacoma, WA	\$2.999	\$2.664	\$0.334	11.1%
Napavine, WA	\$3.01	\$2.690	\$0.309	10.3%
State Avg.	\$3.257	\$2.726	\$0.377	12.2%

Conclusion

Commercial fleets and businesses that opted for cardlock fueling in 2017 likely earned a significant cost advantage over their competitors that chose retail or truck stop fueling instead. In western states, there was an average difference of 19.0 and 35.3 cents per gallon when comparing cardlock pricing against retail and truck stop pricing, respectively. Fleet managers will need to qualify card issuers and review their specific diesel fuel prices before implementing any new fleet card program. But when evaluating fleet card products, fleet managers should strongly consider those that provide access to cardlock fuel locations, because leveraging cardlock networks to gain lower diesel fuel prices could be the difference between success and failure in running a cost-effective fleet.

About P-Fleet

P-Fleet is headquartered in San Diego, California, and provides fuel cards and payments solutions for fleets, businesses and contractors. For more information, visit www.pfleet.com or follow us on [Facebook](#), [LinkedIn](#) and [Twitter](#).