To: JOE MCKINNEY MUNCY(mailroom@mg-ip.com)

**Subject:** U.S. Trademark Application Serial No. 97354145 - ONVO

**Sent:** August 29, 2023 04:55:50 PM EDT

**Sent As:** tmng.notices@uspto.gov

#### **Attachments**

Mach 1 **Edmunds Energy Sage WA Post** BP - ev 01.jpg BP - ev 02.jpg BP - ev 03.jpg BP - ev 04.jpg BP - ev 05.jpg BP - ev 06.jpg BP - ev 07.jpg BP - ev 08.jpg BP - ev 09.jpg BP - ev 10.jpg BP - ev 11.jpg BP - ev 12.jpg BP - ev 13.jpg BP - gas 01.jpg BP - gas 02.jpg BP - gas 03.jpg Circle K - ev 01.jpg Circle K - ev 02.jpg Circle K - ev 03.jpg Circle K - ev 04.jpg Circle K - ev 05.jpg Circle K - gas 01.jpg Circle K - gas 02.jpg Circle K - gas 03.jpg Shell - ev 01.jpg Shell - ev 02.jpg Shell - ev 03.jpg Shell - gas 01.jpg Shell - gas 02.jpg Shell - gas 03.jpg Shell - gas 04.jpg Shell - gas 05.jpg Lexis - gas station ev charging.pdf

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# United States Patent and Trademark Office (USPTO) Office Action (Official Letter) About Applicant's Trademark Application

U.S. Application Serial No. 97354145

Mark: ONVO

# Correspondence Address: JOE MCKINNEY MUNCY

MUNCY, GEISSLER, OLDS & LOWE, P.C.

4000 LEGATO RD SUITE 310 FAIRFAX VA 22033 UNITED STATES

Applicant: NIO CO.,LTD.

Reference/Docket No. N/A

Correspondence Email Address: mailroom@mg-ip.com

### REQUEST FOR RECONSIDERATION AFTER FINAL ACTION DENIED

Issue date: August 29, 2023

**Applicant's request for reconsideration is denied.** See 37 C.F.R. §2.63(b)(3). The trademark examining attorney has carefully reviewed applicant's request and determined the request did not: (1) raise a new issue, (2) resolve all the outstanding issue(s), (3) provide any new or compelling evidence with regard to the outstanding issue(s), or (4) present analysis and arguments that were persuasive or shed new light on the outstanding issue(s). TMEP §§715.03(a)(ii)(B), 715.04(a).

Accordingly, the following refusal made final in the Office action dated April 18, 2023 are **maintained** and continued:

• Partial Refusal - Section 2(d) Likelihood of Confusion Refusals - Limited to "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair"

See TMEP §§715.03(a)(ii)(B), 715.04(a).

In addition, the following refusal made final in that Office action are **withdrawn**:

 Partial Refusal - Section 2(d) Likelihood of Confusion Refusals - Limited to "Electric vehicle service station for maintenance of electric vehicles"

See TMEP §§715.03(a)(ii)(B), 715.04(a).

Further, the following requirement made final in that Office action are **satisfied**:

• Identification of Services Exceed Scope of Foreign Registration – Limited to Specific Services

See TMEP §§715.03(a)(ii)(B), 715.04(a).

<u>Continued and Maintained - Partial Refusal - Section 2(d) Likelihood of Confusion Refusals - Limited to "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair"</u>

The refusal to register under Section 2(d) likelihood of confusion is continued and maintained with

regard to "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair".

The applicant has requested registration for the mark ONVO in standard characters for "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair" in Class 037. A refusal of registration was made final for a likelihood of confusion pursuant to Trademark Section 2(d) with the registered marks ONVO in standard characters (Registration No. 6502747) and ONVO in stylized text with a design (Registration No. 6364493) for, in relevant part, "Retail store services featuring convenience store items, gasoline, diesel fuel, truck driver amenities in the nature of souvenirs, laundry soap, video games, and truck supplies in the nature of motor oil, floor mats, air fresheners; retail store services in the nature of truck stops, travel centers and fuel stops featuring fuel; retail convenience stores" in Class 035.

The applicant presented additional arguments in support of registration. Much of applicant's arguments revolve around the contention that applicant's customers are sophisticated purchasers based on the high price of an electric vehicle. Applicant has submitted evidence that the average demographics of owners of electric vehicles consisted predominantly of those earning at least \$100,000 annually and middle aged men, as well as affluent college educated people with advanced degrees. Applicant further provides evidence that electric vehicles are several times more expensive than gas vehicles. Thus, applicant contends, that purchasers of electric vehicles are sophisticated and purchase these vehicles with consideration and care. However, applicant does not provide electric vehicles. Instead, applicant provides electric vehicle charging and rubber tire repair. The evidence submitted demonstrates that purchasers of electric vehicles purchase those vehicles with consideration and care but not that they purchase applicant's services with consideration and care. In fact, the attached evidence demonstrates that the average cost of charging a vehicle is less than the average cost of filling up a car with gas. See Mach 1, Edmunds, Energy Sage, and The Washington Post. Thus, the sophistication of the purchaser of both applicant and registrant is the same. Gas prices fluctuate depending on the type of gas, the state, and each individual gas station. Similarly, electric vehicle charging fluctuates based on the type of charger, the state, and the individual charging location. Consumers of both applicant's and registrant's services take the same considerations in purchasing the services.

Even if the purchasers of applicant's services are considered sophisticated, the fact that purchasers are sophisticated or knowledgeable in a particular field does not necessarily mean that they are sophisticated or knowledgeable in the field of trademarks or immune from source confusion. TMEP §1207.01(d)(vii); see, e.g., Stone Lion Capital Partners, LP v. Lion Capital LLP, 746 F.3d. 1317, 1325, 110 USPQ2d 1157, 1163-64 (Fed. Cir. 2014); Top Tobacco LP v. N. Atl. Operating Co., 101 USPQ2d 1163, 1170 (TTAB 2011). Further, where the purchasers consist of both professionals and the public, the standard of care for purchasing the goods is that of the least sophisticated potential purchaser. In re FCA US LLC, 126 USPQ2d 1214, 1222 (TTAB 2018) (citing Stone Lion Capital Partners, LP v. Lion Capital LLP, 746 F.3d. at 1325, 110 USPQ2d at 1163), aff'd per curiam, 777 F. App'x 516, 2019 BL 375518 (Fed. Cir. 2019). Even if consumers of the compared goods and/or services could be considered sophisticated and discriminating, it is settled that "even sophisticated purchasers are not immune from source confusion, especially in cases such as the present one involving identical marks and related goods [and/or services]." In re i.am.symbolic, llc, 116 USPQ2d 1406, 1413 (TTAB 2015) (citing In re Research & Trading Corp., 793 F.2d 1276, 1279, 230 USPQ 49, 50 (Fed. Cir. 1986)), aff'd, 866 F.3d 1315, 123 USPQ2d 1744 (Fed. Cir. 2017); see also In re Shell Oil Co., 992 F.2d 1204, 1208, 26 USPQ2d 1687, 1690 (Fed. Cir. 1993). The identity of the marks and the relatedness of the goods and/or services "outweigh any presumed sophisticated purchasing decision." In re i.am.symbolic, llc, 116 USPQ2d at 1413 (citing HRL Assocs., Inc. v. Weiss Assocs., Inc., 12 USPQ2d 1819, 1823 (TTAB

1989), aff'd, 902 F.2d 1546, 14 USPQ2d 1840 (Fed. Cir. 1990)); see also Stone Lion Capital Partners, LP v. Lion Capital LLP, 746 F.3d 1317, 1325, 110 USPQ2d 1157, 1163-64 (Fed. Cir. 2014).

In addition, applicant argues that the services offered under the marks are dissimilar. The fact that the goods and/or services of the parties differ is not controlling in determining likelihood of confusion. The issue is not likelihood of confusion between particular goods and/or services, but likelihood of confusion as to the source or sponsorship of those goods and/or services. *In re Majestic Distilling Co.*, 315 F.3d 1311, 1316, 65 USPQ2d 1201, 1205 (Fed. Cir. 2003); *In re Shell Oil Co.*, 992 F.2d 1204, 1208, 26 USPQ2d 1687, 1689 (Fed. Cir. 1993); TMEP §1207.01.

Further, the applicant argues that the channels of trade are different and the clientele of applicant and registrant are different. However, in addition to the previously attached evidence, the currently attached evidence demonstrates that the services are related and travel in the same channels of trade. See BP, Circle K, and Shell. In addition, the attached evidence from LexisNexis® shows a relative sample of U.S. publications linking charging stations to the same locations as gas stations. See LexisNexis. The evidence demonstrates that consumers are accustomed to seeing retail convenient stores and gas stations and electric vehicle charging services offered through the same channels of trade and on the same premises as each other. Consumers expect to see these services offered at the same location, and the services all target the same broad consumers of motor vehicle drives. Consumers encountering ONVO for electric charging services and ONVO for retail convenience stores and gas stations would likely assume these services emanate from the same source.

Applicant contends that the evidence submitted showing that gas stations and convenience stores having electric vehicle charging stations does not amount to proof that the relevant consumers of the services would be confused. Applicant further argues that the audience of the evidence presented is not the relevant public in this instance; the audience is not the targeted consumers of applicant's electric vehicle charging services. However, the evidence demonstrates that registrant's services are targeted at the specific consumers that applicant's services are also targeted to. The evidence shows that gas stations and convenience stores are offering electric vehicle charging services in order to attract electric vehicle users to use their charging services and also to attract them to their convenience stores. Gas stations, convenience stores, and electric vehicle charging services all target the same broad audience of motor vehicle drivers. The previously attached evidence and currently attached evidence demonstrates that the targeted consumers of both applicant and registrant are the same, and consumers are accustomed to seeing both applicant's and registrant's services offered at the same location.

With respect to applicant's "rubber tire repair", applicant claims that applicant provides rubber tire repair for electric vehicles. However, there is no limitation in the identification of services to limit this rubber tire repair to just electric vehicles. As written, the services are broad and include rubber tire repair for all types of vehicles.

Even if applicant were to amend the identification to limit the tire repair to electric vehicles, those services would still be related. Applicant argues that electric vehicle tires are different and require special tires and special repair. However, there is no evidence in the record to establish that the rubber tire repair of an electric vehicle tire is any different than the rubber tire repair of a gas vehicle. In fact, the currently attached evidence demonstrates that repairing a rubber tire of an electric vehicle is handled the same way as repairing a rubber tire of a gas vehicle. See Sullivan Tire, Les Schwaab, Tech, and OSVehicle. Thus, applicant's contention of special repair of rubber tires for electric vehicles is not supported by the evidence. With respect to the relatedness of the services, in addition to the previously attached evidence, the currently attached evidence demonstrates that gas stations and convenience

stores commonly offer rubber tire repair under the same mark and at the same location. See Al's, Bayside, Bledsoe's, Bob Lee Tire Pros, Harbor Springs, Harhart's, Milito's Needham Service Center, and Seversin's. Consumers are accustomed to seeing applicant's rubber tire repair services offered by the same companies under the same mark as registrant's retail convenience stores and gas stations. Thus, if consumers encountered applicant's ONVO for rubber tire repair and registrant's ONVO marks for retail convenience stores and gas stations, they would likely assume the services emanate from the same source and would be confused.

Where the marks of the respective parties are identical or virtually identical, as in this case, the degree of similarity or relatedness between the goods and/or services needed to support a finding of likelihood of confusion declines. See In re Country Oven, Inc., 2019 USPQ2d 443903, at \*5 (TTAB 2019) (citing In re i.am.symbolic, Ilc, 116 USPQ2d 1406, 1411 (TTAB 2015), aff'd, 866 F.3d 1315, 123 USPQ2d 1744 (Fed. Cir. 2017)); TMEP §1207.01(a); see also In re Shell Oil Co., 992 F.2d 1204, 1207, 26 USPQ2d 1687, 1689 (Fed. Cir. 1993). In this case, the previously attached evidence and the currently attached evidence demonstrates that the services are related and travel in the same channels of trade such that consumers would likely be confused as to the source of the services.

Because the marks are similar and the services are related, there is a likelihood of confusion as to the source of applicant's services, and registration for "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair" is refused pursuant to Section 2(d) of the Trademark Act.

Accordingly, the Section 2(d) Likelihood of Confusion Refusals limited to "Electric vehicle battery charging service; Electric vehicle service station for refueling of electric vehicles; Rubber tire repair" are continued and maintained.

**If applicant has already filed an appeal** with the Trademark Trial and Appeal Board, the Board will be notified to resume the appeal. *See* TMEP §715.04(a).

If applicant has not filed an appeal and time remains in the response period for the final Office action, applicant has the remainder of that time to (1) file another request for reconsideration that complies with and/or overcomes any outstanding final requirement(s) and/or refusal(s), and/or (2) file a notice of appeal to the Board. TMEP §715.03(a)(ii)(B).

/Brendan Quilici/ Brendan Quilici Trademark Examining Attorney Law Office 123 (571) 272-4715 Brendan.Quilici@uspto.gov 844-971-0324 **y f** in

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### 03 Sep The Average Costs of using Car Charging Stations

The new trend is using chargeable cars due to their effectiveness in causing less pollution and for their convenience. Using an electric vehicle gives you multiple advantages over those using gas because a gas vehicle has fewer moving parts than a gasoline-powered car meaning that it requires less maintenance than a regular car.

Just like gas stations put fuel in your car, there are multiple car charging stations to help you charge your vehicle whenever you need it to power up.

Different gas stations will have varied prices of fuel per liter. The same applies to charging stations. They charge according to the charger level you are using and the demand for charging ports when you're changing.

During rush hours, when everyone needs a charging port to recharge their cars, that's when the price goes up per kilowatt. The level of chargers you're using also determines how much it will cost to charge your vehicle entirely. When at a public charging station, you can either use a level 1 or level 2 charger. The level 2 charger is always cheaper than the level 1 charger, but it takes much longer to charge your car at a level 2 charger fully.

When using public charging stations, you will always need to pay money not unless it is a promotion or an offer and they are offering to do it for free. You might find offers here and there to charge your car for free or even in the first few months of purchasing your vehicle, but that's it. You can't always expect to find a free charging station for the entire time you own your vehicle. Even when charging at your house, you will have a higher electricity bill to compensate for the car charges.

### Do you pay to charge your car at a charging station?

You could come across a free EV charging station, but those are fewer compared to the ones you've got to pay. Most charging stations will charge by the kilowatthour (kWh) when it comes to the charging rate.

Compared to charging your car at home, it is more expensive to charge it in public charging stations. At home, it would averagely cost twelve cents per kWh. It is less likely to find a charging station that would cost less than that.

The cost of charging your car in public places goes by what the owner chooses to charge and not whatever label they've put on top of the charger.

You might find that from new car dealers or some grocery places like whole foods to get free charging. The issue with these offers is that they tend not to last for long. The car dealers will end up closing the gates to prevent visitors from coming in, plus their locations are always in the most inconvenient places. It would take

much more to go to their charging points than pay to charge elsewhere.

Grocery stores offering free charging always provide this for a limited amount of time, which is quite reasonable because of how much it will cost them.

As much as you might get these free charging perks here and there, don't expect to get free charging forever; that's quite impossible.

#### How much do car charging stations cost to use on average?

To calculate the amount of money you'll use on charging stations, you'll have to consider the type of EV charger they're using. Charging stations cost more to charge but decrease the time used to charge the cars to a few minutes compared to charging it for days or hours.

On average, it costs between \$0.30-\$0.60 kWh to charge an electric vehicle. Therefore, this means that a small car could cost about \$11.50 to \$23 to fully charge while a bigger or long-distance vehicle could cost between \$22.50 to \$45.

The prices differ because the cost of charging a vehicle varies depending on the company providing the charging services, the EV charging level, type of charger, and charging port location depending on the demand.

Level 3 chargers will cost between \$0.40 and \$0.60 per kWh, while level 2 chargers cost between \$0.20 and \$0.25 per kWh.

The cost of charging your vehicle at home (level 1 charger) depends on a couple of variables, such as; if you're charging at peak hours, your electricity rates, and your type of charger.

However, the average cost is \$0.20, but this could vary depending on a lot of things. So pay attention to those variables.

If you prefer charging at home, you could have a level 2 charger installed, which could take between \$1700 to \$4000 to buy the level 2 charger and have it professionally installed at your home. So when calculating the cost of charging at home, add these expenses to your calculations.

To calculate the cost of charging your electric vehicle, use the formula of ;

Electric Vehicle Battery Size (kWh) x Electricity Rate (\$ per kWh) = Charging Cost (\$)

Speaking of cost you may interested to know how much spend on fuel each year too.

# How long does it take to charge an electric car at a public charging station?

#### JULIOII.

There are three types of charging stations that could help determine the price of charging and the mass of time it would take to charge your electric car.

- Level 3: These types of chargers are much more potent than levels 2 and 1. It takes less time to charge at these stations, but not all cars can charge at these ports. Your car charge also needs to be below 80% charge to be charged at these ports. After your vehicle is at 80% of charge, the car starts charging a little slower. Level 3 chargers could take about fifteen minutes to charge your vehicle with 7kWh, covering around forty-five kilometers.
- Level 2: These charger types are the most typical ones easily found anywhere in public. If your car is at 80% charge, it is better to charge it at a level 2 because it will charge at the same speed as a level 3 charger but at a cheaper cost. Level 2 chargers take between 5 to 12 hours to charge your car entirely.
- Level 1: These chargers are ones you can have in your garage. It takes several hours to charge your car to 100% at home since the outlet has only 120 volts. If you have time, this would be a cheaper option. Charging at home will take between 8 to over 40 hours, depending on your car's battery size.

#### How much does it cost to charge your car at a Tesla charging station?

First off, you can't just walk to a Tesla charger and plug in your car yet. The ports aren't compatible. This means you'll need to buy the J1772 connector to do just that

Buying this connector will cost you under \$160. Another option is the TeslaTap brand that costs between \$140-\$260 depending on the amps you desire.

Tesla charges an average of \$0.28 kWh to use its superchargers. If you're using stations that charge per minute, it's \$ 0.26 for cars charging below 60kWh, while charging above 60kWh costs \$0.13.

So, even though it is possible to charge at a Tesla charging point, you'll need a connector that will help you use the charging port. This factor could be cheap or expensive depending on your situation and needs.

### Can you plug an electric car into a regular outlet?

It is possible to charge your vehicle with a regular three-pin socket. But using a dedicated EV charger will provide more power. EV home chargers deliver about 7kW power, while a standard three-pin home socket only has about 2.3kW.

If you use a dedicated EV home charger, you will get three times more charge three times faster compared to a regular three-pin socket.

When buying your EV, it will come with a charging extension specifically for charging your EV. If you don't cover too many miles per day or use your car for work, you might benefit from charging through your designated charging port. If you leave your car to charge overnight every day, you will have enough range to cover a couple of miles comfortably the next day and not experience range anxiety.

In conclusion, a regular socket at home could charge your vehicle, but it would be slow and not deliver the amount of power you might need to get started the

following day.

### Is charging an electric car cheaper than gas?

Generally, it costs less to use an electric vehicle compared to a car that runs on gas. When you look at the buying price, most electric cars are expensive, but they prove to be cheaper than regular cars in the long run.

In a year, it would averagely cost you between \$300 to \$400 to charge an electric vehicle, depending on your charging location. On the other hand, a car that runs on gasoline could cost you between \$1000 to \$2000 on fuel alone.

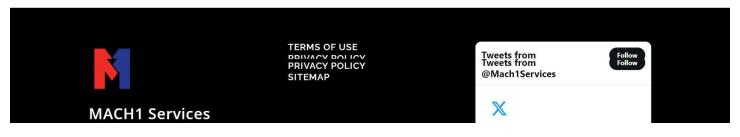
When you compare the number of moving parts between electric vehicles and gas vehicles, you will realize that electric cars have fewer moving parts, meaning they won't need many repairs than vehicles running on gas. Due to many moving parts, cars that run on gas cost a lot when it comes to maintenance.

At first, when you've purchased an electric vehicle, you might notice your electricity bill has gone up, especially if you're charging your car at home. Don't be stressed up by this because this cost will eventually balance due to the lack of buying gas which tends to be much more than what your electricity bill will amount to when you charge your vehicle either at home or in public charging stations.

#### **Final Words**

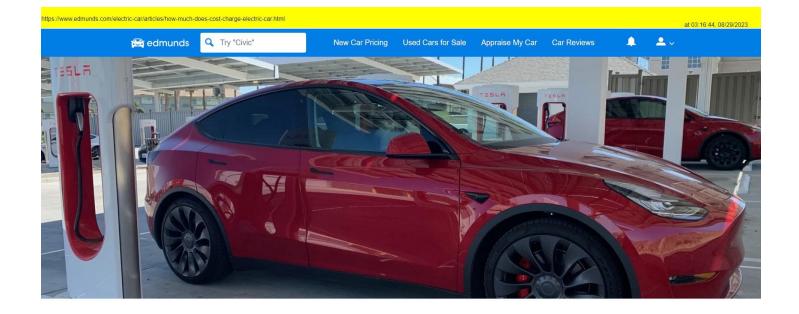
The charging cost of your EV depends on the type of charging station you're using (level 2 or 3) and the time of the day you're charging your car. More traffic in the charging stations means you'll get charged more. The levels of charging you're using to charge your EV depend on the type of car you have and how fast the charger is. That's why level 3 chargers are more expensive.

You can choose to charge your car at home or in public charging stations depending on how much time you have and the range of your vehicle. Public charging areas tend to be a bit more costly than charging your car at home, but they save a lot of time. If you have enough time on your hands, using your home charger would be better to charge in public areas.









# How Much Does It Cost to Charge an Electric Car?

March 7th, 2023 (updated August 8th, 2023)





It costs approximately \$11 to charge an electric car with a 65-kWh battery at home using a Level 2 charger, assuming electricity costs \$0.17 per kWh (the U.S. national average).

In general, it costs less per month to charge an electric vehicle than to fill up a gas-powered car. But calculating these costs requires learning a few new terms and rethinking the concept of a "full tank."

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# How do you calculate the cost to charge an electric car?

The way to calculate the cost to charge an electric car is to start from the total kilowatt-hours (amount of electricity) it takes to recharge the electric car's battery and multiply that by the price you pay per kWh for electricity. For example, if the battery's usable capacity is 50 kWh, and the price of electricity in your home is \$0.23 per kWh, it will cost \$11.50 to recharge the battery when it's fully depleted.

Notably, when you look at an electric car's window sticker, you'll see an estimate for kilowatt-hours consumed per hundred miles (kWh/100 miles), which is the EV equivalent of miles per gallon. You can calculate the cost to charge an electric car from this estimate, too. Simply multiply the vehicle's

consumption estimate (kWh/100 miles) by your cost per kWh for electricity — the output will be the cost per 100 miles. For example, suppose you're considering a 2023 Tesla Model 3 RWD, which is EPA-rated at 25 kWh/100 miles. If you pay \$0.23 per kWh, the estimated cost per 100 miles for that Tesla is \$5.75.

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Search EV tax credits and rebates in your area

See Electric Vehicle Rebates

### Where can you charge an electric car?

Here are different places you can charge an electric vehicle and how much it costs at each location:

- Charge at home
- Charge at a Level 2 public charging station
- Charge at a DC fast public charging station
- Charge at a Tesla Supercharger

#### How much does it cost to charge an electric car at home?

As of this writing, the cost of residential electricity ranges from \$0.10 per kWh in Idaho to \$0.43 per kWh in Hawaii. In most cases, EV charging will be less expensive at home, since electricity rates are lower than those at third-party chargers.

The price per kWh at home varies by location and the utility company. Let's take the 2023 Chevrolet Bolt EV as an example, which has a usable battery capacity of 65 kWh. Assuming you're in Los Angeles, with an average electricity cost of \$0.27 per kWh and a completely depleted battery, it would cost \$17.55 to charge the battery back to full. Here are a couple more examples.

Vehicle	Battery capacity	Electricity cost (Los Angeles)	Cost to charge (empty to full)	
Chevy Bolt EV	65 kWh	\$0.27	\$17.55	
Hyundai Ioniq 5	77.4 kWh (long range)	\$0.27	\$20.90	
GMC Hummer 212 kWh		\$0.27	\$57.24	

## How much does it cost to charge at a Level 2 public charging station?

The cost of charging an electric car using a public Level 2 charging station varies based on the cost per kWh at that specific location and the premium charged by the company that operates the station. Electrify America, a major EV charging provider that does list some of its prices, currently charges \$0.48 per kWh in a number of states such as Arizona, California, Florida, New York, Oregon and more. In certain other states, you'll pay per minute instead. Electrify America charges \$0.03/minute in these states for Level 2 charging.

In other states, such as Georgia, Massachusetts and Texas, Electrify America determines its pricing by the speed of the EV charging station and the maximum power level your vehicle can accept. For stations operating at up to 90 kW, it costs \$0.19 per minute. For DC Fast stations that can push to 350 kW, it costs \$0.37 per minute.

For example, if you owned a Hyundai Ioniq 5 with the long-range 77.4-kWh battery, it would cost \$33.28 for a full charge at the \$0.48/kWh rate. The per-minute pricing turns out to be a better deal, as the same loniq 5, which takes about nine hours to charge fully, would run up a tab of \$16.20 at \$0.03/minute.

#### How much does it cost to charge at a DC fast charging station?

In a typical EV, a recharging stop at a DC fast charging station will cost roughly \$20 to \$40. Electrify America actually charges the same \$0.48/kWh for DC fast charging as for Level 2 charging, while perminute states continue to be a better deal in most scenarios. That's true despite the higher cost per minute for DC fast charging, since you're getting so much more electricity per minute. An Electrify America DC fast charger costs \$0.19/minute for vehicles with maximum charging rates up to 90 kW, and \$0.37/minute for vehicles with maximum charging rates between 90kW and 350 kW.

In the following table, the Bolt EV's modest maximum charging rate means the owner pays at the \$0.19/minute level, while the other two are at the \$0.37/minute level. To calculate the cost in per-minute states, we assume the vehicle spends one hour at the charging station, which may not result in a full charge. The cost in per-kWh states represents a full charge at the \$0.48/kWh rate.

Vehicle	Battery capacity	Maximum DC fast charging rate	DC fast cost to charge fully (per- kWh states)	DC fast cost to charge for one hour (per- minute states)
Chevy Bolt EV	65 kWh	55 kW	\$31.20	\$11.40
Humdai	77 4 MA/h	220 PW	¢27.4E	\$22.20

Ioniq 5	11.4 PANIT	ZZU NVV	φοι.10	<b>\$</b> 22.20	
GMC Hummer EV	212 kWh	300 kW (est.)	\$101.76	\$22.20	

EVgo, another provider of fast-charging stations, uses per-kWh pricing that varies depending on the time of day. In California, prices range from \$0.36 per kWh from midnight to 8 a.m. to \$0.63 per kWh during the peak hours of 4 p.m. to 9 p.m. If you showed up with the loniq 5 at an EVgo station during peak times, it could cost about \$49 for a full charge.

#### How much does it cost to charge at a Tesla Supercharger station?

According to Tesla's website, owners are billed per kWh when possible; otherwise, they are billed per minute. Each station has its own pricing, and Tesla owners can look up the price of the nearest Supercharger on their navigation screen. The pricing can also vary based on peak and off-peak hours. In California, the Supercharger price is approximately \$0.50 per kWh, according to Electrek. In a Tesla Model 3 Long Range with an 82-kWh battery, it would cost about \$41 for a full charge.

For Supercharger stations that bill per minute, Tesla determines its price with a four-tier system, based on the charging speed:

- Tier 1: Charging at or below 60 kW, lowest price per minute
- Tier 2: Charging above 60 kW but at or below 100 kW, second-lowest price per minute
- Tier 3: Charging above 100 kW but at or below 180 kW, second-highest price per minute
- Tier 4: Charging above 180 kW, highest price per minute

Note that Tesla's website provides only the hierarchy above, as opposed to specific pricing.

#### How much does it cost to charge popular electric vehicles?

Here is a list of how much it costs to charge popular electric cars at home using a Level 1 or Level 2 charger in Los Angeles, California, assuming a cost per kWh of \$0.27.

Vehicle	Battery capacity	Cost to charge at home (Los Angeles)
2024 Audi Q8 e-tron	106 kWh	\$28.62
2023 Chevrolet Bolt EV	65 kWh	\$17.55
2023 Ford Mustang Mach-E Extended	91 kWh	\$24.57

Range		
2023 GMC Hummer EV	212 kWh	\$57.24
2023 Hyundai Ioniq 5 Long Range	77.4 kWh	\$20.90
2023 Kia Niro EV	64.8 kWh	\$14.90
2023 Nissan Leaf Plus	59 kWh	\$17.50
2023 Polestar 2	75 kWh	\$20.25
2023 Tesla Model 3 Long Range	75 kWh	\$20.25
2023 Tesla Model Y Long Range	75 kWh	\$20.25
2023 Volkswagen ID.4 Pro	77 kWh	\$20.79

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# What are the different rate plans for electricy consumption?

There are two types of rate plans that utility companies typically have: level-of-use and time-of-use. With level-of-use plans, which is essentially "pay as you go", the electricity cost rises with your consumption. A kilowatt at month's end is likely to cost more than one used at the beginning of the month.

With time-of-use plans, you pay a certain rate based on the time, day and even season you're using electricity. The hours of 4 p.m. to 9 p.m. are typically considered "peak hours" and cost the most. Off-peak hours, usually the early mornings or late nights, are the least expensive. Some utility companies also have midpeak elect

PG&E, one of the largest utility companies in the U.S., offers a time-of-use plan for its customers. During the summer months, off-peak electricity costs as low as \$0.34 per kWh and jumps to \$0.41 per kWh during peak hours. If you charged your Chevrolet Bolt EV during off-peak hours, it would cost about \$22 for a full charge. Compare that to \$26.65 during peak hours.

Some utility companies give you a designated baseline allotment of power. This will result in the lowest rates, but if you go over your allotment, the prices go up. With PG&E, off-peak power for customers who have gone over their allotment costs \$0.42 per kWh, rising up to \$0.49 per kWh for peak hours. This changes the figures for the Bolt EV above to \$27 and \$32, respectively.

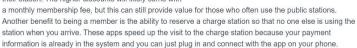


# How do you keep your EV charging costs low?

Here are tips to keeping your EV charging costs low:

# Become a member of charging station companies

You can save up to 35% by downloading a charging station company's app, creating an account, and using their station. The higher discounts will likely come with



#### Switch to a time-of-use rate plan

You're likely to save money by plugging in your EV after 9 p.m., rather than as soon as you get home from work. Some electric vehicles can be set to begin charging at a designated time, which means you can plug it in now and the charging won't start until later. Even charging in the morning is preferable as long as you unplug before peak hours.

#### Limit public charging

Resist the temptation to charge your electric vehicle to 100% whenever you're at a public charging station. If it's a fast charger, you may only need about 20 minutes to give you plenty of charge for the day. Then, you can top off at home where it is less expensive.

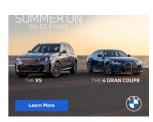
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### Where can you charge electric cars for free?

2024 Honda CR-V Hybrid

Sponsored by Honda

You can charge your electric vehicle for free at places such as museums, dealerships, utility companies and certain businesses that offer the charging as a perk of visiting. Some automakers, such as Volkswagen, Toyota and Ford, will give you a certain amount of free charging as a perk of buying their electric vehicles. The free charging is measured either in time or kWh and often applies





to charging stations from a designated provider like Electrify America.

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#### Edmunds says

While there are more factors to consider when determining the cost of charging an electric car

compared to a gasoline-powered car, it is worth the learning curve because the costs are ultimately lower. For those who can do most of their charging at home, the savings are even greater.

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- How Long Does it Take to Charge An Electric Car?
- The True Cost of Powering an Electric Car

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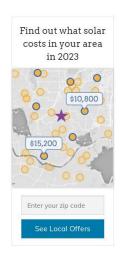
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# How much does it cost to charge an electric vehicle? EV vs. gas fuel comparison

Reading Time: 14 mins

If you're considering purchasing an electric vehicle (EV), one thing you'll want to know is how much you'll pay to charge it. While you likely have experience with filling up a gas tank, charging an EV battery is a bit different. In this article, we'll explain how much you should expect to pay to charge your EV and how this compares to similar internal combustion engine (ICE) — AKA gas-powered — vehicles. We'll also walk you through some of the significant factors that will impact the cost of charging your EV. (Spoiler alert: the best way to lower the cost is to go solar!)





Compare and discover new electric vehicles

Learn about the environmental and financial benefits of driving electric!

#### Key takeaways

- It costs an average of \$56 to charge an electric car for a month and \$674 to charge it for a year if you're only charging at home
- In general, charging an EV is about 3 times cheaper per mile than the cost of fueling a gas-powered car. Based on driving a compact sedan, you will pay approximately \$0.05 per mile to charge your EV compared to \$0.14 to fuel your gas-powered car.

  While you'll likely pay more upfront for an EV than a comparable gas car,
- EVs are typically cheaper over their lifetime.
- The cost of charging an EV will depend on several factors, including your electricity source, the size of your EV's battery, the type of EV charger you use, where you live, and when you charge your EV.
- Want to lower or completely cover your EV charging costs? The best way to do this is to go solar! Sign up for a free account on the <code>EnergySage</code> Marketplace to compare quotes from multiple pre-vetted solar installers near you.

#### What we'll cover in this article

- What's the difference between an EV and an ICE vehicle?
- How much does it cost to charge an EV?
- How much does it cost to fuel a gas-powered vehicle?
- EVs vs. ICE vehicles: which is cheaper overall?

- How far can an EV go on one charge?
  What factors impact the cost of charging an EV at home?
  How much does it cost to charge an EV away from home?
- Frequently asked questions on EV charging





## How much does it cost to charge an EV? Quick overview of some popular EVs

- The Nissan Leaf costs \$6.73 to fully charge
- The Tesla Model 3 costs \$10.47 to fully charge
- The Ford Mustang Mach-E costs \$11.67 to fully charge
- The Audi e-tron costs **\$14.51** to fully charge
- Across these best selling EVs, the charging cost averages around 5 cents per mile

#### Comparing EVs with ICE vehicles

EVs and ICE vehicles will both get you where you need to go, but there are a few key ways they differ. First and foremost: their fuel source. True to their name, EVs are powered by electricity, whereas ICE vehicles run on gosoline, which burns internally. We'll explain the pros and cons of EVs compared to gas-powered cars and discuss how some popular brands vary in upfront cost.

#### EVs offer many benefits over ICE vehicles, including:

- Increased energy efficiency: a higher percentage of energy used to fuel an EV
  converts to usable energy.
- No direct release of carbon dioxide into the atmosphere: if you're not
  powering your EV with clean energy, the electricity source you're using to charge
  it may contribute to emissions (though still far less than an ICE vehicle).
- Less maintenance: since EVs don't have an internal combustion engine, the maintenance costs are often considerably lower.
- Not impacted by rising gas prices: with gas prices at an all-time high and no
  expectation that they'll drop substantially, not having to pay to fill up at the
  pump. You will still be impacted by changing electricity rates, though. While the
  average American spends almost \$1.900 annually for gas, the average EV
  costs U.S. drivers \$674 annually to charge.
- May save you time on your commute: while remote work has increased substantially during the pandemic, if you're driving your EV to work, many states have carpool or high occupancy vehicles (HOV) lanes that EVs qualify to use.
   So, you can hop in the carpool lane by yourself and avoid some traffic.

#### Considerations with EVs

Some downsides to EVs compared to ICE vehicles include:

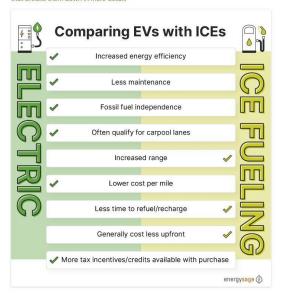
Don't usually travel as far: an EV's battery typically needs to be recharged



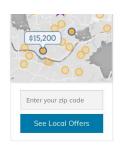


- before a similar ICE vehicle would need its gas tank refilled.
- Take longer to "refuel": you're probably used to filling up your car's gas tank
  whenever it's empty EVs generally require more planning. Even with the
  fastest EV charger, you should expect charging to take about 15 minutes.
  However, if you have an EV charger installed at your home, you'll be able to
  cover most daily drives.
- Generally, have higher upfront costs: as we explain below, you may need to
  pay more upfront for an EV than an ICE vehicle (but it could be less expensive in
  the long run). It's also possible that you'll need to replace the battery modules
  within your EV over the car's lifetime, depending on how frequently you charge it
  and what temperature it's stored.

If you're looking to learn more about the pros and cons of EVs, check out our article that breaks them down in more detail.



Comparing upfront costs of EVs vs. gas-powered vehicles





Whether shopping for an EV or an ICE vehicle, a car is an investment. As mentioned above, EVs generally cost more to purchase than comparable ICE vehicles, though this will vary depending on which EV and ICE vehicle you're considering.

EVs come in various brands, models, and types, while also offering varying ranges (the distance your EV will go on a charge). To provide a cost comparison between EVs and ICE vehicles, we've compiled a list of some of the most popular EVs of 2022 and comparable ICE vehicles in the same category.

VEHICLE CATEGORY \$	EV UPFRONT COST (BEFORE TAX CREDITS)	ICE VEHICLE UPFRONT COST
Compact hatchback sedan	Nissan Leaf: \$28,040 - 36,040	Toyota Corolla Hatchback: \$21,550 - 26,700
Compact sedan	Tesla Model 3: \$42,990 - \$55,990	Honda Civic: \$25,050 - 43,295
Mid-size SUV	Ford Mustang Mach-E: \$46,895 - 69,895	Kia Telluride: \$35,690 - 52,785
Luxury crossover SUV	Audi e-tron: \$70,800 - 90,800	Porsche Macan: \$57,500 - 82,900

Notes: Cost ranges are provided because each vehicle listed represents a product line with varying preferences and specifications.

Generally, you should expect to pay more upfront for an EV than a similar ICE vehicle. Check out this article to get a breakdown of what some of the most popular EVs cost.

#### Which EVs have incentives?

If you're considering purchasing an EV, you've probably heard of the  ${\color{red}\textbf{Qualified}}$ Plug-in Electric Drive Motor Vehicle Tax Credit – AKA the Clean Vehicle Credit – which makes newly purchased EVs eligible for a \$7,500 tax credit. Vehicles previously disqualified due to sales caps (like Tesla and GM) are once again eligible for this incentive. However, there are also now income and price requirements that must be met in order to be eligible for the tax credit:

#### Income requirements

- Joint tax return less than \$300,000
- Head of household tax return less than \$225,000
  Single taxpayer return less than \$150,000

#### Manufacturer's suggested retail price (MSRP)

- Vans, SUVs, and pickup trucks less than \$80,000
- Cars less than \$55,000





Even if your vehicle doesn't meet these requirements, you may be eligible for state EV incentives with the purchase of a Tesla. To learn more about the EV incentives offered in each state, check out this article.

#### How much does it cost to charge an EV?

As we explain below, the cost of charging an EV depends on several factors. We've summarized what you can expect to pay for some popular EV models across various types and ranges. Across all EV manufacturers, the average charging cost of an EV per mile is about 5 cents. These numbers are based on data from the U.S. Energy Information Administration (EIA) As of December 2022, the average cost for electricity in the U.S. is approximately 14.96 cents per kilowatt-hour (kWh).

Remember that the energy required to charge the battery (in kWh) is greater than the battery size because some energy is lost during the charging process. We'll explain this process in greater detail later on, but it's important to note that these numbers are conservative based on data filed with the Environmental Protection Agency (EPAL.

#### What does it cost to charge a Nissan Leaf?

The Nissan Leaf is one of the most popular and affordable EVs currently available. It costs between 4.3 and 4.6 cents per mile to charge a Nissan Leaf.

EV MAKE AND \$ MODEL	ENERGY REQUIRED TO CHARGE BATTERY (KWH)	<b>\$</b>	COST TO CHARGE BATTERY	<b>÷</b>	RANGE OF DISTANCE (MILES)	<b>‡</b>	CHARGING COST PER MILE  (CENTS)
Nissan Leaf S	45 kWh		\$6.73		149 miles		4.5 cents
Nissan Leaf SV	45 kWh		\$6.73		149 miles		4.5 cents
Nissan Leaf S Plus	65 kWh		\$9.72		226 miles		4.3 cents
Nissan Leaf SV Plus	65 kWh		\$9.72		212 miles		4.6 cents

#### What does it cost to charge a Tesla Model 3?

The Tesla Model 3 is Tesla's most affordable model as well as the cheapest Tesla to charge. It costs between 3.60 and 4.646 cents per mile to charge a Tesla Model 3. Check out this article to learn about how much it costs to charge the various Tesla models.





EV MAKE AND MODEL \$	ENERGY REQUIRED TO CHARGE BATTERY (KWH)	COST TO CHARGE \$ BATTERY	RANGE OF DISTANCE \$	CHARGING COST PER MILE \$ (CENTS)
Tesla Model 3 RWD (Rear wheel drive)	70 kWh	\$10.47	272 miles	3.85 cents
Tesla Model 3 Long Range	86 kWh	\$12.87	358 miles	3.60 cents
Tesla Model 3 Performance	94 kWh	\$14.06	315 miles	4.46 cents

#### What does it cost to charge a Ford Mustang Mach-E?

The Ford Mustang Mach-Es offer a few options, though a couple of the Mach-Es are not currently available to order (the 2022 Premium and California Route 1 models). Various Ford Mustang Mach-E models cost between 4.72 and 5.37 cents per mile to charge.

EV MAKE AND \$	ENERGY REQUIRED TO CHARGE \$ BATTERY (KWH)	COST TO CHARGE \$ BATTERY	RANGE OF DISTANCE \$ (MILES)	CHARGING COST PER MILE \$ (CENTS)
Ford Mustang Mach-E (All wheel drive)	78 kWh	\$11.67	224 miles	5.21 cents
Ford Mustang Mach-E (Rear wheel drive)	78 kWh	\$11.67	247 miles	4.72 cents
Ford Mustang Mach-E GT	97 kWh	\$14.51	270 miles	5.37 cents

#### What does it cost to charge an Audi e-tron?

Audi's e-tron line is expanding, but currently comes in two main options: the Q4 sportback e-tron and the Audi e-tron Premium. Audi etrons cost  $\bf 5.32$  or  $\bf 6.42$  cents per mile to charge.

	FESLA PRODUCT	ENERGY REQUIRED TO CHARGE BATTERY (KWH)	COST TO CHARGE BATTERY	RANGE OF DISTANCE (MILES)	CHARGING COST PER MILE (CENTS)
tron	Audi Q4 sportback e- tron	86 kWh	\$12.87	242 miles	5.32 cents





Audi e-tron 97 kWh \$14.51 226 miles 6.42 cents quattro

#### How much does it cost to charge an EV with solar energy?

Hoping to maximize your EV savings? The best way to do so is to power it with solarl On average, your solar payback period is a little over eight years. A solar system will typically last between 25 and 30 years, and an EV will generally last around the same amount of time. So, once you've finished paying off your system, you'll be generating electricity and charging your EV for free!

#### Comparing EVs with ICE vehicles: what it costs to fuel an ICE

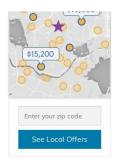
Charging your EV is typically much cheaper than filling up your gas-powered vehicle. You'll pay around \$0.05 per mile to charge your EV compared to \$0.14 to fuel your gas-powered car for a compact sedan. The cost of fueling a gas car vehicle depends on the size of your vehicle's gas tank and the type of gas required, You'll also pay more for gas overall if your car is less efficient (meaning it travels a shorter distance per gallon of gas) and if you're driving more in the city than on highways. We'll explain how much it costs to fuel comparable vehicles to the above EVs in 2023 by looking at some of the most popular ICE options.

ICE MAKE AND \$ MODEL	FUEL TANK CAPACITY (GALLONS)	MILES PER GALLON (MPG) — COMBINED CITY/ HIGHWAY	COST TO FILL UP TANK	RANGE OF DISTANCE (MILES)	FUELING     COST PER     MILE     (CENTS)	<b>‡</b>
Toyota Corolla Hatchback	13.2 gallons	35 MPG	\$45.80	462 miles	9.9 cents	
Honda Civic LX	12.4 gallons	36 MPG	\$43.03	446 miles	9.6 cents	
Kia Telluride AWD	18.8 gallons	21 MPG	\$65.24	395 miles	16.5 cents	
Porsche Macan*	17.1 gallons	21 MPG	\$72.16	359 miles	20.2 cents	

\*Note: requires premium gas, so the costs listed are based on using it. All other vehicles listed use regular gasoline.

According to AAA, as of March 15, 2023, the current gas prices are \$3.47 per gallon for regular gasoline and \$4.22 per gallon for premium. You may pay substantially more for gas if you live in certain areas. For example, gas prices in California and

Enter your zip code
See Local Offers



whereas you may pay about 9% less in the midwest states.

#### Cost per charge/tank for some popular EVs and comparable vehicles

VEHICLE CATEGORY	EV CHARGING COST PER MILE (CENTS)	<b>‡</b>	ICE FUELING COST PER MILE (CENTS)
Compact hatchback	2022 Nissan Leaf: 4.48 cents		2022 Toyota Corolla Hatchback: 9.9 cents
Compact sedan	2022 Tesla Model 3: 3.97 cents		2022 Honda Civic LX: 9.6 cents
Mid-size SUV	2022 Ford Mustang Mach-E: 5.1 cents		2022 Kia Telluride AWD: 16.5 cents
Luxury crossover SUV	2022 Audi e-tron: 5.87 cents		2022 Porsche Macan: 20.2 cents

#### EVs vs. ICE vehicles: which is cheaper overall?

Comparing the long-term costs of EVs and ICE vehicles is challenging and depends heavily on which vehicle you're choosing – but what can you expect in general? In June 2021, the Department of Energy (DOE) conducted a study to compare the maintenance costs of EVs and ICE vehicles.

Overall, the DOE found that an EV costs 6.1 cents per mile driven, whereas an ICE vehicle costs 10.1 cents per mile driven: a **4 cent difference!** While this might not sound like a lot, when you consider the life of your vehicle, it definitely adds up. Let's say you drive 200,000 miles over the lifetime of your vehicle – that's **\$8,000 saved** with an EV. If you drive 300,000 miles, this number increases to \$12,000, representing significant savings. That doesn't even consider any financial incentives you get when you buy your EV!

#### How far can an EV go on one charge?

The range of your EV will depend on the make, model, and any upgrades you choose. Teslas offer some of the highest ranges on the market today. Compared to an ICE vehicle, EVs generally can't travel as far, though as EV technology continues to advance, EV ranges are getting closer to some ICEs.

#### Distance per charge/tank for some popular EVs and comparable vehicles $\,$

VEHICLE CATEGORY \$	EV RANGE DISTANCE (MILES)	<b>‡</b>	ICE VEHICLE RANGE DISTANCE (MILES)	<b>‡</b>
Compact hatchback	Nissan Leaf: 149 miles		Toyota Corolla Hatchback: 462 miles	
Compact sedan	act sedan Tesla Model 3: 272 miles		Honda Civic I X: 446 miles	





compact seaan	TOSTO TROUBLES ET ETTTES	Honor Citie Dr. Honnies
Mid-size SUV	Ford Mustang Mach-E: 224 miles	Kia Telluride: 395 miles
Luxury crossover SUV	Audi e-tron: 226 miles	Porsche Macan: 359 miles

#### What factors impact the cost of charging an EV at home?

Charging an EV is almost always cheaper than filling up an ICE vehicle's gas tank. However, the price difference will depend on some factors listed below.

#### 1. Your electricity source

Because you use electricity to charge your EV, it's no surprise that the most significant factor that will impact the cost of charging is your electricity source. For example, you may pay for your utility's standard affering or choose an electricity alternative, such as community solar, a community choice aggregation (CCA), or a green power plan (GPP). Typically, you'll pay less annually to charge your EV if you subscribe to community solar. However, your utility's standard affering might be cheaper than a CCA or GPP. You can compare these alternative electricity sources.

The best option for charging your EV is using solar since once you pay off your solar system, you'll essentially be able to charge it for free!

#### 2. Your EV's battery size

It's no surprise that you'll pay more per charge if your car has a larger battery (just as you'll pay more to fill up a vehicle with a larger gas tank). However, depending on your EV's range, you may still pay less per mile with a large battery and charge your vehicle less frequently. For example, while you'll pay only \$6.73 to charge a Nissan Leaf, you'll pay 4.5 cents per mile. On the other hand, the Tesla Model 3 will cost about \$10.47 to charge, though you'll pay just 3.85 cents per mile. The Audi e-tron comes in as one of the higher costs to charge at 6.42 cents per mile and a total of \$14.51 per charge.

#### 3. The type of EV charger you use

When you charge your EV's battery, not all of the energy you use is stored in the battery. Some energy is lost as heat, some is used to keep the battery at an adequate temperature, and some escapes as "transmission loss" (a quite technical process, so we won't get into the details). EV chargers come in three levels, and the level you use can impact the amount of energy – higher voltage generally equals less energy loss.

Level 1 charging (120-volt chargers, using a regular outlet) and Level 2 charging (via





208- or 240-voit standard nome by chargers) require converting different QAC) electricity from your home into direct current (DC) electricity that your EV's battery can store and use. This AC to DC conversion causes energy loss because of the heat produced by it. However, Level 3 chargers (400-volt chargers you find on road trips) provide DC electricity, so no conversion losses occur. According to Car and Driver, you'll usually see efficiency above 90 percent with Level 3 chargers. In contrast, Level 1 or Level 2 chargers typically reach about 85 percent, with some dropping to as low as 60 percent in cold weather.

#### 4. Where you live

Electricity costs vary across the country, so where you live will substantially impact how much you pay to charge your EV at home (unless you're charging it with solar energy!). Based on data from the EIA, these states have the highest and lowest electricity costs.

#### States with the highest and lowest electricity costs

HIGHEST ELECTRICITY COST STATES	AVERAGE COST (CENT PER KWH)	COST STATES	AVERAGE COST (CENT PER KWH)
Н	44.78 cents	ND	9.62 cents
NH	30.92 cents	NE	9.84 cents
MA	30.73 cents	WA	10.03 cents
RI	27.50 cents	WY	10.39 cents
CA	24.46 cents	ID	10.51 cents
СТ	23.50 cents	UT	10.54 cents
NY	22.79 cents	MO	11.04 cents
ME	22.52 cents	OR	11.06 cents
AK	22.12 cents	AR	11.17 cents
VT	20.15 cents	IA	11.20 cents

Overall, many New England and western states have the highest electricity costs, while some southeastern states have the lowest.

It's also important to note that more energy is lost in the charging process if you live in more extreme climates — either hot or cold. Your EV requires additional energy to keep the battery at an adequate temperature in these extremes, which leads to a lower charging efficiency and makes temperate climates best for EV charging.

#### 5 When you charge your FV





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Depending on where you live, you may also pay different electricity rates to charge your EV at certain times of the day. Certain utilities have rate structures that adjust the rate you pay for electricity over the course of the day or year based on when electricity is in high demand. These rate structures, known as time-of-use rates or time-varying rates, will vary by utility but generally mean they charge more when the cost of generating electricity and the electricity demand is high – such as in the middle of the afternoon on a hot day. Typically, you'll pay less to charge your EV at night if your utility uses this rate structure.

#### Tracking your actual EV charging usage and costs

If you purchase an EV charger for your home that has access to an app (many of them dol), you can easily see your usage. For example, the ChargePoint app provides usage data by charge and per month for your home EV charger (along with any public ChargePoint charging), showing estimated costs by charge and month. However, you can also use your actual electricity bill with your exact price per kWh to determine your precise cost more closely. You can also update your profile in the ChargePoint app with your EV's make and model for it to track the estimated distance you've charged.



Image credit: ChargePoint app, home charger usage, and trends

#### What does it cost to charge an EV somewhere else?

If you're not at home, you will still want to know what it costs to charge your EV on the go — whether you're covering some extra miles in your daily driving or on a road





trip. The public EV charging infrastructure is expanding in the U.S., so more options are becoming available. Most public chargers are either Level 2 or Level 3, but if you drive a Tesla you'll also be able to charge them at Tesla Supercharger stations (which we discuss in this article).

#### Public Level 2 charging costs

The cost of charging your EV with a public Level 2 EV charger can vary dramatically because every public EV charger can have different prices. For example, your company or office building may offer free EV charging stations to employers and visitors in their parking deck or parking lot.

So, in that case, your daily commute in your EV could be free! If you can charge enough to get a complete charge, you may be able to decrease your overall cost of charging since you won't need to plug in at home as much.

Public Level 2 chargers range in price from free to an hourly or per kW charge, depending on the charger and location. Keep in mind that you may also have parking charges at a parking meter or deck in addition to charging costs. Usually, you can check apps like Plugshare or ChargePoint to see the price, availability, and even the charger's status (such as tips from other EV drivers who have used it and any issues with charging there).







#### Public Level 3 charging costs

Just as with Level 2 chargers, costs may vary depending on the location of the EV charger you use. Level 3 chargers are available on many highways for longer distances or road trips. As with publicly available Level 3 chargers, they can vary in cost, and the price is usually far below what you'd pay for gas on the same road trip in an ICE vabicle.

#### Frequently asked questions about EV charging

#### How much does my electric bill go up with an EV?

According to the Department of Transportation (DOT), the average U.S. driver travels approximately 13.476 miles each year (or 1.123 miles/month). If you use an average charging cost per mile of 5 cents per mile and only charge your EV at home, your electricity bill will increase by about \$56 each month. However, if you charge at work or other free public charging stations, that cost may be lower. Also, if you have solar panels and charge your EV at home, you may pay nothing!

#### How long does it take to charge an EV?

Depending on the level of charging, the range of your EV, and the amount of charge you need to replace, charging an EV can take as little as 15 to 20 minutes at a Level 3 charger or as long as 20 to 40 hours using a Level 1 charger (standard outlet). Read more about how long it takes to charge a Tesla.

#### What types of EV chargers exist?

There are three levels of EV chargers, and each charges at different speeds — Level 1 is the slowest, Level 2 is faster, and Level 3 is the fastest. You can install an EV charger at your home or use a public charger at your office, throughout different cities, at shopping centers, and on many major highways.

#### Install an EV charger at home at home with Qmerit

EnergySage partners with Qmerit, a home EV charging installation leader who works with a trusted network of certified installers. They can help you quickly and easily install your home EV charger.

Find local EV charger installers and get a quote.

#### Power your EV with solar!

If you're looking to lower your EV charging costs, the best way to do so is by going solar! You can easily set up a free account on the EnergySage Marketplace to





you find a solar system that fits your needs at the right price. If you're planning to charge an EV at your home, make a note in your account so installers can size your system accordingly. That way, you'll be able to power your car with renewable energy!

# Enter your zip code See Local Offers

### More reading on EnergySage

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Posted on MARCH 15, 2023 by ELLEN SIRULL.
Categories: ELECTRIC VEHICLES
Tags: DEEP DIVE, ELECTRICITY COST, EV CHARGING



### About Ellen Sirull

Ellen covers clean energy finance, electric vehicles (EVs), and EV charging as part of EnergySage's consumer education team. She brings twenty years of experience helping consumers navigate complex topics. Ellen's writing and insights have been featured on sites such as Money Tips, Experian, and CNBC. She graduated from the University of Georgia with a Bachelor's Degree in Journalism and earned an MBA at Kennesaw State University. Ellen and her family are proud owners of both a solar system and an EV, with a \$0 monthly electric bill being their favorite part of using clean energy.

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HOW LONG DOES A TESLA BATTERY LAST?

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# Is it cheaper to refuel your EV battery or gas tank? We did the math in all 50 states.



Updated Aug. 14 at 10:14 a.m. Originally published Aug. 8, 2023







Gasoline cars are cheaper to refuel than electric vehicles.

I've heard <u>this claim</u> pop up everywhere from <u>Massachusetts</u> to <u>Fox</u>

<u>News</u> over the past two years. My neighbor even refuses to plug in his hybrid Toyota RAV4 Prime over what he calls ruinous electricity rates.

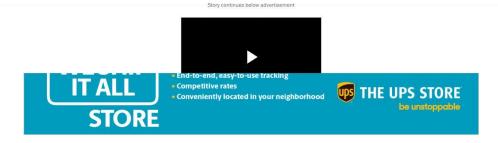
# What gives?

The basic argument is that electricity prices are so high it has erased the advantage of recharging over refilling. This cuts to the heart of why many people buy EVs, according to the Pew Research Center: 70 percent of potential EV buyers report "saving money on gas" as among their top reasons.

So how much does it really cost to refuel an EV?

The answer is less straightforward than it seems. Just calculating the  $\,$ 

cost of gasoline vs. electricity is misleading. Prices vary by charger (and state). Everyone charges differently. Road taxes, rebates and battery efficiency all affect the final calculation.



So I asked researchers at the nonpartisan Energy Innovation, a policy think tank aimed at decarbonizing the energy sector, to help me nail down the true cost of refueling in all 50 states by drawing on data sets from federal agencies, AAA and others. You can dive into their helpful tool  $\underline{\text{here}}$ .

I used the data to embark on two hypothetical road trips across America, delivering a verdict on whether it costs more to refill or recharge during the summer of 2023.

The results surprised me (and they might really surprise my neighbor).

[Renting an EV can be cheap yet inconvenient. Here's how to rent smart.]

# The cost of a fill-up

If you're like <u>4 in 10 Americans</u>, you're <u>considering buying an electric vehicle</u>. And if you're like me, you're sweating the cost.

The average EV sells for \$4,600 more than the median gasoline car, but by most calculations, I'll save money over the long run. It costs less to refuel and maintain the vehicle —  $\underline{\text{hundreds of dollars less per year}}$ , by some estimates. That's before government incentives, and any consideration of never visiting a gas station again.

Yet nailing down a precise number is tricky. The average price of a gallon of gasoline is easy to calculate. Since 2010, the price, in inflation-adjusted terms, is virtually unchanged, according to  $\underline{\text{data from the}}$  Federal Reserve.

The same applies to a kilowatt-hour (kWh) of electricity. But the cost of recharging, by contrast, is far more opaque.

Electricity rates not only vary by state, but by the time of day and even the outlet. EV owners may plug in at home or work and then pay a premium to fast-charge on the road.

That makes comparing the cost of a "fill-up" for a gasoline Ford F-150, America's best-selling vehicle since the 1980s, and its electric counterpart's 98-kWh battery challenging. It requires assumptions about geography, charging behavior and standardizing how the energy in batteries and gas tanks convert into miles. Such calculations must then be applied to different vehicle classes, such as sedans, SUVs and trucks.

No wonder almost no one does it. But we saved you the time. The results reveal just how much you can save — and the few instances where you won't.

The bottom line? In all 50 states, it's cheaper for the everyday American to fill up with electrons — and much cheaper in some regions such as the Pacific Northwest, with low electricity rates and high gas prices.

Average savings per fill up







State ▼	Truck ▼	SUV =	Sedan =
Washington	\$80	\$49	\$59
Oregon	\$71	\$43	\$53
Nevada	\$57	\$35	\$44
Idaho	\$57	\$35	\$43
Utah	\$55	\$34	\$42
California	\$53	\$33	\$43
Arizona	\$50	\$31	\$39
Montana	\$50	\$31	\$38
Wyoming	\$48	\$30	\$37
Illinois	\$47	\$29	\$37

See all ▼

In Washington state, with prices around \$4.98 per gallon of gas, it costs about \$115 to fill up an F-150 which delivers 483 miles of range.

By contrast, recharging the electric F-150 Lightning (or Rivian R<sub>1</sub>T) to cover an equivalent distance costs about \$34- an \$80 savings. This assumes, as the Energy Department estimates, <u>drivers recharge at home 80 percent of</u> the time, along with other methodological assumptions at the end of this article.

But what about the other extreme? In the Southeast, which has low gas prices and electricity rates, savings are lower but still significant. In Mississippi, for example, a conventional pickup costs about \$30 more to refuel than its electric counterpart. For smaller, more efficient SUVs and sedans, EVs save roughly \$20 to \$25 per fill-up to cover the same number of miles.

Story continues below advertisement



An American driving the average <u>14,000 miles per year</u> would see annual savings of roughly \$700 for an electric <u>SUV</u> or sedan up to <u>\$1,000</u> for a pickup, according to Energy Innovation.

But daily driving is one thing. To put the model to the test, I took these estimates on two all-American summer road trips.

# Tale of two road trips

You'll encounter two main kinds of chargers on the open road. Level 2 chargers add about 30 miles of range every hour. Prices range from about 20 cents per kWh to free at many businesses such as hotels and grocery stores hoping to attract customers (Energy Innovation assumes just over 10 cents per kWh in the estimates below).

Fast chargers known as Level 3 — nearly 20 times faster — can top off an EV battery to about 80 percent in as little as 20 minutes. But that typically costs 30 to 48 cents per kWh — a price equivalent to gasoline in some places, as I later found out.

To test how this plays out, I embarked on a hypothetical  $\underline{408\text{-mile}}$  road trip from San Francisco to Disneyland, just south of Los Angeles. For the journey, I selected the F-150 and its electric counterpart, the Lightning, part of the wildly popular series that  $\underline{sold}$  653,957 units last year. There's a  $\underline{strong}$  climate case  $\underline{against}$  building electric versions of America's gas guzzlers, but these estimates are meant to reflect the actual vehicle preferences of Americans.

Road trip across one state

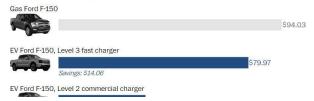
San Francisco to Disneyland (408 miles)



The winner? The EV — barely. The savings were modest because of the substantial premium for using fast chargers, typically three to four times more expensive than charging at home. In a Lightning, I arrived at the park with \$14\$ more in my pocket than if I had driven its gasoline counterpart.

If I decided to make a longer stop at Level 2 chargers at hotels or restaurants, my savings would have been \$57. This trend held for smaller vehicles, too: Tesla's Model Y crossover saved me \$18 and \$44 for the 408-mile journey at Level 3 and Level 2 chargers, respectively, compared to refueling with gasoline.

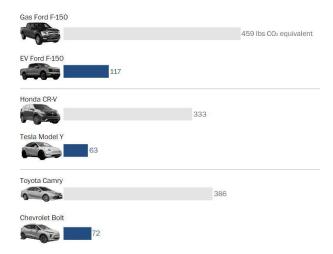
# Total cost to fill up for road trip across California





On the emissions front, EVs pulled well ahead. EVs emit <u>less than a third</u> of the emissions per mile than their gasoline counterparts — and they're getting cleaner every year. America's electricity mix emits just <u>under a pound of carbon emissions for every kWh</u> generated, according to the Energy Information Administration. By 2035, the White House hopes to drive that <u>closer to zero</u>. This meant the conventional F-150 spewed five times more greenhouse gas emissions into the atmosphere than the Lightning. The Tesla Model Y represented 63 pounds of greenhouse gas emissions on the trip compared to more than 300 pounds from all the conventional vehicles.

Total emissions for road trip across California



# Driving where few EVs go

The true test, however, would be a journey from Detroit to Miami. Driving from Motown across the Midwest is not an EV dream. This region has some of the <u>lowest EV ownership rates in the United States</u>. Chargers are <u>not as plentiful</u>. Gasoline prices are low. Electricity is <u>dirtier</u>.

Cross-country road trip
Detroit to Miami (1,401 miles)

Minneapolis

Detroit

New York

Chicago

Detroit

New York

Washington

Houston

New Orleans

Tampa

Miami

Did the EV hold its edge? Sometimes. But not always.

If I was refueling at homes or cheap Level 2 commercial stations along the way (an unlikely scenario), the Bolt EV was cheaper to refuel: \$41 compared to \$142 for the Camry.

But fast charging tipped the balance in favor of the Camry. At Level 3 chargers, the retail cost of electricity added up to \$169 to complete the trip on batteries, \$27 more than the gasoline-powered journey.

# Total cost to fill up for cross-country road trip





On greenhouse gas emissions, however, the Bolt was the clear leader, indirectly accounting for just 20 percent of the emissions coming from its counterpart.

# Total emissions for cross-country road trip



# Do EV detractors have a point?

I wanted to see why those arguing against the economics of EVs came to such a different conclusion. For this, I contacted Patrick Anderson, whose Michigan-based consulting firm works with the auto industry and assesses the cost of EVs each year. It has consistently found most EVs to be more expensive to refuel.

Anderson told me that many economists leave out costs that should be part of any calculation of recharging costs: <a href="state\_EV\_taxes">state\_EV\_taxes</a> replacing gas taxes, costs of home chargers, transmission losses while recharging (about 10 percent), and the cost of driving to sometimes distant public fueling stations. These are small but real costs, he says. Together, they tip the balance toward gasoline cars.

Mid-priced assoline vehicles by his calculations cost less to refuel -

approximately \$11 to drive 100 miles compared to \$13 to \$16 for comparable EVs. The exceptions were luxury vehicles since they tend to be less efficient and burn premium fuel. "This segment is where EVs makes a lot of sense for the median buyer," says Anderson. "It's not surprising that's where we're seeing the most sales."

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But <u>critics say</u> Anderson's assessment overestimates or omits key assumptions: His <u>firm's analysis</u> assumes EV owners use expensive public stations about 40 percent of the time (the <u>Energy Department estimates</u> about 20 percent), overstates battery efficiency losses, adds the "cost" of free public chargers in the form of "property taxes, tuition, consumer prices or investor burdens" and ignores government and manufacturing incentives.

Anderson responded that it didn't assume 40 percent public charging, but modeled two charging scenarios assuming "mostly home" and "mostly commercial" (which included charging commercially 75 percent of the time). He also defended assigning a price to "free" commercial chargers offered by municipalities, colleges and businesses because

. . . . .

"these services are not actually free, but must be paid by users in some fashion, whether it is embedded in property taxes, tuition, consumer prices or investor burdens."

# The true cost of a fill-up

Ultimately, we may never agree on what it costs to refuel an electric vehicle. That may not matter. For the everyday driver in the United States, it's already cheaper to refuel an EV most of the time, and it's expected to get cheaper as renewable capacity expands and vehicle efficiency improves.

The sticker price for some EVs is expected to <u>fall below comparable</u> gasoline cars as soon as this <u>year</u>, and estimates of the total cost of ownership — maintenance, fuel and other costs over a vehicle's lifetime — suggest EVs are already cheaper.

After that there's one last number I felt was missing: the <u>social cost of carbon</u>. It's a rough dollar estimate of the damage from adding another ton of carbon to the atmosphere — a tally of heat deaths, flooding, wildfires, crop failures and other costs tied to global warming.

Every gallon of gas adds about <u>50 pounds of carbon dioxide</u> to the atmosphere, equivalent to about <u>50 cents in climate damage</u> per gallon, researchers estimate. Accounting for external factors such as congestion, accidents and air pollution, according to one 2007 estimate by Resources for the Future, the damage bill is closer to <u>\$3 per gallon</u>.

You're not required to pay this, of course. And EVs also don't solve this problem on their own. For that, we'll need more cities and

neighborhoods where you don't need a car to visit friends or buy groceries.

But electric mobility is  $\underline{\text{essential to helping keep temperature increases}}$ below 2 degrees Celsius. The alternative is a price that has become impossible to ignore.

#### About this story

The costs to fill up an EV vs. a gasoline vehicle were calculated for three vehicle classes: sedans, SUVs and trucks. All vehicle selections are 2023 base models. The average miles traveled by a driver per year was assumed to be  $\underline{14,263}$ , based on 2019 Federal Highway Administration data. For all vehicles, assumptions for range, mileage and emissions were drawn from the Environmental Protection Agency's <u>fueleconomy.gov</u>. Gas prices are based on July 2023 data from AAA. For EVs, the average number of kilowatt-hours required for a full charge was calculated based on the battery size. Charging location was based on Energy Department research indicating that  $\underline{80}$  percent of charging is at home. Residential electricity rates were provided by the Energy Information Administration from 2022. The remaining 20 percent of charging was at public charging stations, with electricity rates based on Electrify America's published rates by state

These calculations do not incorporate any assumptions for total cost of ownership, EV tax credits, registration fees, or operation and maintenance expenses. We also do not assume any EV-related rate designs, EV charging discounts or free charging, or electric time-of-use pricing.

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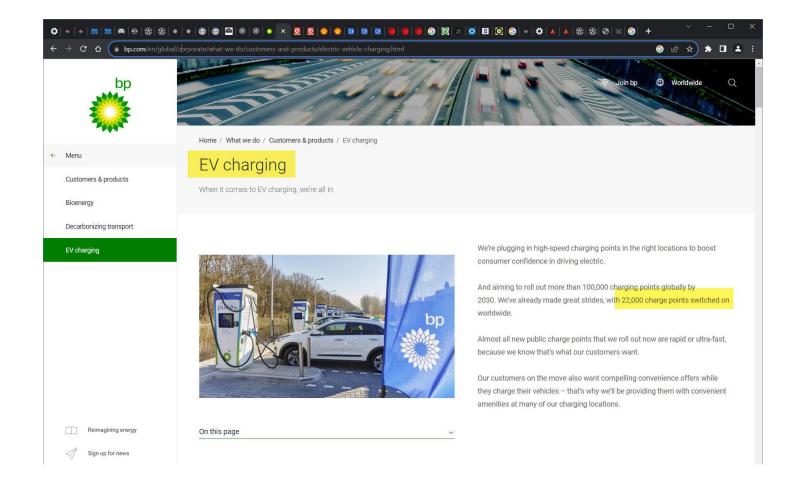
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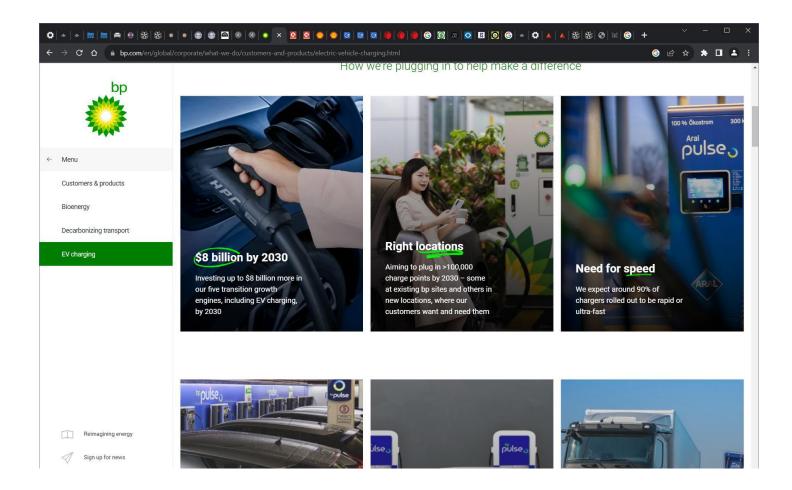
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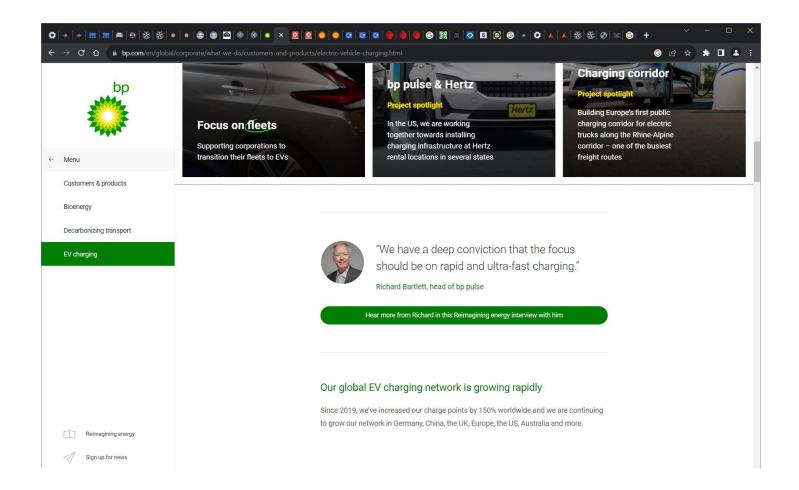
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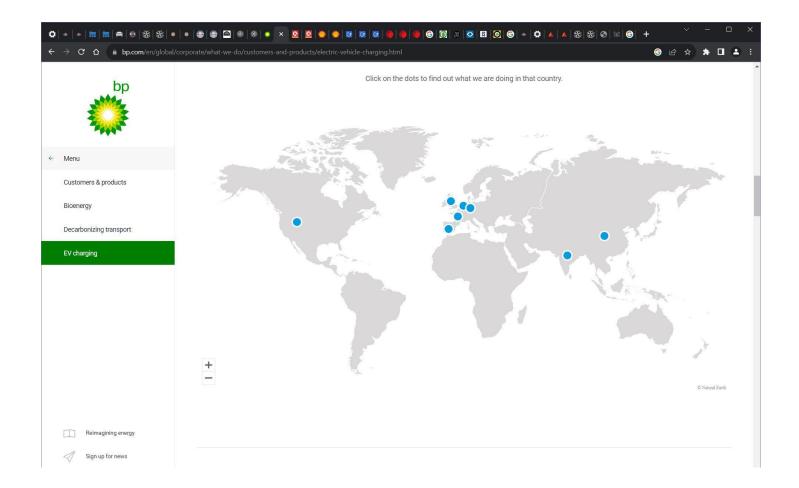


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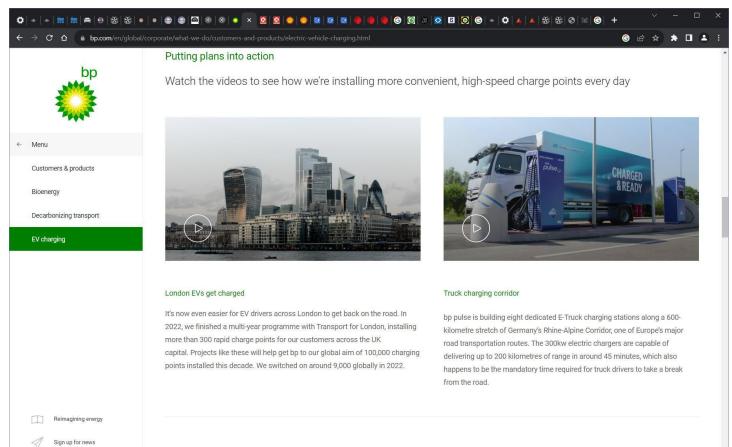
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# Putting plans into action

Watch the videos to see how we're installing more convenient, high-speed charge points every day

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Why the switch to FV is so important

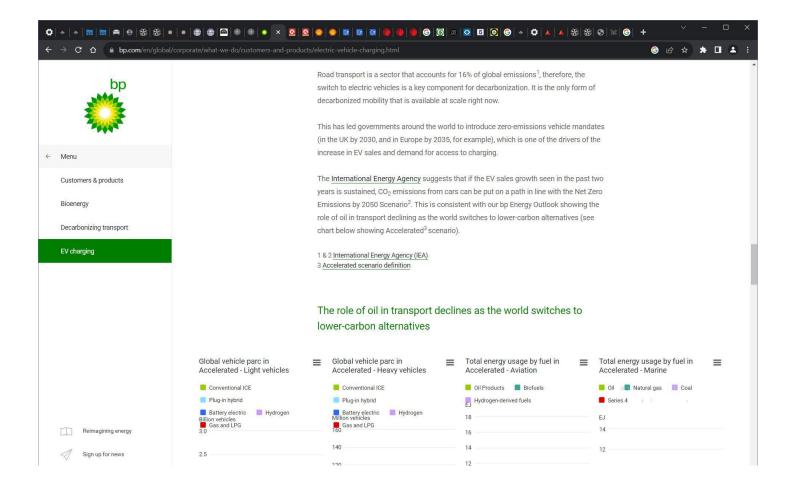
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Road transport is a sector that accounts for 16% of global emissions<sup>1</sup>, therefore, the switch to electric vehicles is a key component for decarbonization. It is the only form of decarbonized mobility that is available at scale right now.

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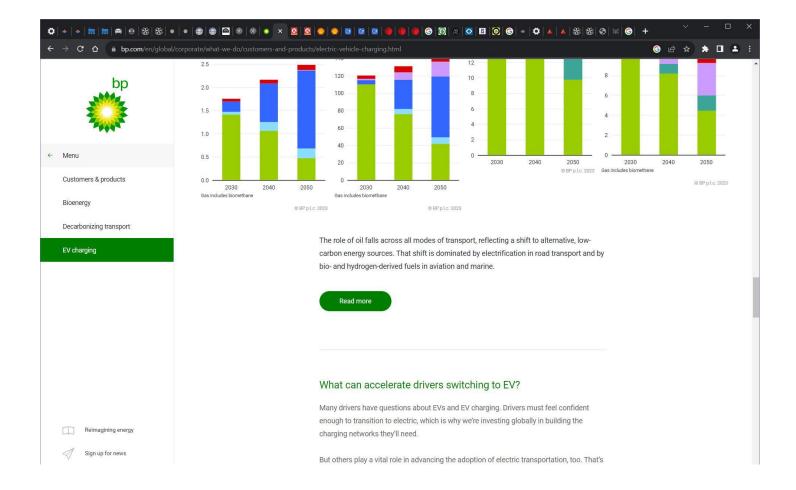
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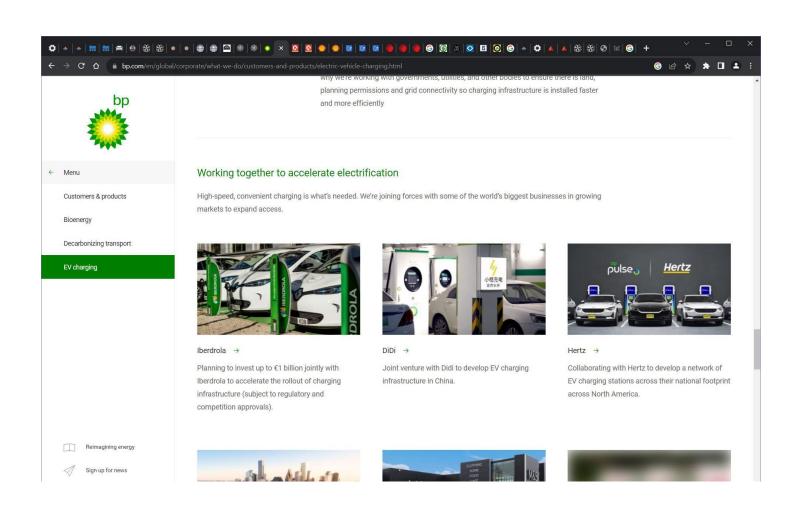


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why we're working with governments, utilities, and other bodies to ensure there is land, planning permissions and grid connectivity so charging infrastructure is installed faster and more efficiently

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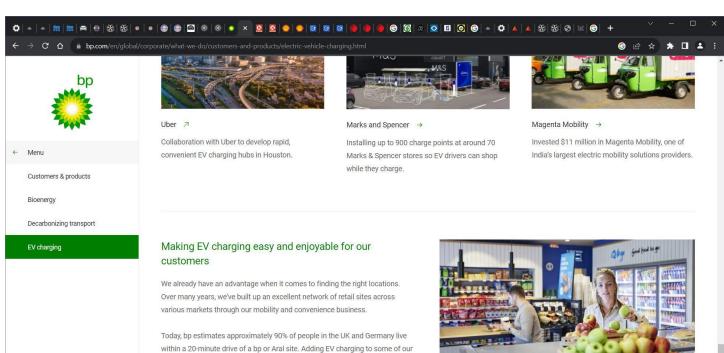
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strategically located retail sites is one of our priorities. But our ambition to build a global network of EV charging goes far beyond our existing footprint, which is why we're working with companies like  $\underline{\mathsf{APCOA}}$  as well as real estate companies to find new locations with our EV charging

What we do know about both existing and new sites is the importance of a

customers.

Reimagining energy





"Enabling the rapid expansion of electric vehicles is core to bp's plan to grow our convenience and mobility business, and

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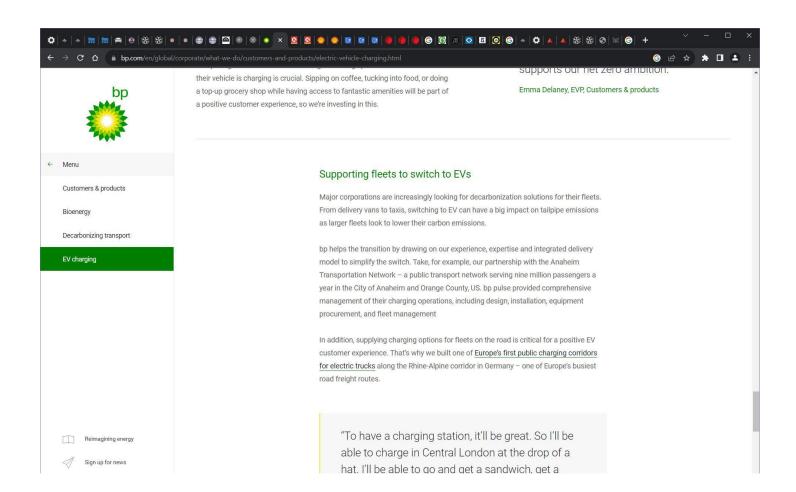
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compelling convenience offer. Creating an inviting space for customers while their vehicle is charging is crucial. Sipping on coffee, tucking into food, or doing a top-up grocery shop while having access to fantastic amenities will be part of a positive customer experience, so we're investing in this.

supports our net zero ambition."

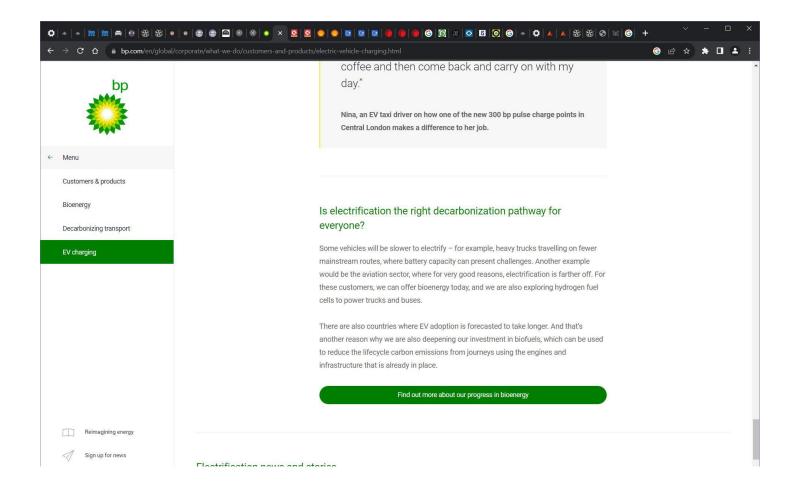
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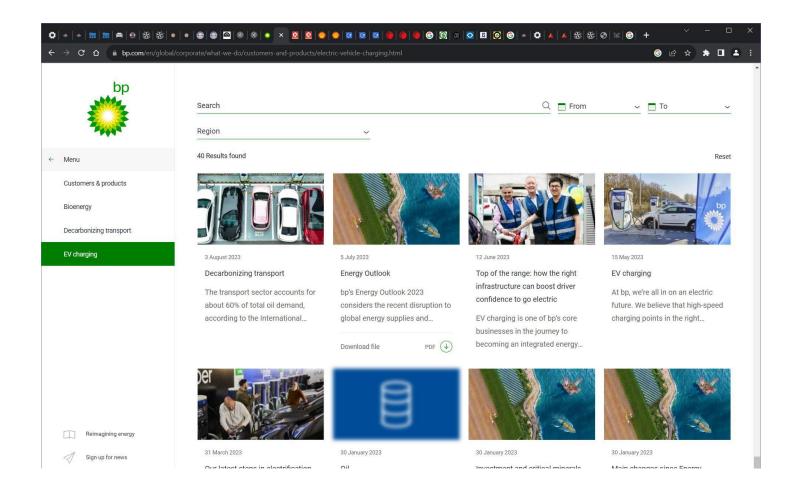
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our ratest steps in electrification

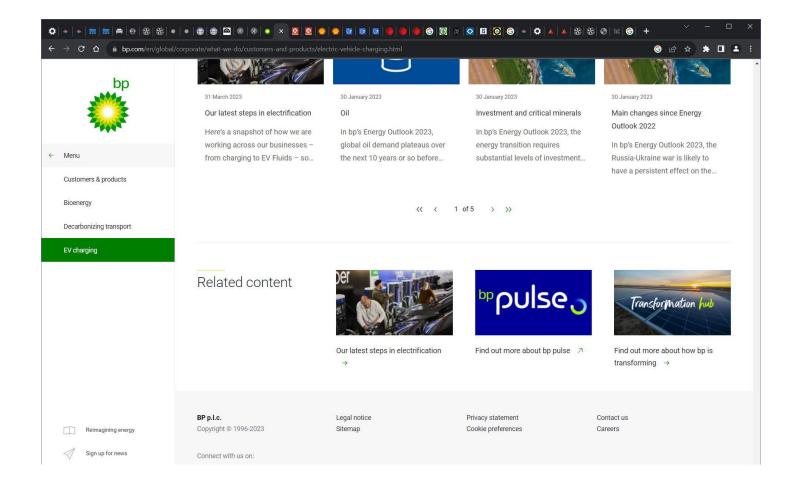
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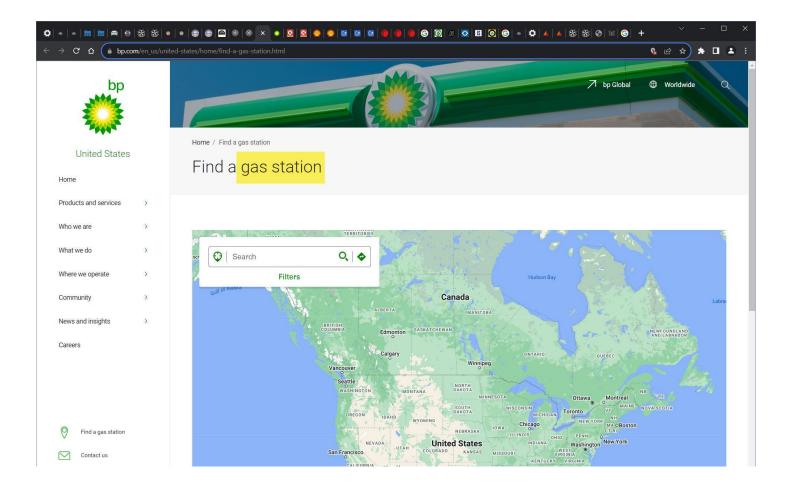


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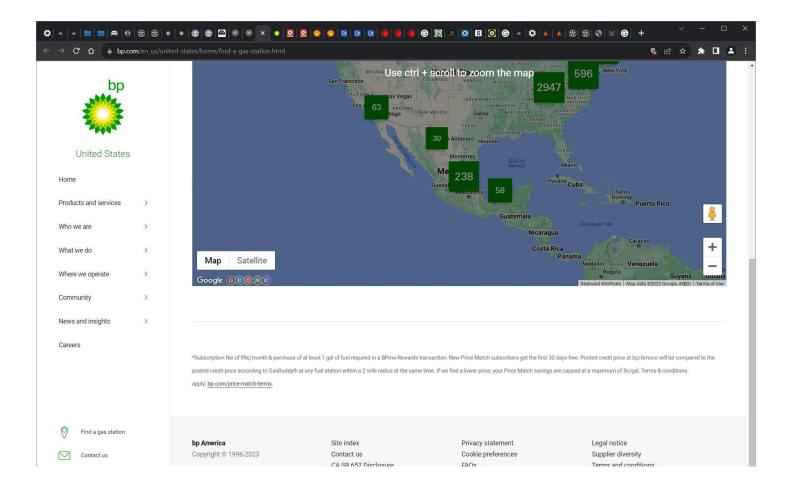
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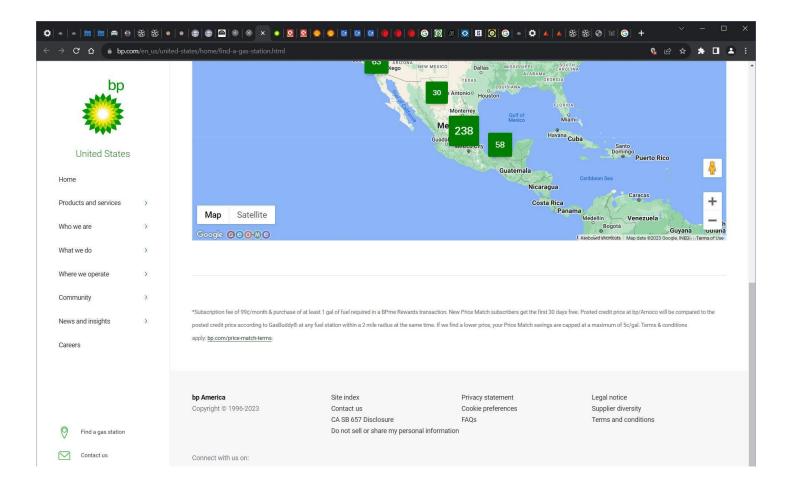
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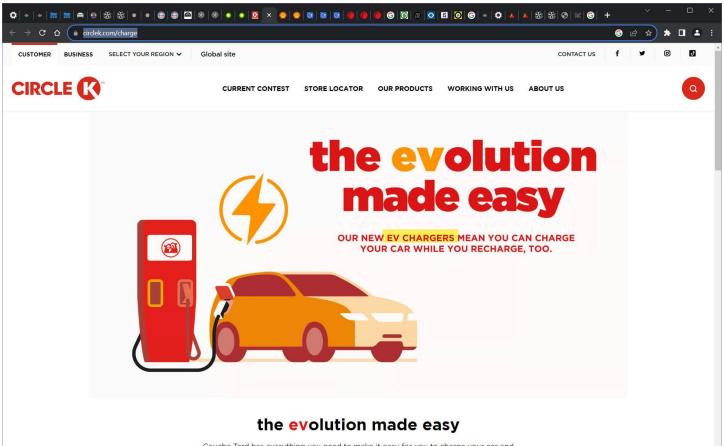


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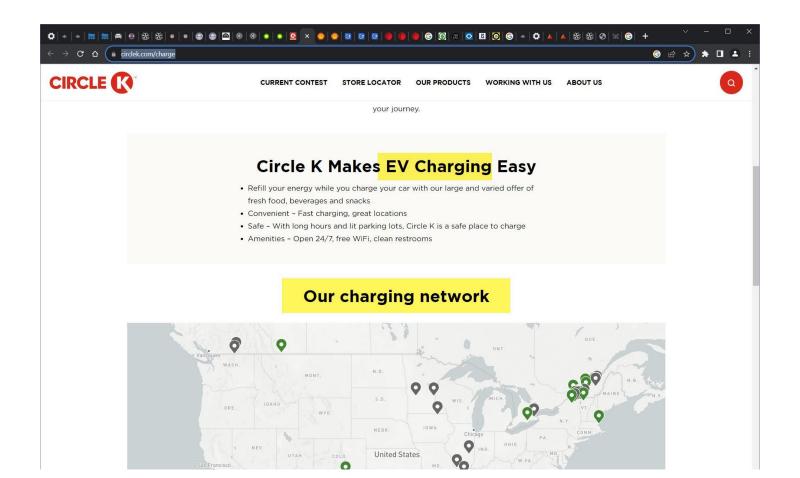
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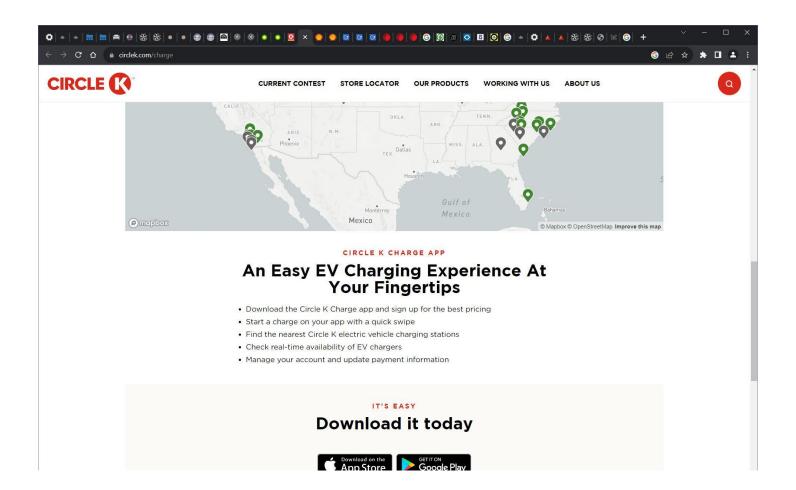
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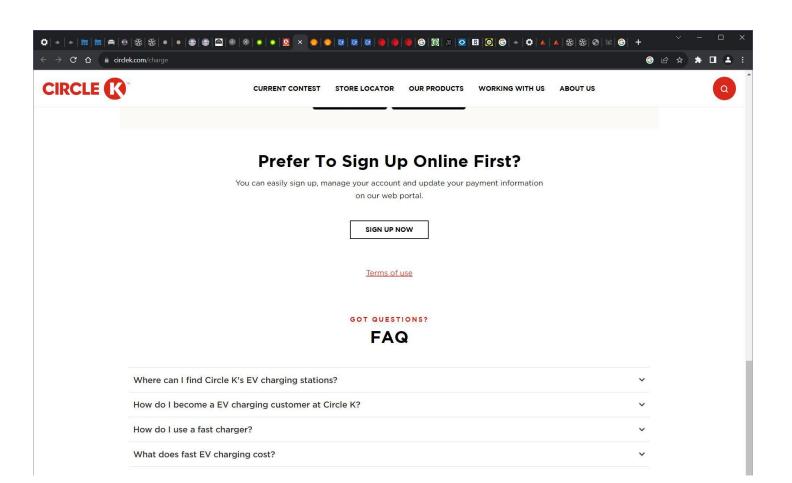


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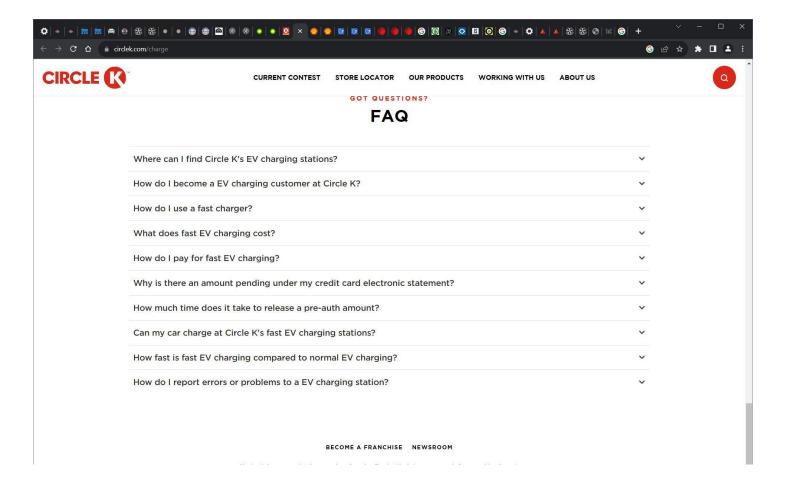
## **Prefer To Sign Up Online First?**

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How do I pay for fast EV charging?	~	
Why is there an amount pending under my credit card electronic statement?	~	
How much time does it take to release a pre-auth amount?	~	•

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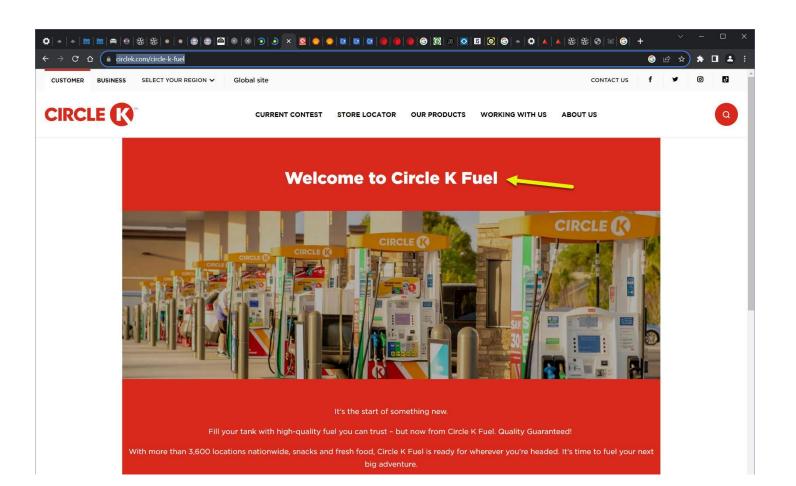


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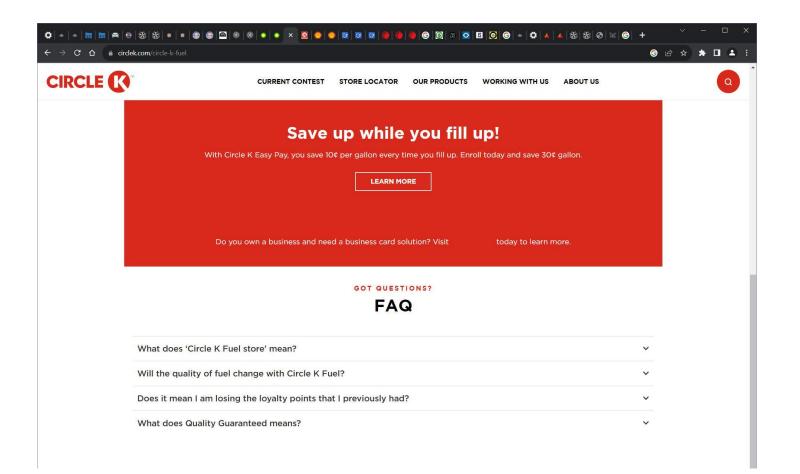
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FIND YOUR NEAREST STORE

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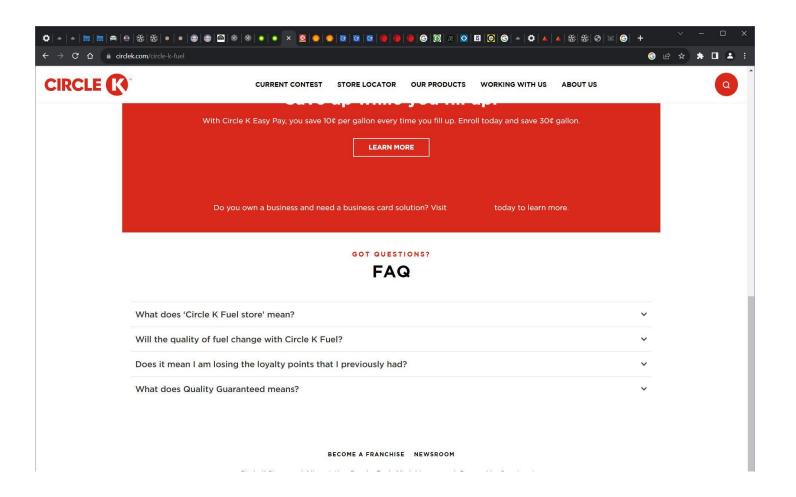


## BECOME A FRANCHISE NEWSROOM

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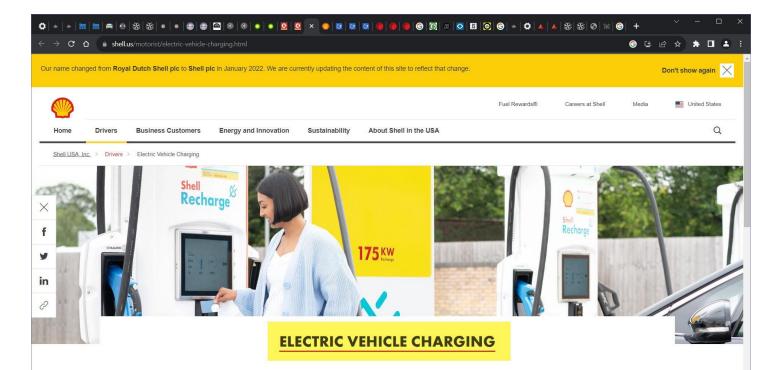


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9:25:51 AM 8/24/2023



## The Shell Recharge network in the US is growing

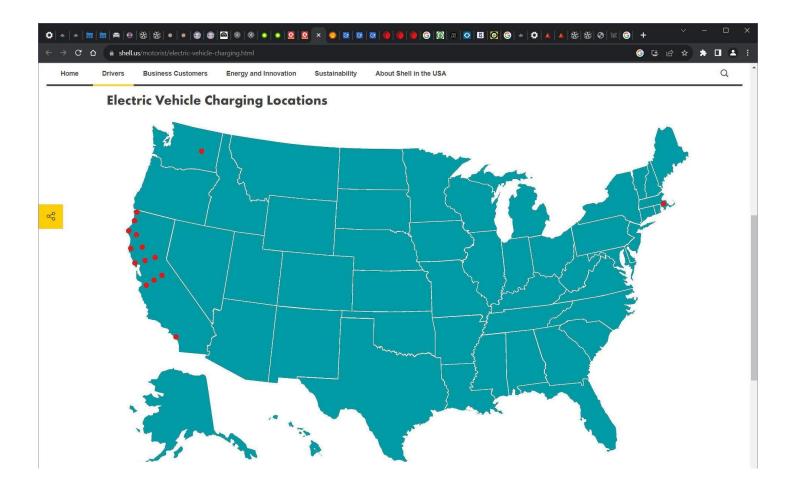
E-Mobility is on its way to mass adoption and will be the leading pathway to decarbonize passenger vehicles. EV adoption will grow exponentially in the U.S., and around the world, over the next two decades. Globally, it's estimated that 68% of all passenger vehicles sold will be electric by 2040. As one of the world's largest energy providers, Shell is uniquely placed to adapt to our customers' needs and provide a consistent EV charging experience.

The Shell Recharge network in the US is growing. Shell Recharge will help facilitate the freedom that has always been at the heart of the Shell brand and the automotive industry by catering to drivers' on-the-road needs during EV travel away from home. We aim be the leader that helps each new generation of drivers understand and embrace the unlimited potential of electric vehicles. Shell

Recharge will nelp remove the partiers that prevent drivers from leeling the freedom of EV driving by providing a simple, rast and reliable charging experience.

## **Electric Vehicle Charging Locations**

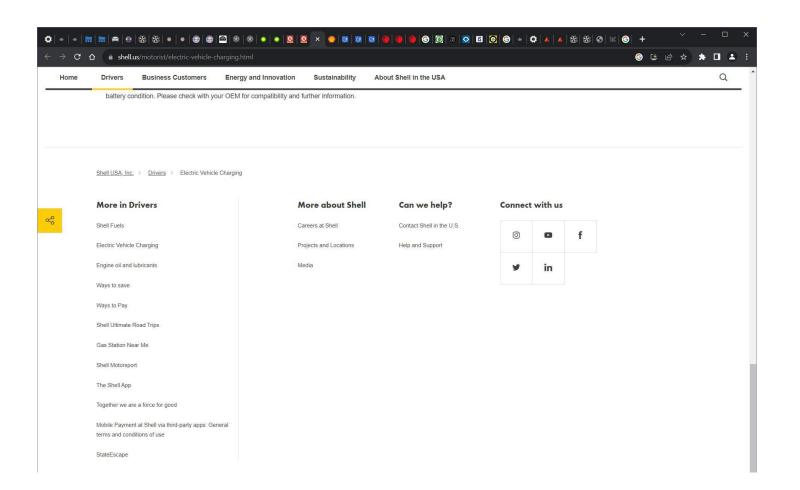
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- <sup>1</sup> BloombergNEF, Electric Vehicle Outlook 2021
- <sup>2</sup> Reliability based on Shell internal data. Charging results may vary, no guarantees provided. Charging speed depends on several factors including temperature outside, type of car, size of battery and battery condition. Please check with your OEM for compatibility and further information.

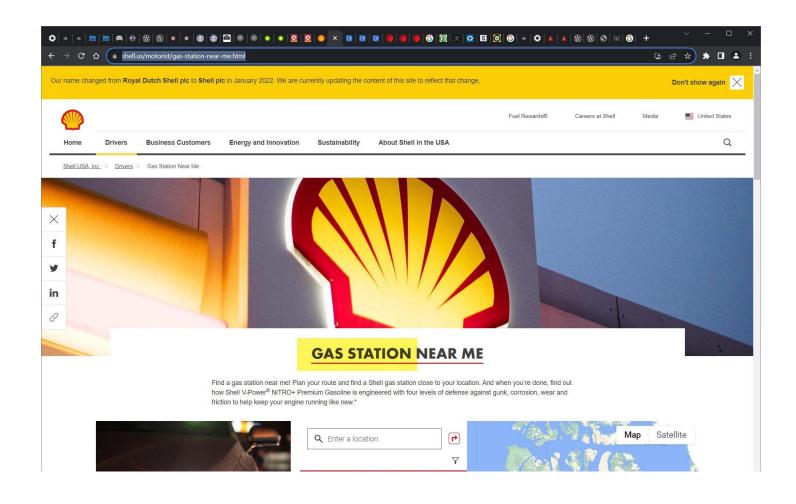
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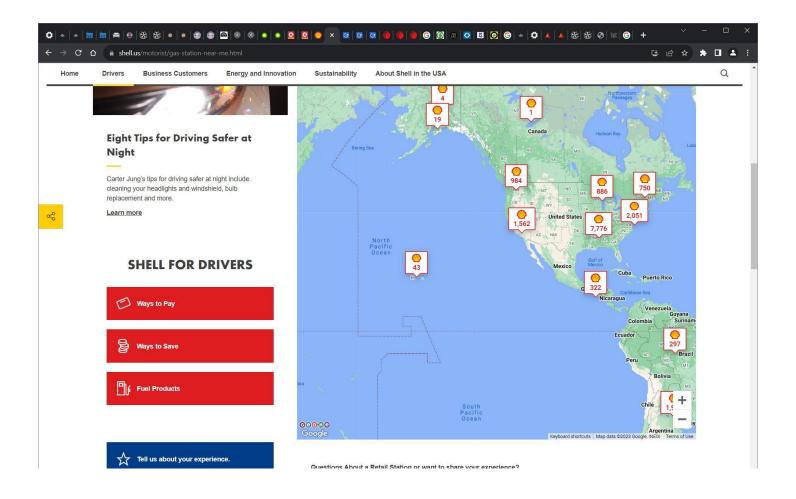
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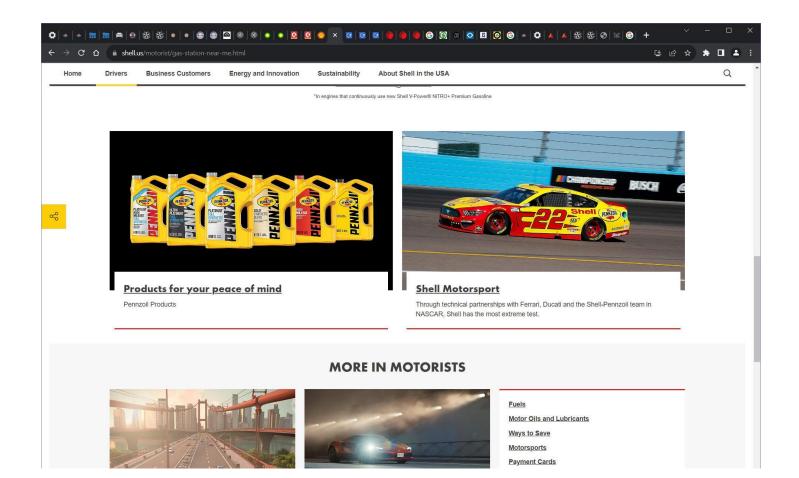
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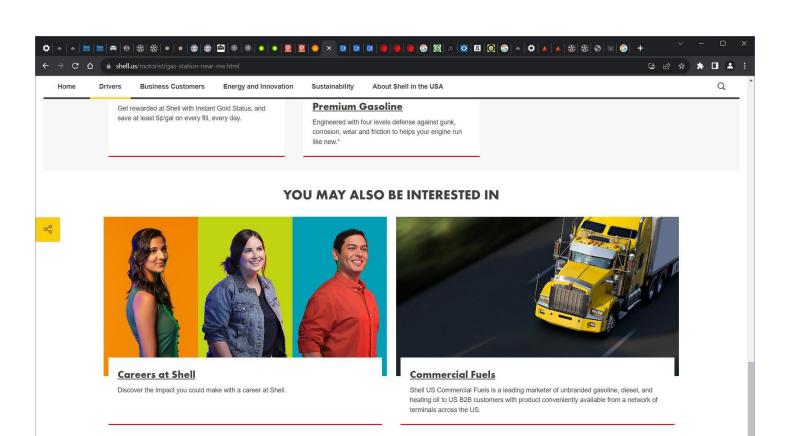
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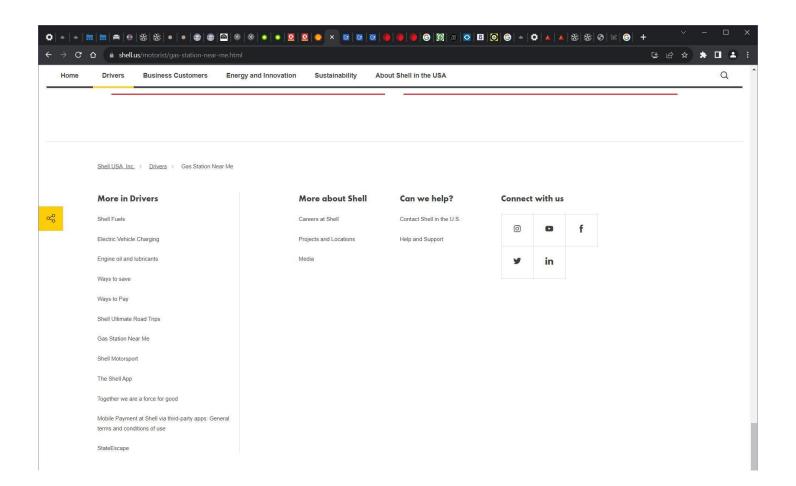


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Date and Time: Wednesday, August 23, 2023 4:09:00 PM EDT

Job Number: 204210321

### Documents (12)

1. Louisville sets maximum number of six gas stations within city

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

**Search Type:** Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

2. Colorado city fighting climate change with rule allowing only six gas stations

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

**Search Type:** Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

3. What's being built next to Bricks in Jenison? It includes several new buildings.

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

**Search Type:** Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

4. Buc-ee's is now open! Everything you need to know about Sevierville 's massive gas station

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

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News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

5. Two bills pave way for fast-charging EV stations around Texas

Client/Matter: -None-



Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

6. Gas-station ant farms at Wally's world in Fenton, where bigger is better

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

7. What has popped up at Midway

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

8. A shock to the system: Inside the effort to convert gas stations to charging stations

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

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News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

9. COSTCO NEARS APPROVAL

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

10. Quinault Indian Nation moving 500 acres to federal trust

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

11. Report: Interest in EVs revvs up

Client/Matter: -None-

**Search Terms:** gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

12. What's going on at 10th and Main in Darby? More than meets the eye

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

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News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

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## Louisville sets maximum number of six gas stations within city

Colorado Hometown Newspapers (Boulder County, Colorado)

March 22, 2023

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Section: NEWS

Length: 525 words

Byline: Andrea Grajeda

... saying the ordinance would allow only six gas stations within the city.

Five gas stations are in the city, plus one that was recently approved at McCaslin Boulevard. Zucarro clarified that automobile repair and service shops are distinct and are not part of the ordinance.

The ordinance also requires gas stations to be 1,000 feet away from one another. The ordinance states that special use approvals for existing gas stations will expire if that gas station is closed for over a year. The site will need to apply for a special use permit again if it continues to be a gas station.

The ordinance will also require installation of <u>electric vehicle</u> <u>charging stations</u> for any new or modified <u>gas station</u>. There must be enough <u>charging stations</u> to equal 20% of the number of gas pumps at the station, with a minimum of two <u>charging stations</u> available.

The ordinance allows for an exception and will allow a seventh gas station if it is part of a new, large retail center.

Zucarro said placing a cap on gas stations allowed in a municipality has been a growing trend following health and environmental concerns about the use of gasoline-powered vehicles. He said if one gas station closed, the city could accept applications to open another.

Councilmember Barbara Hamlington clarified that the ordinance applies to the sale of gasoline. Any company that provides gas to its own vehicles will not be affected.

Councilmember Maxine Most said the council will not be able to fix climate change, but placing the cap on gasoline stations ...

... is a step in the right direction. She said Louisville should not invest in fossil fuel infrastructure that will not survive, as the market shifts to favor *electric vehicles*.

"We should be taking whatever incremental steps to not create additional fossil fuel infrastructure," Most said.

Some residents at Tuesday night's meeting said they wanted the Council to adopt the ordinance. One resident said investing in fossil fuels only negatively affects the environment through air quality, water quality and soil quality. Another resident said there are already enough <a href="gas stations">gas stations</a> in Louisville to serve the city, and any additional <a href="gas gas stations">gas stations</a> only hurt the environment.

Resident Joshua Cooperman said while placing a cap on gas stations will not have a huge impact on greenhouse gas emissions, the cap is a ...

# Colorado city fighting climate change with rule allowing only six gas stations

## The Denver Gazette March 22, 2023 Wednesday

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Section: NATION WORLD

**Length:** 313 words **Byline:** Jack Birle

- - -

### **Body**

The town of Louisville, Colorado, passed an ordinance Tuesday night limiting the number of gas stations allowed to operate within town to only six.

The City Council passed the ordinance unanimously, according to the Colorado Hometown Weekly, as part of an effort to combat climate change.

COLORADO DENTIST ALLEGEDLY GOOGLED 'HOW TO MAKE POISON' BEFORE KILLING WIFE

The ordinance also mandates that **gas stations** should be at least 1,000 feet apart from each other and also requires the "installation of **electric vehicle** (EV) fast **charging stations** for any expanded, modified or new gasoline or automobile service station equaling 20% of the number of gasoline pumps at the stations, with no fewer than two such **charging stations**."

<u>Gas station</u> business owners will be required to reapply for a permit to operate a gas station if the facility lies vacant for more than a year.

A seventh gas station can be built if it is "part of a new, large single-user retail center," according to the ordinance.

"We have an obligation to take every step possible to address the changes to our climate that are ravaging our planet and directly impacting the health, well-being and livelihoods of the constituents we represent in Louisville," council member Maxine Most told Fox News before the vote on Tuesday.

The town of Louisville, Colorado ...

..., is located in Boulder County and is in the northern part of the state, and only has a population of roughly 20,000 people.

CLICK HERE TO READ MORE FROM THE WASHINGTON EXAMINER

States and jurisdictions have taken various actions to fight climate change and lower emissions. In California, lawmakers banned the sale of new gas-powered cars beginning in 2035 as a way to accelerate the move to <u>electric</u> <u>vehicles</u> from gas-powered ones.

Original Location: Colorado city fighting climate change with rule allowing only six gas stations Washington Examiner Videos

Load-Date: March 27, 2023 ...

# What's being built next to Bricks in Jenison? It includes several new buildings.

Grand Rapids Press, The: Web Edition Articles (Michigan)
June 29, 2023 Thursday

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Section: NEWS Length: 446 words

Byline: Audra Gamble, agamble@mlive.com

... three new rows of townhomes will be completed in December.

Along with the one-stall attached garages, each townhome unit will also have a surface parking spot. The townhomes will also be fitted with decks.

The project developer has approval to also build two drive-thru retail spaces near the gas station in the future. One building would be a 2,000-square-foot bank and the other, a 1,620-square-foot space, would be a drive-thru restaurant. The developer said in the past, Starbucks has expressed an interest in the proposed space.

Details on whether those retail spaces are unclear, due to already-crowded traffic at the **gas station** especially during the morning.

If the developer decides against the additional buildings, they would widen the Bricks **gas station** parking lot and install **electric vehicle charging stations**. A decision about those spaces will be made around 2025.

Want more Grand Rapids-area news? Bookmark the local Grand Rapids news page or sign up for the free "3@3 Grand Rapids" daily newsletter.

More from MLive:

Random metal detector checks to begin in Grand Rapids school buildings when classes resume Michigan's \$82 billion budget brings record spending to all corners of state government Where to see Fourth of July fireworks 2023 around Grand Rapids

Load-Date: June 30, 2023 ...

# Buc-ee's is now open! Everything you need to know about Sevierville's massive gas station

Knox News | The Knoxville News-Sentinel Online (Tennessee)

June 26, 2023 Monday

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Section: OIL AND GAS NEWS

Length: 436 words

Byline: Silas Sloan, Knoxville News Sentinel

... traffic in the area so please use extreme caution. This animation gives motorists a look at how to get to there. @THPKnoxville @SeviervillePD @SevierSheriff @SeviervilleTN pic.twitter.com/zQR8iLQFGz

— Mark Nagi (@MarkNagiTDOT)

June 22, 2023

#### What to know about Buc-ee's

- What snacks does Buc-ee's have? A lot.
- We review some of Buc-ee's most famous food items
- Why are <u>people obsessed with Buc-ee's</u>
- Why did <u>Buc'ee's choose Sevierville</u>
- See photos from just before Buc-ee's opened

#### Buc-ee's has a lot of gas pumps

With the larger-than-life beaver mascot and the huge convenience store being so unique and exciting, it's easy to forget Buc-ee's is a **gas station**.

The Sevierville location has 120 pumps and 22 <u>electric vehicle</u> <u>charging station</u>. It also has a 250-foot-long car wash that will open later this year.

### Buc-ee's is massive

The Buc-ee's store comes in at a whopping 74,000 square feet. Let's just say it's bigger than your average gas station convenience store.

Buc-ee's is also known for and prides itself on its large and clean bathrooms.

**Silas Sloan** is the growth and development reporter. Email <u>silas.sloan@knoxnews.com</u>. Twitter <u>@silasloan.</u> Instagram <u>@knox.growth</u>. Support strong local journalism by subscribing at <u>knoxnews.com/subscribe</u>.

This article originally appeared on Knoxville News Sentinel: <u>Buc-ee's is nowopen! Everything you need to knowabout</u> Sevierville's massive gas station

**Load-Date:** 2023-06-26 ...

## Two bills pave way for fast-charging EV stations around Texas

Denton Record-Chronicle (Texas)

April 3, 2023 Monday

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Section: STATE Length: 854 words

Byline: Emily Foxhall The Texas Tribune

...

### **Body**

HOUSTON On a recent weekday morning, an electric F-150 pickup charged at a Phillips 66 station on busy Westheimer Road. As customers were coming and going from the 24 gas pumps, the truck's battery recharged in about an hour at a cost of 43 cents per kilowatt-hour or \$33.52 as it neared full.

It's a glimpse of what the future of gas stations might be as more Texans switch to electric vehicles.

"I think it's great," said the OnCue convenience store supervisor, Vince Viot, who says the chargers have been used steadily since they were installed last year. "You want to get all the customers, right?"

But electric vehicles are a long way from grabbing a big share of Texas' market. Only 105,807 electric vehicles were registered in Texas as of Aug. 31 a paltry 0.4% of all vehicles, according to the state's Department of Motor Vehicles. That share is expected to rise to 8% in the next 10 years, said Tom "Smitty" Smith, executive director of the Texas Electric Transportation Resources ...

... Alliance, at a legislative hearing in March.

Traveling across the vast state in an all-electric vehicle still lacks the convenience of refueling a gas-powered vehicle. There are just 329 fast-<u>charging stations</u> across the state's 270,000 square miles, leaving travelers with limited options as they plan their routes.

It's something of a chicken-or-the-egg problem: Companies need enough customers to justify building charging stations, but drivers want a sufficient number of charging stations before buying an electric car.

Two pieces of proposed state legislation would provide what supporters say is a needed foundation for companies to put in more fast-charging stations to meet the expected demand. Senate Bill 1002 creates guidelines for how electric vehicle charging stations would be paid for and built. And Senate Bill 1001 establishes how they would be registered

... bills because many more fast-charging stations are expected to be built. The Texas Department of Transportation has an electric vehicle infrastructure plan in place, envisioning charging stations at least every 50 miles on designated major interstates, and 70 miles apart everywhere else. Businesses will be able to submit proposals to the state for funds to build the stations.

"We didn't need it before," Smith said in an interview. "And now that we're starting to accelerate into this transition, we need to have the basic building blocks put in place."

### Two bills pave way for fast-charging EV stations around Texas

Lawmakers are also considering various legislation that would impose fees on <u>electric vehicles</u>, such as Senate Bill 505, which recently passed the Senate and would impose a \$400 registration fee for a new <u>electric vehicle</u> and a \$200 annual renewal fee.

Legislators say the fees would make up for gasoline taxes that <u>electric vehicle</u> drivers aren't paying and would be used for transportation projects, though renewable energy advocates have argued that the proposed cost for <u>electric vehicle</u> drivers is too high.

But companies that operate **gas stations** and could start adding **electric vehicle** chargers to their locations are cheering on Senate Bill 1002, which prevents utilities in the state's electricity market from making their customers pay extra so they can build and operate electric vehicle **charging stations**. Instead, the bill would require utilities to operate **charging stations** through affiliated, but separate, entities.

Charge Ahead Partnership, a coalition that includes businesses pushing to expand access to <u>electric</u> <u>vehicle</u> <u>charging</u>, and companies such as Circle K, RaceTrac and TXB wrote to legislators in support of the bill. Kim Okafor, the general manager of Zero Emission Solutions for Trillium and Love's Travel Stops, explained to lawmakers that, without the legislation, they could not compete with utilities which can sell electricity cheaper if they can pass on some of the cost to their power customers.

"With these changes, Senate Bill 1002 will establish a regulatory framework that addresses the concerns of an unfair market, encouraging private enterprises to invest in this new and growing industry," the bill's author, state Sen. Charles ...

... Schwertner, R-Georgetown, said at the committee hearing in March.

At the **gas station** on Westheimer Road, the **charging stations** helped Phillips 66 get experience with attracting customers who have switched to **electric vehicles**, said Scott Minton, director of business development for OnCue Marketing.

"We don't want to be irrelevant 30 years from now when EVs [electric vehicles] dominate the road," Minton said. "You want to be aware. You want to provide the fuels. You want to have a store that people still come to. ... We want to give them a spot where they can still come inside and get a Coca-Cola and a hot dog and get back on the road."

**Load-Date:** April 4, 2023 ...

## Gas-station ant farms at Wally's world in Fenton, where bigger is better

St. Louis Post-Dispatch (Missouri)

April 16, 2023 Sunday

FIRST EDITION

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Section: BUSINESS; Pg. C1

Length: 665 words

Byline: By Daniel Neman St. Louis Post-Dispatch

... de Gaulle Airport in Paris.

Steven Spielberg made a movie loosely based on his story, "The Terminal," starring Tom Hanks. It wasn't very good. Nasseri got along pretty well in the airport, all things considered, though apparently it put him in a fragile emotional state. I can't help but think he would have been happier if he lived instead inside The Andersons, where he would have had access to anything he could possibly have wanted.

The other reason it has been on my mind is that I finally made my first trip to Wally's in Fenton.

Wally's is a destination gas station. It is The Andersons of gas stations. It has 72 gas pumps and several electric vehicle charging stations. But that's not what makes it notable - though six dozen gas pumps will get your attention.

What makes it notable is what is inside the building. It is a convenience store, but it is so much more than that. It is a Convenience Store of the Gods.

Open for a year, Wally's is already known for its beef brisket. The Post-Dispatch's own lan Froeb has actually reviewed it, though he preferred the store's pastrami links and the pizza.

A bakery there turns out fresh-baked cookies, cinnamon rolls and scones, and a coffee bar also serves eight flavors of ice cream. ...

## What has popped up at Midway

Chicago Daily Herald

January 24, 2023 Tuesday

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Section: NEWS; Pg. 4

Length: 304 words

Byline: By Marni Pyke, mpyke@dailyherald.com

... Tallboy Taco last year. Those eateries are part of a multiyear, \$75 million program to expand and jazz up Midway's food options, allowing for 70 businesses ultimately. The total area for concess ions will increase from 44,000 to 70,000 square feet. Other new Midway restaurants are Big City Chicken, Big Shoulders Coffee, Billy Goat Tavern, Cafe Descartes, Einstein Bros Bagels, Fuel Bar and Sarah's Candies. Also this month but some miles away, the city opened a new Chicago Travel Plaza next to O'Hare International Airport at Higgins Road and Patton Drive. The plaza features a Taco John's restaurant, a 7-Eleven and gas station with alternative fuels and electric vehicle charging stations. To learn more about the Midway Modernization Program go to mdwmod.com/home.

## **Graphic**

Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport. Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport in Chicago. Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport in Chicago.

**Load-Date:** January 24, 2023 ...

# A shock to the system: Inside the effort to convert gas stations to charging stations

Boston Business Journal (Massachusetts)

June 8, 2023 Thursday

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# **Boston** Business Journal

**Length:** 1391 words **Byline:** Greg Ryan

. . .

### **Body**

Nouria Energy, a Worcester-based company with more than 150 **gas stations** and convenience stores in New England, is entering the market of **electric vehicle charging stations**. So far, business has been slow.

The chain installed its first two chargers at its Logan Airport location in 2019. It has since put in chargers at stations in Wareham and Worcester and plans to add them to five more Massachusetts locations this year. But the chargers are averaging fewer than five customers per day, according to the company.

"It's kind of the chicken or the egg," said Badih El-Nemr, executive vice president at Nouria, whose father started the company. "We need more EV cars on the road for this program to be lucrative for us."

If <u>gas station</u> and convenience store owners aren't already at a crossroads when it comes to EVs, they can see the blinking yellow light at the intersection ahead. In 2022, one of every 12 new cars purchased in Massachusetts was an EV, nearly triple the level just two years earlier, according to Atlas EV Hub data. By 2035, essentially every new car bought in the Bay State will be electric- or hydrogen-powered, because the sale of new gas-powered cars will be barred under state law.

"Once we get over the 2030 hump, I think things really start to accelerate," said Jon Shaer, a ...

... Boston-area retail sales executive at EV charger provider ChargePoint, who previously served as executive director of a New England convenience store trade group.

### See related stories:

- Which Boston-area communities have the most <u>electric vehicles</u> per capita?
- Local companies are trying to change how we recycle EV batteries

From the perspective of most drivers today, gas stations have a near-monopoly on fuel. But buy an EV, and you could fuel up at home, the office, the grocery store, a restaurant. In a car owner's garage, there is no markup. For business owners, that makes it tricky to set pricing and profit margins in this still-new service.

Other sectors, including automotive repair and collision shops, are facing major disruptions because of <u>electric</u> <u>vehicles</u>. But for many in the <u>gas station</u> industry, the transition amounts to an existential threat, even if the full force

#### A shock to the system: Inside the effort to convert gas stations to charging stations

of that threat is years away. There are nearly 3,000 convenience stores in Massachusetts, about half of which sell fuel, according to the National Association of Convenience Stores. Many are founded and run by immigrants. As of 2021, the stores employed almost 48,000 people statewide and generated over \$14 billion in annual sales.

The question now facing owners of the businesses is whether their locations make sense as charging waypoints - and if so, whether they can afford to spend the hundreds of thousands of dollars it can ...

... take to install a high-quality EV charger.

In some ways, **gas stations** are well-situated to become **charging stations**. They're already located along major roads and intersections, with snacks and coffee to offer to customers.

"Our stores are where they are because they're the most convenient locations for the motoring public," said Peter Brennan, executive director of the New England Convenience Stores and Energy Marketers Association.

But many owners will face difficulties installing a charger, especially in Massachusetts.

One concern is whether nearby grid infrastructure can support chargers without an upgrade. Another is whether there would be enough space between the chargers and gas equipment to minimize fire risk (The National Fire Protection Association has looked at changing the ...

... regulations). For somewhere as sprawling as Texas, where gas stations can easily take up an acre, that may not be a big worry. But in a place as dense as Greater Boston, it's another matter altogether.

Then there's cost. Expenses vary by location, but those in the industry say a single direct-current charging station, which enables fast charging, costs hundreds of thousands of dollars to install, only some of which may be covered by grants.

Nouria's leaders are among those who decided to take advantage of the existing federal and utility subsidies.

"We're in the business of convenience," said Tom Healey, Nouria's vice president of facilities development and ...

... maintenance. "We understand the auto industry is evolving and transitioning over to <u>electric vehicles</u>, and we want to be there to continue to serve our customers."

Healey expects gas sales to be a major revenue source for a long time, but he and his colleagues want to "future-proof" Nouria's operations, he said. That includes not just putting in chargers, but ramping up the chain's in-store offerings - things like free wi-fi, more seating, healthy, fresh food - to appeal to EV drivers who will spend more time on-site during a charge.

Still, the business model is "very challenging," Healey said, given obstacles such as the large upfront capital investment and the so-called "demand changes" for ...

... electricity use.

"To make this an effective and viable business, we need to make a profit off the charging," he said. "We're working on a program where it can be competitive, and we can give customers a fair rate that allows us to be successful, too."

For smaller shops, the upfront investment is often even tougher to swing. Alex Weatherall owns Sherborn Market, an eight-pump **gas station** and convenience store in Sherborn. He is not considering putting in an EV charger right now, having recently invested in a new, separate building on premises for the Dunkin' Donuts franchisee who has been operating inside his store.

"An independent business owner has a finite amount of credit and capital," Weatherall said. "At least right now in our industry, there's an awful lot of other things you could invest in. You just can't make money on a *charging station*." Some industry leaders say there's too much uncertainty over when exactly EV use will reach a tipping point. Even after the sale of new gas-powered cars is off-limits in Massachusetts, the cars could be on the road for decades longer. A federal agency, the Energy Information Administration, projected in a report this year that nationwide, just 13% to 29% of new car sales in 2050 will be EVs.

Owners interviewed by the Business Journal say that right now, they are not feeling ill effects from EVs' increasing popularity - even in cities and towns with some of the highest percentages of ...

A shock to the system: Inside the effort to convert gas stations to charging stations

## **COSTCO NEARS APPROVAL**

The Times-Union (Albany, NY)

March 24, 2023 Friday

TimesUnion EDITION

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Section: BUSINESS; Pg. D1

**Length:** 648 words **Byline:** Melissa Manno

... board on Wednesday reviewed the retailer's site plan for the first time in more than three years.

The planning board's recommendation to approve the site plan is the first step in obtaining the special-use permit required for the Crossgates owner to build the warehouse-style retail facility next to the shopping center. The board's report will be sent to the town zoning board of appeals, the agency responsible for granting the permits.

Slated for the northeast corner of the intersection of Western Avenue and Crossgates Mall Road, the 163,000-square-foot retail facility will include 770 parking spaces, a tire center, an 18-pump **gas station** and eight **charging stations** for **electric vehicles**.

It will be the Washington-based brand's first location in the Albany area.

Adding more charging stations, decorative fencing, a bike rack and more trees along the streetscape are among the planning board's recommendations sent to the ZBA for final action.

"There's been a lot of planning work done, particularly over the last seven years," said town Planner Kenneth Kovalchik.

Mall representatives and others involved in the project presented the site plan Wednesday night, highlighting off-site work they say will be made to reduce traffic flow and enhance pedestrian safety. Plans include a multiuse trail path installed around the perimeter of ...

## Quinault Indian Nation moving 500 acres to federal trust

The Daily World (Aberdeen, Washington)

May 17, 2023

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Section: NEWS

Length: 666 words

Byline: Clayton Franke

... Nation has received approval to transfer about 500 acres of tribally-owned land near Hogan's Corner north of Ocean Shores into the trust of the federal government, and plans to expand on existing businesses there.

Once transferred, the property will be held under the title of the United States government in the tribe's interest, giving the tribe, rather than Grays Harbor County, jurisdiction over the land.

The property consists of 13 parcels in total. One 15-acre parcel located just north of state Route 109 and east of Hogan's Corner will be used to expand on the existing Q-Mart to include a **gas station**, car wash, convenience store, espresso stand and **electric vehicle charging stations**, while the rest — 12 parcels containing stormwater ponds, a small airstrip and three airport hangers — is dedicated to "tribal self-determination."

The Northwest Regional Office of the Bureau of Indian Affairs recently approved the nation's request for the land transfer and delivered the decision on May 4 to Grays Harbor County commissioners, who reviewed the decision at a Tuesday board meeting.

Federal law — the Indian Reorganization Act of 1934 — gives the Secretary of the Interior authority to transfer land into federal trust, but only for tribes that were federally recognized at the time the act was passed.

Placing the land in ...

### Report: Interest in EVs revvs up

San Antonio Express News
July 13, 2023 Thursday
State Edition

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Section: A; Pg. A007 Length: 406 words

Byline: Kyra Buckley, Staff writer

**Highlight:** Nearly half of U.S. consumers who plan to buy a car in the next two years say they'll go electric, according to a new report from consulting firm Ernst and Young. Analysts at Ernst and Young surveyed 1,500 U.S. consumers in March and found that 48 percent of vehicle buyers plan to purchase an EV -- representing a nearly 20 percent jump from last year's survey.

... go electric, according to a new report from consulting firm Ernst and Young.

Analysts at Ernst and Young surveyed 1,500 U.S. consumers in March and found that 48 percent of vehicle buyers plan to purchase an EV -- representing a nearly 20 percent jump from last year's survey.

Texas is already one of the fastest-growing states for EV adoption, recently hitting 200,000 electric vehicle registrations in the state, according to an analysis from Dallas-Fort Worth Clean Cities. Houston drivers account for nearly a quarter of EV registrations in the states.

Despite enthusiasm for EVs among buyers, concerns about access to **charging stations** persists. Just over half of U.S. consumers surveyed by Ernst and Young said they were concerned about finding **charging stations**.

"Consumers need access to safe, reliable, convenient and affordable charging to drive and own an EV, and our research shows real concerns remain," Marc Coltelli, Americas leader of electric mobility at Ernst and Young, said in a statement. "To scale adoption, the challenge confronting America's transition to EVs is instilling charging confidence among consumers."

### Report: Interest in EVs rews up

In the recent Texas legislative session, lawmakers passed two measures, Senate Bills 1001 and 1002, aimed at increasing <u>charging stations</u> in the state. Already <u>charging stations</u> have been popping up at major grocery stores and <u>gas stations</u>.

Moving away from gasoline-powered cars to <u>electric vehicles</u> is a major pillar in fighting climate change. Around 28 percent of greenhouse gas emissions in the U.S. come from transportation, according to the U.S. Environmental Protection Agency. But electricity experts say upgrades must be made to the power grid so it can support the additional use.

University of Houston Energy Fellow Ed Hirs said for the moment the Texas grid can handle the number of EVs on the road, but if the rate of EV adoption continues to increase - which Hirs said he expects - then it will change the characteristics of electricity demand on the grid.

"We ordinarily see ...

## What's going on at 10th and Main in Darby? More than meets the eye

Delaware County Daily Times (Primos - Upper Darby, Pennsylvania)

June 1, 2023 Thursday

Web Edition

Distributed by Newsbank, Inc. All Rights Reserved Copyright 2023 Delaware County Daily Times.

Section: NEWS

Length: 1350 words

Byline: Kathleen E. Carey

. . .

### **Body**

DARBY BOROUGH A 1.7-acre dirt lot sits adjacent to the Darby transportation center surrounded by a chain-link fence draped with tarps at 10th and Main streets.

The owner of the lot, Aminah Shabazz Perez, a principal of Property Management Group, has plans to turn 934 Main St. into a next-concept convenience store, selling fresh produce and employing local residents. It'll also have a **gas station** and up to 10 **electric vehicle charging stations**.

A resident and former mayor of the town, Paula Brown, said construction will disturb a sensitive floodplain, jeopardizing the area and those downstream.

The Pennsylvania Department of Environmental Protection issued a field order on May 18 requiring the ceasing of earth-moving activities for permit and planning issues. Perez said permits are not needed on movement in areas less than an acre and said the project is being subject to harassment for what could be a benefit to the community.

Perhaps time will tell.

Owner's vision for property

"People want this in this community," Perez said on-site Wednesday after the front-end ...



Date and Time: Wednesday, August 23, 2023 4:09:00 PM EDT

Job Number: 204210321

### Documents (12)

1. Louisville sets maximum number of six gas stations within city

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

**Content Type** Narrowed by

New s Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

2. Colorado city fighting climate change with rule allowing only six gas stations

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

**Content Type** Narrowed by

Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec New s

31, 2023

#### 3. What's being built next to Bricks in Jenison? It includes several new buildings.

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

### 4. Buc-ee's is now open! Everything you need to know about Sevierville 's massive gas station

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

#### 5. Two bills pave way for fast-charging EV stations around Texas

Client/Matter: -None-



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Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

6. Gas-station ant farms at Wally's world in Fenton, where bigger is better

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

7. What has popped up at Midway

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

8. A shock to the system: Inside the effort to convert gas stations to charging stations

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

**Content Type** Narrowed by

New s Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

### 9. COSTCO NEARS APPROVAL

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

**Content Type** Narrowed by

Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec New s

### 10. Quinault Indian Nation moving 500 acres to federal trust

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors



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### Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

### 11. Report: Interest in EVs rews up

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023

### 12. What's going on at 10th and Main in Darby? More than meets the eye

Client/Matter: -None-

Search Terms: gas station w/25 (electric vehicle AND charging station)

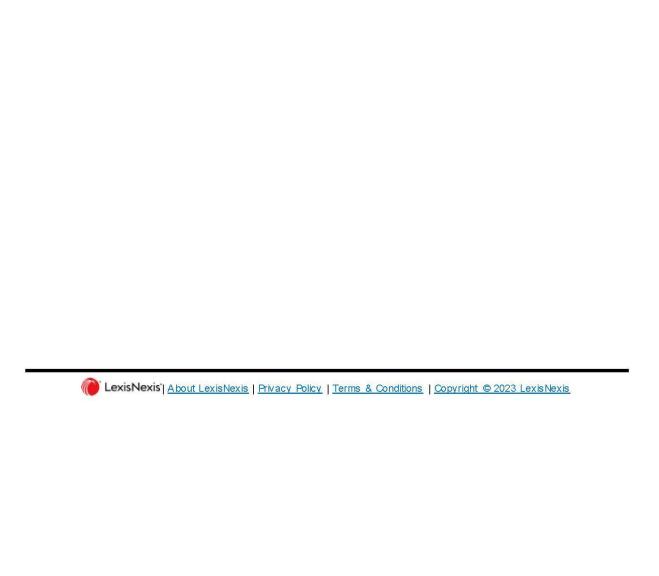
Search Type: Terms and Connectors

Narrowed by:

Content Type Narrowed by

News Sources: U.S. Publications; Timeline: Jan 01, 2023 to Dec

31, 2023



# Louisville sets maximum number of six gas stations within city

Colorado Hometown Newspapers (Boulder County, Colorado)

March 22, 2023

Distributed by Newsbank, Inc. All Rights Reserved Copyright 2023 Colorado Hometown Newspapers (Boulder County, CO)

Section: NEWS Length: 525 words Byline: Andrea Grajeda

... saying the ordinance would allow only six gas stations within the city.

Five gas stations are in the city, plus one that was recently approved at McCaslin Boulevard. Zucarro clarified that automobile repair and service shops are distinct and are not part of the ordinance.

The ordinance also requires gas stations to be 1,000 feet away from one another. The ordinance states that special use approvals for existing gas stations will expire if that gas station is closed for over a year. The site will need to apply for a special use permit again if it continues to be a gas station.

The ordinance will also require installation of <u>electric vehicle</u> <u>charging stations</u> for any new or modified <u>gas station</u>. There must be enough <u>charging stations</u> to equal 20% of the number of gas pumps at the station, with a minimum of two <u>charging stations</u> available.

The ordinance allows for an exception and will allow a seventh gas station if it is part of a new, large retail center.

Zucarro said placing a cap on gas stations allowed in a municipality has been a growing trend following health and environmental concerns about the use of gasoline-powered vehicles. He said if one gas station closed, the city could accept applications to open another.

Councilmember Barbara Hamlington clarified that the ordinance applies to the sale of gasoline. Any company that provides gas to its own vehicles will not be affected.

Councilmember Maxine Most said the council will not be able to fix climate change, but placing the cap on gasoline stations ...

... is a step in the right direction. She said Louisville should not invest in fossil fuel infrastructure that will not survive, as the market shifts to favor *electric vehicles*.

"We should be taking whatever incremental steps to not create additional fossil fuel infrastructure," Most said.

Some residents at Tuesday night's meeting said they wanted the Council to adopt the ordinance. One resident said investing in fossil fuels only negatively affects the environment through air quality, water quality and soil quality. Another resident said there are already enough gas stations in Louisville to serve the city, and any additional gas stations only hurt the environment.

Resident Joshua Cooperman said while placing a cap on gas stations will not have a huge impact on greenhouse gas emissions, the cap is a ...

# Colorado city fighting climate change with rule allowing only six gas stations

The Denver Gazette

March 22, 2023 Wednesday

Distributed by Newsbank, Inc. All Rights Reserved Copyright 2023 The Denver Gazette.

Section: NATION WORLD

Length: 313 words Byline: Jack Birle

...

## **Body**

The town of Louisville, Colorado, passed an ordinance Tuesday night limiting the number of gas stations allowed to operate within town to only six.

The City Council passed the ordinance unanimously, according to the Colorado Hometown Weekly, as part of an effort to combat climate change.

COLORADO DENTIST ALLEGEDLY GOOGLED 'HOW TO MAKE POISON' BEFORE KILLING WIFE

THE RESIDENCE OF THE PROPERTY OF THE PERSON OF THE PERSON

The orginance also mandates that **gas stations** should be at least 1,000 feet apart from each other and also requires the "installation of **electric vehicle** (EV) fast **charging stations** for any expanded, modified or new gasoline or automobile service station equaling 20% of the number of gasoline pumps at the stations, with no fewer than two such **charging stations**."

<u>Gas station</u> business owners will be required to reapply for a permit to operate a gas station if the facility lies vacant for more than a year.

A seventh gas station can be built if it is "part of a new, large single-user retail center," according to the ordinance.

"We have an obligation to take every step possible to address the changes to our climate that are ravaging our planet and directly impacting the health, well-being and livelihoods of the constituents we represent in Louisville," council member Maxine Most told Fox News before the vote on Tuesday.

The town of Louisville, Colorado ...

..., is located in Boulder County and is in the northern part of the state, and only has a population of roughly 20,000 people.

#### CLICK HERE TO READ MORE FROM THE WASHINGTON EXAMINER

States and jurisdictions have taken various actions to fight climate change and lower emissions. In California, lawmakers banned the sale of new gas-powered cars beginning in 2035 as a way to accelerate the move to <u>electric</u> <u>vehicles</u> from gas-powered ones.

Original Location: Colorado city fighting climate change with rule allowing only six gas stations Washington Examiner Videos

## Colorado city fighting climate change with rule allowing only six gas stations

Load-Date: March 27, 2023 ...

# What's being built next to Bricks in Jenison? It includes several new buildings.

Grand Rapids Press, The: Web Edition Articles (Michigan)

June 29, 2023 Thursday

Copyright 2023 Advance Publications, Inc. All Rights Reserved

Section: NEWS Length: 446 words

Byline: Audra Gamble, agamble@mlive.com

... three new rows of townhomes will be completed in December.

Along with the one-stall attached garages, each townhome unit will also have a surface parking spot. The townhomes will also be fitted with decks.

The project developer has approval to also build two drive-thru retail spaces near the gas station in the future. One building would be a 2,000-square-foot bank and the other, a 1,620-square-foot space, would be a drive-thru restaurant. The developer said in the past, Starbucks has expressed an interest in the proposed space.

Details on whether those retail spaces are unclear, due to already-crowded traffic at the <u>gas station</u> especially during the morning.

If the developer decides against the additional buildings, they would widen the Bricks **gas station** parking lot and install **electric vehicle charging stations**. A decision about those spaces will be made around 2025.

Want more Grand Rapids-area news? Bookmark the local Grand Rapids news page or sign up for the free "3@3 Grand Rapids" daily newsletter.

More from MLive:

Random metal detector checks to begin in Grand Rapids school buildings when classes resume Michigan's \$82 billion budget brings record spending to all corners of state government Where to see Fourth of July fireworks 2023 around Grand Rapids

Load-Date: June 30, 2023 ...

# Buc-ee's is now open! Everything you need to know about Sevierville's massive gas station

Knox News | The Knoxville News-Sentinel Online (Tennessee)

June 26, 2023 Monday

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Section: OIL AND GAS NEWS

Length: 436 words

Byline: Silas Sloan, Knoxville News Sentinel

... traffic in the area so please use extreme caution. This animation gives motorists a look at how to get to there. <u>@THPKnoxville @SeviervillePD @SevierSheriff @SeviervilleTN pic.twitter.com/zQR8iLQFGz</u>

— Mark Nagi (@MarkNagiTDOT)

June 22, 2023

#### What to know about Buc-ee's

- What snacks does Buc-ee's have? A lot.
- We review some of Buc-ee's most famous food items
- Why are <u>people obsessed with Buc-ee's</u>

- Why did <u>Buc'ee's choose Sevierville</u>
- · See photos from just before Buc-ee's opened

#### Buc-ee's has a lot of gas pumps

With the larger-than-life beaver mascot and the huge convenience store being so unique and exciting, it's easy to forget Buc-ee's is a gas station.

The Sevierville location has 120 pumps and 22 <u>electric vehicle</u> <u>charging station</u>. It also has a 250-foot-long car wash that will open later this year.

#### Buc-ee's is massive

The Buc-ee's store comes in at a whopping 74,000 square feet. Let's just say it's bigger than your average gas station convenience store.

Buc-ee's is also known for and prides itself on its large and clean bathrooms.

**Silas Sloan** is the growth and development reporter. Email <u>silas.sloan@knoxnews.com</u>. Twitter <u>@silasloan.</u> Instagram <u>@knox.growth</u>. Support strong local journalism by subscribing at <u>knoxnews.com/subscribe</u>.

This article originally appeared on Knoxville News Sentinel: <u>Buc-ee's is nowopen! Everything you need to knowabout</u> <u>Sevierville's massive gas station</u>

Load-Date: 2023-06-26 ...

# Two bills pave way for fast-charging EV stations around Texas

Denton Record-Chronicle (Texas)

April 3, 2023 Monday

Distributed by Newsbank, Inc. All Rights Reserved Copyright 2023 Denton Record-Chronicle, 3555 Duchess Denton, TX.

Section: STATE Length: 854 words

Byline: Emily Foxhall The Texas Tribune

. . .

## **Body**

HOUSTON On a recent weekday morning, an electric F-150 pickup charged at a Phillips 66 station on busy Westheimer Road. As customers were coming and going from the 24 gas pumps, the truck's battery recharged in about an hour at a cost of 43 cents per kilowatt-hour or \$33.52 as it neared full.

It's a glimpse of what the future of *gas <u>stations</u>* might be as more Texans switch to <u>electric vehicles</u>.

"I think it's great," said the OnCue convenience store supervisor, Vince Viot, who says the chargers have been used steadily since they were installed last year. "You want to get all the customers, right?"

But electric vehicles are a long way from grabbing a big share of Texas' market. Only 105-807 electric vehicles were

registered in Texas as of Aug. 31 a paltry 0.4% of all vehicles, according to the state's Department of Motor Vehicles. That share is expected to rise to 8% in the next 10 years, said Tom "Smitty" Smith, executive director of the Texas Electric Transportation Resources ...

... Alliance, at a legislative hearing in March.

Traveling across the vast state in an all-electric vehicle still lacks the convenience of refueling a gas-powered vehicle. There are just 329 fast-<u>charging stations</u> across the state's 270,000 square miles, leaving travelers with limited options as they plan their routes.

It's something of a chicken-or-the-egg problem: Companies need enough customers to justify building charging stations, but drivers want a sufficient number of charging stations before buying an electric car.

Two pieces of proposed state legislation would provide what supporters say is a needed foundation for companies to put in more fast-charging stations to meet the expected demand. Senate Bill 1002 creates guidelines for how electric vehicle charging stations would be paid for and built. And Senate Bill 1001 establishes how they would be registered

... bills because many more fast-charging stations are expected to be built. The Texas Department of Transportation has an electric vehicle infrastructure plan in place, envisioning charging stations at least every 50 miles on designated major interstates, and 70 miles apart everywhere else. Businesses will be able to submit proposals to the state for funds to build the stations.

"We didn't need it before," Smith said in an interview. "And now that we're starting to accelerate into this transition, we need to have the basic building blocks put in place."

#### Two bills pave way for fast-charging EV stations around Texas

Lawmakers are also considering various legislation that would impose fees on <u>electric vehicles</u>, such as Senate Bill 505, which recently passed the Senate and would impose a \$400 registration fee for a new <u>electric vehicle</u> and a \$200 annual renewal fee.

Legislators say the fees would make up for gasoline taxes that <u>electric vehicle</u> drivers aren't paying and would be used for transportation projects, though renewable energy advocates have argued that the proposed cost for <u>electric vehicle</u> drivers is too high.

But companies that operate <u>gas stations</u> and could start adding <u>electric vehicle</u> chargers to their locations are cheering on Senate Bill 1002, which prevents utilities in the state's electricity market from making their customers pay extra so they can build and operate electric vehicle <u>charging stations</u>. Instead, the bill would require utilities to operate charging stations through affiliated, but separate, entities.

Charge Ahead Partnership, a coalition that includes businesses pushing to expand access to <u>electric vehicle</u> charging, and companies such as Circle K, RaceTrac and TXB wrote to legislators in support of the bill. Kim Okafor, the general manager of Zero Emission Solutions for Trillium and Love's Travel Stops, explained to lawmakers that, without the legislation, they could not compete with utilities which can sell electricity cheaper if they can pass on some of the cost to their power customers.

"With these changes, Senate Bill 1002 will establish a regulatory framework that addresses the concerns of an unfair market, encouraging private enterprises to invest in this new and growing industry," the bill's author, state Sen. Charles ...

... Schwertner, R-Georgetown, said at the committee hearing in March.

At the <u>gas station</u> on Westheimer Road, the <u>charging stations</u> helped Phillips 66 get experience with attracting customers who have switched to <u>electric vehicles</u>, said Scott Minton, director of business development for OnCue Marketing.

"We don't want to be irrelevant 30 years from now when EVs [electric vehicles] dominate the road," Minton said. "You want to be aware. You want to provide the fuels. You want to have a store that people still come to.... We want to give them a spot where they can still come inside and get a Coca-Cola and a hot dog and get back on the road."

give them a spot where they can simporne make and yet a coca-cola and a not dog and yet back on the road.

Load-Date: April 4, 2023 ...

## Gas-station ant farms at Wally's world in Fenton, where bigger is better

St. Louis Post-Dispatch (Missouri)

April 16, 2023 Sunday

FIRST EDITION

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Section: BUSINESS; Pg. C1

Length: 665 words

Byline: By Daniel Neman St. Louis Post-Dispatch

... de Gaulle Airport in Paris.

Steven Spielberg made a movie loosely based on his story, "The Terminal," starring Tom Hanks. It wasn't very good. Nasseri got along pretty well in the airport, all things considered, though apparently it put him in a fragile emotional state. I can't help but think he would have been happier if he lived instead inside The Andersons, where he would have had access to anything he could possibly have wanted.

The other reason it has been on my mind is that I finally made my first trip to Wally's in Fenton.

Wally's is a destination gas station. It is The Andersons of gas stations. It has 72 gas pumps and several electric vehicle charging stations. But that's not what makes it notable - though six dozen gas pumps will get your attention. What makes it notable is what is inside the building. It is a convenience store, but it is so much more than that. It is a Convenience Store of the Gods.

Open for a year, vvalily s is already known for its peer prisket. The Post-Dispatch's own ian Proep has actually reviewed it, though he preferred the store's pastrami links and the pizza.

A bakery there turns out fresh-baked cookies, cinnamon rolls and scones, and a coffee bar also serves eight flavors of ice cream. ...

## What has popped up at Midway

Chicago Daily Herald

January 24, 2023 Tuesday

WEB EditioneBlast EditionCLFM EditionMC1 EditionMC3 EditionMD1 EditionMF12 EditionML2 EditionNC EditionNC1 EditionNC14 EditionNC14C EditionNC2 EditionNC3 EditionNC4 EditionNL1 EditionNM1 EditionNM1 EditionNM2 EditionNC4 EditionNM3 EditionNM3

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Section: NEWS; Pg. 4 Length: 304 words

Byline: By Marni Pyke, mpyke@dailyherald.com

... Tallboy Taco last year. Those eateries are part of a multiyear, \$75 million program to expand and jazz up Midway's food options, allowing for 70 businesses ultimately. The total area for concess ions will increase from 44,000 to 70,000 square feet. Other new Midway restaurants are Big City Chicken, Big Shoulders Coffee, Billy Goat Tavern, Cafe Descartes, Einstein Bros Bagels, Fuel Bar and Sarah's Candies. Also this month but some miles away, the city opened a new Chicago Travel Plaza next to O'Hare International Airport at Higgins Road and Patton Drive. The plaza features a Taco John's restaurant, a 7-Eleven and gas stations with alternative fuels and electric vehicle charging stations. To learn more about the Midway Modernization Program go to mdwmod.com/home.

## **Graphic**

Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport. Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport in Chicago. Courtesy of Chicago Department of Aviation A new Garrett Popcorn Shop is open for business at Midway International Airport in Chicago.

Load-Date: January 24, 2023 ...

# A shock to the system: Inside the effort to convert gas stations to charging stations

Boston Business Journal (Massachusetts)

June 8, 2023 Thursday

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# **Boston** Business Journal

Length: 1391 words Byline: Greg Ryan

. . .

## **Body**

Nouria Energy, a Worcester-based company with more than 150 <u>gas stations</u> and convenience stores in New England, is entering the market of <u>electric vehicle</u> <u>charging stations</u>. So far, business has been slow.

The chain installed its first two chargers at its Logan Airport location in 2019. It has since put in chargers at stations in Wareham and Worcester and plans to add them to five more Massachusetts locations this year. But the chargers

are averaging fewer than five customers per day, according to the company.

"It's kind of the chicken or the egg," said Badih El-Nemr, executive vice president at Nouria, whose father started the company. "We need more EV cars on the road for this program to be lucrative for us."

If <u>gas station</u> and convenience store owners aren't already at a crossroads when it comes to EVs, they can see the blinking yellow light at the intersection ahead. In 2022, one of every 12 new cars purchased in Massachusetts was an EV, nearly triple the level just two years earlier, according to Atlas EV Hub data. By 2035, essentially every new car bought in the Bay State will be electric- or hydrogen-powered, because the sale of new gas-powered cars will be barred under state law.

"Once we get over the 2030 hump, I think things really start to accelerate," said Jon Shaer, a ...

... Boston-area retail sales executive at EV charger provider ChargePoint, who previously served as executive director of a New England convenience store trade group.

#### See related stories:

- Which Boston-area communities have the most <u>electric vehicles</u> per capita?
- Local companies are trying to change how we recycle EV batteries

From the perspective of most drivers today, <u>gas stations</u> have a near-monopoly on fuel. But buy an EV, and you could fuel up at home, the office, the grocery store, a restaurant. In a car owner's garage, there is no markup. For business owners, that makes it tricky to set pricing and profit margins in this still-new service.

Other sectors, including automotive repair and collision shops, are facing major disruptions because of <u>electric</u> <u>vehicles</u>. But for many in the <u>gas station</u> industry, the transition amounts to an existential threat, even if the full force

A shock to the system: Inside the effort to convert gas stations to charging stations

of that threat is years away. There are nearly 3,000 convenience stores in Massachusetts, about half of which sell fuel, according to the National Association of Convenience Stores. Many are founded and run by immigrants. As of 2021, the stores employed almost 48,000 people statewide and generated over \$14 billion in annual sales.

The question now facing owners of the businesses is whether their locations make sense as charging waypoints - and if so, whether they can afford to spend the hundreds of thousands of dollars it can ...

... take to install a high-quality EV charger.

In some ways, <u>gas stations</u> are well-situated to become <u>charging stations</u>. They're already located along major roads and intersections, with snacks and coffee to offer to customers.

"Our stores are where they are because they're the most convenient locations for the motoring public," said Peter Brennan, executive director of the New England Convenience Stores and Energy Marketers Association.

But many owners will face difficulties installing a charger, especially in Massachusetts.

One concern is whether nearby grid infrastructure can support chargers without an upgrade. Another is whether there would be enough space between the chargers and gas equipment to minimize fire risk (The National Fire Protection Association has looked at changing the ...

... regulations). For somewhere as sprawling as Texas, where gas stations can easily take up an acre, that may not be a big worry. But in a place as dense as Greater Boston, it's another matter altogether.

Then there's cost. Expenses vary by location, but those in the industry say a single direct-current charging station, which enables fast charging, costs hundreds of thousands of dollars to install, only some of which may be covered by grants.

Nouria's leaders are among those who decided to take advantage of the existing federal and utility subsidies.

"We're in the business of convenience," said Tom Healey, Nouria's vice president of facilities development and ...

... maintenance. "We understand the auto industry is evolving and transitioning over to <u>electric vehicles</u>, and we want to be there to continue to serve our customers."

Healey expects gas sales to be a major revenue source for a long time, but he and his colleagues want to "future-

proof" Nouria's operations, he said. That includes not just putting in chargers, but ramping up the chain's in-store offerings - things like free wi-fi, more seating, healthy, fresh food - to appeal to EV drivers who will spend more time on-site during a charge.

Still, the business model is "very challenging," Healey said, given obstacles such as the large upfront capital investment and the so-called "demand changes" for ...

... electricity use.

"To make this an effective and viable business, we need to make a profit off the charging," he said. "We're working on a program where it can be competitive, and we can give customers a fair rate that allows us to be successful, too."

For smaller shops, the upfront investment is often even tougher to swing. Alex Weatherall owns Sherborn Market, an eight-pump gas station and convenience store in Sherborn. He is not considering putting in an EV charger right now, having recently invested in a new, separate building on premises for the Dunkin' Donuts franchisee who has been operating inside his store.

"An independent business owner has a finite amount of credit and capital," Weatherall said. "At least right now in our industry, there's an awful lot of other things you could invest in. You just can't make money on a <u>charging station</u>." Some industry leaders say there's too much uncertainty over when exactly EV use will reach a tipping point. Even after the sale of new gas-powered cars is off-limits in Massachusetts, the cars could be on the road for decades longer. A federal agency, the Energy Information Administration, projected in a report this year that nationwide, just 13% to 29% of new car sales in 2050 will be EVs.

Owners interviewed by the Business Journal say that right now, they are not feeling ill effects from EVs' increasing popularity - even in cities and towns with some of the highest percentages of ...

## **COSTCO NEARS APPROVAL**

The Times-Union (Albany, NY)

March 24, 2023 Friday

TimesUnion EDITION

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Section: BUSINESS; Pg. D1

Length: 648 words

Byline: Melissa Manno

... board on Wednesday reviewed the retailer's site plan for the first time in more than three years.

The planning board's recommendation to approve the site plan is the first step in obtaining the special-use permit required for the Crossgates owner to build the warehouse-style retail facility next to the shopping center. The boards report will be sent to the town zoning board of appeals, the agency responsible for granting the permits.

Slated for the northeast corner of the intersection of Western Avenue and Crossgates Mall Road, the 163,000-square-foot retail facility will include 770 parking spaces, a tire center, an 18-pump gas station and eight charging stations for electric vehicles.

It will be the Washington-based brand's first location in the Albany area.

Adding more charging stations, decorative fencing, a bike rack and more trees along the streetscape are among the planning board's recommendations sent to the ZBA for final action.

"There's been a lot of planning work done narticularly over the last seven years " said town Planner Kenneth

Kovalchik.

Mall representatives and others involved in the project presented the site plan Wednesday night, highlighting off-site work they say will be made to reduce traffic flow and enhance pedestrian safety. Plans include a multiuse trail path installed around the perimeter of ...

# Quinault Indian Nation moving 500 acres to federal trust

The Daily World (Aberdeen, Washington)

May 17, 2023

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Section: NEWS
Length: 666 words
Byline: Clayton Franke

... Nation has received approval to transfer about 500 acres of tribally-owned land near Hogan's Corner north of Ocean Shores into the trust of the federal government, and plans to expand on existing businesses there.

Once transferred, the property will be held under the title of the United States government in the tribe's interest, giving the tribe, rather than Grays Harbor County, jurisdiction over the land.

The property consists of 13 parcels in total. One 15-acre parcel located just north of state Route 109 and east of Hogan's Comer will be used to expand on the existing Q-Mart to include a <u>gas station</u>, car wash, convenience store, espresso stand and <u>electric vehicle</u> <u>charging stations</u>, while the rest — 12 parcels containing stormwater ponds, a small airstrip and three airport hangers — is dedicated to "tribal self-determination."

The Northwest Regional Office of the Bureau of Indian Affairs recently approved the nation's request for the land transfer and delivered the decision on May 4 to Gray's Harbor County commissioners, who reviewed the decision at a Tuesday board meeting.

Federal law — the Indian Reorganization Act of 1934 — gives the Secretary of the Interior authority to transfer land

into federal trust, but only for tribes that were federally recognized at the time the act was passed. Placing the land in  $\,\dots$ 

# Report: Interest in EVs revvs up

San Antonio Express News July 13, 2023 Thursday State Edition

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Section: A; Pg. A007 Length: 406 words

Byline: Kyra Buckley, Staff writer

**Highlight:** Nearly half of U.S. consumers who plan to buy a car in the next two years say they'll go electric, according to a new report from consulting firm Ernst and Young. Analysts at Ernst and Young surveyed 1,500 U.S. consumers in March and found that 48 percent of vehicle buyers plan to purchase an EV – representing a nearly 20 percent jump from last year's survey.

... go electric, according to a new report from consulting firm Ernst and Young.

Analysts at Ernst and Young surveyed 1,500 U.S. consumers in March and found that 48 percent of vehicle buyers plan to purchase an EV – representing a nearly 20 percent jump from last year's survey.

Texas is already one of the fastest-growing states for EV adoption, recently hitting 200,000 electric vehicle registrations in the state, according to an analysis from Dallas-Fort Worth Clean Cities. Houston drivers account for nearly a quarter of EV registrations in the states.

Despite enthusiasm for EVs among buyers, concerns about access to <u>charging stations</u> persists. Just over half of U.S. consumers surveyed by Ernst and Young said they were concerned about finding <u>charging stations</u>.

"Consumers need access to safe, reliable, convenient and affordable charging to drive and own an EV, and our research shows real concerns remain," Marc Coltelli, Americas leader of electric mobility at Ernst and Young, said in a statement. "To scale adoption, the challenge confronting America's transition to EV s is instilling charging confidence among consumers."

#### Report: Interest in EVs rews up

In the recent Texas legislative session, lawmakers passed two measures, Senate Bills 1001 and 1002, aimed at increasing <u>charging stations</u> in the state. Already <u>charging stations</u> have been popping up at major grocery stores and <u>gas stations</u>.

Moving away from gasoline-powered cars to <u>electric vehicles</u> is a major pillar in fighting climate change. Around 28 percent of greenhouse gas emissions in the U.S. come from transportation, according to the U.S. Environmental Protection Agency. But electricity experts say upgrades must be made to the power grid so it can support the additional use.

University of Houston Energy Fellow Ed Hirs said for the moment the Texas grid can handle the number of EVs on the road, but if the rate of EV adoption continues to increase - which Hirs said he expects - then it will change the characteristics of electricity demand on the grid.

"We ordinarily see ...

# What's going on at 10th and Main in Darby? More than meets the eye

Delaware County Daily Times (Primos - Upper Darby, Pennsylvania)

June 1, 2023 Thursday

Web Edition

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Section: NEWS Length: 1350 words

Byline: Kathleen E. Carey

• • •

## **Body**

DARBY BOROUGH A 1.7-acre dirt lot sits adjacent to the Darby transportation center surrounded by a chain-link fence draped with tarps at 10th and Main streets.

The owner of the lot, Aminah Shabazz Perez, a principal of Property Management Group, has plans to turn 934 Main St. into a next-concept convenience store, selling fresh produce and employing local residents. It'll also have a <u>gas</u> <u>station</u> and up to 10 <u>electric vehicle</u> <u>charging stations</u>.

A resident and former maker of the term David Drawn and construction will disturb a consisting floodulain

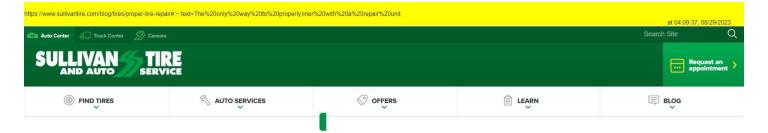
A resident and iorner mayor of the town, Paula Drown, said construction will disturb a sensitive lloodplain, jeopardizing the area and those downstream.

The Pennsylvania Department of Environmental Protection issued a field order on May 18 requiring the ceasing of earth-moving activities for permit and planning issues. Perez said permits are not needed on movement in areas less than an acre and said the project is being subject to harassment for what could be a benefit to the community.

Perhaps time will tell.

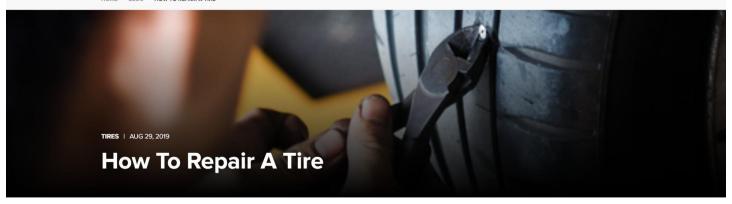
Owner's vision for property

"People want this in this community," Perez said on-site Wednesday after the front-end ...





HOME \* BLOG \* HOW TO REPAIR A TIRE





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from work and you hit some sort of debris in the road, puncturing your tire, and leaving you with a flat.

Although the tire is flat and must be brought to a tire repair shop, like Sullivan Tire and Auto Service, for an inspection, the tire may not necessarily need to be replaced. Depending on where the puncture is located along with the severity of the damage, the tire will either only need a simple repair or will be replaced.

Sullivan Tire and Auto Service abides by the tire repair guidelines of the **U.S. Tire**Manufacturers Association (USTMA, formerly known as the Rubber

Manufacturers Association) and **Tire Industry Association** (TIA).



# **Repairable Tires**

A tire can be repaired if:

- It is punctured within the puncture repair area of the tire (pictured under the "non-repairable tire" section below)
  - The sidewall and the shoulder of a tire cannot be repaired per TIA and USTMA guidelines

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- The puncture doesn't measure more than 1/4 of an inch in diameter
- The repairs do not overlap or if the injuries are not directly across from each other.

#### **Tire Repair Process**

- 1. Remove the tire from the rim
- 2. A thorough inspection of both the inside and outside of the tire
  - Although a tire may appear to be a simple fix from the outside, the bottom half of the nail could have caused potential damage to the interior sidewall
- 3. Once deemed repairable, trim the puncture area of damaged cables to clean and stabilize the area
- 4. From the inside out, pull a rubber stem through the puncture area sealing off the inside of the tire
- 5. From the inside, buff the puncture area then apply special vulcanizing glue
- 6. A patch is then installed on the inner liner over the puncture area causing a chemical reaction
- 7. The tire is then mounted back on the rim, inflated to the proper tire pressure and the repair is checked for leaks

This procedure takes 60-90 minutes to be done properly.

### Schedule Tire Repair

# **Non-Repairable Tires**

In some cases, the tire can't be repaired due to the location or severity of the damage. If the tire meets any of the non-repairable guidelines below, it's time to buy a new tire.

### **Puncture Outside Repair Area**

- If the tire is punctured in any way outside of the Puncture Repair Area (see image), the tire cannot be repaired safely.
- True tire repairs are limited to the middle, or "crown" area of the tire.
- The crown is defined as the center of the tread approximately 1 to 15 inches in

from each shoulder. For most tires, the puncture repair area can also be defined by the first major groove on both shoulders.



### Size of Puncture

- The maximum repairable injury size for passenger and light truck tires through load range E is 1/4 inch or 6mm in diameter.
- If the puncture in your tire is larger than the allowable repair size, the tire must be taken out of service.





# Bulge or Bubble in Sidewall

- If there is a noticeable bubble in the sidewall of the tire, it has been damaged most likely by impacting a curb, pothole, or other types of road hazard.
- The resulting bulge or "bubble" in the sidewall is not repairable, and unfortunately, the tire must be taken out of service.



# Say "No" to Tire Plugs

A tire plug is a sticky, expandable object that gets pushed into the damaged area of the tire from the outside and is adjusted until the air is no longer leaking from the tire. Although the leak may stop, it is easy to believe that the tire is repaired

and good to go; unfortunately, that's not the case. Tire plugs are a quick fix and can fail over time. They can also potentially cause air to become trapped between the layers of tread, eventually causing the tread to separate, resulting in needing to buy a new tire.



### **Industry Standards for Tire Repairs**

The **U.S. Tire Manufacturers Association** (USTMA, formerly known as Rubber Manufacturers Association) and **Tire Industry Association** (TIA) standards:

### **USTMA Tire Repair Basics**

- Repairs cannot overlap. A rubber stem, or plug, must be applied to fill the
  puncture injury and a patch must be applied to seal the inner liner. A common
  repair unit is a one-piece combination unit with a stem and patch.
- Not all tires can be repaired. Specific repair limits should be based on recommendations or repair policy of the tire manufacturer and/or type of tire service.
- NEVER repair a tire that has an existing, improper repair; the tire must be scrapped.

Juliuppeu.

- A plug by itself or a patch by itself is an unacceptable repair.
- NEVER perform an outside-in tire repair or on-the-wheel repair.

### **TIA Tire Repair Basics**

- The only way to properly repair a tire is to demount it from the rim so it can be inspected on the inside, remove the damaged material, fill the void with rubber, and seal the inner liner with a repair unit.
- A plug by itself or a patch by itself is not an acceptable repair because the plug
  does not permanently seal the inner liner and the patch does not fill the void
  left by the penetrating object, which allows water to enter the body of the tire
  and start corroding the steel belts.
- The use of sealants or emergency inflators that contain a sealant are not recommended as long-term solutions to a flat tire for the same reasons.
- Puncture repairs are limited to the center of the tread area. If there are
  punctures or damage in the shoulder or sidewall of the tire, it is not repairable.
- If the injuries are close enough so that the repairs overlap or the injuries are directly across from each other, the tire cannot be repaired and must be scrapped.
- $\bullet\,$  Never repair tires with a tread puncture larger than ½-inch (6mm).

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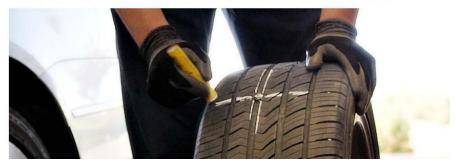
# Les Schwab Tech Tip: How Flat Tire Repair Works

The tires on your vehicle come in contact with a lot of roads, highways, and more. Sometimes items on those roads include nails, screws, or other objects that can find their way into your tires. This is typically what causes a flat. At Les Schwab, we're proud to fix flat tires across the West, and get you and your family safely back on the road. Here's a quick rundown of our process that helps us fix almost 2-million flats at year — often at no charge.



Step 1: We put your vehicle on a lift and perform an inspection. This includes looking over the tread of the tire, the sidewalls, stem (air valve), and looking for exposed belts. This first step can often tell us if your tire can be repaired or needs to be replaced.

Step 2: We remove the wheel and tire assembly. To find all possible issues, we submerge the whole wheel and tire assembly in a water tank to locate and mark the cause of the leak. Once again, the tire expert will determine if the flat can be repaired.





# When Replacement is Necessary

According to the **Tire Industry Association** guidelines, all repairs on any tire are limited to the tread area, not on the shoulder or sidewall. If your tire is damaged beyond repair, or the sidewall is damaged, the tire should be replaced.



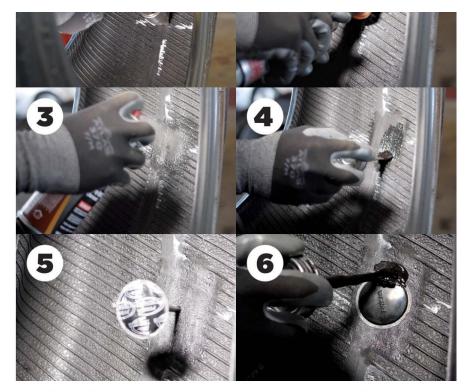


Step 3: If it can be repaired, the technician working on your vehicle will remove the tire from the wheel and prep it inside and out.



Step 4: Oftentimes, we remove the object and drill the damaged area at the angle the object entered the tire. We then buff and clean the inside, cement it, then apply a plug/patch combination and sealer. Depending on the angle of the puncture, a 2-piece patch may be required.





**Step 5:** Before reinstalling the wheel, we double-check the patch by placing the tire and wheel in a water tank. This is done to verify the patch was done properly and there are no leaks.





Once your tire is back on your vehicle, we'll check the pressure on all four tires. Then, we'll ensure Tire Pressure Monitoring System is reset as part of our World Class Customer Service. After that, you're good to go.





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# How to Repair Tesla Tires and Other EV Tires that Have **Sound Suppression Foam**

Blog, Expertise, News, Products, Tips



sound suppression foam. The good news is that like any other tire, sound suppression tires can be repaired. TECH developed a process for repairing sound suppression tires that adheres to the Tire Industry Association (TIA)'s guidelines for proper tire repair. What follows is an overview of the process. For complete details on the process, we invite you to watch

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Remove the Tire from the Wheel

# Download Manual

We have developed a simple acronym to remember the steps of our proper tire repair process. As you read on, please note the first letter in each step: R.E.P.A.I.R.

### Remove the tire from the wheel:

It is important to remove the tire from the wheel to properly inspect the bead, crown and sidewall area from the inside and outside of the tire. As you notice any damage, punctures or injuries, mark them with a tire marker.



Carefully Measure the Injury Angle



Cut Away a Section of the Foam

## **Evaluate the injury:**

To properly evaluate sound suppression tires, you'll need to remove a small section of the sound-deadening foam. To do this, simply cut away a section of the foam using a sharp knife and carefully remove it. When inspecting, look for any non-repairable conditions. For more information on non-repairable conditions, click here.



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Please note: There are two types of adhesives used to attach sound-deadening foam. Cured and uncured. Cured adhesives will need to be fully removed prior to repair installation. Tacky adhesives may limit you to only be able to perform a one-piece patch/plug repair. Uncured adhesives should not be cleaned or buffed away.

# Prepare the injury:

Proper preparation of the injury ensures all damage has been removed and helps create a textured surface that will help maximize adhesion of the patch/plug or two-piece repair. To begin, clean the area with rubber cleaner and a tire scraper.

Next, using a low-speed buffer and buffing wheel, mechanically buff the inner liner of the tire. Use a template or trace an area slightly larger than the repair you'll be installing. Buff using smooth even strokes to prevent carving grooves in the inner liner.

Then, use a carbide cutter to prepare the puncture. Select the appropriate size for the repair you'll be installing. Repeat the process 3-5 times from both the inside and outside of the tire.

Finally, brush the area clean using a wire brush and vacuum up all debris.







Clean and Scrape the Inner Liner



Mark an Area to be Prepped



Buff the Area for Maximum Adhesion



Use Carbide Cutter to Remove Damage



Repeat Cutting From Outside the Tire



Use a Wire Brush to Clean Debris

# Apply vulcanizing fluid:

Vulcanizing fluid (a.k.a. cement) chemically bonds TECH tire repairs to the tire for a safe and permanent fix. To begin, work the cement into the channel using a spiral cement tool. Repeat 3-5 times from both the inside and outside of the tire.

Next, using the lid-mounted brush, apply a thin layer of cement to the buffed area. Allow 3-5 minutes to allow the vulcanizing fluid to dry. You are now ready to install the repair.



Apply a Thin Layer of Cement

# Install the repair:

Prepare your repair for installation by removing the blue poly to expose the cushion gum. Avoid touching the cushion gum. Carefully apply vulcanizing fluid to the tapered portion of the stem to help lubricate the repair and make installation easier.

Next, place the repair in the injury and pull it through by the lead wire using a pair of pliers. Pull until the repair seats against the inner liner. Avoid overpulling which could cause "dimpling" and possibly damage the stem.

Then, use a tire repair stitcher to stitch the repair in place by removing any air trapped under the repair. Work from the inside out to ensure all air is removed.

Lastly, seal the over-buffed area using an inner liner sealer. This will restore the inner liners' air retention properties that may have been compromised during the buffing process. If you plan to re-install the sound-suppression foam. Simply apply the sealer to the entire area where the foam was removed and firmly press the foam back into place (optional).



Use the Lead Wire to Pull the Repair Through



Stitch the Repair to Remove Any Trapped Air



Seal the Over Buffed Area



Replace the Foam (Optional)

### Return the tire to service:

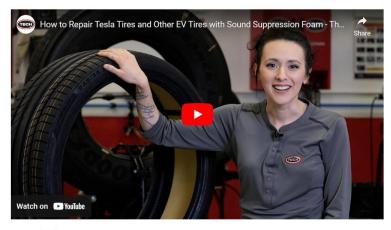
With the repair permanently installed, you are now ready to return the tire to service. This involves re-mounting and balancing the tire, installing the wheel and tire back on the vehicle and perform any necessary TPMS relearn procedures.







Perform any Necessary TPMS Re-Learn Procedures



# **Conclusion:**

Thank you for watching. For more tire repair content, follow TECH on your favorite social



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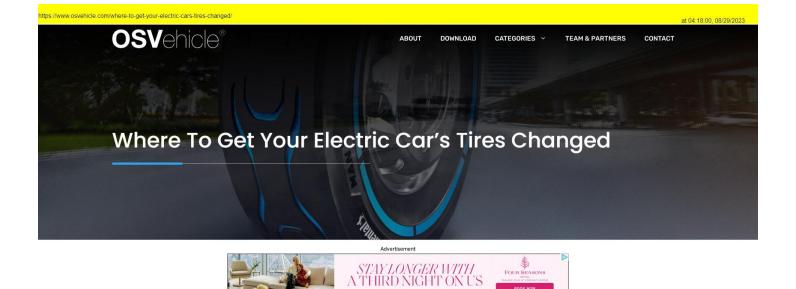
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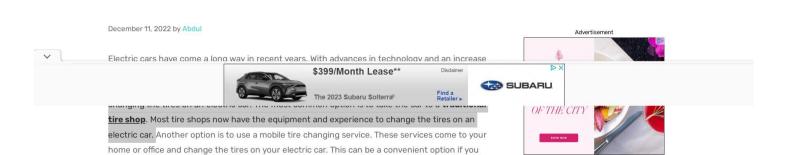
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don't have time to take your car to a tire shop. Finally, some electric car manufacturers offer tire changing services at their dealerships. This can be a good option if you're already familiar with the dealership and trust their service department. No matter which option you choose, changing the tires on your electric car is a relatively simple process. With a little research, you can find a tire changing solution that works best for you.



In the United States, there will be a tenfold increase in the number of electric vehicles sold by 2022. Michelin is aiming to have 20% of its tires made from sustainable materials by 2030. In 2020, the Toyota Prius will account for \$8.1 billion in sales in North America, accounting for a quarter of total company sales. Michelin's tires for EV and hybrid vehicles have low rolling resistance. When you start a cold tire from a standing start, their structure and chemical make it more difficult to lose energy. A hybrid or electric vehicle has a longer battery life when tires are low-roll. The most significant impact on tires is transportation, according to Michelin.

When it comes to replacing the tires on an electric vehicle, it is dependent on the type of vehicle you drive. Some electric vehicles can be equipped with all-season rubber, while others require ultra-high performance summer tires, according to Car Talk. Tires can range in price from \$150 to more than \$200.

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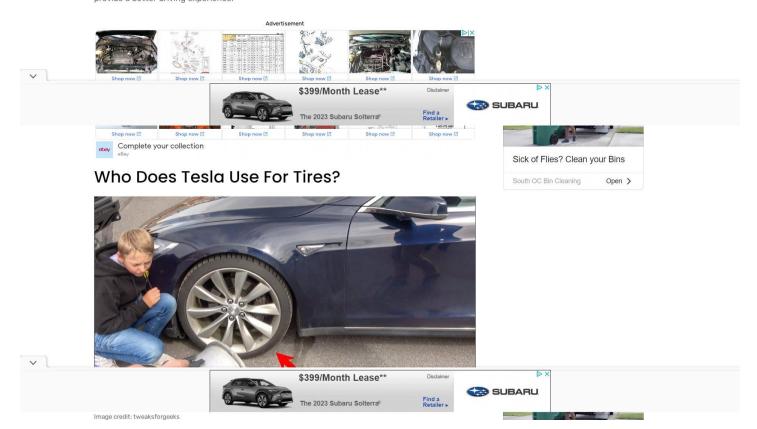
Electric vehicles have plenty of power and torque, but they aren't particularly demanding on tires, which is the opposite of what they are supposed to be. Tires on electric vehicles will wear down significantly less than those on a traditional internal combustion vehicle. There is a lot of traction control on this vehicle.

Because the tires in electric vehicles are typically heavier, there is little spare tire availability. Because electric cars are heavier than normal cars, their tires have a weight of 750 pounds, which can affect their fuel economy. This spare can also be removed as a secondary consideration for providing more space in the trunk.

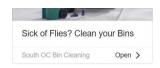


When Tesla employs sensors and other technologies, they can adjust their vehicles' braking, steering, and acceleration to improve performance in all types of weather conditions. Furthermore, the Tesla Supercharger can charge the Model S in as little as 30 minutes. That is faster than the average gasoline station. As a result, even though **regular tires** will work fine on

a Tesla, you may want to consider installing Tesla tires instead. They will last longer as well as provide a better driving experience.







Tesla's current tire supplier is Michelin, although the company has used other suppliers in the past, including Continental and Pirelli. Michelin has supplied tires for Tesla's Model S and Model X vehicles since 2013, and the company is also the exclusive supplier for the Model 3. Tesla has been working with Michelin on developing a **new tire** that would be specifically designed for electric vehicles, and the two companies announced a partnership in 2018 to that end.

The Tesla Model 3 is the most popular plug-in electric vehicle in the world, according to the company. Since its introduction in 2009, Tesla has sold over 5 million cars on the road. Tesla tires



model. Tires equipped with Michelin TO Acoustic Technology reduce vibrations caused by the road surface by up to 20%, which results in 20% less noise inside your vehicle. As a result, when using hands-free communication, drivers and passengers can communicate more easily, reducing fatigue on long-distance trips.







Tesla's tire-replacement service is a significant development for electric vehicles. You will not have to tow or pull your vehicle to a tire shop with this system, and it will also expedite the

MANAGING INDIVIDUAL & ORGANIZATIONAL CHANGE

Fall 2023

#### What are resid fires made Of?

Tesla always uses **radial tires** made of the highest quality rubber and with thicker sidewalls to provide maximum durability. The goal of Tesla's tires is to provide a smooth ride with low rolling resistance for maximum range.



# Does Tesla Pay For Flat Tires?

We can provide flat tire service for up to 50 miles at a time. If the car has a mechanical issue, a faulty fob, or an app malfunction, the car will be locked out of the garage.





How Often Do You Have To Change Tires On An Electric Car? Tires on an EV must be replaced more frequently than those on a regular vehicle. It is worthwhile to pay more for longer-lasting **EV tires** at the tire shop rather than purchasing them at a store. Tires for some EV models are specifically designed for that vehicle.

Electric vehicles, like traditional vehicles, are vastly different in some ways. In the case of tires, it is one of the requirements. If you have an electric vehicle, you can install **standard tires**, but this is not recommended. Electric vehicle tires are designed to meet the unique requirements of these vehicles. Tires designed specifically for electric vehicles are frequently equipped with sound-absorbing foam, making them significantly quieter than standard tires. It is true that EV tires are more expensive at times, but they are generally worthwhile. They are typically made of high-quality materials, such as high-loading resin, which prevents them from degrading rapidly.



When selecting tires for an electric vehicle, it is common practice to select tires that meet the vehicle's specific requirements. All <u>major tire manufacturers</u>, including Bridgestone, Continental, Hankook, Michelin, and Pirelli, sell EV tires. Even though the cost of EV tires is higher, they are worthwhile purchases.







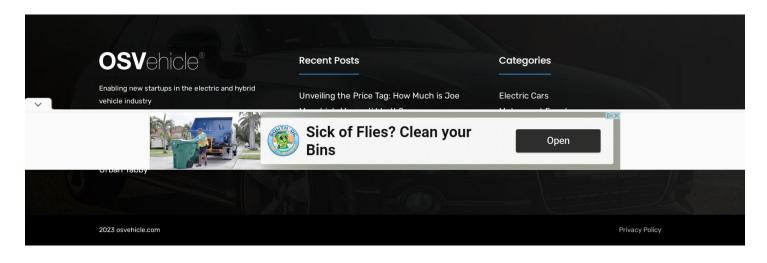


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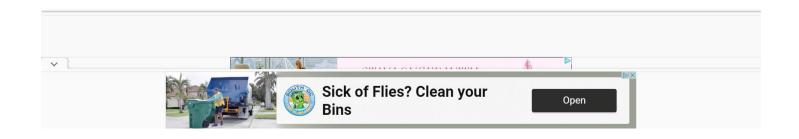
**■** Electric Cars

- Electricity Is An Important Part Of A Hybrid Car
   How To Fix Electric Car Windows In A Ford Focus









# **GAS STATION WITH ETHANOL-FREE GAS**

### Fill Your Tank at Our Pumps With Our Ethanol-Free Gas

Monday - Friday 6:00 AM - 6:00 PM

Saturday 8:00 AM - 4:00 PM

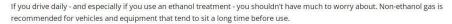
#### Your Non-Ethanol Gas Station

When you need a non-ethanol gas station, drive over to Al's Auto Parts & Service Inc. If you're worried about engine corrosion or don't drive your vehicle frequently, non-ethanol gas might be the best choice you make at the pump. We offer Ethanol-Free Gas in 87, 90 and 93 octane! Ethanol-free gas is the better gasoline solution you've been waiting for! It's also a recommended gas for boats, snowmobiles, ATVs, motorcycles, and other recreational vehicles and seasonal outdoor equipment.

Our non-ethanol gas prices are highly competitive with other stations in York County. Keep reading to learn whether or not you should make the switch.

#### Ethanol-Free Gas Vs. Regular Gas

Regular gas uses ethanol to increase octane and burn fuel more efficiently. While ethanol does provide some benefits, it also absorbs moisture from the air. Over time, moisture can make its way to the bottom of your fuel tank and cause corrosion, stalling, and engine damage.





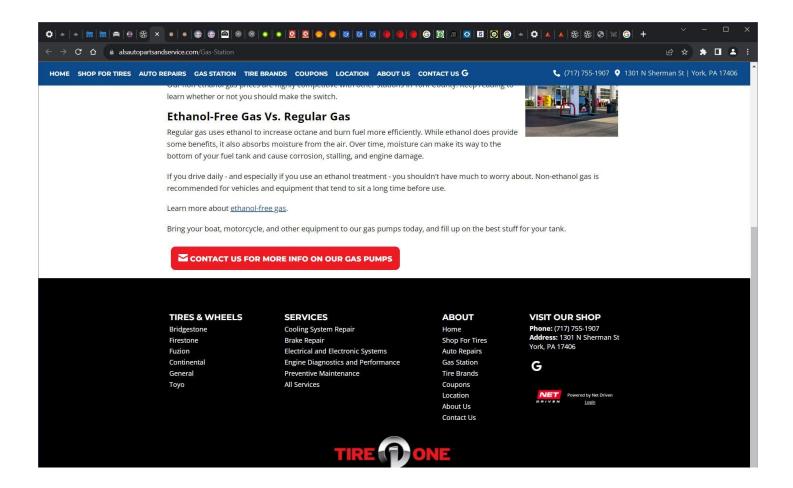
Learn more about ethanol-free gas.



 $Bring \ your \ boat, \ motorcycle, \ and \ other \ equipment \ to \ our \ gas \ pumps \ today, \ and \ fill \ up \ on \ the \ best \ stuff \ for \ your \ tank.$ 

CONTACT US FOR MORE INFO ON OUR GAS PUMPS

9:21:05 AM 8/24/2023





9:21:15 AM 8/24/2023

## AL'S AUTO PARTS & SERVICE INC PROVIDES TIRE REPAIR SERVICES TO YORK, PA, LANCASTER, PA, COLUMBIA, PA, AND OTHER SURROUNDING AREAS.

Request Quote Schedule Service

Approx. Time: 15 Minutes | Price Range: Get Quote for Price

## The Basics Behind Tire Repair Services at Al's Auto Parts & Service Inc

There are many hazards that can make tires less effective and more of a danger to drivers and passengers. It is not uncommon for a sharp stone, nail, or other pointed piece of debris to puncture a tire. Because flat tires are dangerous to use, it is advised that motorists only drive on them in extreme circumstances, such as when they need to reach safety from a busy highway. It is also important to note that the longer a driver uses a flat tire, the more unlikely it becomes that a tire repair service can be performed. This is because riding on a flat tire for too long can cause irrevocable damage to the tire. As the tire deflates, the wheel will come into closer contact with the ground, potentially damaging the rim. It is important to understand that tire repair is time sensitive. The sooner you are able to bring a lightly to moderately damaged tire in for repair, the more likely it is that the tire can be saved.

## Why Should You Have Tire Repair Services Performed at Al's Auto Parts & Service Inc?

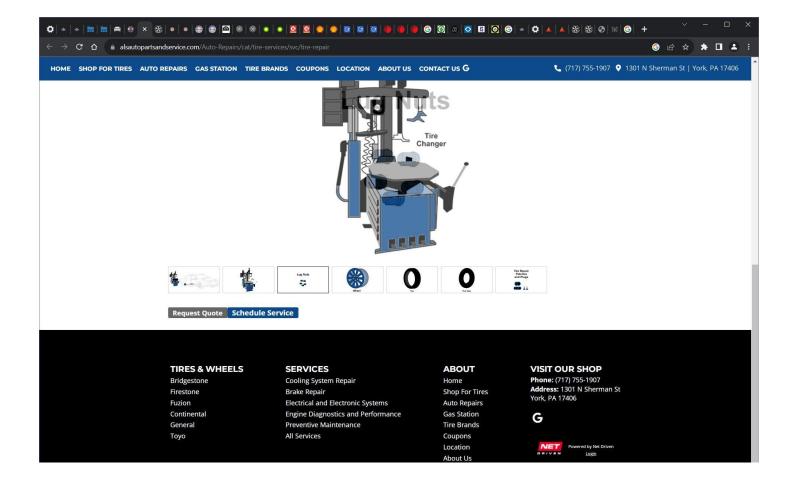
The methods used by our service staff to repair a tire comply with the Rubber Manufacturer's Association (RMA). The RMA states that a flat tire can be repaired if the puncture is 14 inch or smaller and if the puncture is located on the tread of a tire. They recommend that the tire repair procedure involve a plug and a patch on the lining of the tire. A plug and a patch can add thousands of miles more to a damaged tire. For a punctured tire, our staff will patch, plug, or seal the damaged area. If your tire is losing air due to valve stem damage or if the tire is not securely attached to the wheel's rim, our tire repair service staff will be able to help. Ultimately, repairing your tire helps to keep you safe on the road and can save you money in the long run.

We proudly service the Tire Repair needs of customers in York, PA, Lancaster, PA, Columbia, PA, and surrounding areas,

Areas Served: York, PA | Lancaster, PA | Columbia, PA | and surrounding areas



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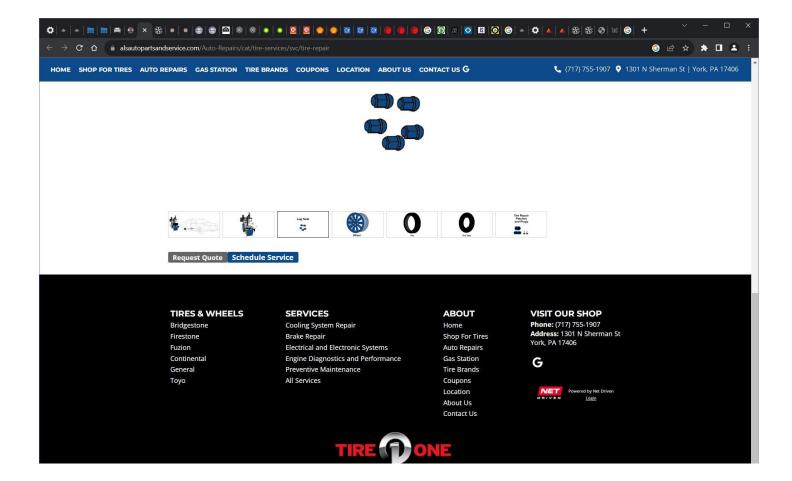


Contact Us



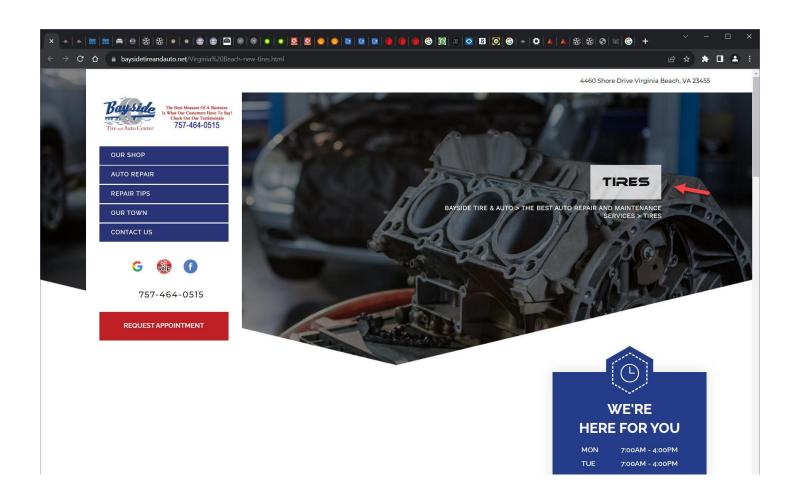


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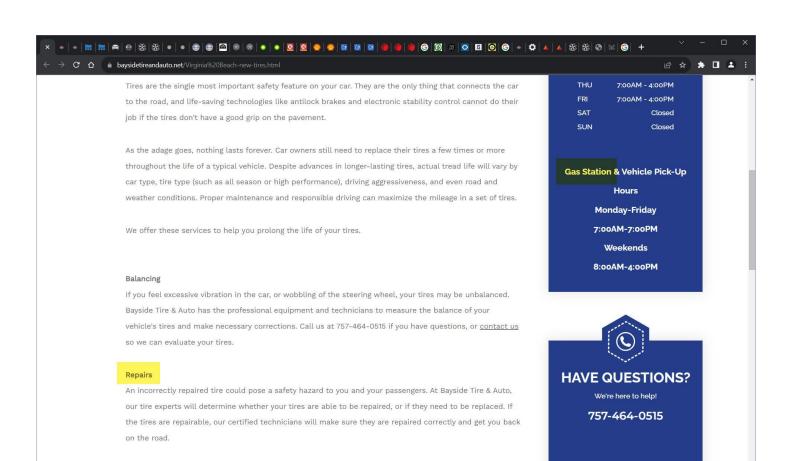
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Tires are the single most important safety feature on your car. They are the only thing that connects the car to the road, and life-saving technologies like antilock brakes and electronic stability control cannot do their job if the tires don't have a good grip on the pavement.

WED	7:00AM - 4:00PM	
THU	7:00AM - 4:00PM	
FRI	7:00AM - 4:00PM	
SAT	Closed	
SLIN	Closed	

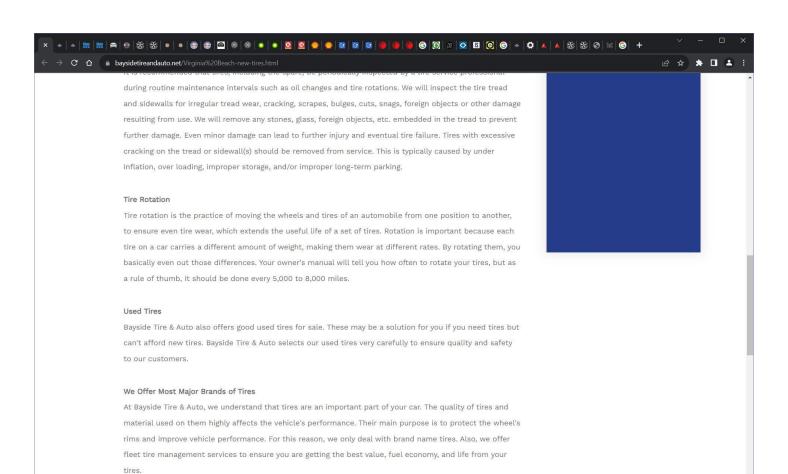
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Tire Inspection

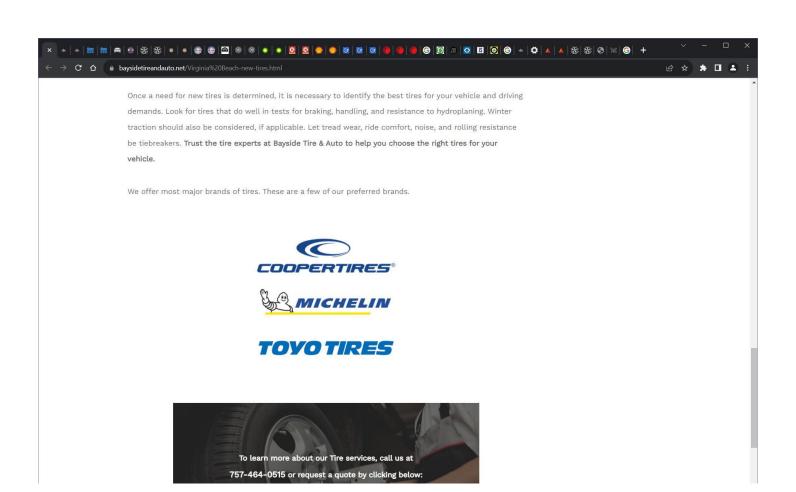
It is recommended that tires, including the spare, be periodically inspected by a tire service professional during routine maintenance intervals such as oil changes and tire rotations. We will inspect the tire tread and sidewalls for irregular tread wear, cracking, scrapes, bulges, cuts, snags, foreign objects or other damage resulting from use. We will remove any stones, glass, foreign objects, etc. embedded in the tread to prevent

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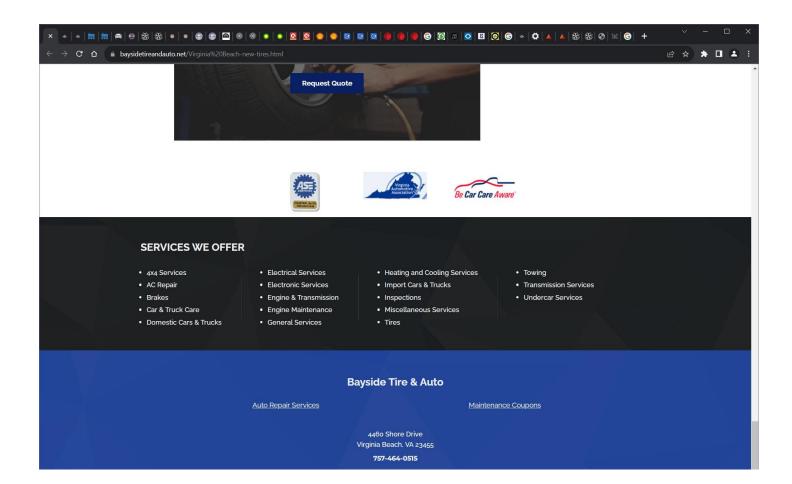
Once a need for new tires is determined, it is necessary to identify the best tires for your vehicle and driving demands. Look for tires that do well in tests for braking, handling, and resistance to hydroplaning. Winter traction should also be considered, if applicable. Let tread wear, ride comfort, noise, and rolling resistance

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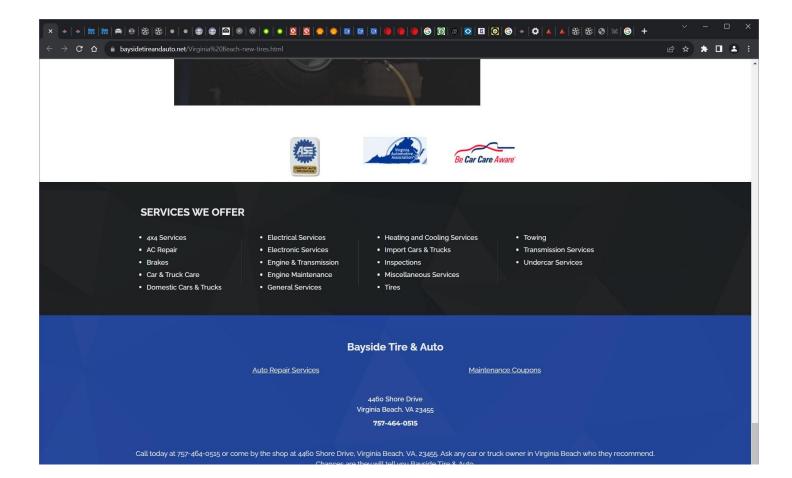




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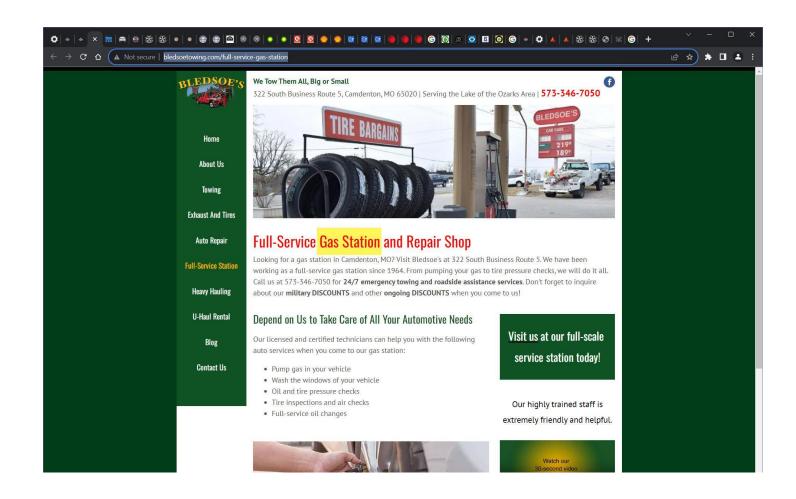


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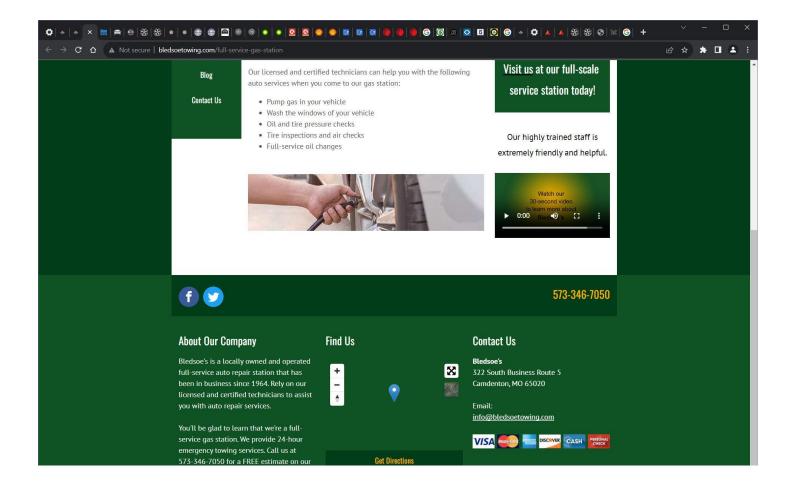








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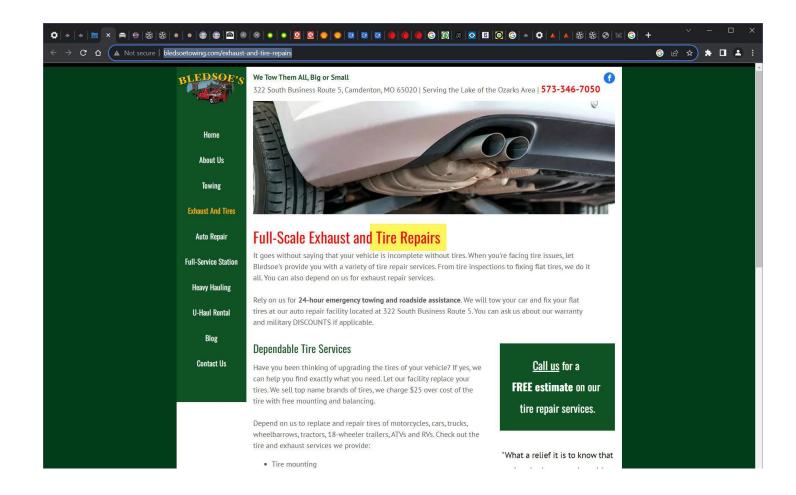


auto repairs and heavy hauling services.



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Tire rotation

• Front-end alignment

Tire inspections and air checks

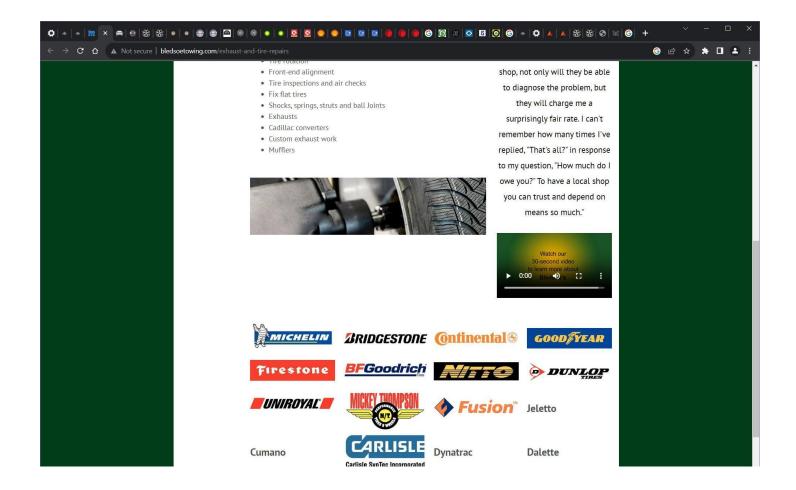
Fix flat tires

Shocks, springs, struts and ball Joints

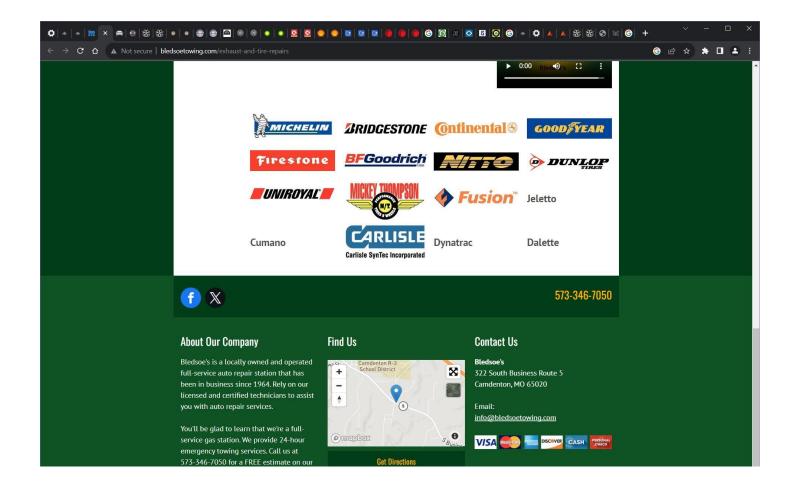
• Exhausts

when I take my car into this shop, not only will they be able to diagnose the problem, but they will charge me a

surnrisinaly fair rate I can't



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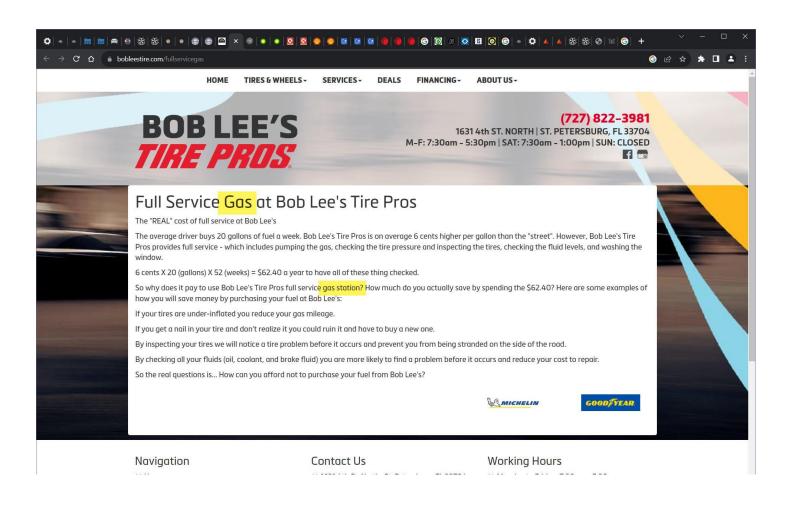


auto repairs and heavy hauling services.



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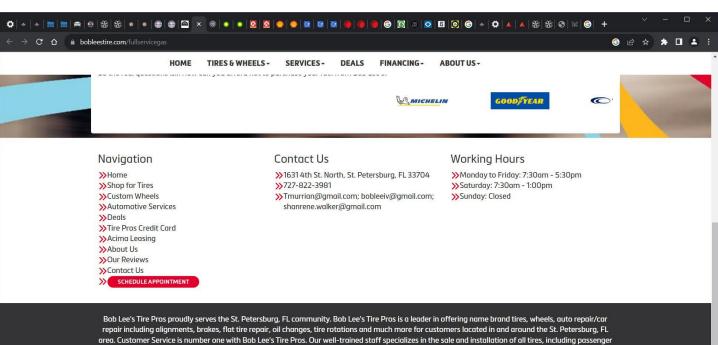


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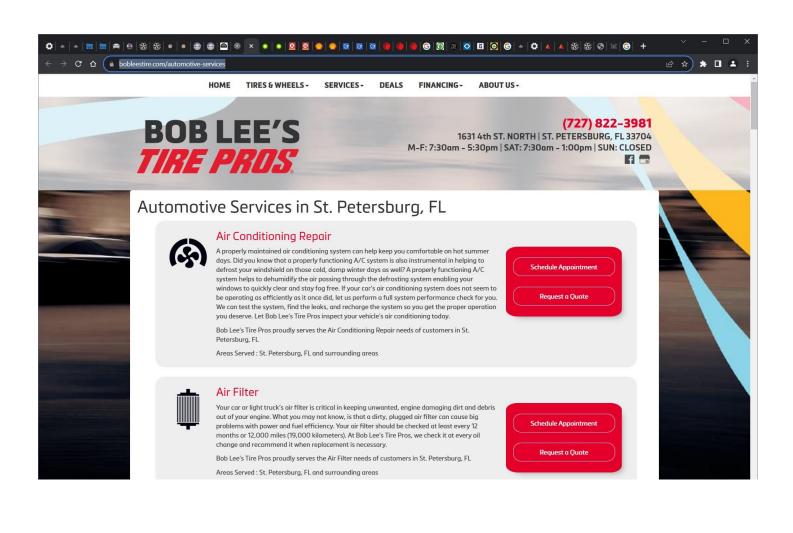


Bob Lee's Tire Pros proudly serves the St. Petersburg, FL community. Bob Lee's Tire Pros is a leader in offering name brand tires, wheels, auto repair/car repair including alignments, brakes, flat tire repair, oil changes, tire rotations and much more for customers located in and around the St. Petersburg, FL area. Customer Service is number one with Bob Lee's Tire Pros. Our well-trained staff specializes in the sale and installation of all tires, including passenger car, performance, light truck or SUV tires. Are you ready for a fresh new look for your vehicle? Custom wheels and rims are also available at Bob Lee's Tire Pros. We also offer complete auto repair/car repair including under-car services, such as oil changes, brakes, shocks, struts, alignment, and transmission fluid flush. Bob Lee's Tire Pros provides these services for both foreign and domestic vehicles in the St. Petersburg, FL area and offers them at competitive prices. Take this opportunity to browse Bob Lee's Tire Pros website or call us at (727) 822-3981.

Are you looking for tires in St. Petersburg, FL? Bob Lee's Tire Pros is the perfect place to shop. Bob Lee's Tire Pros offers name brand tires at affordable prices for your car. Our St. Petersburg, FL location offers brands such as MICHELIN, BFGoodrich, Uniroyal, Bridgestone, Firestone, Goodyear and many others. Bob Lee's Tire Pros also specializes in a full line auto repair and car repair services for your automobile, such as brakes, alignments, oil changes, tune ups and much, much more. Please give our St. Petersburg, FL location a call today at (727) 822-3981 to schedule an appointment.

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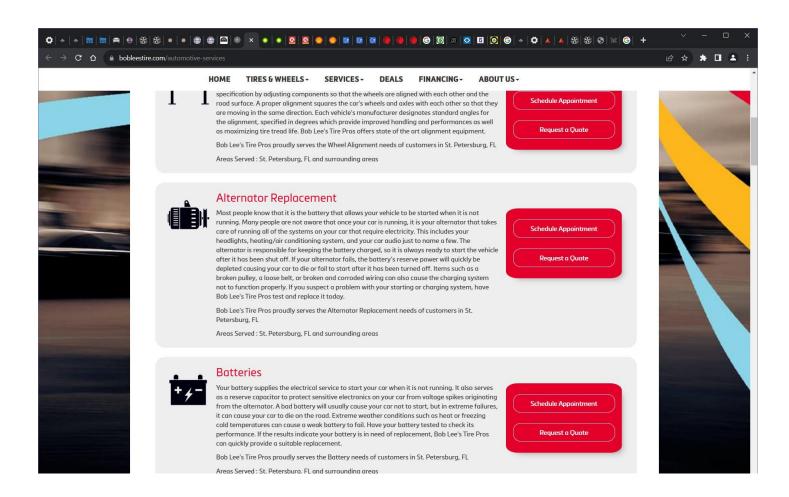


## Alignments

A vehicle alignment brings the car's suspension into the proper vehicle manufacturer's specification by adjusting components so that the wheels are aligned with each other and the road surface. A proper alignment caused the car's wheels and exlass with each other to that the

Schedule Appointment

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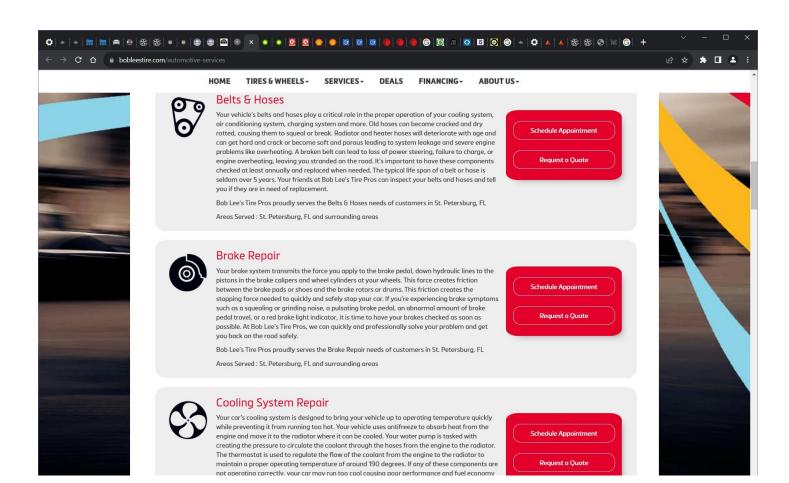






## Belts & Hoses

Your vehicle's belts and hoses play a critical role in the proper operation of your cooling system, air conditioning system, charging system and more. Old hoses can become cracked and dry

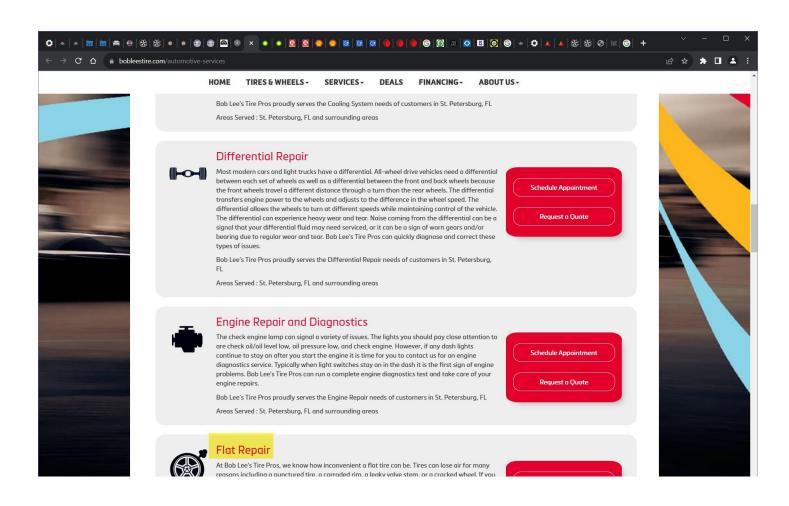




while polluting the air around it. It may also cause the engine to run too hot and overheat causing possible severe engine damage. If you have concerns about the proper operation of your cooling system, have it inspected and serviced today at Bob Lee's Tire Pros.

Bob Lee's Tire Pros proudly serves the Cooling System needs of customers in St. Petersburg,  $\mathsf{FL}$ 

Areas Served : St. Petersburg, FL and surrounding areas



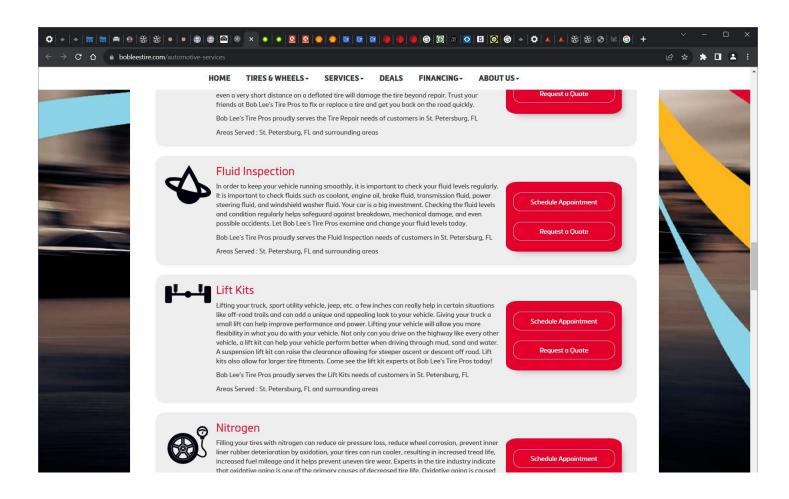


do experience a flat or low tire, come to a stop in a safe place as quickly as possible. If you are stranded on the roadside, turn on your flashers and raise your hood. Once you are safely situated, you can change to your spare or call for roadside assistance. Remember, driving for even a very short distance on a deflated tire will damage the tire beyond repair. Trust your friends at Bob Lee's Tire Pros to fix or replace a tire and get you back on the road quickly.

Request a Quote

Bob Lee's Tire Pros proudly serves the Tire Repair needs of customers in St. Petersburg, FL

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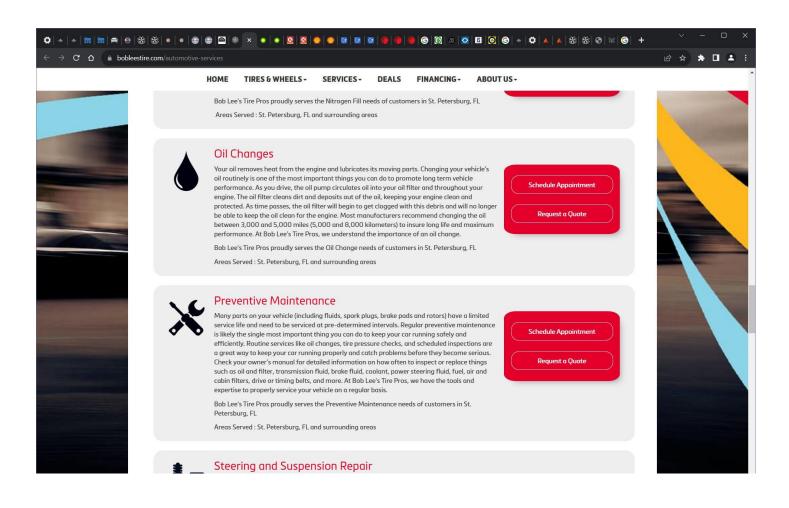
by the diffusion of oxygen from the pressurized air cavity of the tire to the outside atmosphere. Tires that are inflated with nitrogen have a significant reduction in tire failure. Stop by Bob Lee's Tire Pros to discuss the many benefits of using Nitrogen in your tires.

Request a Quote

Bob Lee's Tire Pros proudly serves the Nitrogen Fill needs of customers in St. Petersburg, FL

Areas Served : St. Petersburg, FL and surrounding areas

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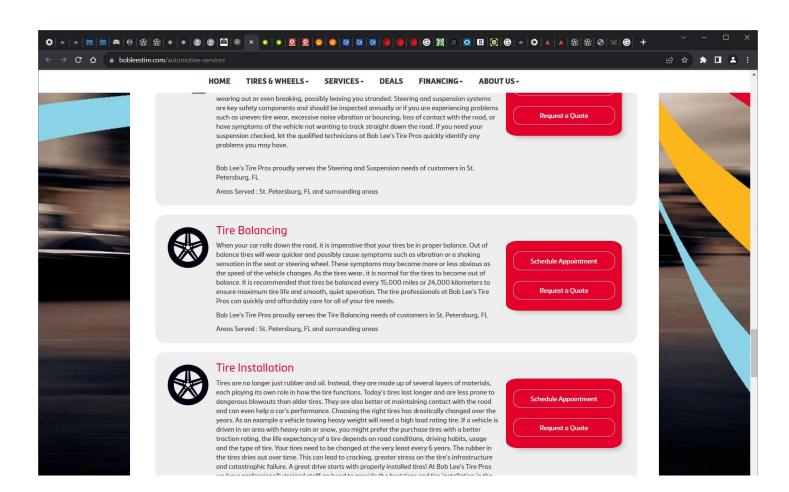
Your vehicle's steering and suspension are designed to create maximum traction between your tires and the road. This provides steering stability, proper handling, and good comfort. These components are ground zero at connecting your vehicle to the horsh roads and are thus prone to wearing out or even breaking, possibly leaving you stranded. Steering and suspension systems are key safety components and should be inspected annually or if you are experiencing problems such as uneven tire wear, excessive noise vibration or bouncing, loss of contact with the road, or have symptoms of the vehicle not wanting to track straight down the road. If you need your

Schedule Appointment

Request a Quote

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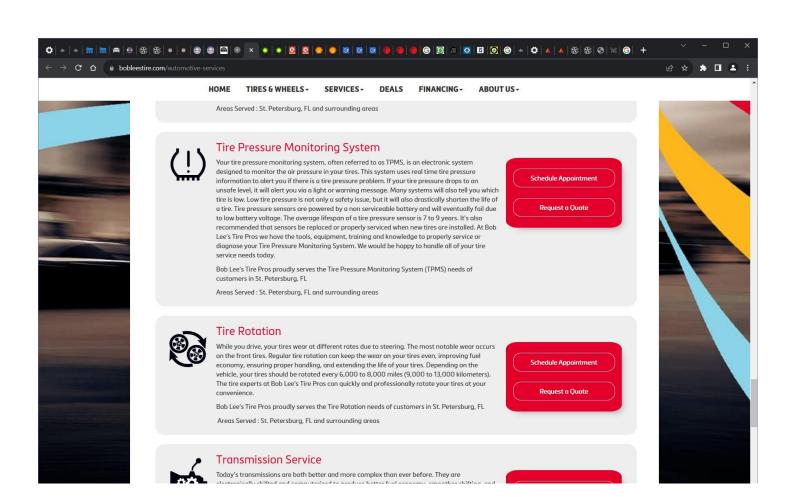




we have professionally a differ start of finite to provide the best thes and the installation in the industry.

Bob Lee's Tire Pros proudly serves the Tire Installation needs of customers in St. Petersburg, FL Areas Served : St. Petersburg, FL and surrounding areas

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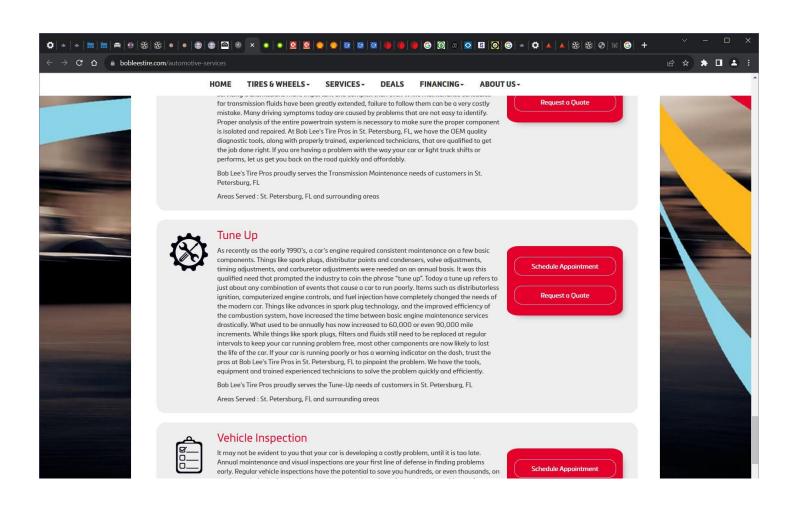




more reliability. They are so sophisticated that they have become fully integrated into the engine performance system. These advancements in technology have made properly diagnosing and servicing transmissions more important and complex than ever. While maintenance schedules for transmission fluids have been greatly extended, failure to follow them can be a very costly mistake. Many driving symptoms today are caused by problems that are not easy to identify. Proper analysis of the entire powertrain system is necessary to make sure the proper component is isolated and consisted. At Bob Look-Tiro Proc. in St. Detaceburg. El. was have the OEM quality.



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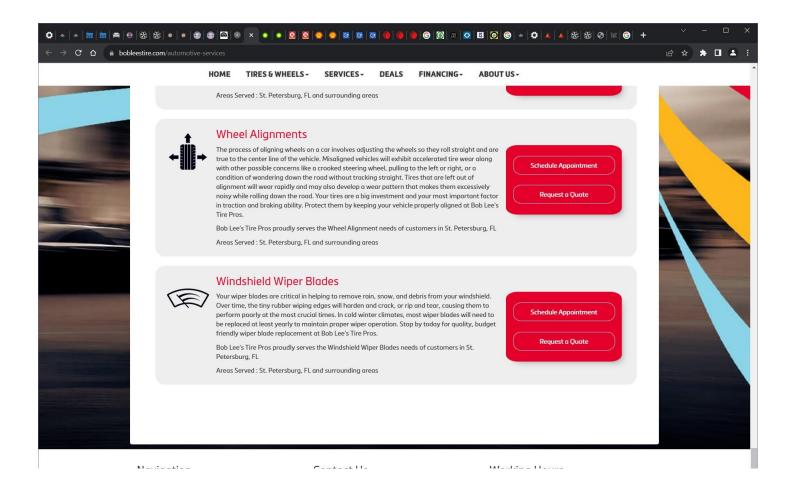


costly repairs in the future, If you are concerned about the safety and road worthiness of your car or light truck, schedule a maintenance inspection today at Bob Lee's Tire Pros.

Bob Lee's Tire Pros proudly serves the Vehicle Inspection needs of customers in St. Petersburg, FL. Areas Served: St. Petersburg, FL and surrounding areas



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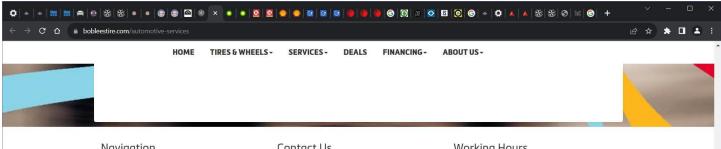
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working Hours

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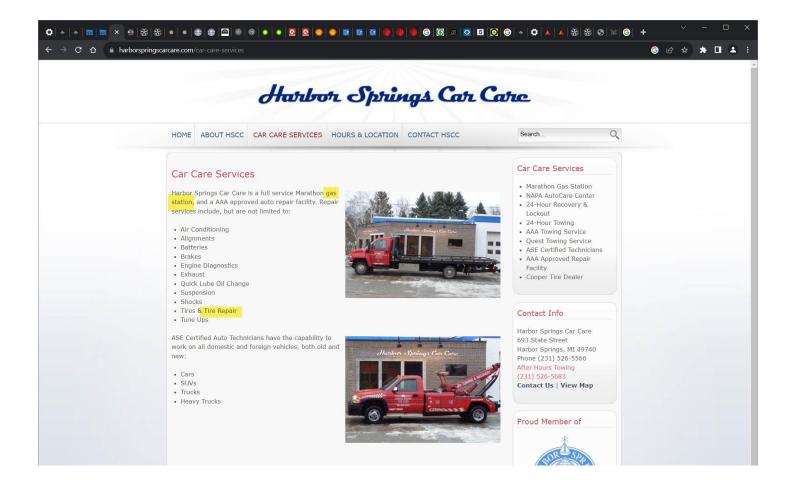
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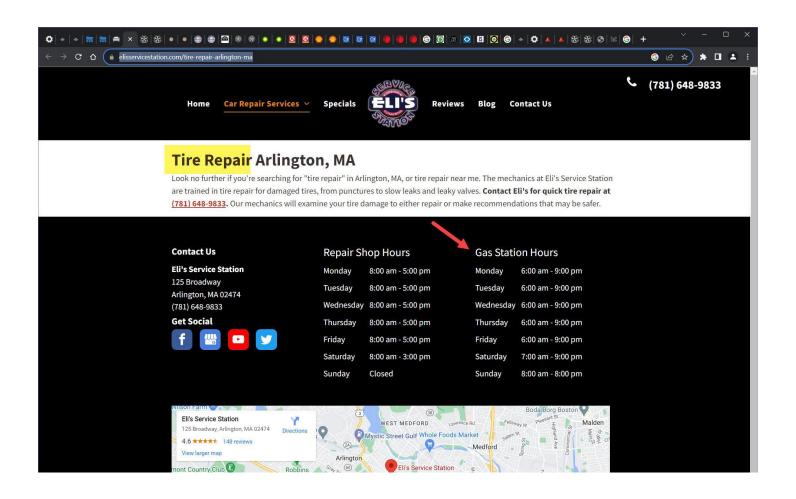
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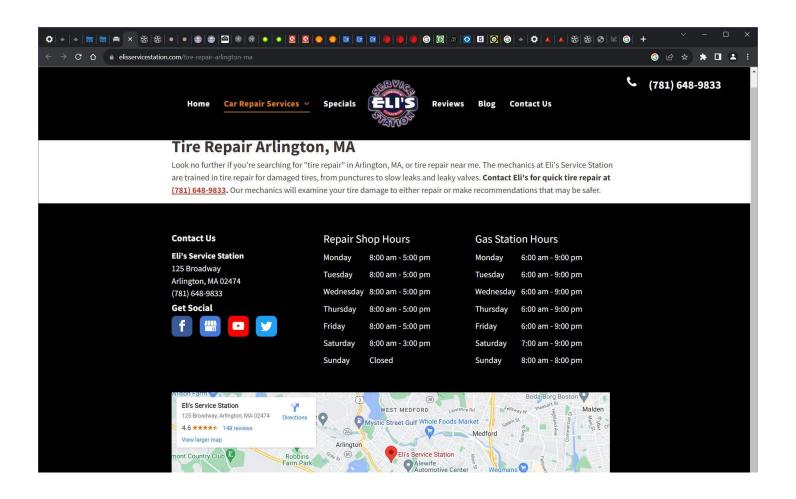
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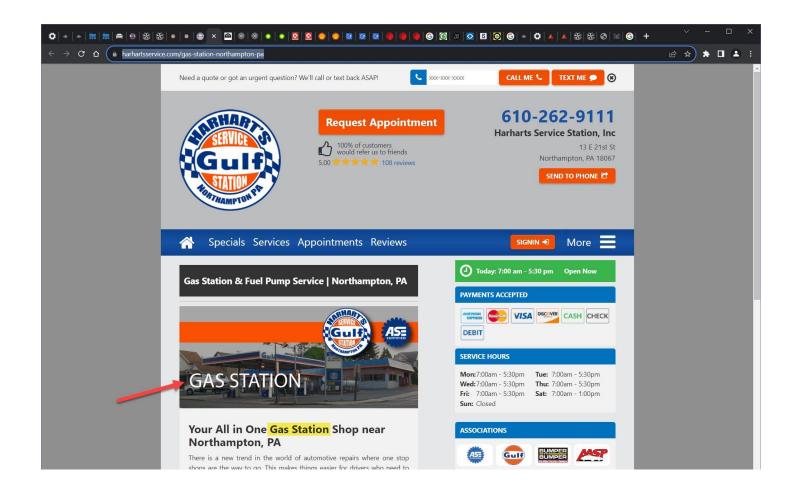
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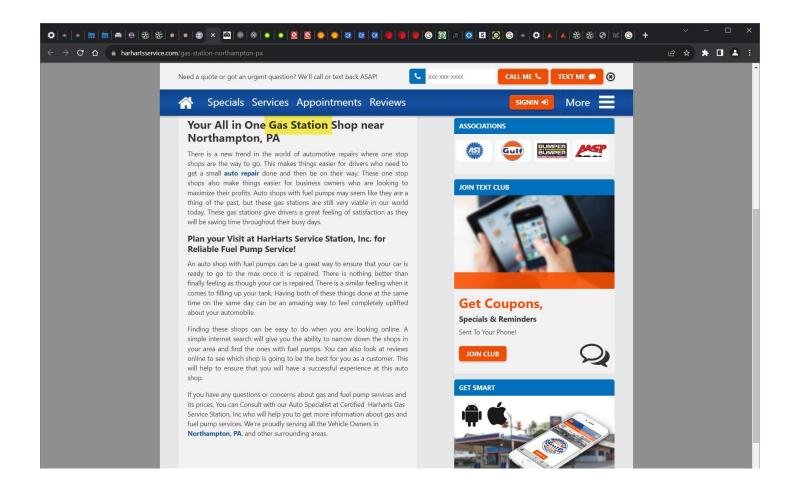
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get a small **auto repair** done and then be on their way. These one stop shops also make things easier for business owners who are looking to maximize their profits. Auto shops with fuel pumps may seem like they are a thing of the past, but these gas stations are still very viable in our world

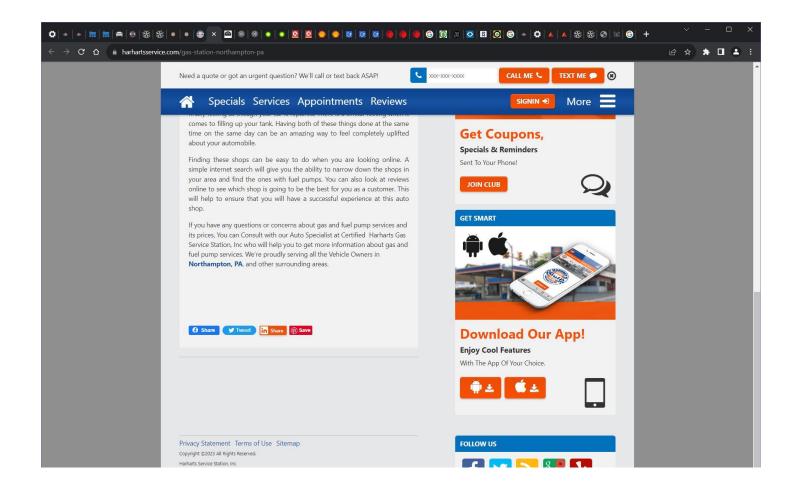


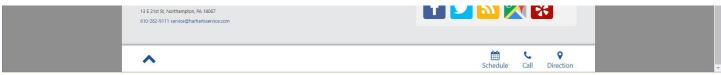
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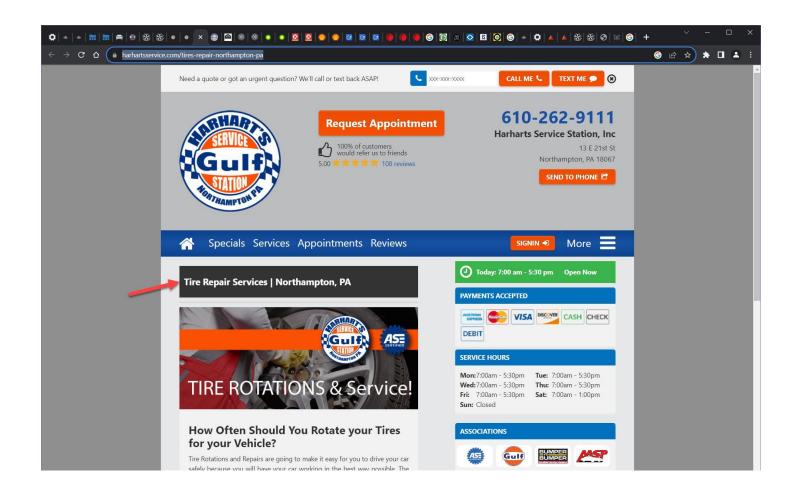


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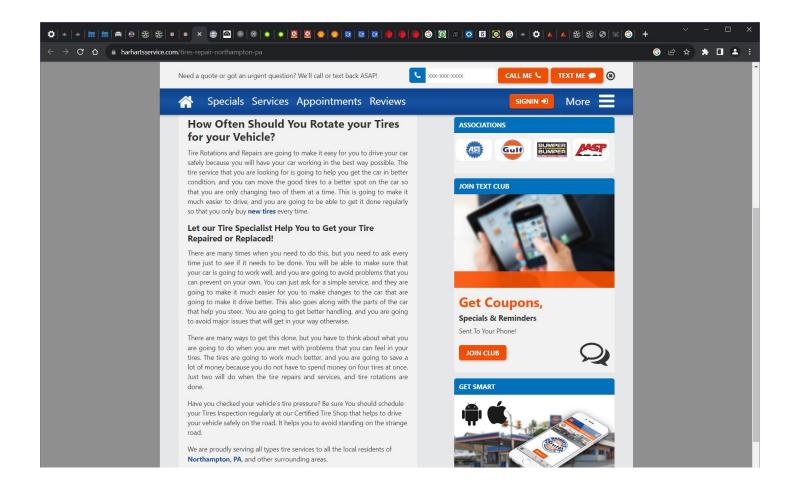
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tire service that you are looking for is going to help you get the car in better condition, and you can move the good tires to a better spot on the car so that you are only changing two of them at a time. This is going to make it much easier to drive, and you are going to be able to get it done regularly

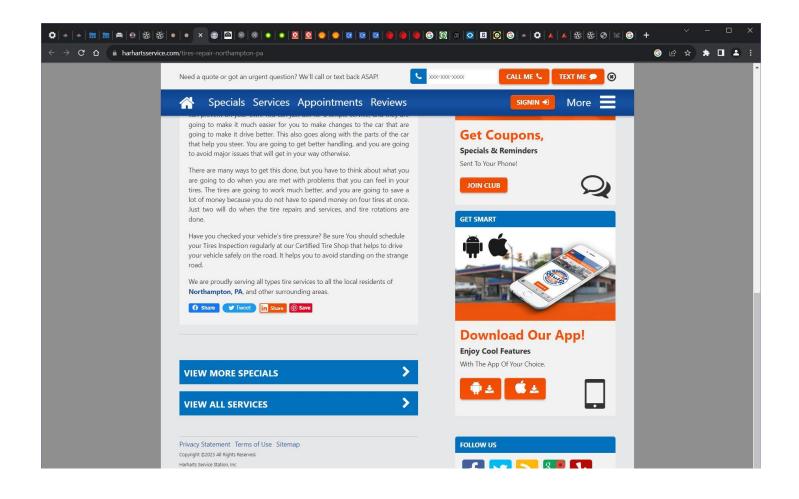


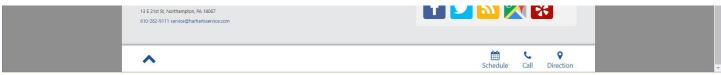
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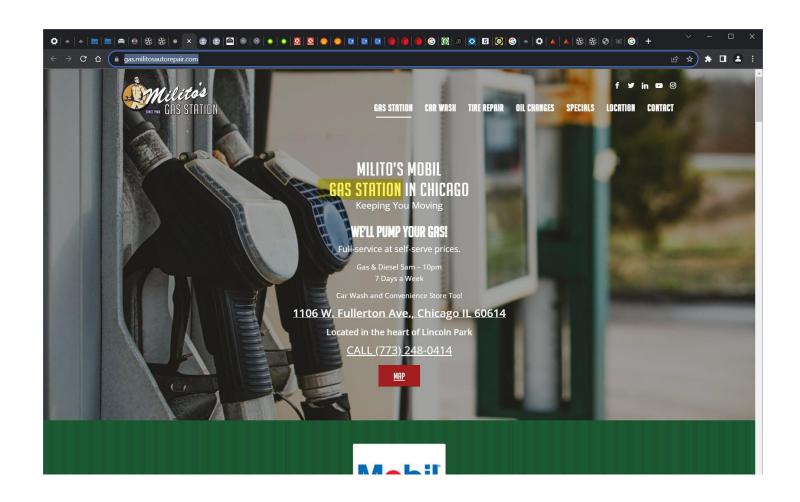


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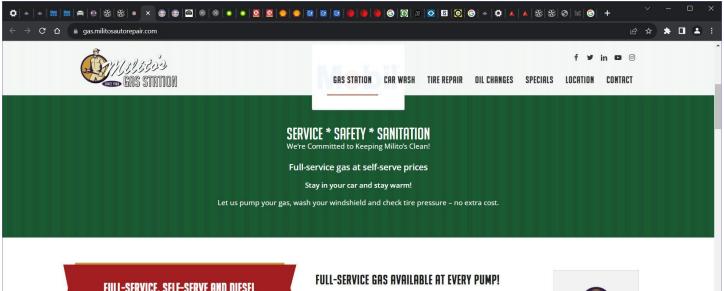


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# FULL-SERVICE, SELF-SERVE AND DIESEL View larger map W Diversey Pkwy W Diversey Pkwy W Diversey Pkwy W Milto's Mobil Gas Station Lincoln Park Conservate Milto's Mobil Gas Station Lincoln Park Conservate W Amittage Ave W Armitage Ave

Avoid nasty weather better at Milito's! Simply pull up to any gas pump and we'll take care of the gas, plus wash your windshield, check your tires and answer car care questions.

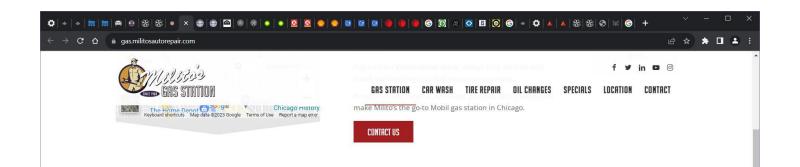
Conveniently located in the heart of Lincoln Park, Milito's Mobil Gas Station gives you big city access with a neighborhood feel.

Self-service, full-service, and diesel fuel provide you with exactly what you need, right around the corner. We offer Top-Tier Mobil Fuels that exceed EPA standards including Diesel #2.

Pop into our **convenience store**, always fully stocked with snack and beverages to fuel you on any journey.

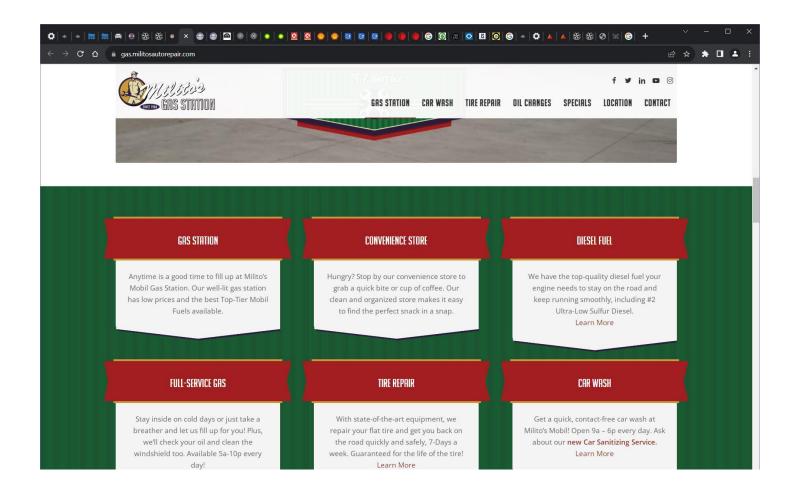


"Staying in my car when it's snowing and cold, while the great guys pump my gas is the reason I go out of my way to Milito's!" – Jen L. 9:21:43 AM 8/24/2023

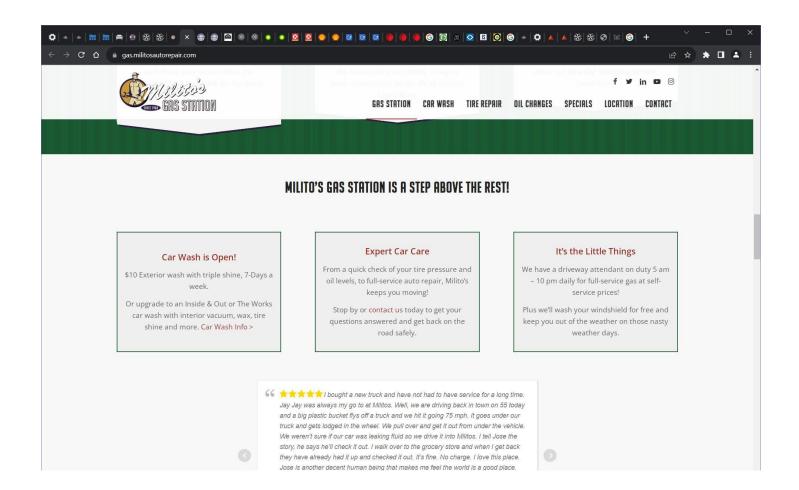




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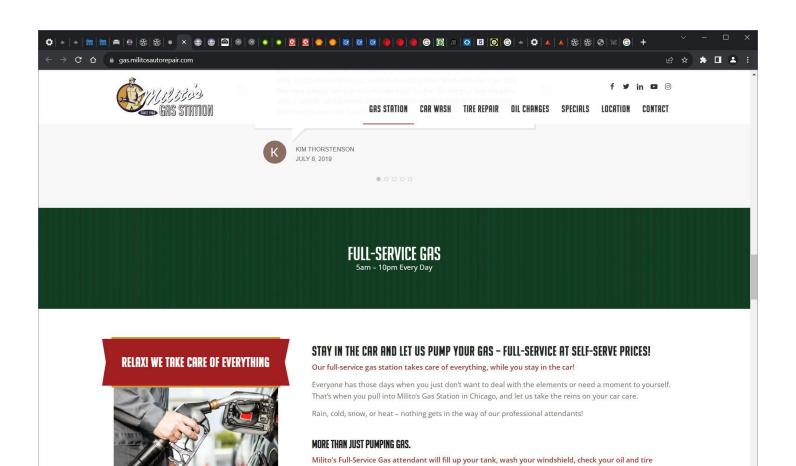
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Did I mention they were busy? Best place ever.

KIM THORSTENSON
JULY 8, 2019

9:21:53 AM 8/24/2023

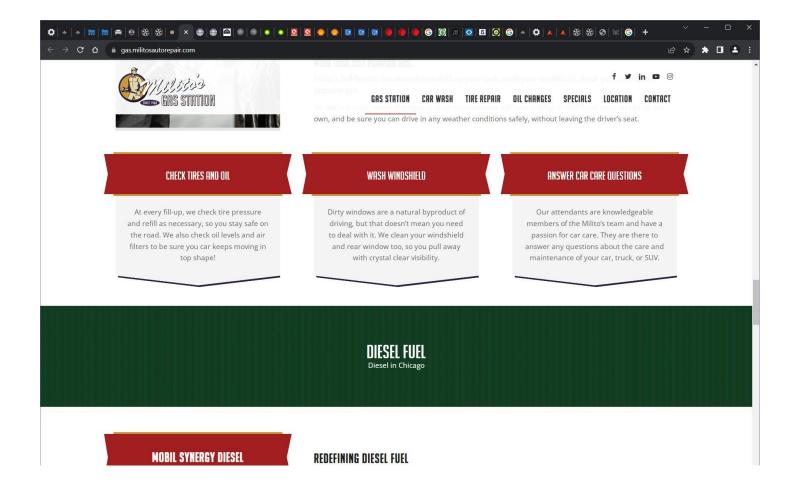


pressure too.



An old-fashioned sense of service and car maintenance still lives at Milito's! We'll treat your car like it's our own, and be sure you can drive in any weather conditions safely, without leaving the driver's seat.

9:21:56 AM 8/24/2023

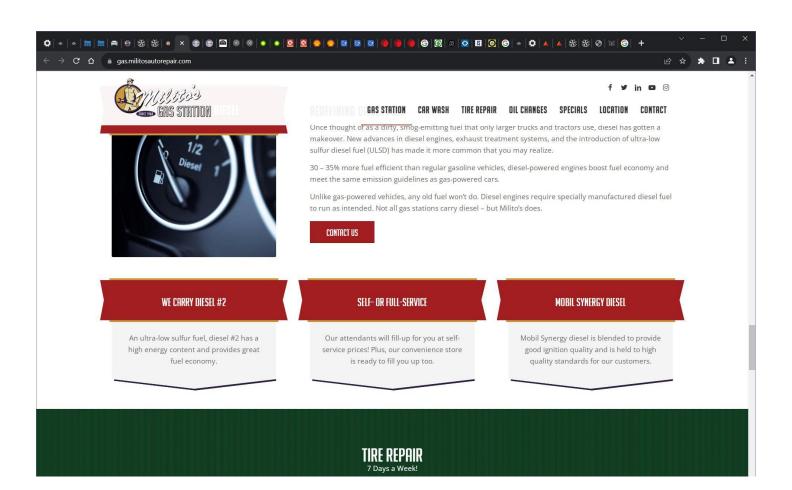




Once thought of as a dirty, smog-emitting fuel that only larger trucks and tractors use, diesel has gotten a makeover. New advances in diesel engines, exhaust treatment systems, and the introduction of ultra-low sulfur diesel fuel (ULSD) has made it more common that you may realize.

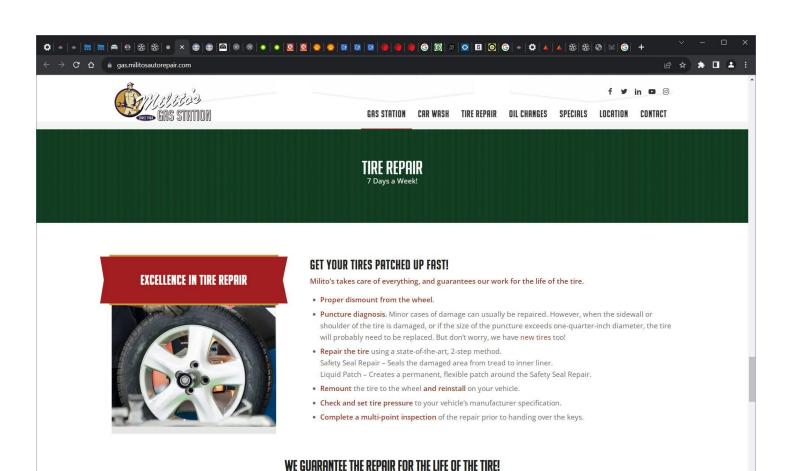
30-35% more fuel efficient than regular gasoline vehicles, diesel-powered engines boost fuel economy and meet the same emission guidelines as gas-powered cars.

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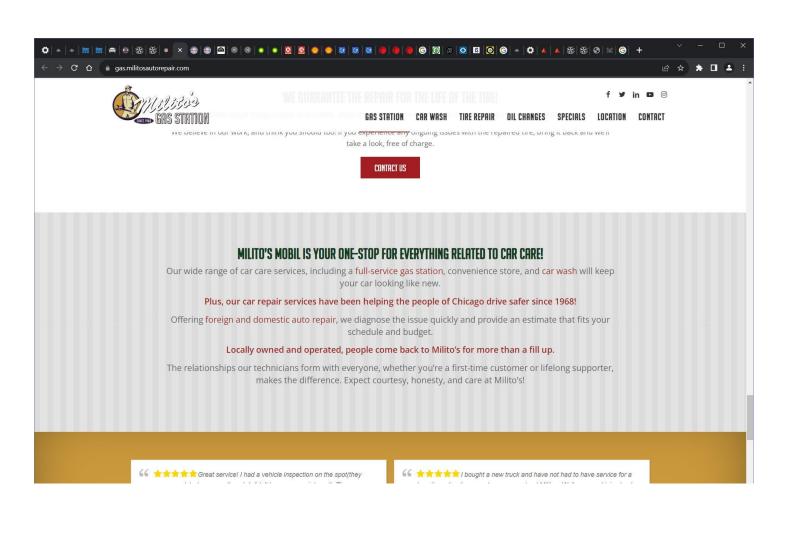


Milito's keeps things simple and honest. After repairing your tire, we guarantee that repair for the life of the tire.

We believe in our work, and think you should too! If you experience any ongoing issues with the repaired tire, bring it back and we'll take a look, free of charge.

CONTACT US

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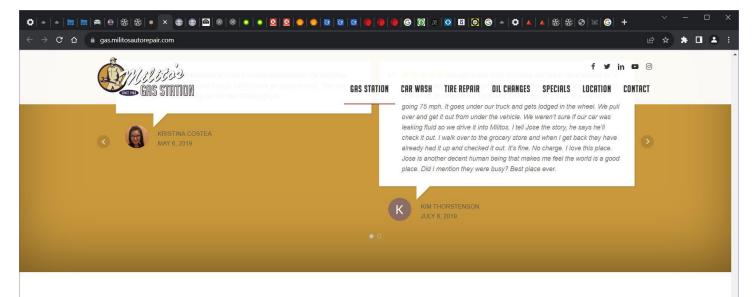




iong time. Jay Jay was always my go to at militos, well, we are driving back in town on 55 today and a big plastic bucket flys off a truck and we hit it going 75 mph. It goes under our truck and gets lodged in the wheel. We pull over and get it out from under the vehicle. We weren't sure if our car was leaking fluid so we drive it into Militos. I tell Jose the story, he says he'll check it out. I walk over to the grocery store and when I get back they have already had it up and checked it out. It's fine. No charge. Llove this place.



9:22:11 AM 8/24/2023



# 5 WAYS TO IMPROVE YOUR GAS MILEAGE



With gas prices as they are in Chicago right now, every gallon counts. And you don't need to buy a brand-new car to help improve your gas mileage.

A few small tweaks here and there can actually make a big difference. Here are 5 easy ways to stretch a gallon.

- Replace your air filters
- Monitor tire air pressure
- Check spark plugs

Keep engine oil clean
 Drive conservatively

Get the most from your gas mileage!

RERD THE FULL ARTICLE

9:22:14 AM 8/24/2023





## WHY USE SYNTHETIC OIL?

The main difference between synthetic oil and traditional oil is at the level of refinement.

The result is that **synthetic oils generally protect your vehicle better** than conventional oils, have some performance advantages, particularly in extreme temperatures, and last longer.

Synthetic Oil Will:

Keep your engine cleaner



### BEST HIGH MILEAGE OIL

It's not unusual for today's engines to run well past 200,000 miles and show little significant wear. But in order for that to be the case, you need to have the right maintenance and the proper meter oil.

A motor oil that is specifically made for high mileage vehicles will contain additives that will help:



### WHAT'S THE BEST OIL?

One of the best ways to take care of your engine is to use the best motor oil for your car. Oil is the lifeblood of your machine, and without it, you'll soon be without a ride.

Here's why Milito's Auto Repair of Chicago chooses Castrol® and Mobil 1® oil and why you should too.

Castrol offers a range of advanced motor oil for your car, including synthetic, synthetic blend,

- Protect the engine from wear and tear
- Provide better protection in the winter and summer

Did you know that you can change from conventional oil to synthetic? Just contact Milito's

- Prevent oil leaks
- Reduce sludge in your engine
- Protect from general wear and tear

high mileage, conventional and diesel oils.

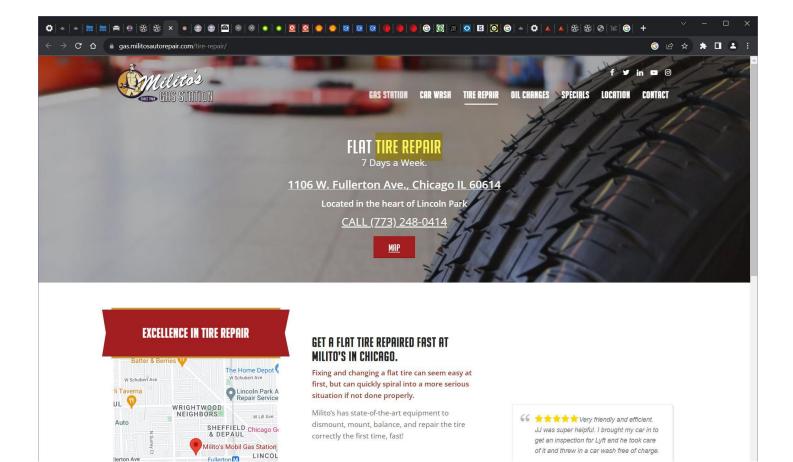
With Mobil 1 Oil, the performance is very robust, especially in terms of low temperature pumpability and high temperature stability and protection against deposits. In both cases, this



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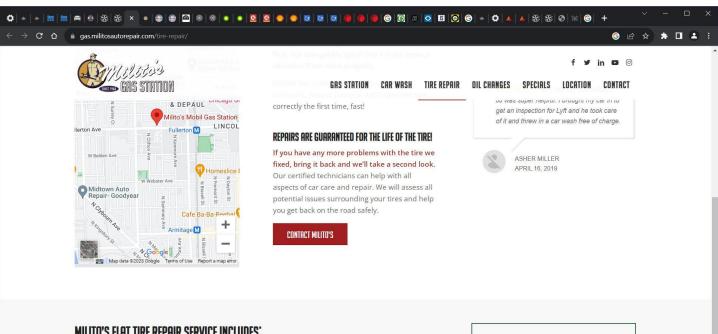


### REPAIRS ARE GUARANTEED FOR THE LIFE OF THE TIRE!

If you have any more problems with the tire we fixed, bring it back and we'll take a second look. Our certified technicians can help with all aspects of car care and repair. We will assess all



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## MILITO'S FLAT TIRE REPAIR SERVICE INCLUDES:

- Proper dismounting of the tire from the wheel.
- Puncture diagnosis. Minor cases of damage can usually be repaired. However, when the sidewall or shoulder of the tire is damaged, or if the size of the puncture exceeds one-quarter-inch diameter, the tire will probably require replacement.
- Repair the tire using two state-of-the-art repair components: Safety Seal Repair - Seals the damaged area from tread to inner liner, creating the perfect repair. Liquid Patch - Creates a permanent, flexible patch around the Safety Seal Repair on the inner liner of the
- Remount the tire to the wheel and properly reinstall on your vehicle.

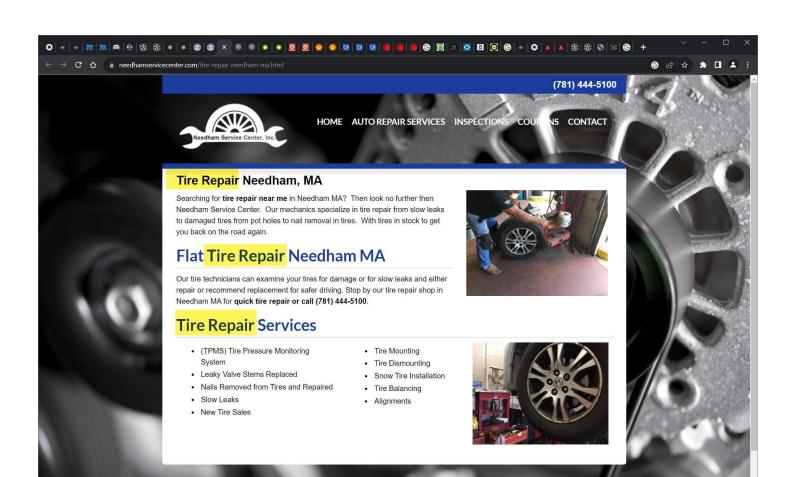
## WE GUARANTEE THE REPAIR FOR THE LIFE OF THE TIRE!

Milito's Auto Repair keeps things simple and honest. After repairing your tire, we guarantee that repair for the life of the tire. We believe in our work, and think you should too! If you are still experiencing issues, bring your car, truck • Check and set tire pressure to your vehicle's specification.
• Complete a multi-point inspection of the repair prior to handing over the keys.

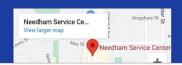
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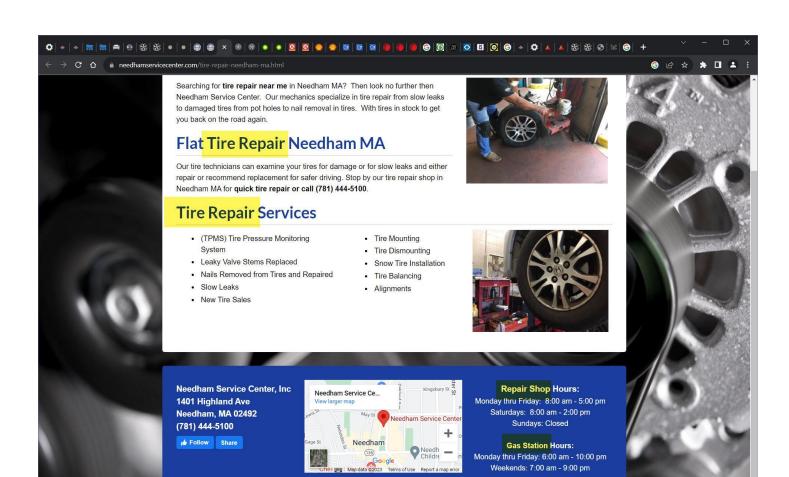
Needham Service Center, Inc 1401 Highland Ave Needham, MA 02492 (781) 444-5100



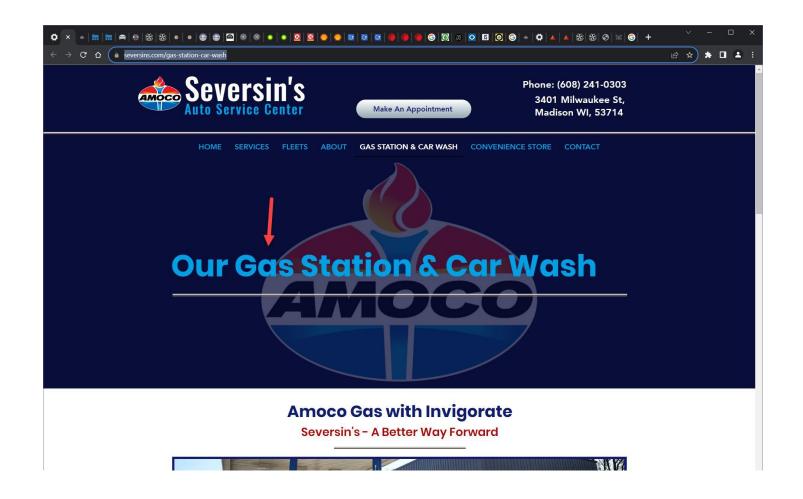
Repair Shop Hours: Monday thru Friday: 8:00 am - 5:00 pm Saturdays: 8:00 am - 2:00 pm Sundays: Closed



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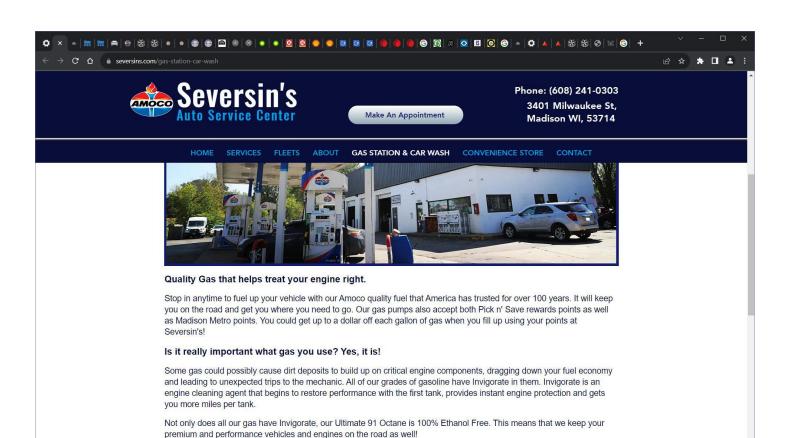


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Seversin's TurtleWax Car Wash

## Seversin's - A Better Way Forward

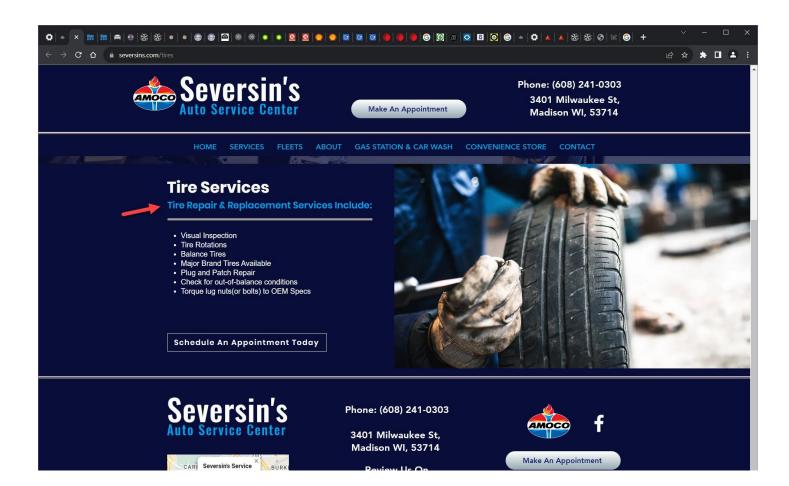
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- Balance Tires
   Major Brand Tires Available
   Plug and Patch Repair
   Check for out-of-balance conditions
   Torque lug nuts(or bolts) to OEM Specs



9:18:28 AM 8/24/2023









9:18:36 AM 8/24/2023

## **United States Patent and Trademark Office (USPTO)**

## USPTO OFFICIAL NOTICE

Office Action (Official Letter) has issued on August 29, 2023 for U.S. Trademark Application Serial No. 97354145

A USPTO examining attorney has reviewed your trademark application and issued an Office action. You must respond to this Office action to avoid your application abandoning. Follow the steps below.

- (1) Read the Office action. This email is NOT the Office action.
- (2) Respond to the Office action by the deadline using the Trademark Electronic Application System (TEAS) or the Electronic System for Trademark Trials and Appeals (ESTTA), as appropriate. Your response and/or appeal must be received by the USPTO on or before 11:59 p.m. Eastern Time of the last day of the response deadline. Otherwise, your application will be abandoned. See the Office action itself regarding how to respond.
- (3) **Direct general questions** about using USPTO electronic forms, the USPTO <u>website</u>, the application process, the status of your application, and whether there are outstanding deadlines to the <u>Trademark Assistance Center (TAC)</u>.

After reading the Office action, address any question(s) regarding the specific content to the USPTO examining attorney identified in the Office action.

## **GENERAL GUIDANCE**

- <u>Check the status</u> of your application periodically in the <u>Trademark Status & Document Retrieval (TSDR)</u> database to avoid missing critical deadlines.
- <u>Update your correspondence email address</u> to ensure you receive important USPTO notices about your application.
- Beware of trademark-related scams. Protect yourself from people and companies that
  may try to take financial advantage of you. Private companies may call you and pretend
  to be the USPTO or may send you communications that resemble official USPTO
  documents to trick you. We will never request your credit card number or social security
  number over the phone. Verify the correspondence originated from us by using your
  serial number in our database, TSDR, to confirm that it appears under the "Documents"
  tab, or contact the Trademark Assistance Center.

• Hiring a U.S.-licensed attorney. If you do not have an attorney and are not required to have one under the trademark rules, we encourage you to hire a U.S.-licensed attorney specializing in trademark law to help guide you through the registration process. The USPTO examining attorney is not your attorney and cannot give you legal advice, but rather works for and represents the USPTO in trademark matters.