To: Paul Luke, Chairman, Skokie Plan Commission
From: Brian J. Augustine, Zoning Administrator and Permit Manager
Case: **2023-12P: Zoning Chapter Amendment**
EV Parking changes

### General Information

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<td>The Village of Skokie is requesting an amendment to Section 118-70 and Article XI of the Skokie Village Code to modify provisions for Electric Vehicle Charging Stations.</td>
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### STAFF ANALYSIS

As part of the Environmental Sustainability Plan, staff is reviewing different sections of the Zoning Ordinance to find ways to encourage sustainability. The latest review focused on electric vehicle charging stations and ways the Village of Skokie could achieve EV (Electric Vehicle) Certification through the Metropolitan Mayors Caucus. It was determined that Bronze Certification was achievable with some zoning text changes. There are several other non-zoning related items that have been or will be completed along with the zoning changes.

The zoning changes that are needed to achieve the Bronze Certification focus on the following areas: 1) permitting EV charging stations in all zoning districts, 2) classifying EV charging stations as an accessory use, 3) clarifying accessibility and site design and requirements, 4) clarifying authorized use of EV spaces and 5) allowing EV charging spaces to count as required off-street parking spaces.

The first item is a text change clarifying that EV charging stations are permitted in all districts where a vehicle may be parked. Currently this is limited to residential districts. In non-residential districts EV spaces are an added benefit to a parking lot.

The second item relates to classifying EV charging stations as an accessory use. The proposed text change will clearly show EV charging stations are permitted as an accessory use within any parking lot or structure in all zoning districts.

The third area focuses on accessible EV parking spaces and accessibility to and from the parking spaces. Spaces and site requirements will now be required to follow ADA (American Disability Act) and ABA (Architectural Barriers Act) Accessibility Standards. This update will ensure the Village of Skokie clearly follows federal standards for accessible EV spaces and access to them.
The fourth item clarifies who is authorized to use an EV charging station and that we follow the Illinois Vehicle Code regulations.

The fifth area of review allows EV charging spaces to count as required off-street parking spaces. This change is probably the item that will have the greatest impact of all of the proposed changes. Currently EV charging spaces do not count towards required off-street parking. This makes it difficult, if not impossible, to add EV charging spaces if you are providing the minimum required on-site parking.

Staff found a Car and Driver online article that estimates that 1 percent of cars on the road in the U.S. were EV in 2022. That same article projects 20-25 percent of new car sales could be electric by 2030 and 40-45 percent by 2035. Even if these projections are on the high end, our current regulations do make it difficult to add EV spaces to existing built up properties. The lack of EV spaces could lead to the potential loss of a customer or a future employee. The proposed text change would allow a site to count an EV charging space as a required off-street parking space.

**STAFF RECOMMENDATION**

Staff recommends that the following sections of Chapter 118 Zoning of the Skokie Village Code be amended, with text to be added highlighted and text to be removed highlighted and struck through in the attached draft ordinance.

**ARTICLE IV. GENERAL PROVISIONS**

**Sec. 118-70. - Electric vehicle charging stations.**

(a)  *Station location.* In residential all districts, an electric vehicle charging station is permitted in any area where a vehicle may be parked. In all—other districts, the station is permitted for use with any legal parking space that is not in a required vehicle parking space, except when that parking space is dedicated to a specific residence.

(b)  *Equipment location.* The charging station equipment must not impede pedestrian, bicycle, or vehicular traffic or be located within the required area of the legal parking space, vehicle overhang, or associated circulation aisles as required by this chapter.

(c)  *Accessory use.* EV charging stations are permitted as an accessory use within any parking lot or structure in all zoning districts

(e) (d)  *Requirements for public use.* When the station is intended to be used by the public:
(1) **Equipment protection.** Adequate protection of charging station equipment from vehicles must be provided, such as curbing, bollards, or wheel stops.

(2) **Signage.** Any charging station that is intended to be used for multiple users must have signage indicating that parking is for electric vehicle charging only, a phone number or other contact information to report when the equipment is not functioning properly, and any time limits on use, tow away, or fine provisions.

(3) **Parking space identification.** The parking space must be identified per the Electric Vehicle Charging Station Guidelines.

(4) **Accessibility.** Electric vehicle charging parking space designs and site requirements for accessibility to and from parking spaces, facilities, buildings, and other elements must comply with the technical accessibility requirements of ADA (American Disability Act) and ABA (Architectural Barriers Act) Accessibility Standards. The EV Charging Station design must comply with ADA and ABA requirements for operable parts and other accessibility standards. Parking space signage should indicate whether the space is for ADA parking only or whether the space can be used by non-ADA vehicles to park under conditions specified by the signage.

(4)(5) **Principal use.** If the primary purpose of the lot is the charging of vehicles, the use is considered an automotive fuel station for zoning purposes.

(6) **Authorized Use:** Authorized use of electric vehicle charging stations should be in accordance with the Illinois Vehicle Code (ILCS 625 ILCS 5/11-1308).

**ARTICLE XI. OFF-STREET PARKING AND LOCATING FACILITIES**

**Sec. 118-218. Required number of off-street motor vehicle parking spaces.**

(a) **Calculation of number of spaces.**

(1) **Fractional numbers.** When determination of the number of parking spaces required by this article results in a requirement of a fractional space, any fraction less than ½ may be disregarded, while a fraction ½ or greater shall be counted as 1 parking space.

(2) **Required on an employee basis.** Parking spaces required on an employee basis shall be based on the average number of employees during the highest period of employment.
(3) Owned, rented, or leased vehicles. Except for residences, in addition to the minimum requirements listed in subsection (b), 1 additional parking space shall be required for each vehicle owned, rented, or leased by the use that is kept on site.

(4) EV Parking Spaces Electric vehicle charging stations may be located in required off-street parking spaces and may be counted toward satisfying minimum off-street parking space requirements.

ATTACHMENTS
1. Website link to Architectural Barriers Act Accessibility Standards
   https://www.gsa.gov/real-estate/design-and-construction/accessible-facility-design
2. 625 ILCS 5/11-1308
3. Car and Driver article updated August 8, 2022
(625 ILCS 5/11-1308)

Sec. 11-1308. Unauthorized use of parking places reserved for electric vehicles.

(a) For the purposes of this Section:
"Electric vehicle" means a battery-powered electric vehicle operated solely by electricity or a plug-in hybrid electric vehicle that operates on electricity and gasoline and has a battery that can be recharged from an external source.
"Electric vehicle charging station" means any facility or equipment that is used to charge a battery or other energy storage device of an electric vehicle.

(b) It shall be prohibited to park a non-electric vehicle in an electric vehicle charging station designated for use by electric vehicles, including an electric vehicle charging station on any private or public off-street parking facility. A person may park only an electric vehicle in an electric vehicle charging station space designated for use by electric vehicles.

(c) Any person or local authority owning or operating any public or private off-street parking facility may, after notifying the police or sheriff's department, remove or cause to be removed to the nearest garage or other place of safety any non-electric vehicle parked within an electric vehicle charging station space designated for use by electric vehicles.

(d) It shall not be a defense to a charge under this Section that the sign or notice posted at the electric vehicle charging station or the designated parking space does not comply with applicable rules, regulations, or local ordinances, if a reasonable person would be made aware by the sign or notice on or near the parking space that the space is reserved for electric vehicles.

(e) Any person found guilty of violating the provisions of subsection (b) shall be fined $75 in addition to any costs or charges connected with the removal or storage of the non-electric vehicle; but municipalities by ordinance may impose a fine up to $100.
(Source: P.A. 99-172, eff. 1-1-16.)
Electric Cars' Turning Point May Be Happening as U.S. Sales Numbers Start Climb

EVs are still far from mainstream, but a 60 percent rise in new-EV registrations is definitely a sign they're getting closer.

BY SEBASTIAN BLANCO  UPDATED: AUG 8, 2022

- Mass-market EVs have been available in the U.S. for more than a decade, but there have only been small, incremental changes in electric car sales for most of that time.
• However, in the first three months of 2022, EV registrations shot up a huge 60 percent even as the overall market was down 18 percent, according to a report by Automotive News.

• With great U.S. EV sales comes great charging station responsibility, and figuring out how to offer public charging options to all of these early adopters is an ongoing concern.

Update (8/8/22): This piece now includes additional information related to electric car sales in the United States.

American car shoppers appear to have discovered electric vehicles. After a decade of slow but steady sales growth, electric vehicle registrations in the U.S. shot up 60 percent in the first quarter of 2022, even as overall new car registrations dropped 18 percent, per a report by Automotive News that used data collected by financial data firm Experian. It’s the latest indication that domestic EV acceptance may have turned some important but invisible corner recently.

What Percentage of New Car Sales are Electric?

The sharp increase in electric-vehicle registrations at the start of 2022 meant that the EV share of the overall market in the U.S. hit a historic 4.6 percent. While places like Norway—where over 86 percent of all new vehicle sales were electric in March—may laugh at that number, EV advocates know that change happens slowly, then all at once, or something like that.

Currently, it’s estimated that around 1 percent of the 250 million cars, SUVs, and light-duty trucks on American roads are electric. However, while it's difficult to estimate future sales, an analysis by IHS Markit projects that 25–30 percent of new car sales could be electric by 2030 and then 40–45 percent by 2035. Using the rates for those projections, Reuters estimates that by 2050 more than half of the vehicles on U.S. roads could be EVs.
This Automaker Has the Most Electric Car Sales (For Now)

One big reason we’re seeing more EVs in people’s driveways is the explosion in exciting new models, from the Ford F-150 Lightning to the Kia EV6 to the Hyundai Ioniq 5. Experian calculated that there were 158,689 new EV registrations in the first three months of 2022.

The big winners were EVs from Tesla (up 59 percent to 113,882 new registrations), Kia (up more than eight-fold to 8,450), Ford (up 91 percent to 7,407), and Hyundai (up more than 300 percent, to 6,964), according to Automotive News. These plus other electric car sales (the Nissan Leaf and the Volkswagen ID.4 were both in the top 10) helped the segment grow to that 4.6-percent record.

Automotive News notes that it and Experian used registration data to get a clearer picture of EV sales in the U.S., since, for example, Tesla does not release sales figures. Other industry analysts have slightly different figures for EV sales at the start
of 2022, but they all show major increases compared to last year. Cox Automotive's estimate of the EV market share for the first quarter of 2022, for example, was 5.2 percent compared to 2.5 percent in 2021. Whatever the exact numbers, something's certainly happening out there.

You'll Guess Which State Sells the Most Electric Car Sales

No surprise, California has the most EV sales out of all 50 states, accounting for 1,135,387 total units as of April 2022, according to an EV market report by Veloz. That's almost 43 percent of all new electric car sales in America between 2011 and 2022. The U.S. Department of Energy also released data on electric-vehicle registrations in 2021. After California, which had 563,070, the states with the most EV registrations are Florida (96,640), Texas (80,900), Washington (66,810), and New York (51,870), respectively. Meanwhile, states such as North Dakota (380), Wyoming (510), South Dakota (680), West Virginia (1010), and Alaska (1290) made up the bottom five.
U.S. DEPARTMENT OF ENERGY

Public Charging an Ongoing Concern

More EVs on the road might seem like good news, but some people see danger ahead, particularly when it comes to public charging. Despite the fact that most EV charging happens at home, this isn’t a solution for everyone, which means public charging needs to be readily available for some to keep raising the number of EVs sold.

The age-old chicken vs. egg story remains alive and well in the EV charging infrastructure world, with a story in the Los Angeles Times in April saying that DC fast-charging station operators need eight to 10 charge sessions a day to turn a "decent return," but if you also need to have enough fast-chargers available so that drivers don’t face too many waiting times. Finding the balance, especially with EV sales surging, could prove difficult.
Tested: Mercedes-AMG EQS vs. Tesla Model S Plaid

Tested: Kia EV6 Is Comfortable, Composed, Quick

Tested: 2022 Hyundai Ioniq 5 Charges Forward

Will Automakers Prioritize EV Sales?

Supply-chain problems plaguing the auto industry may have an impact on which cars are being sold, given that some automakers have to make production decisions about which models to build or not build based on the supply of semiconductor chips or other components in short supply.

If you’ll allow a bit of speculation, the fact that EVs command more attention from the public and the higher starting prices for many EVs could be two potential reasons for automakers to prioritize EVs over internal combustion engine vehicles.
SEBASTIAN BLANCO
CONTRIBUTING EDITOR

Sebastian Blanco has been writing about electric vehicles, hybrids, and hydrogen cars since 2006. His articles and car reviews have appeared in the New York Times, Automotive News, Reuters, SAE, Autoblog, InsideEVs, Trucks.com, Car Talk, and other outlets. His first green-car media event was the launch of the Tesla Roadster, and since then he has been tracking the shift away from gasoline-powered vehicles and discovering the new technology's importance not just for the auto industry, but for the world as a whole. Throw in the recent shift to autonomous vehicles, and there are more interesting changes happening now than most people can wrap their heads around. You can find him on Twitter or, on good days, behind the wheel of a new EV.

Read full bio

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