



February 2023 FVEAA Newsletter

Fox Valley Electric Auto Association

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago-area chapter of The Electric Auto Association

This month's meeting is on Friday **February 17, 2023**
7:00 p.m. and will be IN-PERSON and on Zoom

For February and next month

102 S 2nd St, Geneva, IL 60134

MAP: [Unitarian Universalist Society of Geneva](#)

Note for those needing charging: Plugshare shows 1 Tesla HPWC Destination Charger, up to 64A, and 1 ClipperCreek J1772.EVSE about three blocks east of the Unitarian facility at 15 S River Lane, behind the Police Station - near Atwater's restaurant by the river. (There is also a dual head ChargePoint station at one EV parking space two blocks to the NorthWest at the Courthouse, just off James St. at 4th St. - Building B side entrance. - [ChargePoint](#) (but check the notes to see if it is working!))

Pre-meeting setup check starts at 6:45pm.

Meeting starts at 7pm and will run until 9pm.

Use this information to connect if you want to join remotely:

Topic: FVEAA February 17, 2023 Monthly Meeting

Time: Fri February 17, 2023 6:45 PM CST (pre-meeting setup check), Meeting 7:00 PM

Join Zoom Meeting:

<https://us02web.zoom.us/j/95901481473?pwd=UnpJVUJOUmVPOFZqR013ZFpPbzM0UT09>

Dial-in for audio-only users: Call: 312-626-6799

Enter Meeting ID when prompted: 95901481473#

Participant ID: (blank, just #) *6 mutes/unmutes your line, *9 raises your virtual hand

Contact us if you need the password for audio only calls.

Agenda

- 6:45 Doors Open
- 7:00 Saieed Ahmed - Transformer substation operation
- 7:40 Break
- 8:20 Jeff Miller - Colorado residential charging station requirements
- 8:30 Introductions

Vice President's Words

Tracey McFadden

Greetings fellow EV enthusiasts,

Our January FVEAA meeting was well received. Attendees seemed to enjoy the new venue at the Unitarian Universalist church in Geneva for its central location and comfortable room. We will meet in the same room in February. The address is 102 South Second Street, Geneva IL 60134. Parking is on 2nd street or on James Street.

We are asking all members to take a moment and make a call or send a quick email to their Illinois congressman asking them to reintroduce HB 2135 – the Electric Vehicle Charging Act. The bill is in line with the Electric Vehicle Associations goal of accelerating the adoption of electric vehicles.

It's very simple – just type your address into the website below, and you will be given your congressman's name, email, and phone number. Look for the send email button on the website by your congressman's photo to quickly send an email. Simply say "Please reintroduce HB 2135 – the Electric Vehicle Charging Act".

<https://www.illinoispolicy.org/bymaps/illinois-house/>

The bill is applicable to new or renovated residential or nonresidential buildings and sets forth requirements for parking spaces that are electrical vehicle ready. It also sets forth provisions concerning EV charging station policies for unit owners and renters. For further explanation see the summary diagram below. By passing this at the state level, it saves time, money, and effort by not having to pass separate ordinances in each community.

I'm looking forward to seeing you at the February meeting.

Tracey

ILLINOIS HOUSE BILL 3125 OVERVIEW
Electric Vehicle Charging Act
 As Proposed on February 25, 2022 (Amendments 1 and 2)

SUMMARY

The Electric Vehicle Charging Act (IL HB 3125) will require electric vehicle (EV) charging infrastructure in parking areas of new or renovated residential buildings effective immediately upon passage. Local governments will be responsible for enforcing this act within development permits.

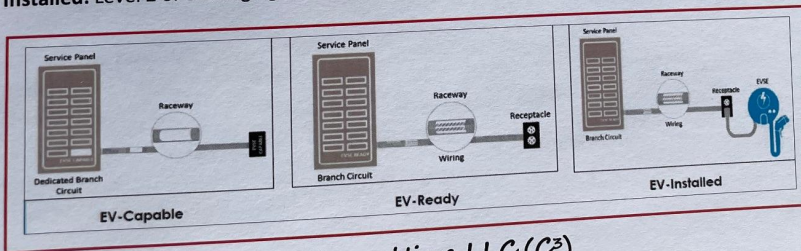
Affordable housing developments and renovations have differing requirements.

| Development Type | EV Capable | EV Ready | EV Installed |
|---|------------|------------|--------------|
| Single Family | 1 | | |
| Small Multi-Family Residential (2 to 4 units) | 1 per unit | | |
| Large Multi-Family Residential (5 units or more) | | | |
| 1 - 6 parking spots | | 100% | |
| 7 - 23 parking spots | 100% | 20% | |
| 24 or more parking spots | 100% | 5 or more* | 1 or more |

* For each spot with EV Installed, EV Ready can be decreased by 2%.

DEFINITIONS

- **EV Capable:** Electric panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the parking spot installed
- **EV Ready:** Electric panel capacity and raceway with conduit to a junction box or 240-volt charging outlet installed at parking spot.
- **EV Installed:** Level 2 or 3 charging station installed at parking spot.



INFORMATION SOURCES

- <https://www.ilga.gov/legislation/102/HB/PDF/10200HB3125lv.pdf>
- <https://www.chargedfuture.com/ev-capable-ev-ready-and-ev-installed/>



Confluence Climate Consulting LLC (C³)
 ConfluenceClimate@outlook.com

4/8/2022

President's Words

Jeff Miller

January Meeting

Thanks to Ted Liu for his road trips strategies. Ted does more road trips than I do, and his approach has evolved because of it. For example, he plans his hotels to be near fast chargers instead of trying to get a hotel with charging. I agree that my hotels should be near fast charging too, I still try to book with AC charging, but use fast charging as a back up. Tracey did a nice presentation on Solid State battery technology and the companies behind it.

February Meeting

Saieed Ahmed is going to kick off the meeting for us by presenting on future substation technology. Saieed is a substation engineer for ComEd. He has other things going on Friday night, so he will be presenting first thing, and introductions will be at the end of the meeting. Bring your questions about grid reliability. Saieed will also be presenting via ZOOM, as he is out of town right now. Second I will be presenting on Colorado's residential charging station requirements.

Articles I found interesting

<https://arstechnica.com/cars/2023/02/toyota-will-recall-16680-rav4-primers-due-to-faulty-battery-software/>

<https://www.swenergy.org/transportation/electric-vehicles/building-codes>

<https://arstechnica.com/science/2023/02/new-battery-seems-to-offer-it-all-lithium-metal-lithium-air-electrodes/>

<https://arstechnica.com/science/2023/02/squid-skin-inspires-novel-liquid-windows-for-greater-energy-savings/>

<https://electrek.co/2023/01/22/tesla-leaks-magic-dock-ccs-adapter-opening-supercharger-network/>

Good news, if they do this you won't need to buy an adapter. Hopefully this also fixes the issue with Tesla cables falling off their hooks and into the snow, sometimes rendering them useless until warm weather.

<https://www.cnbc.com/2023/01/19/hertz-denver-partner-on-a-broad-electric-vehicle-and-charging-program.html>

Colorado doing more innovative things

<https://www.mullenusa.com/about-us>

Gibson's Garage

Simon Gibson

Not much to report this month but I am now looking to get fully conversant with CANBus... This is the messaging system found in most, if not all, modern vehicles. It's a robust system but there can be some head scratching. However, by becoming CANBus conversant perhaps the EV repair and rebuild and conversion industry will have a better time integrating products from different vendors!

On another note, the sudden reduction of Tesla prices makes for an interesting and perhaps challenging conversation. However, I'm thinking about the long term life cycle of vehicles. Where does Tesla fit in that scenario? If new vehicles start being produced by auto manufacturers with much longer warranties perhaps the actual Total Cost of Ownership (TCO) will become a better metric to measure the cost of personal transportation, and indeed the actual carbon cost.

Upcoming EEvents - 2023

Rich Hirschberg

Saturday April 22 - Earth Day at Peck Farm Park

Set up by 10 a.m.

Open 11:00am to 2:00pm - ALL AGES WELCOME!

The event is FREE. Come Celebrate the Earth!

FVEAA Members: Please get people thinking about collecting items for recycling: textiles, shoes, #6 styrofoam, etc. will be collected that day. See next line.

Activities

RECYCLING OPPORTUNITIES: SHOES, COTTON CLOTHES, SMALL ELECTRONICS, HOLIDAY LIGHTS, TVs (\$25 OR \$35 DEPENDING ON TV SIZE)

- FOOD VENDORS
- KIDS' ACTIVITIES & CHALK ART
- NATURE CRAFTS & DEMONSTRATIONS

Tree Planting

50 TREES WILL BE PLANTED AT PECK FARM
ARE YOU INTERESTED IN PLANTING WITH US?
REGISTRATION REQUIRED

- USE CODE 2611306-01

Questions?

VISIT GENEVAPARKS.ORG OR CALL 630-232-4542

The poster features a central graphic of a globe with a recycling symbol and a tree growing from a cup. Text on the poster includes: 'April 22nd Celebrate at Peck Farm Park! 11:00am-2:00pm ALL AGES WELCOME!'. It lists activities such as recycling opportunities (shoes, cotton clothes, small electronics, holiday lights, TVs), food vendors, kids' activities, and nature crafts. It also promotes tree planting with 50 trees to be planted at Peck Farm, requiring registration and the use of code 2611306-01. Contact information for questions is provided: GENEVAPARKS.ORG or call 630-232-4542. Logos for Geneva Park District, Geneva Park District Foundation, City of Geneva, Illinois, and the Natural Resources Committee are displayed at the bottom.



Meeting held at Unitarian Universalist Society of Geneva (Web site photo)

EV Road Trip Strategies

Ted Liu
<http://bit.ly/3GG7FzZ>

Make a plan

- Charging stations less prevalent than gas stations
- Start with shorter trips to learn your tolerances
- Battery buffer - elevation, cold, headwinds
- Register accounts on multiple charging networks
 - Especially ones you will use
- Carry charging equipment
 - Mobile connector
 - Adapters for different plug types (optional)
 - NEMA 5-15, 14-50
 - J1772 and/or CCS to Tesla
 - Tesla to J1772 (Teslatap)

A screenshot of a route planning application titled 'A Better Routeplanner'. It shows a route from Chicago, IL to Birmingham, AL. The total trip is 13 hours 55 minutes for 727 miles. The route includes several charging stops with details on arrival and departure times and battery levels. A map on the right shows the route path through Indiana, Kentucky, Tennessee, and Alabama.



Electric Vehicle Solid-state (SSB) Batteries



Tracey E. McFadden
VP Fox Valley Electric Auto Association



Welcome the FVEAA's new Charter Business Sponsor!

Ted Lowe

Say welcome to our new sponsor: **Chicago Area Clean Cities** (CACC)! CACC sponsored the north NDEW Event with the help of Rich Hirschberg and Samantha Bingham. Our website sponsor's page (<https://www.fveaa.org/sponsors>) has been updated as well as the sponsors listing in this newsletter. Thank you for your support and welcome aboard!

FVEAA business cards available!

Ted Lowe

See one of the officers to get some cards to hand out to people at various Events and daily life to promote EVs and our organization!

Fox Valley Electric Auto Association

PO Box 214
Wheaton, IL 60187-0214

630-260-0424
contactfveaa@fveaa.org

Free Yourself From The Pump^{fm}



Join Us and Discover How!

Check fveaa.org for details about our **monthly meetings!**



Login to our FVEAA website for access to lots of member-only tools!

Ted Lowe

Hi Folks, If you haven't logged in to our website already, please check your email for instructions and login to check it out! Please let me know if you have any questions. Thanks!



FVEAA Web Report

as of 2023-02-15 04:58:10

Website Registered User Statistics

| Statistic | Value |
|----------------------------|------------|
| Total Users | 99 |
| Users Never Logged In | 37 |
| % Active Users | 62.6% |
| Ave. Days Since Last Visit | 525.7 days |

FVEAA On Facebook - Join Us! Like Us!

Ted Lowe

The **FVEAA Facebook group** has 119 members as of 1/17/22! If you're on Facebook but not in the group yet, please join us! If you're not on Facebook yet, please consider joining so you can join our group there. This group supplements our forums because it is much easier to use, read, post pictures and videos and get notifications. Please let me know if you have any questions/comments/suggestions. Hope to see you there!

<https://www.facebook.com/groups/889497691136309/>

Here is the **FVEAA's Facebook Page**. Like Us!

<https://www.facebook.com/FoxValleyElectricAutoAssociation>

FVEAA On YouTube - Check out our videos!

Ted Lowe

The **Fox Valley Electric Auto Association** has a YouTube channel! Subscribe to us and check out our videos! We've had this channel for many years but we're going to start using it more to attract new members and promote EVs. Please let me know if you have some FVEAA-related videos to post.

https://www.youtube.com/channel/UCg_Pgp6g-HEuMICWMO2akPw

Membership Update

Ted Lowe

We currently have **71 active paid-up** members. Many members have taken advantage of the multi-year renewals offered by the new website! **Please renew & recruit new folks!!!**



FVEAA Membership Report

as of 2023-02-15 04:58:10

Count of Members by Type

| Membership Type | Count | Paid Up |
|------------------|-------|---------|
| Business | 1 | 1 |
| Charter Business | 1 | 1 |
| Family | 4 | 4 |
| Individual | 63 | 63 |
| Lifetime | 2 | 2 |
| Totals | 71 | 71 |

Other Statistics

| Statistic | Value |
|-------------------|------------|
| % Paid Up | 100.0% |
| Avg. Paid Up Days | 353.9 days |
| % With Email | 97.2% |

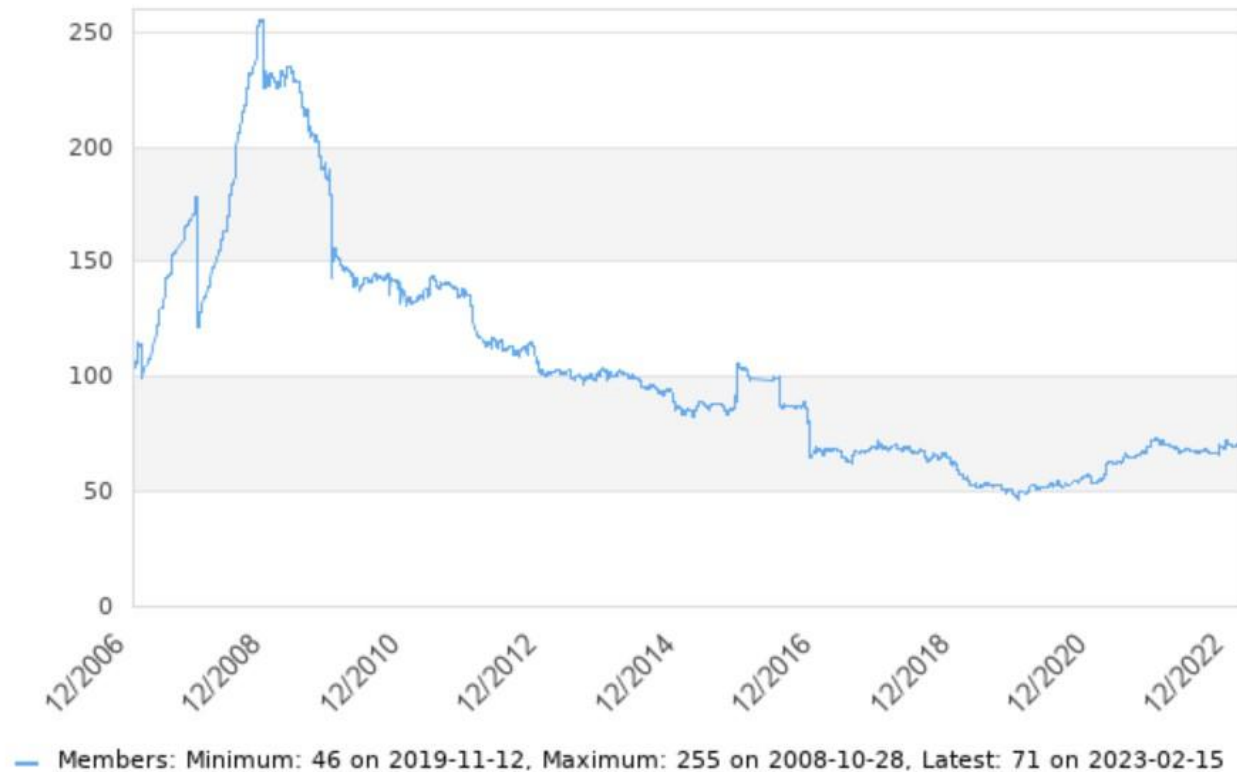
Encouraging Our Membership To Grow and Some History

Ted Lowe

We are growing! We live in a large metro area with 8 million people and EVs are the latest buzz so we should be able to grow the FVEAA! **Please invite your friends, neighbors, family, colleagues**, etc. to FVEAA meetings and Events. Volunteer to attend Events on behalf of the FVEAA (with or without an EV)! Your ideas on how to help grow the FVEAA are welcomed at any time, thanks! Howard Hansen had a **great idea**... giving an FVEAA membership as a gift!

Here is a time-varying graph of our membership size from 2007 to now. Note that we peaked at 255 members in October 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational Events with our converted EVs. The first Tesla Roadster was just coming into being. **Let's get out there and grow the FVEAA!!!**

FVEAA Paid Up Members as of February 15, 2023 9:56am



Monthly Treasurer Reports

Ted Lowe

As Treasurer, I am publishing a brief Treasurer's Report to our forums around the time our monthly newsletter is published.

I am publishing our various cash balances (Money Market, Checking, PayPal) to this location: [FVEAA Committees > Finance > Treasurer Reports](#)

This area of the forums can only be seen by FVEAA members. As an IL Non-Profit corporation, we have no requirement to publish our assets or financial statements publicly.

Feel free to contact me if you have any FVEAA financial matters to discuss.

Membership Renewals

Ted Lowe

Our membership system sends out "renewal reminder emails" before your membership is due. You will receive up to 3 before being marked "not renewed" (inactive). The sooner you renew, the fewer emails you will receive :) So please pay attention to your email from the FVEAA and renew online using this link (for the easiest approach for all of us):

<https://www.fveaa.org/renew>

THANK YOU for your continued support of the FVEAA!

Meeting Minutes - Jan. 20, 2022

Bruce Jones

- Meeting started at 7:05 p.m.
- Jeff held Introductions all around
- Presentation “EV ROAD TRIP STRATEGIES” by Ted Liu
- Ted presented on road trip strategies based on his experiences traveling in his Tesla Model 3 over the last several years.
 - Make a plan
 - Book hotels in advance
 - Useful Apps
 - Charger networks (non-exhaustive)
 - Plan overview
- He takes many long trips every year and included specific details of a 727 mile trip from Chicago to Atlanta using “abetterroutepanner.com”
- One surprising advantage of driving an EV is, he felt more rested at the end of a day’s drive due to the more frequent stops, even though it takes a little longer. Driving a gas vehicle gets you there faster but is exhausting.
(ba-domp-bomp)
- Excellent presentation, thanks Ted!
Ted Liu to Everyone 8:04 PM link to his slides is at <http://bit.ly/3GG7FxZ>

BREAK 8:00 – 8:20 p.m.

- **SOLID STATE BATTERIES** by Tracey McFadden
- Tracey provided a presentation on Solid State batteries and the potential for future EVs.
 - What Experts Say About Solid State Batteries
 - Players in the market
 - Growth projections = 36% annual growth
 - How they work compared to conventional batteries
 - Demo videos
 - Benefits
 - Density, size, safety, resistance to dendrites, lifespan, operating temperature ranges, easier manufacturing, reduced carbon footprint
- Well done Tracey!

Selected Chats and side discussions

- Bob K - There was an article in the Sunday Tribune about the Kia EV6 GT. Here’s a link that is mostly the same.
- https://www.gmtoday.com/autos/auto-review-kia-ev6-gt-the-discount-tesla-dr-agster/article_ca7d22e8-8510-11ed-aa67-93b88b7c5818.html
- Bob Kaplow summarizing for the chat on his tips for road trips:
 - 1) Tesla charging is now too fast! (10 minutes is hardly time to stretch, go to the bathroom, get a snack etc.)
 - 2) Charge to 100% before leaving home
 - 3) On the Tesla routing, I’ll go as low as 10% arrival (use the energy/consumption display to track your usage / status)
 - 4) When stopping for food/rest CHARGE BEFORE STOPPING!
 - 5) You do need to think when stopping in charging deserts: I’ve been to Mitchell IN and Galena IL, far from Superchargers.
- Recommendation from Steve on alternative meeting location in Riverside or closer to Chicago

- **Simon Gibson to Everyone 7:20 PM Perhaps a good idea rotating the locations so that the combination remote/physical meetings might generate a larger audience over time!**
- **We're trying to improve the meeting on zoom for those that can't be here in person, we have 2 cameras tonight at the live room!**
- **All member ideas are considered. The forums would be a good place to discuss this further.**

- **The meeting ended at 9:20 p.m.**

FVEAA Membership Application Form - Version 2014-01-01

Name: _____

Address: _____

City, State Zipcode: _____

Phone: _____ Phone Type: Home ___ Work ___ Cell ___

Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

Membership Types and Annual Dues (please circle one):

| | |
|------------------|-------|
| Individual | \$20 |
| Business | \$100 |
| Premier Business | \$250 |
| Charter Business | \$500 |

Newsletter Delivery Type (please circle one): No Newsletter Electronic

Please make checks payable to "FVEAA" and postal mail it with this membership application form to:


FVEAA

PO Box 214


Wheaton, IL 60187-0214

Attn: Membership

FVEAA Charter Business Members

| | |
|--|---|
| <p>Chicago Area Clean Cities</p> <p>Samantha Bingham 2 N LaSalle St #950 Chicago, IL 60602 Email: info@chicagocleancities.org Web: https://chicagocleancities.org</p> |  The logo for Chicago Area Clean Cities (CACC) is an oval-shaped emblem. The top half of the oval contains the words "CHICAGO AREA" in a blue, sans-serif font. The bottom half contains the words "CLEAN CITIES" in the same font. The central part of the oval features a stylized illustration of the Chicago skyline, including the Willis Tower and other skyscrapers, set against a blue background with a white sun and a white cloud. |
| <p>Chicago Area Clean Cities (CACC) is a 501(c)(3) not-for-profit working to promote the use of clean fuels for clean air in the Chicago area and throughout Illinois. Our coalition includes people from private business, academia, government, scientific research and energy and environmental services. Our main goal is to help with the adoption of cleaner transportation options.</p> | |

FVEAA Business Members

| | |
|--|---|
| <p>EV Converters LLC</p> <p>Rolly Waller 130 Windsor Park Dr, C121 Carol Stream, IL 60188 Cell: 630-865-5744 Email: rollywaller@gmail.com</p> |  The logo for EV Converters LLC features a stylized black electrical plug with a yellow lightning bolt striking it from the left. To the right of the plug, the text "EV Converters" is written in a bold, black, sans-serif font, with "LLC" and a trademark symbol (TM) below it. |
| <p>EVC will become a Franchisor (when the US government approves the conversion rebate) to appoint Franchisees (eg, service stations, oil change shops, transmission shops, independent mechanics, etc.) to convert Internal Combustion Engine (ICE) vehicles to electric vehicles (EV).</p> | |