ELECTRIC VEHICLE (EV) SUBCOMMITTEE
LEBANON ENERGY ADVISORY COMMITTEE (LEAC)
JUNE 12, 2025 - 3:00 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE

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1. Call to Order

2. Approval of Minutes

A. May 29, 2025

3. Old Business

A. E-bike Project

B. Downtown TIF District

C. Request for Proposals (RFP) for EV charging stations

D. Potential revisions to Zoning Ordinance

4. New Business

A. Zoning vs. Site Plan regulations for EV charging requirements

5. Open to the Public

6. Upcoming Events & Future Agenda Items

A. Upper Valley EV Expo, Saturday, September 6, 2025, 11 a.m. to 4 p.m., Hartford, VT. Town Hall, 171 Bridge Street, White River Junction, VT 05001; https://driveelectricmonth.org/event?eventid=4838

7. Set next meeting

A. July 10, 2025 3 p.m.?

8. Adjournment

Meetings are open for in-person and remote attendance. Members of the public who wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupt virtual or phone connection(s), the meeting will continue without remote access capabilities.
Any person with a disability who wishes to attend this public meeting and needs additional accommodation, please contact the ADA coordinator at City Hall by calling 603-448-4220 at least 72 hours in advance so that the City can make any necessary arrangements.

AGENDA
ELECTRIC VEHICLE SUBCOMMITTEE OF THE
LEBANON ENERGY ADVISORY COMMITTEE
June 12, 2025

AGENDA ITEM 2
APPROVAL OF MINUTES:

May 29, 2025

ELECTRIC VEHICLE SUBCOMMITTEE OF THE LEBANON ENERGY ADVISORY COMMITTEE
THURSDAY, MAY 29, 2025 - 2:00 PM
CITY COUNCIL CHAMBERS, WITH REMOTE ACCESS VIA

MEMBERS PRESENT: Sherry Boschert- Chair, Tom Benzel, Bill Stearns
MEMBERS ABSENT: None
STAFF PRESENT: Chris Kilmer

1. **Call to Order-**Ms. Boschert called the meeting to order at 2:05 pm. (No video recording of the meeting)

2. **Approval of Minutes**
   A. May 8, 2025- No discussion. Motion by Mr. Benzel, Second by Mr. Stearns, Approved unanimously.

3. **Evaluate responses to Request for Proposals for EV charging stations**

   A. Ms. Boschert advised the AARP E-bike grant was not awarded. No reason, will look at T-Mobile Community grant as an option to resubmit
   B. Discussion around the four (4) received bids. It was agreed each member would review one bid, with the Waldron Bid for a Fast Charger at the Landfill not being acted on at this time. Ms. Boschert will review Universal EV proposal and score, Mr. Stearns will review SWTCH proposal and score and Mr. Benzel will review and score the Commonwealth proposal.

4. **Next Meeting** June 12, 2025

5. **Adjournment**- motion by Ms. Boschert, second by Mr. Benzel at 2:40 pm

Minutes completed by Chris Kilmer

AGENDA
ELECTRIC VEHICLE SUBCOMMITTEE OF THE
LEBANON ENERGY ADVISORY COMMITTEE
June 12, 2025

AGENDA ITEM 3
OLD BUSINESS:

D. Potential revisions to Zoning Ordinance: Lebanon's current Zoning Ordinance, Draft amendments, & Proposal for EV Charging Infrastructure Standards.

ATTACHMENT A (for Agenda item 3.D.)

Lebanon's current Zoning Ordinance November 2024

Pages 183-184:

607.8 Electric Vehicles.

A. Purpose. The purpose of this section is to facilitate the transition to ***electric vehicle*** use and to expedite the establishment of convenient, cost-effective ***electric vehicle infrastructure*** that such a transition necessitates.

B. Applicability. ***EV charging stations*** are allowed as an ***accessory use*** in all zoning districts. When the retail charging of ***electric vehicles*** is proposed to be the principal use of a ***lot***, then the proposed ***EV charging station*** shall be considered a ***service station*** for zoning purposes.

C. EV Infrastructure Requirements / Off-Street EV Parking Requirements. ***EVSE-installed spaces, EV-ready spaces***, and ***EV-capable spaces*** shall be provided as follows:

1. One- and Two-Family Dwellings. All new ***one***- and ***two-family dwellings*** shall provide at least one (1) ***EV-ready*** space per ***dwelling unit***.

2. Multi-Family Dwellings. Parking for ***multi-family dwellings*** shall include:
   a. ***EVSE-installed spaces*** for a minimum of 5% of proposed ***off-street parking spaces***.
   b. ***EV-ready spaces*** for a minimum of 20% of proposed ***off-street parking spaces***.
   c. ***EV-capable spaces*** for a minimum of 65% of proposed ***off-street parking spaces***.

3. Non-Residential Uses. Parking for uses requiring or proposing to provide 30 or more ***off-street parking spaces*** shall include:
   a. ***EVSE-installed spaces*** for a minimum of 2% of proposed ***off-street parking spaces***, with a minimum of two ***EVSE-installed spaces***.
   b. ***EV-ready spaces*** for a minimum of 10% of proposed ***off-street parking spaces***.
   c. ***EV-capable spaces*** for a minimum of 50% of proposed ***off-street parking spaces***.

4. Where the calculations above result in a fractional parking space, it shall round up to the next whole number.

5. Where the number of ***EVSE-installed spaces*** provided exceeds the minimum required, the excess spaces shall be deducted from the total number of required ***EV-ready spaces***.

6. Where the number of ***EV-ready spaces*** provided exceeds the minimum required, the excess ***EV-ready spaces*** shall be deducted from the total number of required ***EV-capable spaces***.

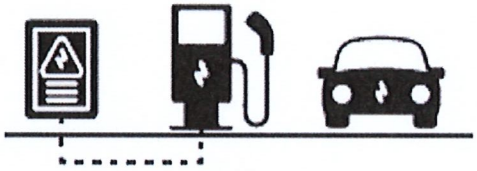
7. Up to five (5) ***Level 2 EV-installed spaces*** may be substituted with one (1) ***Level 3 EV-installed space*** (minimum 50kW).

8. ***EVSE-installed spaces***, ***EV-ready spaces***, and ***EV-capable spaces*** are to be included in the calculation for both the number of minimum required and maximum permitted off-street parking spaces.

    a. Every two (2) ***EVSE-installed spaces*** provided in addition to the required minimum may be counted as four (4) ***off-street parking spaces*** as relates to Section 607.1 (Minimum Off-Street Parking Requirements), for reduction of total required parking not greater than 10 percent of the total amount of required parking.

Appendix A – Definitions

Pages 183-184 and 187:

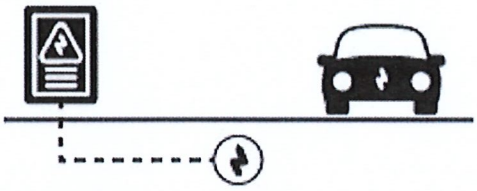


ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) / EV charging station: The apparatus installed specifically for the purpose of transferring energy between the site or building wiring and the Electric Vehicle. EVSE does not include any equipment affixed to the electric vehicle.

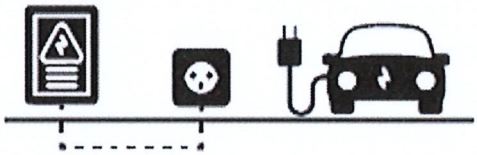
ELECTRIC VEHICLE INFRASTRUCTURE: Structures, machinery, and equipment necessary and integral to support an ***electric vehicle***, including ***EV charging stations*** and electrical outlets.

ELECTRIC VEHICLE (EV): An automotive-type vehicle for on-road use primarily powered by an electric motor, including any battery electric vehicle, fuel cell electric vehicle, or plug-in hybrid electric vehicle, that draws current from an onboard battery charged through a building or site electrical service, ***EVSE***, or other source of electric current.

EV-CAPABLE SPACE: An ***off-street parking space*** with electrical panel capacity and space for a branch circuit dedicated to the parking space that is not less than 40-ampere and 208/240-volt and equipped with raceways, both underground and surface mounted, to enable the future installation of ***EVSE***. For two adjacent EV-capable spaces, a single branch circuit is permitted.



EV-READY SPACE: An off-street parking space provided with a full dedicated branch circuit that includes not less than 40-ampere and 208/240-volt panel capacity, conduit, wiring, receptacle, and overprotection devices terminating in an outlet, receptacle or junction box that will support an installed EVSE and which is located in close proximity to the location of the parking space. For two adjacent EV-ready spaces, a single branch circuit is permitted. These spaces are "ready to go" with the addition of an EV charging station (EVSE).



EVSE-INSTALLED SPACE: An ***off-street parking space*** with a dedicated branch circuit and ***EVSE*** for ***Level 2 EV charging stations***, at minimum.

LEVEL 2: Charging level for ***EVs*** that operates on a dedicated 40-100 amp breaker (same kind used by a clothes dryer or stove) on a 208 or 240 volt AC circuit while drawing 6.2+ kW to supply 19+ miles of range gained per hour of charging.

LEVEL 3: Fast or rapid charging level for ***EVs*** that operates on a 60 amp or higher breaker on a 480 volt AC electric circuit or higher three phase circuit with special grounding equipment and mounting on an equipment pad.

ATTACHMENT B (for Agenda item 3.D.)

Draft amendments to Zoning Ordinance (with proposed changes in red) compiled by Sherry Boschert in consultation with Planning Department staff, LEAC, and the LEAC EV Subcommittee

From Zoning Ordinance pages 183-184:

607.8 Electric Vehicles.

A. Purpose. The purpose of this section is to facilitate the transition to ***electric vehicle*** use and to expedite the establishment of convenient, cost-effective ***electric vehicle infrastructure*** that such a transition necessitates.

B. Applicability. ***EV charging stations*** are allowed as an ***accessory use*** in all zoning districts. When the retail charging of ***electric vehicles*** is proposed to be the principal use of a ***lot***, then the proposed ***EV charging station*** shall be considered a ***service station*** for zoning purposes.

C. EV Infrastructure Requirements / Off-Street EV Parking Requirements. ***EVSE-installed spaces, EVSE-ready spaces***, and ***EVSE-capable spaces*** shall be provided as follows:

1. One- and Two-Family Dwellings. All new ***one***- and ***two-family dwellings*** shall provide at least one (1) ***EVSE-Ready Low-power Level 2 charging*** space per ***dwelling unit***.

2. All new dwellings with up to three units, including Accessory Dwelling Units (ADUs), shall provide at least one (1) ***EVSE-Ready Low-power Level 2 charging*** space per dwelling unit.

3. Multi-Family Dwellings (four or more units; adding units to existing multi-family housing triggers the requirements for the new units only). Parking for new ***multi-family dwellings*** shall include:

a. For each residential unit with parking, **at least one EVSE-Ready Low-power Level 2 charging space per unit**.

b. ***EV-Capable Low-power Level 2 spaces*** for a minimum of 25% of the remaining off-street parking spaces.

4. Non-Residential Uses. Parking for uses requiring the provision of 10 or more new or additional ***off-street parking spaces*** shall include:

a. ***EVSE-Installed Level 2 spaces*** for a minimum of 2% of new or additional ***off-street parking spaces***, with a minimum of two ***EVSE-Installed spaces.***

b. ***EVSE-Ready or EVSE-Capable Level 2 spaces*** for a minimum of 20% of new or additional ***off-street parking spaces.***

c. For parking spaces dedicated for employee use, these requirements may be replaced by a minimum of one EVSE-Ready Low-power Level 2 charging space for at least 30% of employees in the largest shift who drive to work.

d. For existing (not "greenfield") non-residential developments, these requirements for EV charging may be replaced by a contribution to a common fund managed by the City of

Lebanon for installing public EV charging stations at a separate site, with the contribution amount to be determined by the City.

5. Where the calculations above result in a fractional parking space, it shall round up to the next whole number.

6. Where the number of ***EVSE-Installed spaces*** provided exceeds the minimum required, the excess spaces shall be deducted from the total number of required ***EVSE-Ready spaces*** of a similar level (Low-power Level 2, or Level 2).

7. Where the number of ***EVSE-Ready spaces*** provided exceeds the minimum required, the excess ***EVSE-Ready spaces*** shall be deducted from the total number of required ***EVSE-Capable spaces*** of a similar level (Low-power Level 2, or Level 2).

8. Up to five ***Level 2 EVSE-Installed spaces*** may be substituted with one (1) ***Level 3 EV-Installed space*** (minimum 150 kW).

9. ***EVSE-Installed spaces***, ***EVSE-Ready spaces***, and ***EVSE-Capable spaces*** are to be included in the calculation for both the number of minimum required and maximum permitted off-street parking spaces.

a. Every two (2) ***EVSE-Installed spaces*** provided in addition to the required minimum may be counted as four (4) ***off-street parking spaces*** as relates to Section 607.1 (Minimum Off-Street Parking Requirements), for reduction of total required parking not greater than 10 percent of the total amount of required parking.

Pages 183-184 and 187:

Appendix A – Definitions

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) / EV CHARGING STATION (EVCS): The apparatus installed specifically for the purpose of transferring energy between the site or building wiring and the Electric Vehicle. EVSE does not include any equipment affixed to the electric vehicle.

ELECTRIC VEHICLE INFRASTRUCTURE: Structures, machinery, and equipment necessary and integral to support an ***electric vehicle***, including ***EV charging stations*** and electrical outlets.

ELECTRIC VEHICLE (EV): An automotive-type vehicle for on-road use primarily powered by an electric motor, including any battery electric vehicle, ~~fuel cell electric vehicle,~~ or plug-in hybrid electric vehicle, that draws current from an onboard battery charged through a building or site electrical service, ***EVSE***, or other source of electric current.

EVSE-CAPABLE SPACE: An ***off-street parking space*** with electrical panel capacity and space for a branch circuit dedicated to the parking space that is not less than 20-ampere and 110/120-volt panel capacity for Level 1 charging, or 20-ampere and 208/240-volt for Low-Power Level 2 charging, or 40-ampere and 208/240-volt for Level 2 charging, and is equipped with raceways, both underground and surface mounted, to enable the future installation of ***EVSE***. For two adjacent EV-capable spaces, a single branch circuit is permitted.

EVSE-READY SPACE: An off-street parking space provided with a full dedicated branch circuit that includes not less than 20-ampere and 110/120-volt panel capacity for Level 1 charging, or 20-ampere and 208/240-volt panel capacity for Low-Power Level 2 charging, or 40-ampere and 208/240-volt panel capacity for Level 2 charging plus conduit, wiring, receptacle, and overprotection devices terminating in an outlet or receptacle ~~or junction box~~ that will support an installed EVSE or support attachment of a charge cord for the vehicle and which is located in close proximity to the location of the parking space. For two adjacent EV-Ready spaces, a single branch circuit is permitted. These spaces are "ready to go" as outlets for users who bring their own charging cords or with the addition of an installed EV charging station (EVCS).

EVSE-INSTALLED SPACE: An ***off-street parking space*** with a dedicated branch circuit and ***EVSE.*** ~~at minimum~~.

LEVEL 1 (which is not mandated but is included here for informational purposes)**:** Charging level for ***EVs*** that operates on a dedicated 20-amp breaker (same kind used for conventional electrical outlets in most buildings) on a 110- or 120-volt AC circuit while drawing 1.9-3.2 kW to supply approximately 2-5 miles of range gained per hour of charging.

LOW-POWER LEVEL 2: Charging level for ***EVs*** that operates on a dedicated 20-amp breaker on a 208- or 240-volt AC circuit while drawing 3.3-6.1 kW to supply approximately 15+ miles of range gained per hour of charging.

LEVEL 2: Charging level for ***EVs*** that operates on a dedicated 40- to 100-amp breaker (same kind used by a clothes dryer or stove) on a 208- or 240-volt AC circuit while drawing 6.2+ kW to supply 19+ miles of range gained per hour of charging.

LEVEL 3: Fast or rapid charging level for ***EVs*** that operates on a 60-amp or higher breaker on a 480-volt AC electric circuit or higher three-phase circuit with special grounding equipment and mounting on an equipment pad.

ATTACHMENT C (for Agenda item 3.D.)

Proposal for EV Charging Infrastructure Standards
Submitted to: Lebanon Energy Advisory Committee – EV Subcommittee
Submitted by: Tom Benzel, Committee Member
Date: May 26, 2025

Overview
To support the increasing adoption of electric vehicles (EVs) in Lebanon and ensure our community's infrastructure is forward-compatible with future demand, the EV Subcommittee recommends an update to the current EV charging requirements in new residential and commercial developments.

Current Standard
The existing Zoning regulations mandate that percentages of parking spaces at new dwellings or new non-residential developments be equipped with an EV-installed, EV-ready, or EV-capable Level 2 charging stations (40-amp capacity). (See percentages at https://view.publitas.com/city-of-lebanon/zoning-ordinance/page/131.) While well-intentioned, this standard may present cost and infrastructure barriers for developers, especially for multi-unit dwellings or commercial lots.

Proposed Amendment
To encourage cost-effective and scalable EV infrastructure deployment, we propose the following two-part standard:
1. Reduced Capacity Requirement:
- Allow installation of low-amperage Level 2 chargers (minimum 20-amp dedicated circuits), which still qualify as Level 2 charging but are more affordable and require less electrical service capacity.
2. Staged Installation with Full Readiness:
- Require that all parking spaces be constructed as EV Capable with the electrical conduit, panel capacity, and wiring infrastructure necessary to support future installation of 20-amp Level 2 chargers. (See definitions of EV Capable, EV Ready, or EV Installed at https://view.publitas.com/city-of-lebanon/zoning-ordinance/page/184.)
- Mandate that 25% of the parking spaces by EV Installed, functional chargers installed at the time of initial occupancy.
- This allows for initial cost control while ensuring all spaces can be upgraded as demand grows without major retrofitting.
Rationale
- Future-Proofing: Ensures developments are prepared for the increasing number of EVs without requiring full buildout immediately.
- Cost-Efficiency: Reduces up-front infrastructure costs while preserving long-term flexibility.
- Grid Management: Lower amperage chargers spread over time reduce peak load stress and allow better integration with distributed energy resources.
- Equity and Access: By building out conduit and capacity now, future residents or tenants won't face barriers to EV adoption.
Implementation Considerations

- Developments must include a load management plan to ensure the installed panel can accommodate phased charger installation.
- Charging systems should be network-capable to allow demand response and smart load balancing.
- Periodic reviews (every 2 years) should be built into the Planning Department's development review process to assess if the 25% installation threshold needs to be increased.

Conclusion

This proposal strikes a balance between Lebanon's climate and mobility goals and the financial and logistical constraints of development. By mandating infrastructure now and requiring partial installation, the city ensures we are building a practical, EV-ready future.

AGENDA
ELECTRIC VEHICLE SUBCOMMITTEE OF THE
LEBANON ENERGY ADVISORY COMMITTEE
June 12, 2025

AGENDA ITEM 4
NEW BUSINESS:

A. Zoning vs. Site Regulations for EV charging requirements: AI Summary of locating EV charging requirements in Zoning vs. Site Plan Regulations.

ATTACHMENT D (for Agenda item 4.B.)
AI Summary of Locating EV charging requirements in Zoning vs. Site Plan regulations

The City of Lebanon, NH, is considering relocating electric vehicle (EV) charging station requirements—specifically, the mandated number of chargers per development—from its zoning ordinance to the site plan review regulations. This shift aims to provide the Planning Board with greater flexibility in granting waivers. While such a change could offer certain advantages, it also presents significant drawbacks. Below is an analysis of the pros and cons, followed by an argument against making this change, all compiled by AI.

Pros of Moving EV Charger Requirements to Site Plan Review Regulations

1. **Enhanced Flexibility for Developers and the Planning Board**: Site plan review regulations can be more readily adjusted than zoning ordinances, allowing the Planning Board to respond to unique site conditions or evolving technologies without undergoing the more rigorous process of amending zoning laws.

2. **Streamlined Waiver Process**: By situating requirements within site plan review, the Planning Board may find it administratively simpler to grant waivers or modifications, potentially accelerating project approvals and encouraging development.

3. **Alignment with Technical Considerations**: Site plan reviews often delve into technical specifics, such as infrastructure capacity and site design, which are pertinent to the installation of EV charging stations. This could lead to more context-sensitive decisions regarding EV infrastructure.

Cons of Moving EV Charger Requirements to Site Plan Review Regulations

1. **Reduced Regulatory Certainty**: Zoning ordinances provide a stable, long-term framework that developers can rely upon. Moving requirements to site plan review could introduce variability, making it harder for developers to anticipate obligations, potentially deterring investment.

2. **Potential Undermining of EV Infrastructure Goals**: The flexibility afforded by site plan reviews might lead to inconsistent application of EV charging requirements, hindering the city's broader objectives for EV infrastructure development and climate action.

3. **Diminished Public Engagement**: Changes to zoning ordinances typically involve public hearings and greater community input. Site plan reviews may not offer the same level of public participation, potentially reducing transparency and community involvement in decisions affecting local infrastructure.

4. **Challenges in Enforcement and Compliance**: Zoning ordinances are enforceable through established legal mechanisms, providing clear avenues for compliance and

enforcement. Site plan review conditions may be more challenging to monitor and enforce consistently.

National Context: EV Charging Requirements in Municipal Codes
As of December 2024, numerous municipalities across the United States have incorporated EV charging requirements into their regulatory frameworks:

- **Building Codes**: 12 states and 53 local governments have added EV provisions to their building codes, local ordinances, and zoning requirements. (Energy Codes)
- **Zoning Ordinances**: Many jurisdictions classify EV charging stations as accessory uses within zoning codes, facilitating their integration into various land uses without necessitating special permits.
- **Site Plan Review Regulations**: While some municipalities address EV charging in site plan reviews, this approach is less common and may lead to less consistent application of requirements.

The trend indicates a preference for embedding EV charging requirements within zoning ordinances or building codes to ensure clarity, consistency, and enforceability.

Argument Against Moving Requirements to Site Plan Review Regulations
Retaining EV charging station requirements within Lebanon's zoning ordinance is advisable to maintain regulatory certainty, promote equitable infrastructure development, and uphold the city's commitment to sustainability goals.

Zoning ordinances provide a transparent and predictable framework that benefits both developers and the community. They ensure that EV infrastructure requirements are applied uniformly, supporting the city's broader objectives for reducing greenhouse gas emissions and promoting alternative transportation options.

Shifting these requirements to site plan review regulations could introduce variability and reduce the enforceability of EV infrastructure mandates. This move might also limit public participation in decision-making processes, as zoning changes typically involve more robust community engagement than site plan reviews.

Given the national trend of incorporating EV charging requirements into zoning ordinances and building codes, Lebanon would align with best practices by maintaining its current approach. This strategy supports long-term planning, fosters community trust, and ensures that the city remains a leader in sustainable development.

In conclusion, while relocating EV charging requirements to site plan review regulations may offer short-term flexibility, the potential drawbacks—such as reduced consistency, enforceability, and public engagement—suggest that maintaining these requirements within the zoning ordinance is the more prudent course of action.