Community Transportation Electrification Plan

Prepared for
City of Alton, Illinois

Prepared by
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ACKNOWLEDGEMENTS

Ameren Illinois would like to thank the City of Alton for its thoughtful engagement in the development of this Community Transportation Electrification Plan. We know that community leaders have many responsibilities, and we appreciate the time invested in providing insight into the community and its transportation electrification priorities. In particular, Ameren Illinois would like to thank Andy Campbell and the City Plan Commission for their critical role in this project.

While Ameren Illinois and community members are actively engaged in the development of this Plan, the information and recommendations contained within do not represent the opinion of any individual and are meant to provide perspective and information to support the community's transportation electrification decision-making process. This Plan represents the best information available at the time of publication and should be reviewed over time to inform future decision-making.

EXECUTIVE SUMMARY

Ameren Illinois developed this Community Transportation Electrification Plan (Plan) in partnership with Alton community leadership as a roadmap to support the community in achieving its transportation electrification goals.

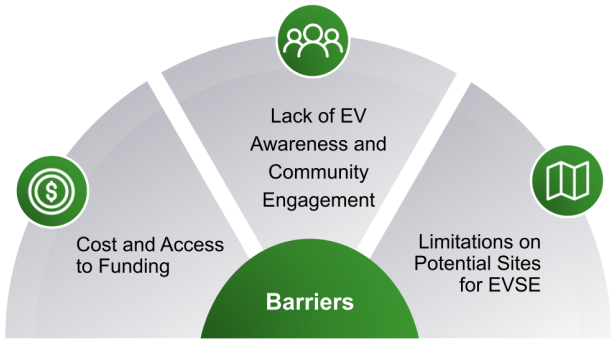
Alton, Illinois, is a historic river city located in Madison County, forming an important part of the Metro-East region within the Greater St. Louis metropolitan area. With a population of about 25,600, the city features a blend of residential, commercial, and industrial areas. It is served by major highways like U.S. Route 67 and Illinois Routes 3, 140, 111, and 143. Alton's economy is anchored by industries such as manufacturing, healthcare, and retail, and the city provides essential public services through its own Fire and Police Departments.

The city is actively advancing its sustainability goals, currently partnering with a local university to conduct a greenhouse gas inventory and update its 2011 climate action plan. A new comprehensive plan is also in development and will include updated sustainability priorities, including transportation electrification. While Alton has not yet applied for EV infrastructure grants, it has begun incorporating EV elements into public improvement efforts, such as park redevelopment projects. Several local businesses have already installed private EV chargers, reflecting a growing interest in clean transportation. These steps highlight Alton's commitment to evolving into a forward-thinking, resilient community with a strong focus on environmental stewardship and economic opportunity.

Alton envisions becoming a community where electric transportation is accessible and beneficial for residents, businesses, visitors, and the municipal fleet. While the adoption of electric vehicles (EVs) and electric vehicle supply equipment (EVSE) has been limited to date, the city has begun integrating EVSE into its redevelopment and infrastructure planning efforts. This proactive approach aligns with broader community goals, including reducing transportation costs for residents, improving air quality, supporting sustainability initiatives, and attracting new investment and economic development. By embracing electric mobility, Alton positions itself to enhance quality of life, support workforce recruitment—whether local or regional—and strengthen its identity as a forward-thinking, connected city in the Metro-East region.

The planning process began with an assessment of the current state of transportation electrification within Alton's ZIP code. The analysis found that 104 electric vehicles are currently registered in the area, and several public charging sites are available within the community. Additionally, there are 249 charging sites located within a 25-mile radius of Alton.

Ameren Illinois and community leadership identified several barriers that have affected EV adoption to date and create challenges for the future. These barriers include cost and access to funding, lack of awareness and education and limitations on potential sites.



To begin addressing these barriers, Ameren Illinois worked with community leadership to develop near-term strategies to continue the growth of electric transportation in the community:

1. **Install EVSE at Priority Locations**
   The planning process identified Rock Springs Park, Alton Square Mall, and four other potential sites for public EVSE.
2. **Develop a Plan to Electrify Alton's Fleet Vehicles**
   Utilize the resources in the Strategy 2 section to identify the best EV option for the city's first EV fleet vehicle.
3. **Develop a Partnership Strategy to Support EVSE Infrastructure Installations**
   Engage with local business owners and organizations such as Alton Memorial Hospital, Sunnybrook's development, and other stakeholders to define objectives, develop plans, and identify funding strategies.
4. **Develop and Deploy an EV Outreach and Education Program for Local Residents, Partners, and Stakeholders.** Community leaders can utilize and facilitate access to a variety of programs and educational resources offered by Ameren Illinois.

Because the cost of pursuing these strategies is a key consideration for Alton, Ameren Illinois helped the community identify available resources that can provide valuable financial and technical support. To start, **as an Equity Investment Eligible Community and/or low-income community, Alton is eligible to receive an additional $75,000 from Ameren Illinois through the same Community Engagement and Consultation (CEC) program that funded the development of this Plan.** Ameren Illinois offers several other programs and resources to support communities pursuing transportation electrification, and Alton may qualify for additional local, state, and federal funding opportunities. These resources are discussed throughout this Plan and in the accompanying appendices.

The remainder of this Plan presents additional context and details around Alton's transportation electrification goals, the current state of EV adoption, charging station deployment in and around the community, priority strategies, and actions. Ameren Illinois appreciates the opportunity to partner with Alton on this process and looks forward to continuing the partnership as Alton pursues its goals.

INTRODUCTION

In light of Illinois' statewide clean air goals and in support of their own objectives for enhancing livability, spurring economic growth, and attracting and retaining top talent, communities across the state are taking steps large and small to support transportation electrification for their residents, businesses, educational facilities, and other community institutions. Transportation electrification projects can be complex, and success often requires multiple parties working together to bring projects from initial conception to completion. Careful planning is a crucial element to initiating projects and ensuring their success. The communities most likely to be left behind in the transportation electrification transition are often also those with the greatest need for support. To address these challenges and help spread the benefits of electrification throughout its service area, Ameren Illinois launched its Community Engagement and Consultation (CEC) program.

The CEC program supports communities in developing custom transportation electrification plans and implementing those plans using available resources, including direct financial support from Ameren Illinois for Equity Investment Eligible Communities (EIECs) and/or low-income communities (as defined in Ameren Illinois' Beneficial Electrification Plan). The primary goals for this program are to help community leaders navigate transportation electrification on behalf of their residents and businesses, to strengthen transportation electrification planning and implementation processes across the region via a network of qualified professionals, and to help address financial barriers to electrification by providing monetary resources for qualifying communities.

This Plan was developed on behalf of Alton in consultation with community leadership, to provide customized information, recommendations, and resources that can serve as a roadmap for the community as it considers its transportation electrification priorities.

The Plan Includes:

- An overview of Alton's transportation electrification vision and goals,
- An assessment of current EV adoption in Alton and deployment of public EVSE in and around the community,
- A critical review of potential benefits and barriers to transportation electrification in Alton,
- Recommended strategies for Alton to achieve its transportation electrification goals, and
- A catalogue of resources available to help support implementation for these strategies.

Ameren Illinois looks forward to the opportunity to continue partnering with Alton as it proceeds on its transportation electrification journey.

VISION AND GOALS

Community Overview

Alton is a historic riverfront city in Madison County, Illinois, with a population of 25,676 and a homeownership rate of 57%. Strategically located along the Mississippi River, Alton is well-connected by U.S. Route 67 and Illinois Routes 3, 140, 111, and 143. The city also offers regional transit options through Amtrak, Madison County Transit buses, and an extensive bike trail system. The Clark Bridge links Alton directly to Missouri, supporting both commuter and commercial travel.

The local economy is anchored by healthcare, manufacturing, and retail. Key employers include Alton Memorial Hospital, Argosy Casino, and Wieland Rolled Products, which is expanding its electric vehicle-related manufacturing operations in nearby East Alton.

Alton is actively supporting electric vehicle adoption with public charging stations located at sites such as Riverfront Park, Best Western, Argosy Casino, and the SIU School of Dental Medicine.

The city is also investing in renewable energy, notably through a 5MW solar array on a closed landfill. This project is expected to generate 10,000 MWh of electricity annually and deliver $1 million in revenue over its lifespan.

With strong infrastructure, diverse economic drivers, and a clear focus on clean energy, Alton is positioned as a resilient, future-ready community in the Metro-East region.

Alton's Vision for Transportation Electrification

Alton envisions establishing itself as a community where electric transportation options are easily accessible for its residents, businesses, visitors, and municipal fleet. EVs and EVSE adoption in the community have been minimal to date, but the city has recently begun taking steps to incorporate EVSE into redevelopment plans. Alton plans centrally located public EV charging infrastructure to help make it a destination for EV drivers. While improving access to electric transportation will require a multi-step strategy, Alton has identified several potential near-term transportation electrification projects that could be feasible with additional financial support.

Community Collaboration

In the spring of 2025, Ameren Illinois collaborated with the City Plan Commission to discuss Alton's transportation electrification priorities and establish the current baseline of EV adoption, EVSE infrastructure, and general level of EV awareness within the community. Discussion also covered initiatives pursued or considered to date, community-specific barriers, potential partners, and priority sites for new infrastructure. This process included multiple teleconference discussions, a questionnaire, and an official application to the program. These discussions and the additional material provided by community leaders were critical to developing the assessment and recommendations presented in the remainder of this document.

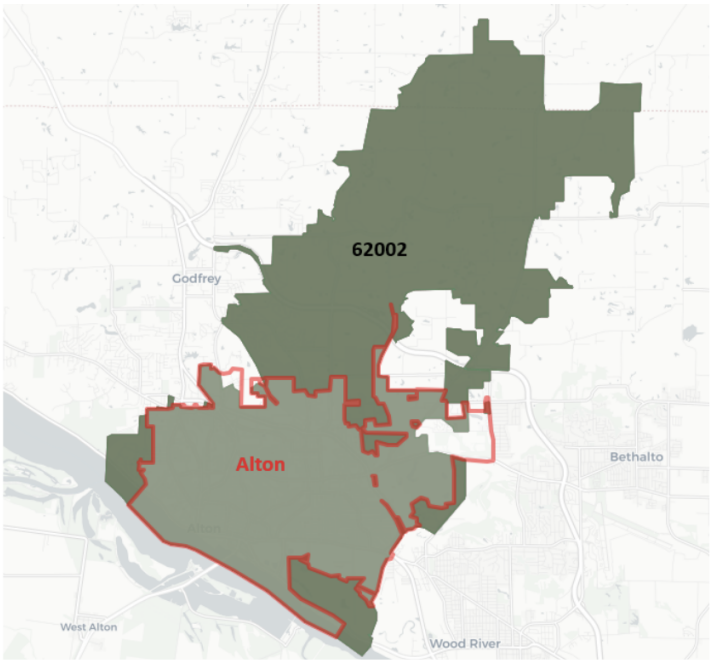
COMMUNITY ASSESSMENT

Data Sources

To understand future transportation electrification opportunities, it is important to first understand the current state of EV adoption and EVSE infrastructure development within the community and in surrounding areas; Ameren Illinois worked with Alton to develop community-specific metrics to investigate these factors.

Alton is well-represented by a single ZIP code, 62002, as shown in **Figure 1.** The ZIP code also covers significant rural areas outside of Alton's city limits; however, these areas were determined to have minimal impact on community-specific analysis. Ameren Illinois began the analysis with ZIP code-level data and then worked with the community to refine estimates to ensure an accurate tally for the community itself. **Appendix E** provides a list of key data sources used to inform this community assessment.

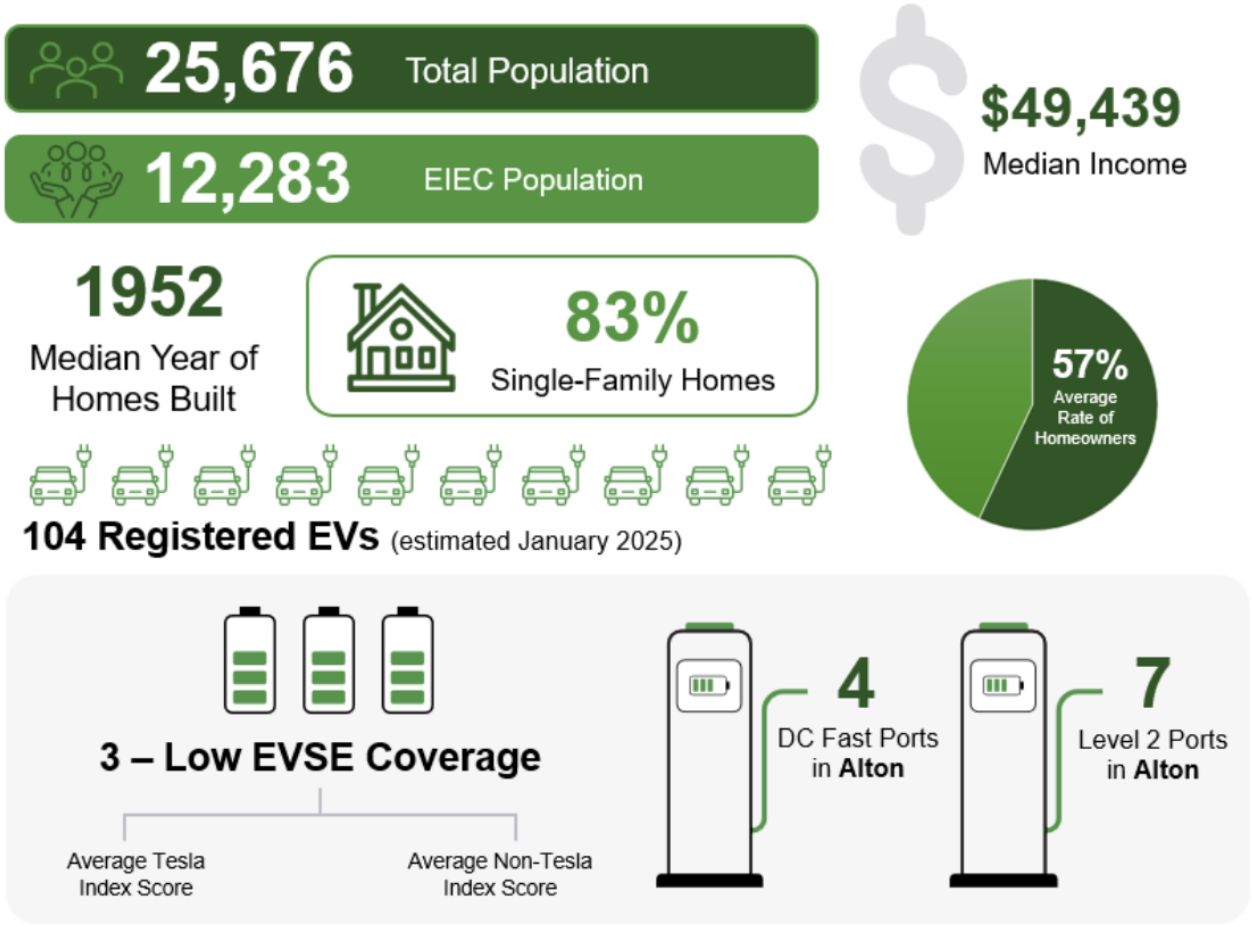
Figure 1. Alton Community Boundaries (outlined in red) and Associated ZIP Code Coverage



Residential Snapshot

Alton is a community of approximately 25,700 residents, with about half living in EIEC and/or low-income areas. This is based on an analysis of income and other socioeconomic factors within ZIP code 62002, as detailed in **Table 1**. Additional key residential metrics are provided in **Figure 2**.

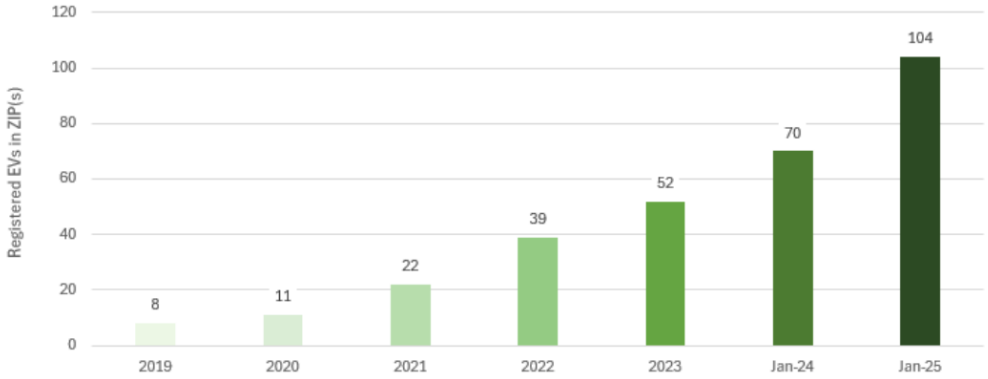
Figure 2. Key Residential Metrics



EV Adoption

As of January 2025, approximately 104 EVs are registered in Alton's ZIP code (62002), a significant increase from just 6 in 2018—highlighting steady growth in local EV adoption. **Figure 3** below illustrates growth in registered EVs over the past five years.

Figure 3. Historical EV Adoption



Municipal Snapshot

The City of Alton operates a municipal fleet composed entirely of internal combustion engine (ICE) vehicles, including trucks, SUVs, and sedans used by first responders, public works, and other municipal departments. Alton is home to several buildings that house county services and features a vibrant downtown area with the county courthouse, restaurants, retail shops, and various businesses serving both local and regional residents. The area surrounding Alton is a mix of farmland and urban development. The city also includes key industrial employers such as Alton Steel—which employs approximately 350 people—as well as Alton Memorial Hospital and OSF Saint Anthony's Health Center. Major transportation routes serving Alton include U.S. Route 67, which connects to St. Louis, Missouri, along with Illinois State Routes 3, 111, 140, and 143, which provide access to surrounding counties.

Existing EVSE Infrastructure

Alton has several charging sites, though they are fairly spread out across the city. The largest population of sites within a 25-mile radius are primarily located near Edwardsville and across the river in Missouri, as shown in **Figure 4**. The 25-mile radius used in this analysis was defined for Alton based on the needs of commuters in the area. The US Census Bureau has found that, on average, residents within Alton have a 23.4 minute[1] commute to work.

[1] https://www.census.gov/acs/www/about/why-we-ask-each-question/commuting/

Figure 4. EVSE Infrastructure Within 25-Mile Radius of Alton

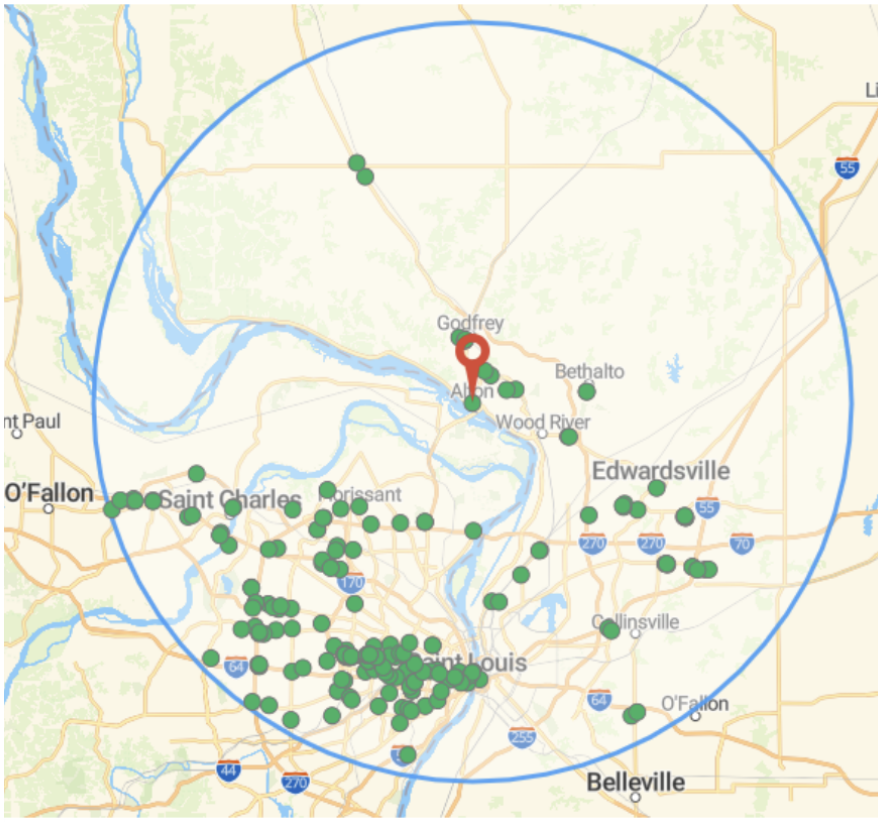


Table 1 provides counts of public EV chargers and available ports within a 25-mile radius of Alton.[2] Chargers are defined by their charging power and whether they are Tesla or non-Tesla; this distinction remains important as most Tesla chargers are still inaccessible to vehicles manufactured by other companies. As expected, Level 2 non-Tesla chargers are the most common type in the area. More than half of available EVSE infrastructure is in Iowa. Note that some locations may have co-located Level 2 and DC fast chargers.

Table 1. Tesla v. Non-Tesla EVSE Infrastructure Within 25 Mile Radius of Community

EVSE Infrastructure Category	Illinois	Missouri	Total Count
Public Level 2 (Tesla)	2 (4 Ports)	16 (55 Ports)	18 (59 Ports)
Public Level 2 (Non-Tesla)	30 (59 Ports)	156 (352 Ports)	186 (411 Ports)
Public DC Fast Chargers (Tesla)	2 (20 Ports)	5 (49 Ports)	7 (69 Ports)
Public DC Fast Chargers (Non-Tesla)	13 (46 Ports)	25 (46 Ports)	38 (92 Ports)
Total EVSE within 25-Mile Radius	**47 (129 Ports)**	**202 (502 Ports)**	**249 (631 Ports)**

[2] Data from the US Department of Energy's Alternative Fuels Data Center, accessed October 28, 2024.

Potential EVSE Location Suitability Scoring

Ameren Illinois worked with Alton to identify potential priority locations for new EV charging infrastructure based on accessibility, where residents and visitors spend their time, and other business and community needs. Once these potential locations were identified, each location was screened for suitability through the Geospatial Energy Mapper (GEM), a publicly available tool originally funded by the US Department of Energy and maintained by Argonne National Laboratory.[3]

For a specific address, GEM provides a suitability score based on several factors that can affect the cost and utilization of new EVSE. The factors considered in site scoring within GEM are population density, EV charger density, distance to the nearest electric substation, road traffic density, and distance to the nearest major road. See **Appendix F** for additional information on the parameters considered within GEM modeling.

While this scoring can provide valuable insight to the community on the suitability of sites based on these factors, it is not able to account for local and site-specific considerations, which are explored in more depth in the following sections. In particular, GEM does not account for available capacity on Ameren Illinois' distribution system. Communities should review Ameren Illinois' Distribution Load Capacity Map[4] and follow the process detailed in **Appendix G** to ensure sufficient capacity is available or that infrastructure costs are known before beginning to implement new EVSE projects.

[3] Geospatial Energy Mapper (GEM)

[4] The Ameren Illinois Distribution Load Capacity Map is publicly available at: Ameren Illinois Distribution Load Capacity

COMMUNITY BENEFITS AND BARRIERS TO TRANSPORATION ELECTRIFICATION

While transportation electrification presents opportunities for communities to realize significant benefits on behalf of their residents and businesses, a variety of barriers can slow project implementation. This section outlines potential benefits to Alton from supporting transportation electrification initiatives and presents community-specific barriers identified through discussions between Ameren Illinois and Alton leadership.

Benefits of Transportation Electrification

The adoption of EVs and the expansion of EVSE infrastructure in Alton present near-and long-term benefits, extending across environmental, economic, energy, mobility, and sustainability domains. Taken together, supporting place-based transportation electrification programs can help Alton to thrive.

Municipal Cost Savings

For communities that operate municipal vehicle fleets, EVs offer lifetime cost savings relative to internal combustion engine (ICE) vehicles through lower cost fueling and reduced operations and maintenance. While the upfront cost of EVs is typically higher than comparable ICE vehicles, federal and local incentive programs can help offset or eliminate this cost difference, allowing communities to begin realizing financial benefits from a transition to EVs with little to no additional upfront expenditure.

Economic Impacts

The expansion of EVSE infrastructure can serve as a catalyst for local economic growth. Installing and maintaining EV charging stations creates jobs in construction, electrical work, and network management while also offering opportunities for local businesses to become involved in the burgeoning electrified economy. As EV ownership increases, residents will benefit from the lower operating costs associated with EVs. Additionally, businesses that invest in EVSE may see increased customer traffic and be able to attract employees who value access to EV charging to fuel their commutes.

Environmental and Health Benefits

EVs produce fewer greenhouse gas emissions and help improve local air quality. This shift can reduce harmful pollutants such as nitrogen oxides (NOx) and particulate matter (PM), which are known contributors to respiratory and cardiovascular diseases. Steps to limit transportation-related pollution can support a wide array of public health goals, especially for vulnerable populations such as children, the elderly, and those with pre-existing health conditions.

Equity and Accessibility

Expanding EV adoption and EVSE infrastructure availability can also help address transportation equity issues. Ensuring that EV chargers are available in all parts of Alton, including low-income and underserved areas, will help open more paths for all residents to access the benefits of electrified transportation. Many low-income households spend a disproportionate amount of their income on transportation costs. By making EVs more accessible and offering convenient public charging options, Alton can help reduce transportation costs for these households, leading to greater economic equity and mobility for all residents.

Enhanced Mobility, Accessibility, and Regional Appeal

A well-planned EVSE network will improve mobility and accessibility for both residents and visitors. By ensuring that charging stations are conveniently located in accessible, high-traffic areas, Alton can help alleviate concerns about EV range, which remains a significant barrier to EV adoption. Improving charge station access can encourage more residents to switch to EVs and attract visitors from neighboring areas who may stop to charge while exploring local businesses. The development of a public charging network can also help ensure that all members of Alton can access EV charging even if they lack access to home charging.

Educational and Community Engagement Opportunities

The transition to EVs presents an opportunity for Alton to engage in educational programs and outreach initiatives to introduce this new technology option to residents. Workshops, information sessions, and public events can help raise awareness about the benefits of EVs and educate residents on available incentives, rebates, and programs to support EV ownership. Alton can inspire residents to take an active role in embracing innovation in transportation technology while supporting a host of local goals for ensuring Alton's vitality.

Long-Term Sustainability and Future Readiness

By investing in EV infrastructure now, Alton can position itself as a leader in sustainability and innovation. A robust EVSE network demonstrates forward-thinking planning that aligns with state and global trends toward electrification and decarbonization. As vehicle manufacturers continue to phase out internal combustion engine (ICE) vehicles and more governments enact regulations to support electric mobility, communities with established EV infrastructure will be better equipped to handle future demands. This proactive approach ensures that Alton remains competitive and attractive to new residents, businesses, and investors looking for environmentally conscious, sustainable regions.

Barriers to Transportation Electrification

Ameren Illinois and Alton community leaders identified a range of barriers confronting its transportation electrification efforts. Strategies and actions to address these barriers are presented below.

Cost and Access to Funding

Cost and access to funding is the biggest barrier to installing EVSE infrastructure for the City of Alton, a common problem for smaller communities. The initial costs for EVSE can be difficult to fund alone, especially with competing priorities. Cities can pursue grants when they are available, but often infrastructure grants focus on public transit and paths for biking, walking, and schools. Electrifying fleets can be another place to start, as vehicles age out of service. While the lifetime cost of operating an EV may be lower than a traditional ICE vehicle, upfront costs may be higher. Addressing higher initial vehicle costs can be difficult when balancing annual budget cycles for local vehicle fleets.

Lack of EV Awareness and Education

Residents and businesses in Alton may be unfamiliar with EVs and charging infrastructure, may hold misconceptions about EVs, or may simply lack the information needed to support their own path to adoption. Common concerns such as cost, range anxiety, and charging times could also present barriers to wider EV adoption.

Limitations to EVSE and EV adoption

Electrical Infrastructure Constraints: Many potential locations, especially older residential homes and commercial buildings, may lack the necessary electrical capacity to support EV charging stations. Upgrading electrical infrastructure in these areas can be costly and time-consuming, further limiting viable site options.

Land Ownership and Permissions: Installing EVSE on certain properties requires creating partnerships or obtaining permissions from private landowners, business owners, or government entities, which can create delays or complications. For public installations, coordination with local business owners may be necessary to secure the needed approvals.

Geographic and Environmental Considerations: Some areas within Alton may face geographic challenges, such as limited accessibility or environmental restrictions, making them unsuitable for EVSE. For instance, flood-prone or rural areas might require additional considerations before installation.

READINESS STRATEGIES

The following readiness strategies describe ways that Alton's leaders can work towards achieving the community's transportation electrification goals, either independently at the municipal level or in collaboration with community partners. Funding available through Ameren Illinois programs or from other local, state, and national sources could help offset some of the costs in deploying these strategies.

Strategy 1: Install EVSE at Priority Locations

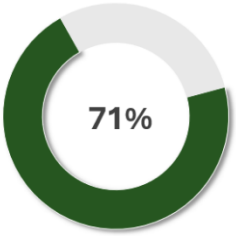
Alton currently has several functioning EV chargers, but the City Plan Commission has identified seven additional locations that could better serve the community. These include Rock Springs Park—which already has two public chargers, hosts large events, and is near an area slated for improvements near College Avenue and Alton Middle School—Alton Square Mall, James H. Killion (Salu) Park, City Hall (a former charger site with high past usage), and a grocery store cluster that would serve Schnucks, Save-A-Lot, ALDI, and others. Suitability scores from the GEM model are shown below. Notably, suitability remains consistent throughout downtown Alton, regardless of the exact location.

The City of Alton needs to determine whether these EV charging stations will be owned and operated by the city or private entities. **Appendix A** and **Appendix B** provide resources that can support this decision. While all of these sites have moderate suitability scores based on the parameters of the GEM model, all are in areas with low capacity (less than 0.5 megawatt) on Ameren Illinois' distribution system. The first step community leaders should take before beginning the process of procuring EVSE is to review these locations with Ameren Illinois to determine whether development would entail additional cost to supply electricity to the new EVSE sites. Existing electricity supply capacity throughout the historic downtown of Alton is high, potentially avoiding additional infrastructure costs. Refer to **Appendix G** for an outline of this process.

Rock Springs Park

2116 College Ave, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

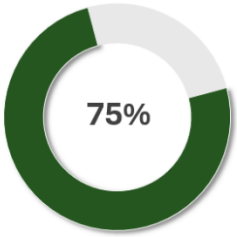
- ✓ High accessibility
- ✓ Diverse event and recreation opportunities
- ✓ Existing EVSE
- X Limited distribution system capacity

Notes: Rock Springs Park hosts multiple parking options, and its diverse use cases and year-round events make it a strong candidate for expanding on already existing EVSE.

Alton Square Mall

200 Alton Square, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

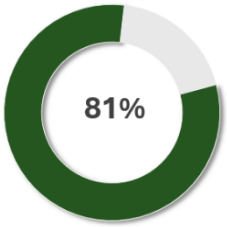
- ✓ Ample parking stalls
- ✓ Proximity to major throughfares (IL-3 / Homer Adams Pkwy
- X Limited distribution system capacity

Notes: Anchored by multiple popular stores and located near to a major east-west corridor, the Alton Square Mall could serve many different charging cases between visitors and locals alike.

Save-a-Lot / ALDI Area

2811 Homer M Adams Pkwy, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

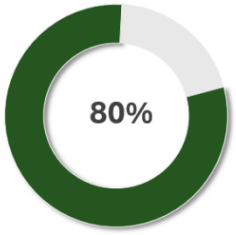
- ✓ Ample parking stalls
- ✓ Proximity to major throughfares (IL-3 Homer Adams Pkwy)
- X Limited distribution system capacity

Notes: Like the nearby Alton Square Mall, this commercial cluster scores well for having the parking infrastructure and strategic location next to a major arterial road to serve diverse charging needs.

City Hall

101 E 3rd St, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

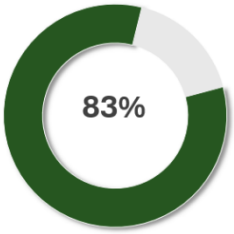
- ✓ High visibility and accessibility
- ✓ Proximity to downtown core
- X Limited distribution system capacity

Notes: Previously the site of an EV charger, City Hall's strategic location in downtown makes it an excellent candidate for new EVSE.

Downtown Alton Parking Lots

101 E 3rd St, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

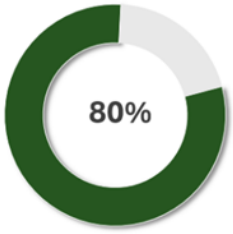
- ✓ Ample stalls
- ✓ Pre-existing high demand
- ✓ Proximity to downtown core
- X Limited distribution system capacity

Notes: For similar reasons as City Hall, this large, well-utilized lot in downtown sees traffic from visitors and locals alike year-round and is a strong candidate for EVSE installation.

James H. Killion (Salu) Park

2400 Washington Ave, Alton, IL 62002

Site Suitability Score:



System Capacity:

- ○ **High** 1.001 – 10 (MW)
- ○ **Medium** 0.501 – 1 (MW)
- ● **Low** 0 – 0.5 (MW)

Key Factors:

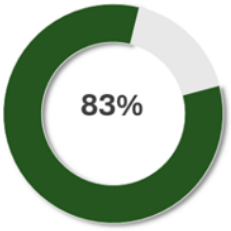
- ✓ Diverse community/local events
- ✓ Proximity to major throughfares
- X Limited distribution system capacity

Notes: Tucked away in a residential area, this park hosts multiple sports courts, a playground, and newly installed restrooms. It scores well due to its location nearby to Homer M Adams Parkway but would likely serve local charging needs due to its quieter location. Events and recreation opportunities hosted here boost its potential use cases.

Alton Police Station

1700 E Broadway, Alton, IL 62002

Site Suitability Score:



System Capacity:

- **High** 1.001 – 10 (MW)
- **Medium** 0.501 – 1 (MW)
- **Low** 0 – 0.5 (MW)

Key Factors:

- ✓ Ample stalls
- ✓ Proximity to major throughfares
- ✓ Fleet electrification potential
- X Limited distribution system capacity
- X Isolated from downtown core

Notes: This site benefits from its large parking lots and strategic location along Broadway but is still removed enough to see more limited use cases - compared to being able to park and walk to other amenities. However, if fleet electrification is explored in the future, the site is a logical choice to charge city-owned vehicles.

Strategy 2: Develop a Plan for Electrifying Alton's Fleet

Strategy 2 focuses on electrifying Alton's fleet vehicles. The City Plan Commission noted strong interest from the police, public works, and parks departments, though more information is needed on feasibility, battery life, and charging logistics. School bus drivers have also shown curiosity about electric options due to potential cost savings. While Alton contracts school bus services through Illinois Central Bus Garage, it's unclear if they are pursuing electrification. Currently, there are no EVs in the city fleet, but interest is growing—particularly within the police and public works departments. The fire department has not yet been approached. Fleet electrification could yield long-term cost savings and raise public awareness as EVs become more visible throughout the community. A comprehensive fleet review may uncover additional cost-effective opportunities for transition.

A lifecycle cost analysis of electrifying fleet vehicles should factor upfront costs, available funding sources, incentives, and cost savings over the life of the vehicle compared to an ICE vehicle due to anticipated reductions in fuel and vehicle maintenance costs. Available resources to support this analysis include:

- **Lifetime Cost Savings:** By using the Ameren Illinois Cost Savings Calculator, community leaders can calculate the savings the city would have when transitioning from an ICE vehicle to an EV using the most current cost information.

- **Funding Sources and Incentives:** Funding provided through Ameren's CEC program can be used to offset the cost of purchasing a new EV. Additional potential funding sources and available tax credits are included in **Appendix B**.
- **Free fleet assessment by Ameren:** Ameren Illinois offers a free fleet assessment, which delivers a custom report on the impacts of fleet electrification, including a cost-benefit analysis, comparative vehicle costs, EVSE infrastructure requirements, and a strategic plan to transition fleets to EVs.

To support the continued transition to an EV fleet, installing additional charging infrastructure will be important. Refer to **Appendix C** for more information on EVSE infrastructure options and **Appendix D** for typical costs associated with hardware and purchase and installation.

As Alton continues adding EVs, community leaders should consider the following:

1. **Develop community support:** Building support among Alton residents for EVs will be important. EV ride-and-drives and other educational events can help Alton community members become more familiar with the EV driving experience. First-hand experience can provide important opportunities for community members to answer key questions and to begin to envision themselves as part of the EV transition.
2. **Analyze the costs:** A full lifecycle assessment that weighs not only up-front costs but anticipated vehicle fuel and maintenance savings over time can provide a better picture for local decision-makers when weighing the budget impacts associated with transitioning to electric transportation.
3. **Anticipate supporting community learning opportunities:** Ameren Illinois offers free EV educational materials that can help train the Alton police force and city administrators. Allowing staff to test drive EVs and supporting that experience with on-site educational sessions can help all key personnel engage in and support the EV transition.
4. **The entire fleet doesn't have to transition at once:** Transitioning an existing city fleet to an EV fleet will take time. Conducting an internal assessment of municipal needs and cost benefits is an important step.
5. **Proper maintenance will be important:** EV maintenance and repair differs from that of an ICE vehicle. If existing staff maintain and repair fleet vehicles, consider sending them to a training course to learn how to properly maintain and repair an EV. Electrify Illinois has information on training programs across the state that can certify Alton's existing technicians.
6. **Collaborate with other communities:** Work with communities surrounding Alton that are also transitioning their fleets. Leveraging lessons learned across communities can help ensure that emerging issues are quickly identified and addressed.

Strategy 3: Develop a Partnership Strategy to Support EVSE Infrastructure Installations

The City of Alton identified OSF Saint Anthony's Health Center and Alton Memorial Hospital as potential partners in EVSE development. To encourage EV adoption, the city can also engage developers of current and upcoming projects. The 40-unit Sunnybrook townhome development currently lacks EV charging plans but presents an opportunity. Additionally, a mixed-use project, Wedge Innovation Center, is considering EVSE.

Operated by AltonWorks, The Wedge aims to drive regional growth, and future plans for housing and retail redevelopment along Alton's historic corridor could further benefit from integrated charging infrastructure.

To foster this partnership, Alton community leaders can:

1. **Engage potential partners:** Identify the local businesses and organizations that may be interested in working with Alton to incorporate EVSE infrastructure into their plans, particularly those that have sustainability goals. Many industries are working to electrify fleets and provide local charging, and collaborating with Alton on electrification activities may help support those goals.
2. **Define relevant objectives:** Alton's objectives for transportation electrification may differ from partner objectives. Clarifying shared objectives and goals can help identify projects that can benefit both Alton and partners.
3. **Develop funding options wherever possible:** After identifying relevant goals and objectives, community leaders can begin to identify funding options to potentially help offset the costs of local transportation electrification initiatives.
4. **Demonstrate impact and share information on challenges and success:** As community leaders and partners complete projects, leverage success stories and showcase benefits and positive outcomes to engage and encourage others to explore their own EVSE infrastructure installation options. While specific projects may differ in focus and scale, many barriers will be similar. Sharing best practices and lessons learned among community stakeholders and partners can help reduce costs and speed implementation of future projects.

Strategy 4: Develop and Deploy an EV Outreach and Education Program for Local Residents, Partners, and Stakeholders

Ameren Illinois offers educational resources on EVs and EVSE infrastructure. **Table 2** outlines programs that could assist with the purchase of an EV or installation of EVSE infrastructure. Community leaders can facilitate access to these programs. Ameren Illinois also offers EV Ride & Drive and virtual learning events on EVs that can provide information-sharing opportunities. These events help individuals to experience driving an EV and offer an opportunity to ask questions.

Table 2. Ameren Illinois Programs and Educational Resources

EV Comparison Tool	This tool compares EV models to help consumers understand the various performance attributes to consider when making a purchase.
EV Savings Calculator	The EV Savings Calculator can help residents understand how owning an EV could save them money on fuel and maintenance during the life of the vehicle.
EV Tax Credits	FuelEconomy.gov provides the most up to date information on Federal Tax Incentives for EV and EVSE infrastructure purchase and installation.
Home EVSE Infrastructure Tax Credits	Federal incentives exist for installing home charging stations. Visit the website for more information.
EV Purchase Tax Credits	The IRS offers rebates on EV purchases at time of purchase. For the most up to date information, visit their website.
Ameren Illinois ChargeSmart Program	The Ameren Illinois ChargeSmart program is a whole house rate that helps residents shift their energy usage and habits over time. To assist in the shift to charging EVs and using major appliances overnight, Ameren Illinois provides a bill credit for the first 12 consecutive months enrolled in the program.
Ameren Illinois Quarterly EV Newsletter	Community leaders and residents can sign up for the quarter EV Newsletter. This newsletter contains EV owner testimonials, educational information, and updates on upcoming Ameren events.

In addition to the tools listed above, community leaders can access the Alternative - Fuel Life Cycle Environmental and Economic Transportation Tool (AFLEET) provided by the Argonne National Laboratory. This tool examines the environment and economic costs and benefits of alternative fuel and advanced vehicles (AFVs).

When the city administrator and community leaders determine they are ready to move forward with any project listed in this plan, town meetings could be held to inform residents and garner input. While Alton leaders likely will hold the responsibility for completing certain projects, building community support can help ensure that key questions are addressed during the early planning phase. These community meetings also present an opportunity to offer residents EV information, including information resources from Ameren Illinois.

ACTION PLAN AND CONCLUSION

The following steps are recommended to pursue the identified transportation electrification projects and access available funding:

Step 1: Review Plan and Determine Next Steps

This Plan documents Alton's transportation electrification goals and recommends specific actions in the Readiness Strategies section that support achieving those goals. Community leaders should review these options and determine which project(s) to prioritize. Reviewing available distribution capacity at the selected locations with Ameren Illinois will be important to determining the feasibility of installing EVSE at these locations. Refer to **Appendix G** for this process.

Along with the Plan, community leaders should refer to the EV Readiness Guide provided after the Discovery Meeting. The EV Readiness Guide is meant to support all aspects of this Plan, including how to support and engage community members as the Plan is implemented.

Step 2: Identify Electrification Professionals to Support the Plan

This Plan includes installing EVSE infrastructure, and it will be important to work with an ICC Certified Installer during the process. Certified technicians can be found on Ameren Illinois' partner website at https://amerenevpartners.com/ where the community can use the map to locate the nearest ICC-certified electricians. EVSE infrastructure comes in various sizes, configurations, and price ranges and certified electricians or other partners can help the community explore additional options based on specific needs.

Step 3: Access Funding from Ameren Illinois

Alton qualifies for $75,000 in funding from Ameren Illinois based on its qualification as an EIEC and/or low-income community.

This funding process will be executed through a Memorandum of Agreement (MOA) signed by community leaders and Ameren Illinois. Within 45 days of the MOA signature, the community will receive the funds to begin its Community Transportation Plan process. As a reminder, these funds from Ameren Illinois can be used for projects in or serving equity investment-eligible communities and/or low-income communities, including:

- Installation of EVSE Infrastructure[5]
- Purchasing EVs for the municipal fleet
- Hiring contractors to support project delivery
- Facilitating educational training programs
- Organizing EV-focused community events

Additional projects may be approved for funding. Please work with Ameren Illinois to approve funding use for other electrification projects outside of those listed above.

[5] The community may qualify for additional Ameren Illinois incentives.

Step 4: Execute the Plan

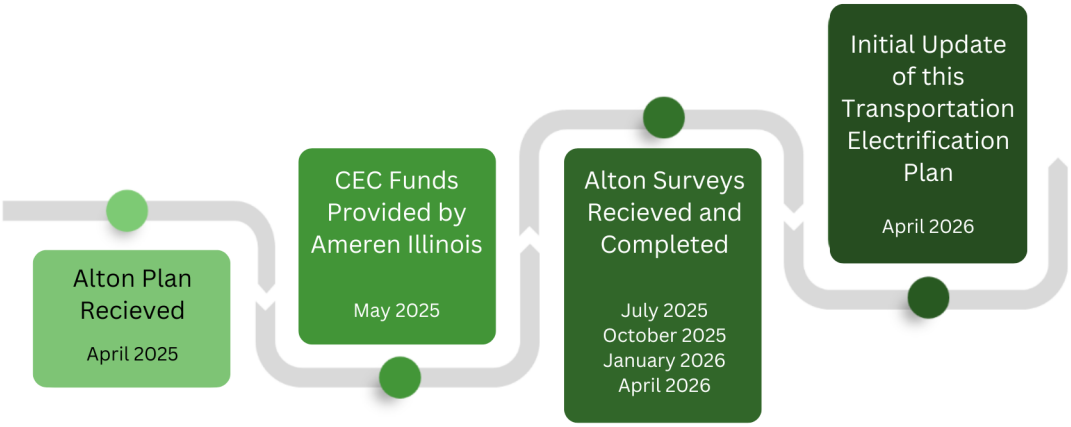
After Alton community leaders have reviewed this Plan and secured partners to work with through Ameren Illinois' EV Partner Network, the next step is to execute this Plan. The City Plan Commission and other community leaders should refer to the Readiness Strategies of this Plan to follow execution steps and recommendations. Ameren Illinois is available to assist in this process.

Step 5: Revisit and Update Transportation Electrification Priorities

Alton community leaders should regularly revisit the Plan to determine progress and challenges faced. As technology evolves, this Plan should be updated to incorporate the new opportunities and adjust accordingly to add new goals and remove those that have been achieved. In addition, community leaders will be asked to complete a survey to provide updates on the status of the Plan to Ameren Illinois, including any EVSE infrastructure installation, electrified fleet purchases, and how funds provided by Ameren Illinois are used. These surveys will be provided at 3, 6, 9, and 12 months after the Plan has been delivered. Please access Ameren Illinois' Electric Vehicle Partner Network to find contractors and EVSE installers who can provide estimates for the costs and associated timeline of your planned project; this information will be requested in follow-up surveys.

Timeline

The estimated timeline for your community to complete these steps is as follows:

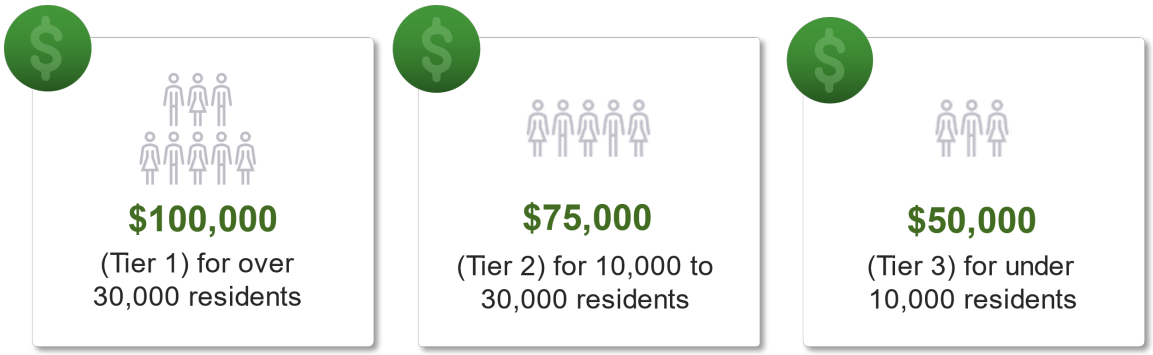


Ameren Illinois appreciates the opportunity to partner with Alton on the development of this Plan and looks forward to continuing to support the community's transportation electrification journey.

APPENDICES

APPENDIX A: AMEREN ILLINOIS BENEFICIAL ELECTRIFICATION RESOURCES

Ameren Illinois' Community Engagement and Consultation (CEC) program supported the development of this Community Transportation Electrification Plan. Additionally, for qualified EIEC and/or low-income communities, the program provides funding to support the implementation of identified projects. Funding levels are defined based on the number of residents in these underserved communities:



In addition to the CEC program, Ameren Illinois offers other beneficial electrification programs and resources to its residential and non-residential customers. These programs are summarized in **Table A-1**, including links to additional program information.

Table A-1. Ameren Illinois Beneficial Electrification Programs (as of Q4 2024)

Program Name	Residential Customers	Non-Residential Customers	Description
Ameren EV Partner Network	✓	✓	Ameren Illinois' EV Partner (EVP) Network connects homeowners, business owners and municipalities to qualified professionals to address their EV charging needs. The EVP Network offers valuable incentives to businesses and residential projects, helping to offset the costs associated with installing public EV charging stations and related infrastructure.
EV Newsletter	✓	✓	Residents who subscribe to the Ameren Illinois quarterly EV Newsletter receive information on upcoming events, EV news, and interviews with existing EV owners.
EV Comparison Tool	✓		Residents considering purchasing an EV can use Ameren Illinois' EV comparison tool to help them decide which EV will best fit their lifestyle. This tool also helps customers determine if an EV qualifies for a federal or state tax rebate.
ChargeSmart	✓		Residential customers can save money through the ChargeSmart program by shifting their household energy use (including EV charging) to preferred charging hours (11:00 PM – 7:00 AM). Ameren Illinois provides a $4 monthly bill credit for the first year enrolled to help customers adapt to shifting their energy usage.

Program Name	Residential Customers	Non-Residential Customers	Description
ChargeSmart Non - Residential Charging Program		✓	ChargeSmart encourages electric vehicle adoption and charging at times better for the grid with bill credits, preferred charging period delivery credits, demand charge rate limiter, and supplemental line extension allowances.
Fleet Assessment		✓	Ameren Illinois provides a Free Fleet Assessment for municipalities and non-residential customers. A detailed report is provided to help facilities and municipalities determine if transitioning their fleet to EVs is cost-effective.
Driver Education		✓ Public High Schools	Provides IHSCDEA-approved educational resources that schools can use to incorporate EV education into their existing Driver Education Curriculum.
Driver Education Program EV and EVSE Infrastructure Rebates		✓ Public High Schools	Qualified schools can apply for rebates for the purchase of an EV and/or charging equipment to accompany their existing Driver Education program.

APPENDIX B: ADDITIONAL COMMUNITY RESOURCES

In addition to programs and resources offered by Ameren Illinois (described in Appendix A), this appendix provides information on a variety of state and federal resources that communities can leverage to support their transportation electrification initiative. These resources provide financial assistance, rebates, and technical support to help offset the costs of EVSE installations and enhance the overall viability of transportation electrification projects.

Federal Resources and Programs

Federal resources and programs offer significant financial incentives, grants, and tax credits to help communities reduce the costs of EVSE installations and promote widespread EV adoption. The following funding opportunities are currently available:

Alternative Fuel Infrastructure Tax Credit

The Alternative Fuel Vehicle (AFV) Refueling Property Credit is available for qualified AFV fueling property installed in qualified locations on or after January 1, 2023, and through December 31, 2032. Eligible properties include EV charging equipment. Businesses are eligible for a tax credit of:

- 6% of the depreciable costs, up to $100,000 per item; or
- 30% of the depreciable costs, up to $100,000 per item, if the installation meets U.S. Department of Labor prevailing wage and apprenticeship requirements.

Tax-exempt entities, including state and local governments, may be eligible to receive this credit, via IRS elective pay provisions. For elective pay eligibility requirements, please see IRS Elective Pay and Transferability.

Consumers who purchase qualified alternative fueling equipment for installation at their principal residence in qualified locations may receive a tax credit of up to 30% of the cost, up to $1,000. Full guidance on the qualification for is available on the IRS website. Eligible census tracts can be reviewed on the DOE's 30C Tax Credit Eligibility Locator.

Charging and Fueling Infrastructure Grants

The U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program) offers funding to deploy publicly accessible EV charging and alternative fueling infrastructure in urban and rural communities and along Alternative Fuel Corridors (AFC). The CFI Program offers two types of funding opportunities:

Alternative Fuel Corridor Grants (Corridor Program)

This grant applies to infrastructure deployments located on public roads or at publicly accessible locations, including public parking facilities, public buildings, public schools, or public parks are eligible. Low-income, underserved, rural, and high-density communities will be prioritized for grant funding. Corridor Program grants are available to infrastructure deployments along designated AFCs and for educational and community engagement activities.

To apply for grant funding, the USDOT Federal Highway Administration requests submittals through Grants.gov. All available information is posted on USDOT's program website.

Commercial EV and Fuel Cell Electric Vehicle (FCEV) Tax Credit

Beginning January 1, 2023, a tax credit is available to businesses and tax-exempt organizations for the purchase of new EVs and FCEVs. Vehicles with a gross vehicle weight rating (GVWR) below 14,000 pounds must have a battery capacity of at least seven kilowatt-hours (kWh) and vehicles with a GVWR above 14,000 pounds must have a battery capacity of at least 15 kWh. The tax credit amount is equal to the lesser of the following amounts:

- 15% of the vehicle purchase price for plug-in hybrid EVs
- 30% of the vehicle purchase price for EVs and FCEVs
- The incremental cost of the vehicle compared to an equivalent ICE vehicle

Maximum tax credits may not exceed $7,500 for vehicles under 14,000 lbs. and $40,000 for vehicles above 14,000 pounds. Businesses may not combine this tax credit with the Clean Vehicle Tax Credit. For more information, see the Internal Revenue Service (IRS) Commercial Clean Vehicle Credit website and the IRS Guidance on the Incremental Cost for the Commercial Clean Vehicle Credit.

Community EV Charging Grants

The U.S. Department of Transportation and the U.S. Department of Energy's Joint Office of Energy and Transportation (Joint Office) offers grants of up to $4 million for projects that expand community e-mobility access and provide clean reliable energy. Topic areas include solving no-home charging, electrifying light- and medium-duty fleets, and developing managed charging programs. Grants are available for planning projects as well as demonstration and deployment projects, which have a minimum cost share requirement of 50%. Eligible applicants include universities; businesses; non-profit organizations; and state, local, and tribal governments. Terms and conditions may vary by topic area. For more information, see the Joint Office's Communities Taking Charge website.

State-Level Resources for Illinois

State incentives provide communities with targeted rebates, grants, and financial support aimed at reducing the costs of EVSE installations and encouraging the adoption of EVs. The following state-level programs are available to support Illinois communities' electrification efforts:

EV Charging Station Grants

The Illinois Environmental Protection Agency (IEPA) offers grants to public and private entities for the installation and maintenance of publicly available Level 2 and direct current fast charging (DCFC) stations. Rebate awards may cover up to 80% of the eligible project costs. Additional rebates are available for EV charging stations deployed in underserved and environmental justice communities. For more information, see the IEPA Climate and Equitable Jobs Act website.

EV Rebates

The Illinois Environmental Protection Agency (IEPA) offers rebates to residents for the purchase of a new or pre-owned EV. Rebates amounts are available according to the schedule in the table below. In past years demand for these funds was depleted a few months into the program. :

Table B-1. Rebate Offerings by Timeline

Purchase Timeframe	Rebate Amount
July 1, 2022 – June 30, 2026	$4,000
July 1, 2026 – June 30, 2027	$2,000
Beginning July 1, 2028	$1,500

IEPA also offers rebates of $1,500 to Illinois residents for the purchase of an electric motorcycle. EV owners must apply for the rebate within 90 days of purchasing or leasing and registering the EV in Illinois. Applicants may only receive one rebate in a 10-year period. Rebate award amounts may not exceed the purchase price of the vehicle. Low-income applicants will be given funding priority. Additional restrictions apply. For more information, see the IEPA EV Rebate website.

APPENDIX C: OVERVIEW OF EV AND EVSE INFRASTRUCTURE

EV Basics[6]

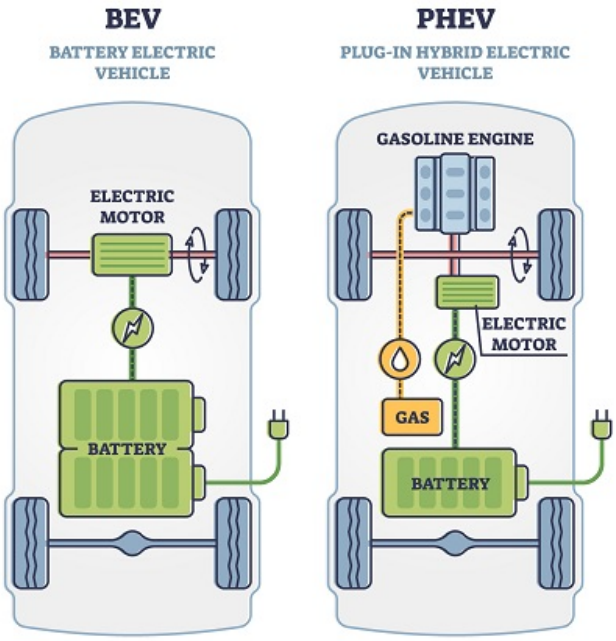
Electric mobility includes light-duty automobiles, medium- and heavy-duty electric EVs, electric micro-mobility devices, and transit vehicles. The EV market is evolving rapidly, with models available in a range of vehicle types, from compact cars and sedans to sport utility vehicles (SUVs) and pickup trucks. Some EVs operate solely on batteries, while others are plug-in hybrid models with both an electric motor and an ICE. This appendix provides an overview of the various types of EVs and associated vehicle charging infrastructure, with information pertaining to light-, medium-, and heavy-duty EVs, including battery electric buses (BEBs) used in transit applications and electric school buses (ESBs).

Battery Electric Vehicles (BEVs)

Battery electric vehicles (BEVs)—also referred to as "all-electric vehicles"—run on electricity only and are recharged from an external power source. They are propelled by one or more electric motors powered by rechargeable battery packs.

Almost all BEVs can travel at least 100 miles on a charge, and many new vehicles coming on the market offer an all-electric range of 200-300 miles or more. Included among BEVs are battery-powered buses, such as BEBs and ESBs.

Figure C-1. BEV and PHEV Design



Plug-In Hybrid Electric Vehicles

Plug-in hybrid electric vehicles (PHEVs) also use batteries to power an electric motor and can be recharged from an external power source, but they incorporate a smaller ICE that can recharge the battery (or in some models, directly power the wheels) to allow for longer driving ranges. A schematic comparison is provided in Figure C-1.

PHEVs can usually drive moderate distances in "EV mode" using only the battery, typically from 20 to 50 miles in current models. This significantly reduces their gasoline use and emissions under typical driving conditions, because most trips are short.

PHEVs use 14 to 47 percent less fuel than conventional vehicles if their batteries are fully charged. When electricity is unavailable, PHEVs can run on conventional fuel (i.e., gasoline or diesel).

Electric Buses

Similar to BEVs, battery electric buses and electric school buses run on electricity only and require recharging their onboard battery packs from an external power source. BEBs are categorized as long-/extended-range or fast-charge depending on the size of their battery packs. Long-/extended-range BEBs have larger battery packs (250– 660 kWh) and are meant to only be charged once or twice per day, whereas fast-charge BEBs have

[6] Descriptions and figure below courtesy of the US Department of Transportation: Vehicle Types | US Department of Transportation

smaller battery packs (50 – 250 kWh) that can receive more frequent high-powered charges; ESBs generally fit into this category, as they tend to have shorter routes with a midday break for charging. The average range for BEBs and ESBs varies based on the battery pack capacity and is significantly impacted by weather, driving behavior of the operators, topography, and ridership load.

Vehicle Charging Infrastructure Types

Most EV charging occurs by plugging an electric power source directly into a port on the vehicle, similar to filling a car with gasoline. Plug-in EVSE can operate at different power levels, which can have a significant impact on the speed to recharge and the cost of equipment: [7]

Level 1

Level 1 chargers are 120V devices that can be plugged into a standard 120V AC outlet, but they require 40-60 hours to charge a BEV from empty to 80 percent and 5-6 hours for a PHEV. While Level 1 chargers are a convenient option for those without upgraded electrical panels or for vehicles parked for extended periods, they are not viable for public installations and were not considered in the development of this Plan.

Level 2

Level 2 equipment offers higher-rate AC charging through 240V (in residential applications) or 208V (in commercial applications) electrical service, and is common for home, workplace, and public chargers. Level 2 chargers can charge a BEV from empty to 80 percent full in 4-10 hours and a PHEV in 1-2 hours.

DC Fast Chargers (DCFCs)

DCFC equipment offers rapid charging at popular destinations or long-distance corridors. DCFC equipment can charge a BEV to 80 percent in 20 minutes to an hour. Most PHEVs currently are not able to charge at these stations.

Table C - 1. Charging Specifications

	Level 1	Level 2	DCFC
Connector Type	J1772 connector 	J1772 connector 	CCS connector  CHAdeMO connector  Tesla connector 

[7] Technology descriptions and figures below courtesy of the US Department of Transportation: Charger Types and Speeds | US Department of Transportation

	Level 1	Level 2	DCFC
Voltage	120V AC	208-240V AC	400-1000V DC
Typical Power Output	1 kW	7kW – 19 kW	50 – 350 kW
Estimated PHEV Charge Time from Empty	5 – 6 hours	1 – 2 hours	N/A
Estimated BEV Charge Time from Empty	40 – 50 hours	4 – 10 hours	20 mins – 1 hour
Estimated Range Per Hour of Charging	2 – 5 miles	10 – 20 miles	180 – 240 miles

Tesla Chargers Versus Non-Tesla Chargers

As of July 2024, Tesla has begun opening its Supercharger network to non-Tesla vehicles, but progress has been slow due to software delays, compatibility issues, and hardware shortages. Despite Tesla's 30,000 fast-charging ports across the U.S. and Canada, most remain inaccessible to non-Tesla drivers. To evaluate charger access in and around the community, the assessment differentiated between Tesla and non-Tesla charger locations when analyzing EVSE availability. While approximately 90% of EV charging occurs at home or work, access to public charging infrastructure remains critical for a healthy EV market. Currently, there are 2,651 public Level 2 charging ports and 1,171 DC fast-charging ports available to the public in Illinois,[8] but over half of the DC fast chargers are proprietary Tesla units, limiting access for non-Tesla users and contributing to range anxiety among potential EV buyers. **Table C - 1** summarizes the typical power outputs, charging times, and compatibility for PHEVs and BEVs based on the different connector or charger types for light duty vehicles.

[8] US Department of Energy Alternate Fueling Station Locator, accessed October 24, 2024: Alternative Fuels Data Center: Alternative Fueling Station Locator

APPENDIX D: REPRESENTATIVE EVSE PROJECT COSTS

Table D -1 provides representative ranges for the types of costs most commonly associated with installing Level 2 and DCFC infrastructure. These cost ranges are estimates only and are intended to be used by communities for initial screening of potential projects. Actual costs may vary significantly based on equipment features, site configurations, available electric capacity, and other project-specific factors.

Table D - 1. Estimated EVSE Installation Costs[12]

Category	Level 2	DCFC
Hardware Costs	Average cost: **$400 - $2,000** Depends on brand and features	Basic 50 kW unit: approx. **$20,000** High-power units (over 200 kW): **can exceed $150,000**
Installation Costs	Standard Installation: **$1,300 - $3,300+** Cost in this range can include labor for basic installation and minor electrical work, such as installing 240V circuit. Site-specific considerations can cause these costs to increase.	Standard Installation: **$45,000 - $70,000** These costs can include significant electrical infrastructure upgrades, such as installing 480V three-phase power systems.
Additional Costs	Additional electrical upgrades (if needed) are approximately **$300 - $2,500+** These costs include potential service panel upgrades and other site-specific needs.	Additional site preparation (if needed): Costs for trenching, conduit installation, etc. can **add $4 - $12 per foot or more**. Specific locations could have additional costs as well, depending on local characteristics.
Permitting Costs	**$150 - $500+**, depending on local regulations	**$150 - $500+**, depending on local regulations

To refine cost estimates, the community should contact trade allies who are qualified as Ameren Illinois Electric Vehicle Partners to obtain the most accurate, market-rate quotes for specific projects. **Table D - 2** is included and left blank for community leaders to fill in as they speak with dealerships and/or and the EV Partner Network about estimated costs for products and services.

Table D - 2. For Community Use in Planning

Item	Cost	Units	Total Low Range Estimate	Total High Range Estimate
Total Cost				

APPENDIX E: COMMUNITY ASSESSMENT DATA SOURCES

Data sources used to characterize the community, and the granularity of each, is presented in **Table E - 1.** While these data sources represent the best information available for each metric of interest, census block group and ZIP code boundaries do not necessarily align with community boundaries and may not reflect reality in specific communities. To address this, Ameren Illinois reviewed initial estimates with community leaders to refine values to better reflect the community, where necessary.

Table E - 1. Data Sources Informing Community Assessment

Data Element	Source	Granularity
EIEC and/or low-income definitions	Illinois Power Agency based on U.S. EPA EJ Screen	Census block group
	U.S. Department of Housing and Urban Development's (HUD) Low to Moderate Income Population	Census block group
	Illinois Restore, Reinvest, and Renew (R3) communities	Census block group
Total Population and EIEC Population	2020 Census	Community and ZIP code
Household metrics (homeownership rate, median income, build year, housing stock)	American Community Survey (ACS) 5-year Estimate (2022)	Census block group
Existing vehicle metrics (commute time, vehicle ownership, quantity)	American Community Survey (ACS) 5-year Estimate (2022)	Census block group
Estimated Registered EVs	Illinois Secretary of State	ZIP Code
Public EVSE Infrastructure within/nearby community	Alternative Fuels Data Center, U.S. Department of Energy	Specific addresses

APPENDIX F: SITE SUITABILITY SCORING METHODOLOGY

To best support the adoption and implementation of EVSE equipment, Ameren Illinois worked with the community to identify potential sites that align with ongoing EVSE planning efforts. Ameren Illinois then leveraged the Geospatial Energy Mapper (GEM)[9] model to help assess and refine these locations, ensuring they are well-suited for EVSE installations. The GEM model is a powerful, interactive web-based decision support system that allows users to locate areas with high suitability for energy-related projects, including EVSE infrastructure.

The model evaluates site suitability based on a variety of ranked and weighted variables. To assess the suitability of the potential sites for new EVSE installation, Ameren Illinois utilized the following parameters in the GEM model to develop a suitability score for each location.

Distance to Substation

One of the key inputs considered when selecting potential EVSE installation sites is the distance in miles to the nearest electrical substation. This information is based on the Department of Homeland Security's (DHS) Homeland Infrastructure Foundation-Level Data (HIFLD) for open transmission lines. Proximity to substations is a critical factor because placing EVSE closer to electrical service infrastructure can significantly reduce installation costs.

By locating EVSE near substations, communities can minimize the need for costly trenching, boring, and extensive electrical upgrades, which are often necessary when charging stations are installed farther from the electrical grid. Reduced installation costs not only make the project more feasible but also improve the return on investment for public and private stakeholders involved in the transportation electrification process.

Population Density

Population per square mile is a priority input because it directly correlates with potential demand for EV charging infrastructure. Higher population density typically means more vehicles, increased transportation activity, and a greater likelihood of EV adoption. By prioritizing areas with higher population densities, EVSE installations are more likely to serve a larger number of residents and visitors, ensuring maximum utilization of charging stations. This also helps to strategically place EVSE in areas where it can have the greatest impact, both in terms of accessibility and supporting broader transportation electrification goals.

EV Charger Density

EV charger density, including both Level 2 and DC Fast Chargers, is a priority input because it reflects the existing EV charging infrastructure in an area. Areas with high charger density may already be well-served, while those with lower charger density indicate a greater need for additional EVSE installations. By evaluating charger density, the community can identify gaps in the current network and prioritize locations where additional chargers will have the most significant impact on accessibility, reducing range anxiety and encouraging further EV adoption. This ensures a balanced distribution of charging infrastructure to meet current and future demand.

Road Traffic Density

Road traffic density refers to the volume of vehicles traveling through a particular area over a given period. Areas with high road traffic density often experience heavy commuter or commercial vehicle flow, making them

[9] https://gem.anl.gov/tool

prime locations for infrastructure development, such as EV charging stations. High traffic areas, such as major highways, intersections, and urban centers, are more likely to attract a diverse range of drivers, including EV owners, as these locations are convenient for quick stops and charging.

However, road traffic density is considered a secondary input because, while it influences the potential visibility and accessibility of EV chargers, it is not as directly tied to EV adoption or charging demand as factors like population density or existing EV infrastructure. Road traffic density highlights areas with significant vehicle movement, but since many of these vehicles may not be electric, it does not guarantee high utilization of EVSE. Instead, it acts as a complementary factor, helping to ensure chargers are placed in areas where they will be seen and easily accessible, but should be evaluated alongside other critical factors like EV ownership and existing charger availability.

Distance to Major Road

Distance to major roads refers to the proximity of a potential EVSE installation site to highways and other major thoroughfares that handle high volumes of traffic. Being near these roads can improve the visibility and convenience of charging stations for commuters and travelers, making it easier for EV drivers to charge their vehicles during long trips or while passing through the area. Chargers located near major roads are typically more accessible to a broader audience, including those outside the local community. However, distance to major roads is considered a secondary input because the primary focus is on developing EVSE infrastructure that will support the local community.

APPENDIX G: AMEREN ILLINOIS CAPACITY REQUEST PROCESS

Step 1 Customer submits formal service request to Ameren Illinois Construction Services (ICE) team by phone or email. https://www.ameren.com/illinois/company/business-partners/construction-facilities

Step 1a. If a customer qualifies for, and chooses to elect Rider EVCP (ChargeSmart), they will need to collaborate with an Ameren EV Partner in order to receive incentives. https://amerenevpartners.com/

Step 2: ICE team will assign to field engineer and then communication will then happen with the field engineers and that is where site plans, load information, existing Ameren facilities etc. are covered.

Step 3: Based on project location and load information provided, engineering will assess the ability of Ameren's existing facilities to support the load. If upgrades are required Ameren engineering will make that determination and create cost estimates.

Step 4: If upfront customer contribution is required that will need to be paid prior to Ameren beginning construction.

Step 5: Option available for qualifying customers to enroll in ChargeSmart. In order to take advantage of incentives customer must work through the trade ally program and utilize Electric Vehicle Partner Network EVP for instillation.

Initial Checklist:

Ameren ILLINOIS

Initial Customer Meeting Checklist

CRTS Request Number: _____ Meeting Date: _____

Customer or Designee: _____ Phone number: _____

Ameren Contact: _____ Phone number: _____

Ameren Illinois takes pride in providing excellent customer service. We pledge to make your project a priority and a positive experience through ongoing communication. Our goal is to fully meet your expectations. In order to do that, we need your assistance. One or more of the following items must be completed by you or your designee before Ameren can proceed with your project. If you have questions at any time, please contact the Ameren contact listed.

Check all that apply

All required documentation (plats, plans, owner's certificates, 911 addressing, etc.) must be provided in order for Ameren engineering to begin.	☐
Electric and/or natural gas service request forms must be fully completed to accurately depict the proposed electric or natural gas load in order for Ameren engineering to begin.	☐
All fees for work to be performed must be paid in full in advance of construction.	☐
All required agreements for the work to be performed, including easement, contracts, etc. must be executed and returned, as directed.	☐
All trees, brush, etc. must be cleared from the path of construction. IL law requires a 21 day notice prior to trimming or removing trees on public property.	☐
All property corners (pins) must be exposed, staked and labeled with address or lot number.	☐
All customer required conduit must be installed per Ameren Illinois specifications.	☐
Where underground facilities are being installed, the site elevation must be within 6" of final grade. For subdivisions, notification of final grade must be provided in writing.	☐
An underground waiver form must be signed acknowledging that any customer owned underground facilities will be located and marked by the customer.	☐
The electric meter must be located no further than the midpoint of the wall closest to Ameren distribution facilities. The meter enclosure must be inspected, where applicable.	☐
The electric meter enclosure must be installed per the Ameren Service Manual and approved by Ameren or the local inspector, where applicable.	☐
The gas regulator must be located within 3-5 feet from the front corner of the home; at least 12" from all operating windows, vents or air intakes; have no source of ignition within a 3' radius, and clearly marked.	☐

APPENDIX H: COMMUNITY PROGRAM APPLICATION

AIC CEC - Application Form

COMPLETED

Response ID	: slDTHCXN
IP address	: 35.144.35.129
Response link	: https://survey.zohopublic.com/zsir/tuBqBk/slDTHCXN
Survey URL accessed by the respondent	: https://survey.zohopublic.com/zs/tuBqBk
Start time	: Mar 03, 2025 09:36:10
Completion time	: Mar 03, 2025 09:50:14
Time taken	: 14 mins
Collector	: AIC Community Leader Survey - Application Form

Page 1 : Ameren CEC Program - Application Form

Q1.

Field label	Response
First Name	Andy
Last Name	Campbell
Title	City Plan Commission
Community Name	Alton
Address	101 E. Third St
City	Alton
Zip Code	62002
Phone	618-363-6304
Email	ayancey@cityofaltonil.gov

Q2. What steps has your community taken so far to incorporate EV infrastructure into your community infrastructure plans?

Adding charging stations

Q3. What is your timeline for implementing EV Charging Stations in your community?

6 months to 1 year

Q4. How is the community assessing the demand for EV charging stations among residents and businesses?

EV ownership is noticeable in the city, with several residents driving electric vehicles.

Q5. Does your community have mostly single-family or multi-family homes?

Single-family

Q6. What challenges, barriers, or opportunities does your community see regarding EV adoption, charging infrastructure, and electrification, particularly considering factors like housing age, multifamily residences, new construction, development projects, and public areas?

Aside from funding, no major barriers are anticipated for installing additional charging stations.

Q7. What strategies are being considered to ensure equitable access to EV charging infrastructure in any portion of your community that qualifies as underserved or marginalized?

None

Q8. Are there any existing partnerships or collaborations with electrification professionals to install and maintain EV charging stations?

No

Q9. Has your community had conversations about the costs associated with installing and maintaining charging stations?

Yes

Q10. Were there any concerns?

Funding

Q11. What solutions to charging infrastructure in multi-family homes have you discussed?

--

Q12. Have you engaged local businesses and stakeholders in their adoption of EV charging infrastructure?

Yes

Q13. What has been the outcome?

Conversations with businesses and stakeholders about installing charging stations have been minimal.

Alton Works, a downtown developer, includes charging stations in parking areas of their refinished properties.

However, installing stations in some right-of-way areas may not be feasible due to space limitations.

Q14. Are there zoning or regulatory measures in place that could impact EV charging station installation?

Basic zoning regulations exist for charging station installations, mainly covering installation guidelines and signage requirements.

Q15. What broader sustainability plans does your community have?

Public Works is interested in adding EVs to the fleet, especially since they recently installed a solar array at their facility.

The city is working on a sustainability plan and partnering with SIUE to conduct a greenhouse gas inventory for both the public and private sectors.

This will help set long-term sustainability goals, though the specific focus areas are still undecided.

Q16. Please provide information for any local businesses or organizations we should work with when creating your community plan.

--

Q17. Other comments/notes:

The city currently has around six charging stations, with some located in public lots and city parks.

The city council supports electrification efforts, and coordination with Ameren is expected to be smooth.

Possible locations for new charging stations include a parking lot at Public Works, a downtown public parking lot, and an inoperable charging station at City Hall. Coordination with the Public Works director will be needed.

The city does not have a specific local electrification professional for installations. GRP Wegman does some of the city's work, but they are not necessarily the designated installer.

APPENDIX I: COMMUNITY MEETING NOTES

Meeting Notes:

3/3/25 (Discovery meeting) EIEC

- The ZIP code for the city of Alton is confirmed as 62002.
- The city currently has around six charging stations, with some located in public lots and city parks.
    - The exact number needs to be verified.
- The charging stations are being utilized by EV drivers.
- The city's fleet does not yet have any electric vehicles.
- Public Works is interested in adding EVs to the fleet, especially since they recently installed a solar array at their facility.
    - The array is slightly oversized, and they hope to use it for charging EVs.
- EV ownership is noticeable in the city, with several residents driving electric vehicles.
- The city consists primarily of single-family homes.
- Aside from funding, no major barriers are anticipated for installing additional charging stations.
- The city council supports electrification efforts, and coordination with Ameren is expected to be smooth.
- Possible locations for new charging stations include a parking lot at Public Works, a downtown public parking lot, and an inoperable charging station at City Hall.
    - Coordination with the Public Works director will be needed.
- The city does not have a specific local electrification professional for installations.
    - GRP Wegman does some of the city's work, but they are not necessarily the designated installer.
- Conversations with businesses and stakeholders about installing charging stations have been minimal.
    - Alton Works, a downtown developer, includes charging stations in parking areas of their refinished properties.
    - However, installing stations in some right-of-way areas may not be feasible due to space limitations.
- Basic zoning regulations exist for charging station installations, mainly covering installation guidelines and signage requirements.
    - These are outlined in Title 11 of the city code and are generally easy to comply with.
- The city is working on a sustainability plan and partnering with SIUE to conduct a greenhouse gas inventory for both the public and private sectors.
    - This will help set long-term sustainability goals, though the specific focus areas are still undecided.

3/28/25 (follow up meeting)

- ZIP code for Alton is 62002; 62018 and 62024 are neighboring municipalities, not within city limits.
- **General Information:**
    - Public works and parks operate out of the same building.
    - City currently does not charge for its public chargers but is exploring the idea.
- **Does your community have an existing community plan or sustainability plan or any types of goals, milestones, or metrics related to EV or EVSE already established or in mind to strive to achieve?**
    - The city is working with a local university on a greenhouse gas inventory to update a 2011 climate action plan.
- **Why are you interested in transportation electrification for your community?**

  - A new comprehensive plan is being developed, which will include updated sustainability elements.

- **What are the main attractions for tourists (if applicable) in your community?**
  - Alton hosts several events at Riverfront Park, such as the 4th of July celebration, Mississippi River Festival, summer concert series, food truck festival, an F1 powerboat event, and a weekly farmers market. This area includes several parking lots, but not all have EV charging.
- **Who are the major employers or businesses in the area? Has there been any collaboration with any of them on EVSE endeavors?**
  - The hospital (Alton Memorial) and OSF Saint Anthony's. Those are two big ones. And Alton Steel. Haven't worked with them on EV stuff yet, but there's potential.
  - Alton Steel has a 5 MW solar array that provides about 5% of their energy.
- **Are there other organizations or stakeholders that the city is currently partnering with or considering a partnership with?**
  - Two hospitals in town (OSF Saint Anthony's and Alton Memorial under SMS) could be potential partners.
- **What existing EV charging stations are you aware of in the community? Do you know who the owners are of the stations/chargers?**
  - Alton currently has two public charging stations at Riverfront Park and possibly two (formerly three) at Gordon Moore Park.
  - City Hall had a Level 1 charger that is currently offline due to concerns about it not being on a backup generator and potential liability if power goes out.
  - Several businesses have private chargers: a law firm (Simmons, Henry, Conroy), a shopping plaza by St. Louis Bread Co., and Roberts Ford.
  - Some businesses like Fast Eddie's do not currently have chargers and might benefit from them.
  - Hotels and gas stations in Alton largely lack charging stations; one hotel (Premier Hotel) has a Tesla charger.
  - No known chargers at the Amtrak train station, but this was flagged as a promising location.
  - Confirmed locations with existing or past chargers:
    - Riverfront Park (2 operational)
    - Gordon Moore Park (possibly 2 operational)
    - City Hall (out of service)
    - Premier Hotel (Tesla)
    - Best Western
    - Roberts Ford
    - Casino's chargers are city-owned, not casino-owned. One is down; two are operational.
- **What would you consider the barriers the community has to face as they move forward with transportation electrification?**
  - Cost and education. People don't understand the savings or even the resources available. And it's tough when you're working with older infrastructure. There's a desire to be involved, but people want to be smart about it, and make sure it's a good investment long-term.
- **Has your community applied for any grant funding related to EVs or EVSE?**
  - City has not applied for EV infrastructure grants yet but is open to doing so. Most grants so far have been for the private sector or highway-focused via NEVI.
  - The city has started including EV infrastructure in park improvement grants.

- **Are there any projects being planned or in development that would conflict with funding or supporting the funding of an EV/EVSE project?**
    - No
- **How interested and aware is your community about EVs, and have you heard any specific comments or feedback from community members or visitors with respect to EVs or charging stations?**
    - There is growing public interest and demand for EV charging, especially from residents asking about the City Hall station being offline.

12. **Does your community have any interest in fleet electrification? (municipal, transit, schools)?**
    - The police department, public works, and parks departments have all expressed interest in electrifying their fleets but need more information about feasibility, battery life, and charging logistics.
    - School bus drivers have expressed curiosity about switching to electric for cost savings.
    - Alton contracts bus services through Illinois Central Bus Garage; unsure if they are pursuing electrification.
    - No current EVs in the city's fleet, but interest is strong, especially in police and public works departments. Fire department has not been approached yet.
13. **Do you have any ideas or are you aware of any particular locations or sites you feel would effectively meet charging needs or might be strategically located?**
    - **Rock Springs Park** (https://maps.app.goo.gl/BThDAFk6R81AJtQt6)
        1. City plans to improve the area near College Avenue and Alton Middle School.
        2. Currently has 2 public chargers.
        3. Hosts multiple large events: 4th of July celebration, Mississippi River Festival, summer concert series, food truck festival, F1 powerboat event, and weekly farmers market.
        4. Several parking lots available, not all with charging.
    - **Alton Square Mall** (200 Alton Square, Alton, IL 62002)
        1. North on Homer Adams, large asphalt area.
    - **Grocery store cluster**:
        1. Schnucks (2811 Homer M Adams Pkwy, Alton, IL 62002)
        2. Save A Lot (2980 Homer M Adams Pkwy, Alton, IL 62002)
        3. Aldi's (2822 Homer M Adams Pkwy, Alton, IL 62002)
    - **City Hall** (101 E 3rd St, Alton, IL 62002)
        1. Former location of charger that was well utilized.
    - **City-owned lot between West Fourth and West Fifth Streets** (https://maps.app.goo.gl/kPRNf9z3NDgvgrs8A)
        1. Busy during weekends, near the Federal Building and downtown businesses.
    - **Salu Park (James Killian Park)** (https://maps.app.goo.gl/nNEYeRQwxNT6mDeh7)
        1. Has parking and a newly installed bathroom; well utilized.
    - **Hotel and retail area near the train station**:
        1. Holiday Inn Express (1904 Homer M Adams Pkwy, Alton, IL 62002)
        2. Kohl's (1770 Homer M Adams Pkwy, Alton, IL 62002)
        3. Home Depot (1710 Homer M Adams Pkwy, Alton, IL 62002)
    - **Amtrak Station** (1 Golf Rd, Alton, IL 62002)
        1. Adjacent to commercial development, potentially good location.
    - **Alton Police Station** (1700 E Broadway, Alton, IL 62002)
        1. Could be explored as a site, especially as it's used for safe exchanges (e.g., online purchases).
14. **Are there any current/future developments that could benefit from including EV charging stations?**

- A new coworking space is being built and will include EV chargers.
- 40-unit residential townhomes (no current plans for EV charging).
- Mixed-use development (residential + retail) across from the coworking space by Alton Works; may include some charging, under review.

APPENDIX J: ECONOMIC DEVELOPMENT RESOURCES FOR BUSINESSES

Table J - 1 provides information on available economic development programs for businesses within Alton.

Table J - 1. Economic Development Programs as of 2025

City of Champaign Economic Development

Alton provides a variety of competitive programs to support businesses interested in establishing themselves in the area. These economic development initiatives include:

- Job Creation Loan Program
- Infrastructure Loan Program

TIF Districts

The City of Alton has established two TIF Districts to encourage local development and support community revitalization. The Riverfront TIF District and the Hunterstown TIF District offer funding opportunities for qualified redevelopment efforts.

TIF dollars can assist with a range of eligible expenses such as land acquisition, infrastructure upgrades, site preparation, building rehabilitation, and even professional services. Projects are reviewed individually by the City's Department, with final approval determined by the Mayor and City Council. Learn more: https://www.cityofaltonil.gov/planning-and-development/economic-programs/

Enterprise Zone Benefits

Businesses located within Alton's River Bend Enterprise Zone can access a variety of financial incentives designed to lower costs and encourage economic growth. Covering key areas like the Alton Central Business District and Industrial Corridor, this multi-jurisdictional zone offers qualifying businesses benefits such as, investment tax credits, jobs tax credits, utility tax exemptions, sales tax exemptions on approved building materials, and possible property tax abatements

This program is coordinated by Madison County Community Development (MCCD) on behalf of the City of Alton. Business owners can learn more by contacting MCCD at 618.692.6200 ext. 4386. Review program overview: https://www.cityofaltonil.gov/planning-and-development/economic-programs/

Commercial Façade Improvement Program

To support small business beautification and historic preservation, the City of Alton offers the Commercial Façade Program—a grant opportunity for commercial properties generally located south of Homer Adams Parkway.

Eligible participants can receive a reimbursement grant covering 25% of exterior improvements, up to $7,500 for a single facade or $10,000 for multiple facades. This initiative helps local business owners invest in curb appeal, while improving the overall character of Alton's business corridors. Learn more: https://www.cityofaltonil.gov/planning-and-development/economic-programs/