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Eastern Iowa Electric Vehicle Readiness Plan

Presenting:
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Study Area & Goals

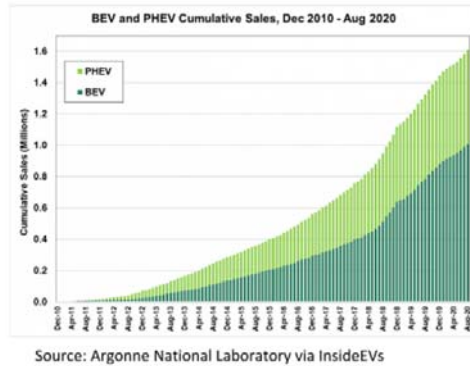


- Increase EV use
- Increase EV charger availability
- Increase equitable access to EVs and charging
- Reduce emissions
- Improve air quality
- Generate economic benefits
- Establish regional collaboration to leverage resources and share learnings

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Existing conditions

- EVs represent 2% of the current passenger vehicle market but are growing rapidly



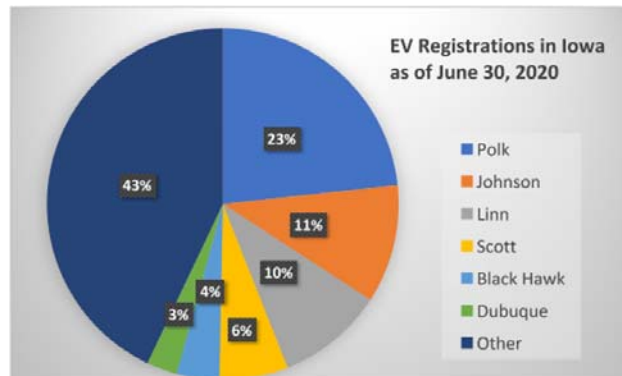
CAR COMPANIES WITH ELECTRIC VEHICLES AVAILABLE IN THE U.S.

- Audi
- BMW
- Chevrolet
- Chrysler
- Fiat
- Ford
- Hyundai
- Jaguar
- Kia
- Lincoln
- Mercedes-Benz
- Mitsubishi
- Nissan
- Porsche
- Range Rover
- Subaru
- Tesla
- Toyota
- Volvo

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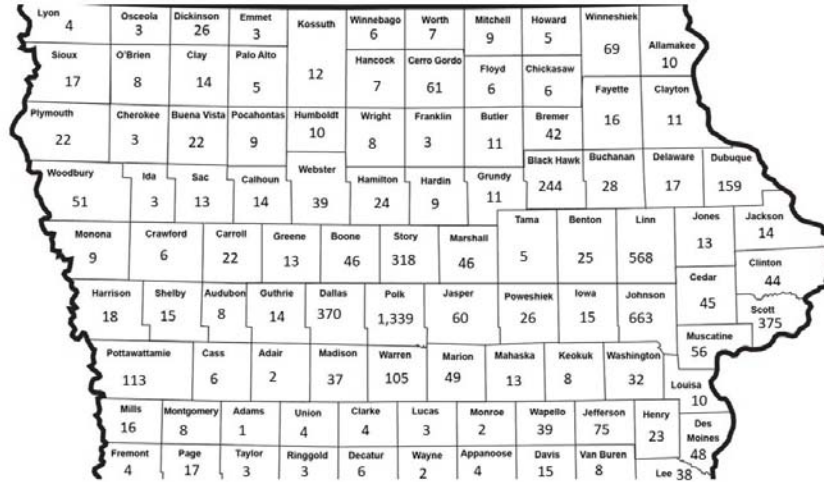
EV adoption trends in Iowa

- EV ownership has become more widespread throughout the state
- Increase from < 1,000 vehicles to > 5,400 between 2016-2020
- Shifting from PHEVs to BEVs, following national trends



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EV registrations by county



Source: WOI-TV, 2021

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Charging infrastructure in Iowa

City	Population (2019)	Public EV charge points	Charge Points Per Million Population
Cedar Rapids	133,562	26	195
Davenport	101,590	11	108
Iowa City	75,130	29	386
Waterloo	67,328	6	89
Dubuque	57,882	13	225
Cedar Falls	40,536	10	247
Bettendorf	36,543	2	55

- Optimal number of publicly available charge points is 400 ports/million people to spur EV adoption



25 charge points in QC/383,781 MPA population = 65 charge points/million

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Current EV laws and ordinances

State

- In 2019 the Iowa's legislature:
 - Ruled EV charging station owners can charge for the electricity provided
 - Established a 2.6 cent per kWh excise tax on all public charging stations starting in 2023
 - Instituted an annual fee for EVs
- Iowa received \$21 million as part of the Volkswagen Settlement Environmental Mitigation Trust program
 - \$198,000 to 15 Level 2 community charging projects
 - \$900,000 disbursed to 6 DC fast projects, including to the Iowa 80 Truckstop in Walcott
 - Iowa DOT accepting applications through March 5 for current funding cycle

Municipal

- Cedar Rapids and Davenport have adopted provisions specific to EV charging infrastructure
- Iowa City and Dubuque have set goals for EV adoption in city fleets

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Stakeholder input

Cost	<ul style="list-style-type: none"> • Action should fit within relevant fiscal parameters and be categorized into high, medium, and low-cost.
Political & Policy Feasibility	<ul style="list-style-type: none"> • Action should be evaluated in the context of current administrative and legislative landscapes.
Equity	<ul style="list-style-type: none"> • Action should be evaluated based on their impact on low-income and disadvantaged communities.
Impact on EV Adoption	<ul style="list-style-type: none"> • Action should reasonably advance transportation electrification and its associated benefits in the region (e.g., economic development, air quality improvements).
Policy Durability	<ul style="list-style-type: none"> • Action should be assessed based on its effectiveness on a short, medium, and long-term basis.
Scalability	<ul style="list-style-type: none"> • Action should be assessed based on its applicability at the regional level.
Technical Feasibility	<ul style="list-style-type: none"> • Action should be evaluated in the context of its practical implementation.
Timing	<ul style="list-style-type: none"> • Action should be evaluated based on when the jurisdiction can start implementation (near-, medium-, or long-term).

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Strategies and implementation

Key Readiness Strategy	Information Provided For Each Strategy in the Plan
Invest in EV Charging Infrastructure	Description and background information
Expand Access to EV Charging Infrastructure	List of Actions organized by priority level
Adoption of and Access to EVs	Strategy Priority Level based on the evaluation metrics
Increase Education and Awareness of EVs and EV Charging	Strategy Implementation Timing to start acting
Coordinate Regionally to Implement Actions and Strategies	Lead Stakeholder(s) responsible for initiating & leading the strategy
Lead by Example	Additional Stakeholders involved in the strategy's implementation
	Strategy Implementation with examples and suggestions
	Best Practices related to strategy implementation

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Strategy: Invest in EV infrastructure

Actions:

High Priority

- Quantify the need for new publicly available charging equipment to fill gaps at both local and regional level, including DC fast chargers to enable long-distance travel along corridors.

Medium Priority

- Identify and pursue opportunities to fund city-owned and operated charging infrastructure (available for employee and public use) in high-traffic locations such as parking lots nearby major roadways, retail, and recreational areas.
- Collaborate with external entities (e.g., other government agencies, chambers of commerce, workplaces, businesses) to track and pursue grants for public and workplace charging infrastructure.
- Promote existing utility programs offering rebates for EV charging.

Low Priority

- Encourage coordination between utilities and potential private EV charging hosts to leverage existing utility funding/incentives (e.g., VW settlement).

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Strategy: Expand access to EV charging

Actions:

High Priority

- Amend local zoning/land use codes to require EV charging as a permitted accessory use, and to include requirements and/or incentives (e.g., density bonuses) for the installation of charging infrastructure in new construction and major renovations.

Medium Priority

- Implement tailored local policies to streamline and clarify EV charging permitting and inspection processes at private and public locations.

Low Priority

- Specify definitions and design guidelines (e.g., safety, accessibility) for EV parking spaces for both on- and off-street parking.



Source: <https://iowa80truckstop.com/services-amenities/amenities/ev-chargers/>

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Strategy: Promote EV adoption/access

Actions:

High Priority

- Coordinate with dealers to facilitate future point-of-sale rebates for EVs.

Medium Priority

- Work with local financial institutions to make low interest EV and EV charging loans available to small businesses, income-qualified candidates, disadvantaged communities, and others.

Low Priority

- Promote utility programs offering specially designed residential and commercial EV rates (e.g., time-of-use, subscription rates), and off-peak charging programs to lower EV operational costs and shift load to off-peak periods.
- Engage in partnerships with the private sector and other organizations that provide opportunities for funding (e.g., grants, financing) and promote innovation or pilot projects to advance electric transportation across modes (e.g., car-sharing, ridesharing, and micro-mobility, including e-bikes).
- Create local or regional EV group buy/purchase programs to increase EV availability at auto dealerships.
- Prioritize and incentivize projects that demonstrate local economic benefits for low-income residents such as job creation, training opportunities, youth engagement, and workforce development.

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Strategy: Education and Awareness

Actions:

High Priority

- Develop and maintain a comprehensive EV resources website to educate all Eastern Iowa consumers on the environmental, financial, and other benefits of EVs. The website should include information on logistics of buying EVs (including available incentives), installing charging (including the local permitting process), finding charging, and more. Link to other reputable and well-maintained resources (e.g., AFDC) as appropriate.

Medium Priority

- Develop outreach plans targeting specific audiences, with customized messaging that speaks directly to those end-users (e.g., community webinars, legislative briefings to educate public officials).

Low Priority

- Target education and outreach efforts based on demand, tailoring messages accordingly (residents, businesses, dealerships, developers, employers, etc.). Also target low-income and underrepresented populations.
- Work with local community colleges, and trade schools to incorporate vocational programs for electrician and EV maintenance jobs into their curriculum (or STEM programs).
- Engage with advocacy organizations to create educational toolkits about EVs (costs, range) and EV charging (infrastructures, best practices at workplaces, multifamily housing).
- Connect the public with EV ambassadors, such as driver groups and EV enthusiasts; organize ride & drive events (in-person and virtual); create marketing campaigns featuring personal stories.
- Leverage connections with the Iowa Clean Cities Coalition to showcase local success stories (for example, public charging installations).
- Engage and partner with community-based organizations to understand opportunities, challenges to expand EV adoption and access in rural areas.
- Provide educational resources to employers and fleet managers regarding EV use and charging station deployment. Inclusive of technical assistance and training.
- Create a program to recognize dealers and other businesses that do the most to champion EVs.

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Strategy: Coordinate regionally

Actions:

High Priority

- Integrate EV readiness into regional planning efforts, including regional transportation plans and sustainable communities' strategies.

Medium Priority

- Engage in state, regional, and national advocacy efforts to support laws, incentives and policies that further EV adoption (e.g., zero-emission vehicle or ZEV mandates, low-income rebates, point of sale vouchers), aligning with other leading cities and complementary regional initiatives.
- Create a regional working group or steering committee to share lessons learned, monitor emerging EV applications and track progress toward EV readiness at the regional level.
- Develop common metrics to track progress on EV readiness at the local and regional level. Monitor and report progress toward EV readiness at the municipal/county level.

Low Priority

- Encourage local partners (Chambers of Commerce, retail businesses, etc.) to develop non-monetary incentives to e.g., reward EV ownership with access to premium parking spaces.

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Strategy: Lead by example

Actions

High Priority

- Educate municipal/county employees about EVs and EV charging and encourage EV adoption through the development of workplace charging programs.

Medium Priority

- Assess the existing municipal/county fleet, develop a fleet management plan, and explore opportunities to incorporate EVs.
- Incorporate a low-income lens/component in any program or activity that is carried forward.

Low Priority

- Monitor and look for opportunities for projects to address emerging trends and technologies including battery storage, battery second-life applications, vehicle-to-grid and vehicle-to-building, wireless charging, and autonomous vehicles.



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What comes next?

Each strategy includes:

- Lead stakeholders
- Strategies for implementation
- Best practices
- Key performance indicators

Continued coordination

- Continued steering committee meetings (quarterly)
- Share funding opportunities, regional coordination, best practices, track progress
- Coordinate events:
 - National Drive Electric Week
 - Fleet manager field trips

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Link to the plan

http://www.inrcog.org/pdf/Eastern_Iowa_EVRP_final_June_2021.pdf

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QUESTIONS?

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